International Journal of Business and Economics, 2016, Vol. 15, No. 1, 35-49

Business Group's Diversification Strategy and Sustainability

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Abstract

This paper explores how the resource endowments of business groups affect diversification strategy, and how different degrees of diversification influence business group financial performance and sustainability. The sample of this study is the top 300 business groups in Taiwan according to China Credit Information Service. Regression results show that tangible, intangible, and human resource endowments all positively affect business group diversification strategy. We also find an inverted-U relationship between the degree of diversification and the financial performance. Thus, diversification strategy enhances business group sustainability.

Key words: business groups; diversification strategy; financial performance; sustainability

JEL classification: L25; L21

1. Introduction

With the transition to a free market economy, Taiwan has undergone rapid development in the past decades. Many large businesses have risen and are large not only in scale. These businesses have correlated management styles and decision-making criteria, and together they form a business group that all have the same starting point: seeking the best interests of the group as a whole and accelerating the growth of group size, regardless of whether the groups are correlated through equity control, association business, family, friendship, or other factors. Business groups in Taiwan already wield a considerable amount of influence on Taiwan's industrial structure.

How businesses examine the integrity and characteristics of resources in a highly unpredictable external environment and whether corporate resources provide fair and sufficient support to the company influence diversification strategies and target market selection. According to Barker and Duhaime (1997), during business development, corporations inevitably encounter many obstacles, some of which

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might cause business performance to decline. When not properly handled, the obstacles threaten the businesses' survival and, in worst case scenarios, even lead to suspension, the end of operations, and bankruptcy. Thus, diversification strategies can be applied as a mode of operation.

The topic of diversification strategies is not only gaining attention in the field of practical management but also by scholars. Numerous studies have focused on the effects of diversification on corporate performance, but the results have revealed differences of opinion. Some studies have found a positive correlation between the degree of diversification and corporate performance (Christos, 2001; Vernon, 1971), whereas others have reported a negative correlation (Collins, 1990). Others studies have revealed that the two have a nonlinear U-curve relationship (Capar and Kotable, 2003). By contrast, other research has found that the degree of diversification and corporate performance have an inverted-U relationship (Hitt et al., 1997); when diversification exceeds a certain degree, the additional costs override the income, damaging corporate performance.

This study is conducted through two dimensions, namely resource endowments and performance, to elucidate the influences of diversification strategies used by business groups. According to the research motive above, this study uses a resource-based view (RBV) to determine whether utilizing corporate resources affects diversification strategy, examining the relationship between diversification strategies and performance. The remainder of this paper is structured as follows. Section 2 presents a literature review and hypotheses. The research design and method are detailed in Section 3, and the results are presented in Section 4. Section 5 discusses the findings, and Section 6 presents our conclusions.

2. Literature Review and Hypotheses

2.1 Resource Endowments

Penrose (1959) considers a corporation to be a mixed body of various resources, including tangible, intangible, and human resources. When a firm has more resources, it is more capable of investing in other industries (Dunning, 1992), and the relationship between the corporation's resources and growth is extremely close. In addition, Peteraf (1993) maintains that a corporation's competitive advantages are derived from combining and applying its own internal resources, upon which the growth and development of the corporation are based. Therefore, a resource-rich corporation can use these resources to diversify investments (Teece, 1982). These arguments support the view that, if a business group has an advantage in resources, it will likely use this advantage to develop a new market and transfer its resources to a new industry, thereby expanding its business size, achieving more effective resource management, and maintaining its competitive advantages. Therefore, the more resources that a business possesses, the greater the possibility for it to have more resources compared with normal-sized businesses; furthermore, such a business will lean toward using diversification to utilize these resources. According to the

preceding argument, we posit the following hypothesis.

Hypothesis 1: The abundant resource endowment of a business group affects the degree of diversification.

