Ownership Concentration, Location, and Internalization Advantage in Financial Performance

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Abstract
Taiwan maintains close economic cooperation with the Southeast Asian countries through trade, investment, and industrial advancement. This paper focuses on multinational enterprises in the Taiwanese electronic industry that invested in Southeast Asia from 1997 to 2009. Regression results show that ownership concentration, location, and internalized advantage have various effects on firm financial performance. Performance indicators reveal that ownership concentration has a positive effect on return on equity and return on invested capital, and location has a positive effect on Tobin’s q, whereas internalization advantage is significant for each of them but with less explanation power. Ownership concentration exhibits the greatest explanation power of financial performance. To explore the host country effect, this paper also decomposes the country samples and indicates the theoretical and managerial implications of the research findings.

Keywords: ownership, location, internalization, advantage, Southeast Asia, financial performance

JEL Classification: M21, M16

Introduction
Recently, foreign direct investment has been increasing, becoming a major catalyst of the globalization of economics. Regarding motivation to invest in other countries,
eclectic theory is one of a major framework that has been widely applied in previous studies. The concept of the eclectic theory of international production was proposed by John H. Dunning in 1976. This eclectic theory states that the extent, form, and pattern of international production are determined by the configuration of three sets of advantages as perceived by enterprises. These factors - ownership concentration, location, and internalized advantage - are also called OLI factors (Dunning, 1988).

Because of regional development, countries of East Asia are expected to become interdependent. The Association of Southeast Asian Nations (ASEAN) was established on August 8, 1967, in Bangkok, Thailand, with the signing of the ASEAN Declaration (Bangkok Declaration) by founding its countries, namely Indonesia, Malaysia, the Philippines, Singapore, and Thailand. ASEAN plays crucial roles regarding international trends.

As enterprises globalize, their method of maintaining stable development is critical. The determinants of firm performance have long been of central interest to strategic management researchers (Rumelt, Schendel, and Teece, 1994). The resource-based perspective concerns interfirm competition. For independent firms, the operation goal is to allocate resources and achieve the highest performance. In 1997, a financial crisis occurred because the ownership concentration in East Asia was greater than that in other regions, and the corporate governance was insufficient. Corporate governance influences both company competitiveness and performance. For overseas investment, establishing an appropriate mechanism is the most crucial component.

The purpose of this paper is to analyze the influence of the factors of ownership advantage, location advantage, and internalization advantage by examining the performance of Taiwanese electronics firms investing in Southeast Asia (Indonesia, Malaysia, the Philippines, Singapore, and Thailand) during 1997–2009.

**Literature review and Hypotheses development**

In its original form, the eclectic paradigm stated that the extent, form, and pattern of international production are determined by the configuration of three sets of advantages as perceived by enterprises. Three types of ownership-specified advantages are identified: those stemming from exclusive or privileged access to particular income-generating assets; those that are normally enjoyed by brand-new branch plants but not restructuring firms; and those that are a consequence of geographical diversification or multinationality. Another condition for international production is that it must be in the best interests of enterprises that possess ownership-specific advantages, which can transfer these advantages across national boundaries within their own organizations, rather than sell them or license their right of use to foreign-based enterprises. The other condition of the eclectic paradigm concerns the place of production. Enterprises will engage in foreign production whenever they perceive that it is in their best interests to combine spatially transferable intermediate products produced in the home country, with at least some immobile factor endowments or other intermediate products in another country (Dunning, 1988).

Although eclectic theory is comprehensive, it requires further improvement. Among management researchers, Penrose (1959) was the first to deem enterprise resources
as the model influencing enterprise activities. A major contribution of the resource-based perspective is that it explains long lives differences in firm profitability that cannot be attributed to differences in industry conditions (Peteraf, 1993; Wernerfelt, 1984). In general, the resource-based perspective considers that resources and abilities are roots of competitive advantages (Collis and Montgomery, 1995); the main purpose of this perspective is to determine the optimal competitive strategy.

Enterprises comprise by numerous sub-units of organizations. Whether the operations of sub-units can work properly depends on the management. The concept of corporate governance was proposed in 1970, but was not widely discussed until the 1997 Asian financial crisis. In general, corporate governance is a mechanism for management. Ownership structure refers to the ownership type and allocation of the company and is related to the management mechanism of corporate governance (Prowse, 1998; Rajan and Zingales, 1998).

