Inter-Firms Relationships and Supply Chain Strategy Mechanism in Indonesian Family SMEs

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Abstract—In an emerging economy such as Indonesia, family firms represent the most common form of business organization. This study discussed the supply chain strategy mechanism for inter-firms relationships in context of family small medium enterprises (SMEs). This study investigated in what situation family SMEs should apply relational or and formal supply chain strategy mechanism. This study used multiple regression analysis to examine hypothesis. In the data collection, questionnaires were distributed to 350 owners and managers of small-medium enterprises, around seven cities in Java Island in Indonesia. Results indicated two factors asset specificity and uncertainty – influenced both formal and relational supply chain strategy. Through the investigation of supply chain strategy mechanism in family SMEs this study contributes to answer the appropriateness of the application supply chain strategy mechanism in Family SME

Keywords—Indonesian Family SMEs, Supply chain strategy Mechanism, Government Policy

1. Introduction

Supply chain strategy is often seen as a way of lifting the performance of family businesses [1,2]. Applying better supply chain strategy can reduce opportunistic behaviour by family members and focus the business towards achieving business objectives, thus obtaining better performance (Schulze et al. 2001). Supply chain strategy can determine whether the involvement of family members is an asset or a liability for the business (Dyer 2018). Good supply chain strategy guides a family business towards better performance. Thus it contributes to sustainability of family businesses.

In Indonesian society the role of the family and its strongly bound relationships provides the basis for supply chain strategy in business [3]. Furthermore, family businesses are often identified with informal supply chain strategy where family values are the basis for conducting relationships within the business and with other organizations [4, 5]. A study by [6] shows that much business cooperation starts with the family unit and achieves business success, although much also fails. Secondly, Indonesia is a developing country with a transitioning economy and changing institutions [7]. According to [8], the increasing scale and complexity of the economy and business will bring changes to supply chain strategy – from a focus on personal and social relations towards “impersonal” institutional supply chain strategy. However, a number of previous studies have delivered a range of differing findings. Several studies show that the role of social relations in supply chain strategy is declining in accordance with changing economic institutions (for example Guthrie 2001) – whilst other studies indicate the opposite [9].

The study of supply chain strategy, formal and informal, in the Indonesian context is important for several reasons. Firstly, Indonesia has a collective culture of shared values and relationships strongly implanted in its society and manifested in the way its communities operate, including in the field of business [10]. This paper attempts to analyses the preferences of family businesses in Indonesia in utilizing formal supply chain strategy and personal and relational supply chain strategy, particularly in their relations with other businesses. Although most businesses in Indonesia are family businesses of small and medium size, studies of supply chain strategy practices of these firms are rarely conducted [11]. This raises the question about the role of supply chain strategy in family businesses. Starting with these questions this paper discusses the role of supply chain strategy in small and medium family businesses in Indonesia.

Asset Specificity and Supply chain strategy Mechanisms in Family Businesses

Asset specificity is reflected in assets that are dedicated for a particular purpose [12]. Their value tends to fall if they are used for a different purpose [13]. Uncertainty relates to a situation in the future that is difficult to predict. Asset specificity lifts the risks of business transactions because if increases the dependence of a business relationship and potential switching costs [14]. When a party invests in asset specificity through a cooperative business relationship, the value of their assets will depend on the participation of their business partner. If the business partner ends the business
relationship the value of those assets will fall because there are fewer alternative business partners [15]. The absence of an alternative for specific assets can lead to opportunism [16]. This opportunism can cause excess transaction costs, overheads and reduced investment when compared with normal market transaction [17].

In the literature there are several views about the implications of asset specificity. The first view is about the use of extensive contracts – the higher the degree of asset specificity the greater the degree of contract detail required to prevent opportunism [18]. The main argument of this view is that detailed contracts can reduce the freedom of movement of a partner who may otherwise carry out opportunistic behaviour [19]. Detailed contracts can limit opportunism because they can anticipate situations which may happen in the future [20]. Detailed contracts can make those involved in businesses better prepared for future business uncertainties. Supporters of formal contracts also argue that complete and detailed contracts guarantee better preparations to anticipate future situations. This argument is based on the view that those better prepared can better face future situations than those not prepared. Although that’s true, human limitations in absorbing and processing information means that contracts will never be perfect – they would always need adjustment in the future.

The second view supports the use of a “relational contract” [21-24]. This approach involves relational supply chain strategy. Differing from formal contracts, supporters of relational supply chain strategy [25-27] say the relational supply chain strategy mechanism is efficient for on-going transactions. From the viewpoint of relational supply chain strategy the greater the degree of asset specificity being transacted, the greater the need for cooperation and coordination between the two parties [26]. Relational supply chain strategy thus emphasizes trust and reciprocity, which is created through joint planning, joint problem solving and commitment to work closely together [27, 28]. This mechanism can reduce opportunism and lift business coordination.