Barney (1991) defines firm resources as all assets controlled by a firm that enable it to conceive of and implement strategies and that improve firm efficiency and effectiveness. The preceding literature review demonstrates that the strengths and weaknesses of a business in a competitive market can be understood through corporate resources. Thus, the amount and characteristics of corporate resources are of utmost importance. Businesses should prioritize using resources to gain a competitive advantage and determine the optimal usage and allocation of different resource types.

This study uses RBV to discuss the influences brought by business group diversification. Resources are central in determining competitive advantages; thus, the accumulation and use of resources is a critical concern for business managers. By combining previous research on the categorization of resources (Barney, 1991; Collis and Montgomery, 1997; Grant, 1991), we classify resources into tangible, intangible, and human resources to conduct diversification analysis. Tangible resources are easily determined, typically appearing on company balance sheets, and include real estate, manufacturing equipment, and raw materials (Collis and Montgomery, 1997). Intangible resources include company reputation, brand, culture, patents and trademarks, and cumulative education and experience (Collis and Montgomery, 1997). Human resources comprise managerial capabilities, professional skills, experience, staff resilience and loyalty, training, judgment, wisdom, and harmonious relationships and foresight among management and staff members (Barney, 1991; Grant, 1991). According to these definitions, we derive the following hypotheses.

Hypothesis 1-1: Tangible resource endowment positively affects the degree of diversification of business groups.

Hypothesis 1-2: Intangible resource endowment positively affects the degree of diversification of business groups.

Hypothesis 1-3: Human resource endowment positively affects the degree of diversification of business groups.

2.2 Diversification and Performance

According to RBV, corporate profitability is derived from the allocation and use of resources (Wernerfelt, 1984). This is one of the purposes of diversification; we believe that businesses use corporate resources when applying diversification strategies to gain profit. The profits earned are referred to as financial and operating performance. Diversification is perhaps used by businesses to solve the dilemma of poor operating performance. We derive from the above statements the following hypothesis.

Hypothesis 2: Diversification strategy affects business group performance.

Most scholars believe that corporate diversification and management performance have a linear relationship. However, recent studies have revealed that the two can also have a nonlinear, curvilinear relationship (e.g., Hitt et al., 1997). The current study suggests that the two may have an inverted-U relationship; that is, when the degree of diversification passes a certain level, the additional costs of diversification exceed its benefits, causing a decline in performance. Initial profit is proportional to the degree of diversification because of how synergy is influenced by the resources and capabilities of a business. Once a business initiates diversification in unfamiliar fields, the resources and capabilities become limited, and the company loses its advantage. Overall operational risk increases, leading to reduced profitability.

Kim and Mathur (2008) report that the cost of diversification exceeds its benefits. Moreover, when businesses invest in developing various business units, they encounter the multiple differences that exist across such business units. Therefore, the businesses must invest in additional management resources to reconcile the differences between the internal and external environment. These additional management costs might distract the company from focusing on its core business and adversely affect the overall value of the enterprise (Chang and Wang, 2007). Hitt et al. (1997) also believe that diversification increases the complexity of an organization, increasing both internal coordination costs and difficulty in information integration, and thus offsetting the benefits of diversification. Increases in costs caused by information asymmetry between departments and difficulty in communication and coordination are also factors in the decline of companies' overall operations.

Diversification strategy is positively associated with company performance at the first stage of diversification, in which investment is only in a few markets, the internal structure of the organization is simple, and the negative effects of transaction costs and management information processing are minimal. However, increased levels of diversification create greater difficulty in internal integration. When the costs of transaction and management information processing increase, the cost of diversification gradually overrides its benefits, reducing corporate performance and thus leading to an inverted-U relationship between the degree of diversification and company performance.

In other words, the initial stages of diversification yield positive company performance, but excessive diversification damages performance. Therefore, we propose the following hypothesis.

Hypothesis 2-1: An inverted-U relationship exists between the degree of diversification and the business group financial performance.