Ownership structure: Ownership concentration
Ma, Naughton, and Tian (2010) found that firm performance increases with increasing ownership concentration. Konijn, Kraussl, and Lucas, (2011) also find that multiple block-holdings negatively affect Tobin’s q, but concentrated ownership structure is to be preferred on average. The positive impact of ownership concentration on firm value is detected in regressions (Grosfeld, 2006). Heugens, Essen, and Oosterhout (2009) presented a meta-analysis of the relationship between concentrated ownership and firm financial performance in Asia, finding a small but significant positive association between both variables. In this paper, ownership concentration is measured by the director and supervisor shareholding ratio, blockholding and shareholding ratio, and manager shareholding ratio.

H1: Ownership concentration positively influences firm performance.

Location character: Cluster effect
Cluster has been recognized as a crucial determinant of firm location choice. For foreign investors, clustering factors are positive externalities arising from similar geographic clusterings of firms or industries in a region, such as knowledge spillover from competitors, through which specialized labor pool and input providers are created by industry demand. Clustering is also beneficial in attracting foreign direct investment (FDI) because it offers economies of scale and positive externalities associated with spatial concentration of colocation facilities and economic activities related to production (Porter, 1990). Krugman (1991) indicated that agglomeration can increase return to scale and decrease transaction costs.

According to previous studies, clustering is defined into three types. Considering that urbanization economies are a crucial type of agglomeration, the first type of clustering comprises externalities of agglomeration, such as the sharing of goods or facilities, which are separated. In this case, the spillover of knowledge generally occurs at the local level; therefore, regions with high urbanization may attract FDI. Measurements for this type involve using the share total. The second clustering type is specific foreign agglomeration. The concentration of foreign-specific agglomeration is measured according to relative foreign workers, which are defined as a portion of foreign labor divided by the all of foreign workers nationwide. The third type is regional clustering of
industrial concentration. This study uses measures the cluster with the proportion of total population to total area of the country.

**H2: Cluster effect positively influences firm performance.**

**Company advantages**

**Firm growth rate**

McConnell and Servaes (1995) observed that growth rate has a positive effect on firm value and is reflective of performance. Markides (1995) indicated that growth rate and performance have a positive relationship. The applied variable is measured according to changes in year-to-year sales, \( \text{SALES}_G = 1 - \frac{\text{Sales}_t}{\text{Sales}_{t-1}} \)

**H3: Firm growth rate positively influences firm performance.**

**Internationalization**

Ramaswamy (1993) defined configuration as the number of overseas plants owned by a company, finding a strong positive relationship with performance, and further noting that a count of the number of countries in which plants are located reveals similar results. Delios and Beamish (1999) observed a positive relationship between geographic scope and performance. The degree to which firms operate abroad is included as an exogenous factor and is measured as \( \text{FASSETS} = \left( \frac{\text{foreign assets}}{\text{total assets}} \right) \times 100 \). It might be expected that firms with considerable foreign operations would be more profitable (Jung, 1991; Grant, 1987; Morck and Yeung, 1991).

**H4: Internationalization positively influences firm performance.**

**Diversification**

Montgomery (1994) indicated that organizational resources can be used efficiently to achieve economic scope. Harris, Kriebel, and Raviv (1982) noted that information asymmetry leads to inefficient organizational resource allocation. Worldscope lists the four-digit SIC industries in which firms operate; it does not list revenue generated within each industry but lists industries in order of importance. Thus, it is possible to measure diversification by using a simple SIC count. However, this results in a somewhat crude measure (Hill and Snell, 1988). Therefore, we measured diversification by using a standard Herfindahl measure of diversification. Berry’s (1971) definition of diversification is as follows: \( \text{Hd} = 1 - \sum P_i^2 \), in which \( \text{Hd} \) denotes the degree of diversification and \( P_i \) represents the proportion of sales from i department to total sales. As the degree of \( \text{Hd} \) increases, the level of diversification increases.

**H5: Diversification positively influences firm performance.**

**Industry effect**

Several theoretical perspectives recognize the importance of industry membership in firm performance. Indirectly, industry membership affects performance through strategic perspectives (Sutcliffe and Huber, 1998) and actions (Slevin and Covin, 1997). Directly, performance appears to be affected by industry traits such as complexity (Zajac and Bazerman, 1991), rivalry (Wiseman and Bromiley, 1996), and regulatory changes (Reger, Duhaime, and Stimpert, 1992). The industry effect accounts for the nature of the competitive environment in which a firm operates. This paper uses the rate of growth of the industry to measure the industry effect.