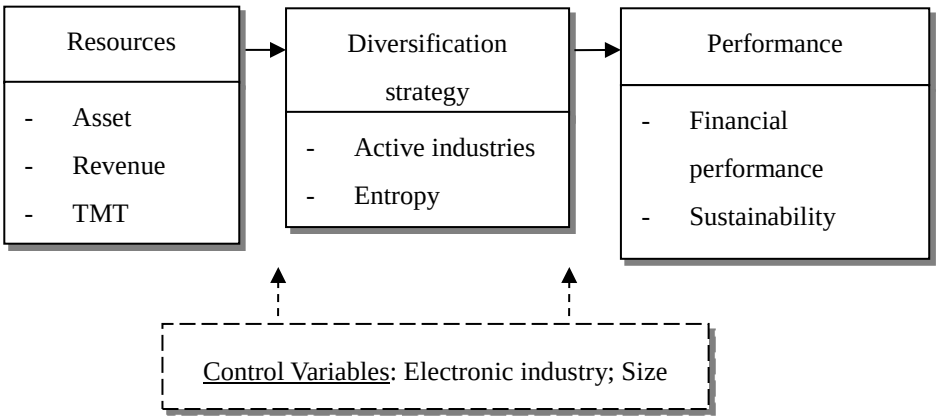
Business sustainability refers to the ability of a company to make a profit, thereby surviving and benefiting from local, national, and international economic systems. The contribution of a company to a promising future should stem from the positive impact of the business in an industry, which can be achieved only if the

business becomes sustainable. Therefore, companies should ensure sustainable strategies and operations.

Sustainability has become a critical term in the strategic management context, underlying the possibility for organizations to achieve a sustainable competitive advantage by employing valuable, rare, imperfectly imitable, and difficult-to-substitute resources (Kazlauskaite and Buciuniene, 2008). When a business does not seek alternative development though restructuring or other means when the industry it belongs to goes into recession, the business might collapse. Therefore, many corporations use diversification strategies to invest in new business opportunities and extend business longevity. After a business begins diversification, its performance influences the development of the entire business group. A major reason that business groups undergo diversification is to reduce operational risks; thus, diversification should be able to further enhance business sustainability by spreading risk. Figure 1 presents a conceptual model of the relationship between diversification and sustainability, which we hypothesize as follows.

Hypothesis 2-2: The degree of diversification positively affects business group sustainability.

Figure 1. Conceptual Model



3. Method

3.1 Data and Sample

Regarding data collection, this study focused on large- and medium-sized business groups found in the 2012 edition of the *Business Groups in Taiwan* handbook and the 2013 edition of *Medium Size Business Groups in Taiwan* as objects of study. According to previous studies, we define a business group as several legally independent firms linked together through persistent formal (e.g., ownership sharing) or informal (e.g., family) ties (Chen and Jaw, 2013; Khanna and Rivkin, 2001;

Ramaswamy et al., 2012). The data of 300 business groups from 2011 were obtained. The first subsection of this section describes the sample data, including the objects of study and sample selection; the second subsection includes the operational definition and measurements of variables; and the third subsection details research methods.

The 300 large business groups have access to the most abundant resources in Taiwan. They play a principal role in the industrial development of Taiwan, leading the transformation from light to heavy industry and from household appliance to electronics and precision manufacturing, which has positioned Taiwan as a crucial link in the international supply chain.

3.2 Measurements

3.2.1 Resource Endowments

We consider three categories of resources: tangible, intangible, and human resources (Barney, 1991; Grant, 1991). Collis and Montgomery (1997) suggest that tangible resources are available from balance sheets and include real estate, production facilities, and raw materials. Therefore, we use the total assets of a business to measure tangible resources. Intangible assets include the brand, company image, and professional capabilities of a corporation and can aid in business operations (Collis and Montagomy, 1995). We use sales as a proxy for intangible assets because sales represent the overall market power or capability of a firm. Top management teams (TMT) are the most crucial human capital, dominating firm strategy and direction (Barney, 1991) and thus are used to measure human resources. In summary, the operational definitions of tangible, intangible, and human resources are based on the total assets, sales, and the number of TMT members of a business group, respectively, and are used to measure the resource endowment of business groups.