**H6: The industry effect positively influences firm performance.**

**Performance**
Accounting variables

Return on assets (ROA) is measured as the ratio of net income to total assets. Return on equity (ROE) is measured as the ratio of net income to book value of equity. Return on invested capital (ROIC) is measured as the ratio of net income to the sum of book value of equity and long-term liability.

Marketing variable

We construct the Tobin’s q using the algorithm proposed by Lindenberg and Ross (1981) and modified by Smirlock, Gilligan, and Marshall (1984) to compute the replacement cost of plants and equipment. Consequently, to compute the denominator of the Tobin’s q, we employ the book value and estimated replacement cost of assets other than plants, equipment, and inventories. To compute the numerator of the Tobin’s q, we use the market value of common stock and the book value of debt and preferred stock. Tobin’s Q = (MV + PS + DEBT)/TA; MV denotes the product of a firm’s share price and the number of outstanding common stock shares; PS is the liquidating value of the firm’s outstanding preferred stock; DEBT represents the value of the firm’s short-term liabilities net of its short-term assets, plus the book value of the firm’s long-term debt; and TA denotes the book value of the total assets of the firm.

Control variables

Larger companies have more resources and produce a sustainable competitive advantage to increase performance. Firm size is measured by the logarithm of total assets (Gedajlovic and Shapiro, 1998). Company age influences performance (Khanna and Palepu, 2000; Zhao and Luo, 2002). Firm age is measured by subtracting the year of company establishment from 2009.

Methodology

Data and sample

The target firms are the parent companies in Taiwan and their subsidiaries in Southeast Asia. We use annual data from 1997 to 2009. The data are obtained from several databases such as the Taiwan Economic Journal (TEJ; director and supervisor shareholding ratio, blockholding and shareholding ratio, manager shareholding ratio, firm growth rate, and diversification), the World Bank database (clustering), and the MOPS database (internationalization). Additionally, the industry effect data are derived from the Department of Statistics of the Ministry of Economic Affairs, Taiwan.

According to Taiwanese financial data, among firms investing in Southeast Asia, 134 sample firms are investigated this study. There are nine companies from Indonesia; 55 from Malaysia, 11 from the Philippines, 87 from Singapore, and 36 from Thailand. All these firms are in the electronic industry.

Research model

\[
\text{ROA}_{it} = \beta_0 + \beta_1 \text{LASSETS}_{it} + \beta_2 \text{EXPERIENCE}_{it} + \beta_3 \text{OWN1}_{it} + \beta_4 \text{OWN2}_{it} + \beta_5 \text{OWN3}_{it} + \beta_6 \text{CLUSTER}_{it} + \beta_7 \text{SALES}_{it} + \beta_8 \text{FASSET}_{it} + \beta_9 \text{DIV}_{it} + \beta_{10} \text{INDUSTRY}_{it} + \mu_{it}
\]  

(1)
Ownership Concentration, Location, and Internalization Advantage

\[ \text{ROE}_{it} = \beta_0 + \beta_1 \text{LASSETS}_{it} + \beta_2 \text{EXPERIENCE}_{it} + \beta_3 \text{OWN1}_{it} + \beta_4 \text{OWN2}_{it} + \beta_5 \text{OWN3}_{it} + \beta_6 \text{CLUSTER}_{it} + \beta_7 \text{SALESG}_{it} + \beta_8 \text{FASSET}_{it} + \beta_9 \text{DIV}_{it} + \beta_{10} \text{INDUSTRY}_{it} + \mu_{it} \]  
\text{(2)}

\[ \text{ROIC}_{it} = \beta_0 + \beta_1 \text{LASSETS}_{it} + \beta_2 \text{EXPERIENCE}_{it} + \beta_3 \text{OWN1}_{it} + \beta_4 \text{OWN2}_{it} + \beta_5 \text{OWN3}_{it} + \beta_6 \text{CLUSTER}_{it} + \beta_7 \text{SALESG}_{it} + \beta_8 \text{FASSET}_{it} + \beta_9 \text{DIV}_{it} + \beta_{10} \text{INDUSTRY}_{it} + \mu_{it} \]  
\text{(3)}

\[ \text{TOBINQ}_{it} = \beta_0 + \beta_1 \text{LASSETS}_{it} + \beta_2 \text{EXPERIENCE}_{it} + \beta_3 \text{OWN1}_{it} + \beta_4 \text{OWN2}_{it} + \beta_5 \text{OWN3}_{it} + \beta_6 \text{CLUSTER}_{it} + \beta_7 \text{SALESG}_{it} + \beta_8 \text{FASSET}_{it} + \beta_9 \text{DIV}_{it} + \beta_{10} \text{INDUSTRY}_{it} + \mu_{it} \]  
\text{(4)}