3.2.2 Diversification

Entropy and the number of industries in which a firm is active are used to assess diversification level. Berry (1975) maintains that diversification involves an increase in the number of industries in which a company is active. According to this definition, the number of industries in which a firm is active is used in this research as an indicator of group diversification level. The concept of entropy is used in various fields, including economics, management, and marketing (Attaran and Zwick, 1989). Jacquemin and Berry (1979) use the value of entropy to calculate business group diversification level. Thus, the entropy indicator can be used to analyze the diversification level of different industries, an analysis that is not possible by using other diversification indicators.

The entropy formula is as follows:

$$Diversification = \sum_{i=1}^{n} P_i \ln\left(\frac{1}{P_i}\right),$$

in which P_i is the ratio of sales of the firm in the number of industries i.

3.2.3 Performance

Kaul (2003) considers performance to be not only a consequence of diversification but also a key factor in considering the intention of a firm to diversify. In the present study, we use return on assets (ROA) and return on equity (ROE) to assess financial performance and the business group age for determining the sustainability of a business group. ROA represents the ability of a business group to make a profit through internal resources with net income after tax to divide average total assets. ROA can be used to assess the effectiveness of invested capital. ROE shows shareholder profit earned by a business group from the aspect of shareholders with net income after tax/shareholder equity. ROE can be used to determine whether shareholders can receive greater profits from their investments after a business group implements a diversification strategy.

Sustainability may be regarded as a desirable management ideal that can mediate the interests of different stakeholders when a long-term perspective is adopted (Consolandi et al., 2009). Other definitions of sustainability also describe it as a business approach that creates long-term shareholder value (Elkington, 1997; Welter, 2011). Therefore, the business group age is also a means of assessing sustainability performance. A company continuing with its selected concept of sustainability may indicate a successful diversification strategy. This study uses data from 2011 derived from the 2012 *Business Groups in Taiwan* handbook and *Medium-Size Business Groups in Taiwan* by China Credit Information Service. Therefore, in this study, the business group age of a firm is calculated as 2011 minus the year of the business group's foundation.

3.2.4 Control Variables

We include two control variables: industry and size. China Credit Information Service defines a firm as being active in the electronics industry if its core business is in the electronics, information technology, or computer accessory manufacturing industry. Many business groups in the electronics industry play important roles in Taiwan's economic development. Compared with other industries, the electronics industry requires more capital and involves more R&D costs. We use the electronics industry as a control variable to identify whether diversification is affected by industry factor. In this study, the core business of a firm is used as a dummy variable: if the core business of a firm is in the electronics industry, then the variable is 1; otherwise, the variable is 0. Our samples are derived from large and medium business groups because such groups are the targets of the database used in this study. A variable is used to identify the influence of the size of a business group on diversification; the variable is 1 when the business group is large and 0 otherwise.

4. Results

Table 1 contains the results of a regression analysis conducted by evaluating the response variables of active industries and entropy. The table presents the analysis results for Model 1 and Model 2, which examine the same hypothesis. Two indicators of diversification strategy present the cohesive findings. Model 1 uses the active industries of a business group as a response variable to determine the influence of the resource endowment of a business group on the diversification level of the group. The overall model fit achieves significance ($F = 159.672; p < 0.01$), indicating that total assets, net revenue, and number of TMT members can explain over 70% of a business group's diversification level ($\triangle R^2 = 0.726$). The regression analysis results reveal that the tangible resources of a business group exert a considerable positive influence on diversification level ($\beta = 0.132; p < 0.05$), verifying that tangible resources can enhance diversification level; thus, Hypothesis 1-1 is supported. The intangible resources of a business group also exert a large positive influence on the diversification level ($\beta = 0.367; p < 0.01$) in the regression model, verifying that intangible resources can increase diversification level; thus, Hypothesis 1-2 is supported. Furthermore, the number of TMT members in a firm also exerts a considerable positive influence on diversification level ($\beta = 0.456; p < 0.01$), indicating that the number of TMT members can also strengthen the diversification level; thus, Hypothesis 1-3 is supported.

Model 2 uses entropy as a response variable to identify how much the resource endowment of a business group affects its diversification level. The overall model fit achieves significance ($F = 4.433; p < 0.05$), yet the total assets, net revenue, and number of TMT members can explain less than 10% of a business group's diversification level ($\triangle R^2 = 0.054$), an amount that is less than that of the active industries indicator. The regression analysis results reveal that the tangible resources of a business group exert a large positive influence on the diversification level ($\beta = 0.322; p < 0.01$), verifying that tangible resources can enhance diversification level; thus, Hypothesis 1-1 is supported. The intangible resources of a business group exert a considerable positive influence on the diversification level ($\beta = 0.069; p < 0.01$), verifying that the amount of intangible resources can increase the diversification level; thus, Hypothesis 1-2 is supported. Furthermore, the number of TMT members in a firm also exerts a notable positive influence on the diversification level ($\beta = 0.207; p < 0.01$), revealing that the number of TMT members can strengthen the diversification level as well; thus, Hypothesis 1-3 is supported.

The results in Table 2 indicate the relationship between diversification strategy about active industries and the effects on the financial performance and sustainability. In Model 3, the relationship between the linear equation of diversification indicator-active industries and ROA appears to be significantly negative ($\beta = -0.173; p < 0.1$). The relationship between the quadratic equation of active industries and ROA is significantly positive ($\beta = 0.110; p < 0.1$). These results indicate that the relationship between the diversification level of a business group and its financial performance (ROA) is expressed as an inverted-U curve, which supports Hypothesis 2-1. In Model 4, the relationship between the linear equation of active

industries and ROE is nonsignificant ($\beta = -0.089; p > 0.1$), as is that between the quadratic equation of active industries and ROE ($\beta = -0.052; p > 0.1$). The result for ROE is not supported; therefore, Hypothesis 2-1 is partially supported. In Model 5, the business group diversification level apparently exerts a significant positive effect on the group age in the regression model ($\beta = 0.421; p < 0.01$), indicating that the diversification level of a business group can influence business group sustainability; thus, Hypothesis 2-2 is supported.

Table 1. Results of Resources and Diversification Strategy

	Model 1		Model 2	
	Response variable: Industries		Response variable: Entropy	
	β	t-value	β	t-value
Control variables				
Electronic Industry	−0.052	−1.672**	0.055	0.945
Size	0.019	0.253	0.283	2.026**
Predictor Variables				
Asset	0.132	1.822**	0.322	2.905***
Revenue	0.367	5.834***	0.069	0.590***
TMT	0.456	11.841***	0.207	2.896***
F-Value	159.672***		4.433**	
Adjusted R^2	0.726		0.054	

Notes: *, **, and *** denote significance at 10%, 5%, and 1% levels.

Table 3 presents the relationships between the linear equation of entropy, another indicator of diversification level. In Model 6, ROE, ROA, and that of the quadratic equation of entropy and ROA are nonsignificant ($\beta = 0.031$; $\beta = -0.025; p > 0.1$); the ROE in Model 7 and that of the quadratic equation of entropy and ROE are also nonsignificant ($\beta = -0.064$; $\beta = 0.060; p > 0.1$), a result that cannot explain why the relationship between a business group's diversification level and its financial performance (ROA and ROE) is an inverted-U curve and does not support Hypothesis 2-1. Model 8 reveals that entropy has a significant positive effect on group age in the regression model ($\beta = 0.187; p < 0.01$), showing that the diversification level of a business group can aid in extending the sustainability of the business group, also supporting Hypothesis 2-2. In summary, compared with entropy, the active industries indicator is a more accurate predictor of business group financial performance and sustainability.