Dependent variables:
- ROA : Return on Asset;
- ROE : Return on Equity
- ROIC : Return on Invested Capital;
- TOBINQ : Tobin’s Q

Independent variables:
- LASSETS : Firm size
- EXPERIENCE : Firm age
- OWN1 : Percentage of share hold by board;
- OWN2 : Percentage of share hold by stakeholders;
- OWN3 : Percentage of share hold by managers;
- SALESG : Growth;
- FASSET : Geographic scope;
- CLUSTER : Cluster;
- DIV : Diversification;
- INDUSTRY : Industry effect

Results

Table 1 shows the results from the total sample, indicating that firm age is highly significant and positively correlated with ROA. This shows that as firm experience increases, performance increases. Internalization is highly significant and negatively correlated with ROA because of divided assets.

Variables exhibited the same outcome regarding ROE and ROIC. Firm size is highly significant and positively correlated with ROE and ROIC, showing that as firm scale increases, performance increases. Manager shareholding and growth rate are also highly significant and positively correlated with ROE and ROIC, showing that managers pursue higher performance by increasing sales growth (Markides, 1995; McConnell and Servaes, 1995). Industry is an external variable and has a positive effect on ROE and ROIC.

Firm age is highly significant and negatively correlated with the Tobin’s q; this indicates that firm experience limits its performance. Internalization is highly significant and positively correlated with the Tobin’s q, showing that overseas investment increases performance (Grant, 1987; Jung, 1991; Morck and Yeung, 1991).
We also decomposed the sample to different host countries; the results are shown in Tables 2–4. For Malaysia, clustering has a negative effect on ROIC, suggesting that companies do not gain from clustering. For Singapore, the ratio of board shareholding has a positive effect on ROE, and the ratio of manager shareholding has a positive effect on the Tobin’s q; internalization has a negative effect on accounting variables, but a positive on marketing variable. Furthermore, diversification is negatively correlated with ROE, indicating that firms invested in Singapore do not focus on this strategy (Harris, Kriebel, and Raviv, 1982). For Thailand, the ratio of ownership hold by stakeholders has a negative effect on ROA; clustering has a positive effect on ROE, but is negatively correlated with the Tobin’s q.

### Table 1

<table>
<thead>
<tr>
<th>Variables</th>
<th>ROA</th>
<th>ROE</th>
<th>ROIC</th>
<th>TOBINQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>73.7359***</td>
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<td>-0.2875***</td>
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<td>-1.9906</td>
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<td>0.0004</td>
<td>-0.0093***</td>
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<td>-0.2062</td>
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<td>0.0018</td>
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<tr>
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<td>0.001</td>
<td>0.0021</td>
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<tr>
<td>OWN3</td>
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<td>0.0313***</td>
<td>0.0155***</td>
<td>0.007</td>
</tr>
<tr>
<td>CLUSTER</td>
<td>0.1692</td>
<td>0.0027</td>
<td>-0.0008</td>
<td>-0.0053</td>
</tr>
<tr>
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<td>0.0009***</td>
<td>0.0006***</td>
<td>8.3205</td>
</tr>
<tr>
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<td>-0.0003</td>
<td>0.0023***</td>
</tr>
<tr>
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</tr>
<tr>
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<td>0.1946**</td>
<td>0.1054**</td>
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</tr>
<tr>
<td>F-statistic</td>
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<td>9.0295***</td>
<td>8.8727***</td>
<td>6.5002***</td>
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<td>Adjusted R-squared</td>
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<td>0.3873</td>
<td>0.3837</td>
<td>0.3056</td>
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</table>

Notes: *p<0.1; **p<0.05; ***p<0.01.