Table 2. Results of Diversification Strategy and Performance Active Industries

	Model 3		Model 4		Model 5	
	Response variable: ROA		Response variable: ROE		Response variable: Sustainability	
	β	t-value	β	t-value	β	t-value
Control variables						
Electronic Industry	−0.038	−0.656	−0.117	−2.022**	−0.265	−5.051***
Size	−0.012	−0.126	0.064	0.702	−0.204	−2.095***
Predictor Variables						
Diversification	−0.173	−0.750*	−0.089	−0.388	0.421	5.976***
Diversification	0.110	0.559*	0.052	0.265		
F-Value	0.670		1.133		23.180***	
Adjusted R^2	0.004		0.002		0.182	

Notes: *, **, and *** denote significance at 10%, 5%, and 1% levels.

Table 3. Results of Diversification Strategy and Performance Entropy

	Model 6		Model 7		Model 8	
	Response variable: ROA		Response variable: ROE		Response variable: Sustainability	
	β	t-value	β	t-value	β	t-value
Control variables						
Electronic Industry	−0.036	−0.622	−0.112	−1.93**	−0.306	−5.624***
Size	−0.076	−1.268	0.036	0.601	0.047	0.852
Predictor Variables						
Diversification	0.031	0.182	−0.064	−0.382	0.187	3.40***
Diversification	−0.025	−0.148	0.060	0.358		
F-Value	0.491		1.133		14.311***	
Adjusted R^2	0.007		0.002		0.118	

Notes: *, **, and *** denote significance at 10%, 5%, and 1% levels.

5. Discussion

This section discusses the regression analysis outcomes that support our

hypotheses. Recall Hypothesis 1-1: tangible resource endowment positively affects the degree of diversification of business groups. This finding indicates that a business group implements diversification strategies when it has sufficient tangible resources to do so. The goal of developing a firm should be determining the most effective means of using and allocating resources (Quinn and Camron, 1983) to maximize profit. To maintain competitiveness, a firm will accumulate valuable resources such as capital, factories, and facilities in its early stage of development. Sufficient tangible resources enable a corporation to continue growing, and diversification strategy becomes an option.

Next recall Hypothesis 1-2: intangible resource endowment positively affects the degree of diversification of business groups. The support for this hypothesis indicates that a business group will implement diversification strategies when they have sufficient intangible resources. Sanchez and Henene (2004) argue that diversification strategies can aid a corporation in creating synergy, before which additional resources should be used in a new market. Through further essential technology utilization, intangible resources such as brand reputation and the professional knowledge and marketing skills of employees can be effectively utilized. Therefore, diversification strategies are more likely to be implemented when a business group has abundant intangible resources.

Next recall Hypothesis 1-3: human resource endowment positively affects the degree of diversification of business groups. The support for this hypothesis indicates that a business group implements diversification strategies when it has more TMT members. TMT is critical in decision-making processes, and TMT members are the people most likely to have abundant experiences in business operation and professionalization. Through accumulated experience and idea sharing, TMT members can provide sound decisions and strategies when a corporation encounters growth or decline. Therefore, the diversification level of a business group is affected when diversification strategies are implemented if the human resources are sufficient.

Next recall Hypothesis 2-1: the relationship between the diversification level of a business group and ROA appears to be an inverted-U curve. This may be because ROA mainly reflects an ability to profit by utilizing a group's internal resources, a reason that is similar to the reason that a group implements a diversification strategy. This relationship is only supported by the active industries indicator; therefore, this hypothesis is only partly supported, possibly because the active industries method usually considers all diversified businesses in a business group, whereas the entropy method considers how much a business group depends on its diversified businesses. Business groups in Taiwan tend to be more conservative; their diversification strategies usually involve entering closely related industries. For profit, these business groups depend on their own core business rather than on diversified businesses from unrelated industries. Ignoring the importance of these unrelated industries, the entropy method, after considering the ratio of overall income, was less able to explain the phenomenon than were the active industries. Therefore, this hypothesis is only supported when the active industries method is used. The inverted-U curve indicates that when a business group begins to use internal resources to implement

diversification strategies, profits from using internal resources can increase. However, the diversification level exceeding a certain threshold may increase costs and thus reduce ROA.

Finally, recall Hypothesis 2-2: business group diversification level can affect sustainability. Chandler (1962) asserted that firms implement diversification strategies to maintain growth. Because every corporation has a life cycle, when a business enters a mature or recessive stage, it adopts a diversification strategy to enter a different market and extend its growth or life. Therefore, implementing a diversification strategy can increase the sustainability of a business group.

6. Conclusions

6.1 Research Conclusions

In this study, how the resource endowments of Taiwanese business groups affect diversification strategies is investigated, and how diversification strategies influence financial performance and sustainability is also determined. Three hundred business groups identified in the 2012 *Large Business Groups in Taiwan* and 2013 *Medium-Size Business Groups in Taiwan* are researched. The outcome of this study suggests that a business group's tangible, intangible, and human resources have significant positive effects on the development of diversification strategies.

We also examine the relationship between business group diversification level and performance after diversification strategy implementation. The results only partly support our hypothesis because of the gap between different diversification indicators. Regarding supported outcomes, analyzing the influence of the diversification level on financial performance reveals that the relationship between diversification level and ROA appears to be an inverted-U curve. This indicates that after a business group begins diversification, performance improves because diversification from both related and unrelated fields can aid a corporation in achieving an economy of scale, thereby reducing costs while increasing prices and gaining a competitive advantage. Therefore, in the early stage of diversification, the performance of a firm can exhibit positive growth. However, diversification exceeding a certain level may damage performance because the business group is unfamiliar with its newly entered industries. When these industries are larger, investing risks and management and trade costs are higher. Overdiversification by a firm may also attract competitors' awareness and attacks. Such consequences of overdiversification negatively affect the financial performance of companies. Therefore, the relationship between diversification and ROA performance appears to be an inverted-U curve.

When the diversification level is low, close cooperation among subsidiary companies can benefit the business group. However, if a business group overextends itself in the market, its profits will be negatively affected, because different local cultures and the differing characteristics of various markets bring increased management, trade, information, and coordinating costs that are higher than earned profits. Thus, negative consequences after the integration of new industries are

difficult to manage and incur substantial additional costs.

As our hypotheses posited, the benefit of diversification is entering different fields and developing new industries to stimulate the competitiveness of an industry, enable a business group to grow further, and extend the life of the group to achieve sustainability. The diversification level of a business group can positively affect the sustainability of the group. A company can open a new market to attain greater competitive advantages and sustainability by pursuing diversification into related or unrelated industries.

6.2 Limitations and Suggestions for Future Research

To ensure data comparability, we use only data from 2011 to create models for analysis. However, data from only 1 year can hardly explain the dynamic structural changes that occur after a business group implements diversification. Hypothesis 2 concerns the influence of diversification strategy implementation on operational performance. Using only the static data of 1 year may be insufficient because it does not enable variables over time to be assessed properly. Future research may use panel or longitudinal data to test this hypothesis.

This research adopts a RBV to develop hypotheses regarding diversification, whereas many aspects of the influence on diversification remain unexplained. Furthermore, human resources like TMT characteristics, which can substantially affect decision making processes, have received insufficient attention from the academic fields and can be a theme of future studies.

6.3 Research Contributions

In this study, we contribute theoretically through the following: (1) divide resource endowments into three categories and examine them separately to determine which complement the RBV; (2) compare two objective measures of diversification strategy and demonstrate that using active industries for prediction is more accurate than is using entropy; (3) decompose the concept of performance and findings that different strategy affects financial performance differently; and (4) observe the nonfinancial performance of sustainability and reveal that diversification can bolster the sustainability of business groups, even though this strategy may not improve financial performance.

This study focuses on Taiwan as the research subject, investigating how most businesses in the country exist in the form of business groups and how the resources controlled by these companies dominate the overall economic development of Taiwan. Through this research, we determine how these business groups manage the changing external environment and decide whether to diversify. We hope the results and findings deepen the understanding of Taiwanese business groups.

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