### Table 2

<table>
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<th>Variables</th>
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<th>TOBINQ</th>
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<td>-0.0097***</td>
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<td>0.0006</td>
<td>0.0017</td>
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<td>0.0009</td>
<td>0.0021</td>
</tr>
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<td>0.0343***</td>
<td>0.0172***</td>
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</tr>
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<td>-0.0266*</td>
<td>0.0243</td>
</tr>
<tr>
<td>SALESG</td>
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<td>0.0009**</td>
<td>0.0005***</td>
<td>0.0001</td>
</tr>
<tr>
<td>FASSET</td>
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<td>-0.0004</td>
<td>-0.0003</td>
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<td>Variables</td>
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<td>0.396</td>
<td>0.3928</td>
<td>0.3064</td>
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</table>

Notes: *p<0.1; **p<0.05; ***p<0.01.

Table 3

The result of performance (Singapore)

<table>
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<tr>
<th>Variables</th>
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<th>TOBINQ</th>
</tr>
</thead>
<tbody>
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<tr>
<td>OWN1</td>
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<td>0.0009</td>
<td>0.0015</td>
</tr>
<tr>
<td>OWN2</td>
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<td>0.0005</td>
<td>0.0025*</td>
</tr>
<tr>
<td>OWN3</td>
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<td>0.0233***</td>
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<td>SALESG</td>
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<td>0.0008**</td>
<td>0.0005***</td>
<td>0.0001</td>
</tr>
<tr>
<td>FASSET</td>
<td>-0.2366***</td>
<td>-0.0013**</td>
<td>-0.0008**</td>
<td>0.0026***</td>
</tr>
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<td>INDUSTRY</td>
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<td>F-statistic</td>
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Notes: *p<0.1; **p<0.05; ***p<0.01.

Table 4

The result of performance (Thailand)

<table>
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<th>Variables</th>
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<th>TOBINQ</th>
</tr>
</thead>
<tbody>
<tr>
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<td>5.9213***</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.2528</td>
<td>0.4154</td>
<td>0.405</td>
<td>0.3022</td>
</tr>
</tbody>
</table>

Notes: *p<0.1; **p<0.05; ***p<0.01.
Discussion and Conclusion

Ownership structure
Manager shareholding is crucial and clearly affects the performance of ROE and ROIC.

Location character
The outcomes of ROA and the Tobin’s q are completely opposed because ROA measures the short period, whereas the Tobin’s measures the long term.

Company advantage
Sales growth is statistically significant with a positive coefficient for ROE and ROIC (Markides, 1995; McConnell and Servaes, 1995).

Industry effect
The industry effect has a positive effect on ROE and ROIC.

By analyzing the variations among countries, the optimal investment strategy for these countries can be determined by differences in ownership structure, location character, company advantage, and industry effect.

Ownership structure
The three types of ownership concentration have different effects on performance.

Location character
For three countries, performance decreases in the short period but increases in the long term. Clustering is not an ideal strategy for firms investing in Malaysia and Singapore (Krugman, 1991), but is reasonable for Thailand.

Company advantages
For all countries, sales growth is positively correlated with performance (Markides, 1995; McConnell and Servaes, 1995). For Singapore and Thailand, there is little evidence that diversification reduces performance.

Industry effect
All the results indicate that the industry effect is an external advantage for firms.

Contribution
This paper offers suggestions for firms which intend to invest in Southeast Asia. Previous studies have discussed the relationship between ownership concentration and performance. In this paper, the results only partially confirm the hypothesis. If the companies consider increasing their investment performance, they must determine the correct type of ownership to implement.

Intra-firm advantages are shown in this study to play a critical role in performance. In particular, managers must determine strategies regarding two concerns: firm growth rate and internationalization.
Ownership Concentration, Location, and Internalization Advantage

The industry effect is the environmental factor for all the firms. The relationship between the industry effect and performance in this study reflects a real-world situation.

Limitations and future research

The data used in this study are obtained from several databases including the TEJ (director and supervisor shareholding ratio, blockholding and shareholding ratio, manager shareholding ratio, firm growth rate, and diversification), the World Bank database (clustering), and the MOPS database (internationalization). In addition, the industry effect is found in the Department of Statistics of the Ministry of Economic Affairs, Taiwan. Data and measures are limited by the government databases, suggest future researcher can explore this concept to use survey or apply different measurements might cause better statistic outcome. Second, this study uses annual data for 1997–2009 and investigates only Taiwanese electronic firms invested in five countries in Southeast Asia (Indonesia, Malaysia, the Philippines, Singapore, and Thailand) as a sample. We suggest that further research extend the study period and investigate other countries or industries. Furthermore, the outcome for diversification remains undetermined in this study. Using another sample or modifying the measurements may result in a more favorable outcome.

References