Relational supply chain strategy is often connected with “norms” of cooperation [29-33]. These cooperative norms can facilitate the two parties to carry out business activities with greater self-assurance because of shared expectations about what they will be doing in the future. Through carrying out joint actions, each party involved in a responsible business relationship aims at business performance and joint protection from the negative effects of asset specificity and uncertainty. Information exchange helps each party to obtain valuable information to support the business relationship. Participation relates to the willingness of the two parties to share decision making and goals [31]. In the literature, relational supply chain strategy has the potential to reduce handling and transaction costs.

Like other business institutions, family businesses are involved in relations with their business colleagues [34]. They manage business relations with suppliers that provide raw material for production, as well as distributors who help market their product. They might also play a role as suppliers and distributors for their colleagues’ businesses. Because of that, cooperative relations with their business partners can become value chains. In modern businesses the cooperative development of value chains constitutes a general method to “value-add” in business. Because developing links with business colleagues can create transaction costs, efforts to reduce transaction costs are important issues for businesses.

The literature about family businesses observes that family companies develop close long term relationships with business colleagues. Relationships between family companies and other stakeholders are connected with social capital [35]. Family ownership of businesses promotes personal relations with stakeholders [36]. This causes them to apply relational supply chain strategy [37].

In the context of asset specificity, family businesses consider several supply chain strategy alternatives. Firstly, they might consider a family association when choosing business colleagues. Research undertaken by [38] on sub-contracting contends that sub-contractors with family links were preferred. That is, family businesses tended to choose sub-contractors with links to them. Secondly, an absence of sub-contractors with ties to the family business led it to use formal contracts. Family businesses, however, chose relational supply chain strategy approaches when the business was developing long-term and repeat transactions with their business colleagues ([39]. Thirdly, family businesses favoured formal contracts for discrete or “one-off” transactions.

Although the literature indicates that family businesses generally adopt a relational supply chain strategy approach in dealing with businesses, they may react differently when facing high market risks. For example, research by [40] shows that family businesses tend to be risk averse. A tendency to preserve “socio-emotional wealth” for succeeding
generations made them avoid higher risks [41, 42]. The goal of perpetuating the socio-emotional wealth of the family guided the business when they dealt with key stakeholders. Research from [43] also supports this point where they found that family businesses limited the transfer of knowhow to their competitors. Since asset specific transactions are risky, family businesses might avoid mechanisms which could have a negative impact on family socio-emotional wealth.

Uncertainty and Supply chain strategy

Mechanisms in Family Firms

Transaction cost theory (TCT) views uncertainty as another factor which determines the type of supply chain strategy [44]. Uncertainty is defined as the difference between information received to carry out a task against information held by an organization. Uncertainty can also be defined as the level at which the surrounding environment is simple or complex. The existence of uncertain surroundings makes organizations try to predict their production accurately, or to achieve their strategic plans. Uncertainty increases when the market becomes more difficult to predict. This situation has implications for contracts already signed where contracts then become not easily specified and their performance difficult to verify. Uncertainty can also make a party manage business relations to undertake re-negotiation or to seek new business colleagues, which eventually causes rising transaction costs.

The main consequence of uncertainty is the need to adapt. For example, existing contracts may not cover some business transactions which were not previously envisaged. As uncertainty increases, so do adjustment costs, including costs required to reach new agreements. From the perspective of transaction costs, in a highly uncertain situation a supply chain strategy hierarchy will be preferred rather than market mechanisms, because businesses find themselves more able to control internal factors rather than external ones. Through hierarchic supply chain strategy mechanisms the organization can better manage its own transactions. Hierarchic supply chain strategy is more adaptive compared with market mechanisms because the business has more control of transactions.

Similar to asset specificity, uncertainty motivates businesses to adopt two approaches – relational supply chain strategy or formal contracts. By the first choice a business avoids legal stipulation and uses social norms to reduce future uncertainties. Social sanctions such as reducing or terminating business cooperation can dissuade another party from opportunistic behavior. Cooperation is an important social norm. Compared with norms such as sanctions, cooperation provides a more positive response to uncertainty. This approach is perceived to be more effective as a response to uncertainty.

Transaction cost theory contends that uncertainty can affect market exchange. In uncertain conditions, contracts become less relevant because actual realities are difficult to assess with existing contracts – and that situation may encourage opportunistic behaviour. For example, in relations between component manufacturers and suppliers uncertainty may cause differing expectations about raw material needs. Uncertainty about market demand and product can make manufacturers reluctant to order a certain amount of components (Walker & Weber 1987). Uncertainty also makes suppliers reluctant to offer fixed prices to the manufacturer due to evidence of fluctuating component prices.

Relationships between family business owners and stakeholders are often stronger than those between managers and their workers. Informal agreements reached through personal ties between family members and their business connections are often more durable than those made through formal authority [45]. Through relational supply chain strategy family businesses are more able to share their future expectations, giving them more confidence and flexibility in their business relations. And via relational supply chain strategy family businesses can share important information for planning and problem solving. In this way information sharing can obtain the latest analysis to respond to changing markets. Furthermore, through joint planning, family businesses can develop mutual goals and efforts to achieve these approaches cooperatively. In short, relational supply chain strategy can promote cooperation – by contrast to emphasizing business sanctions. [18] studied relational supply chain strategy in small and medium scale businesses to achieve global markets. They observed that relational supply chain strategy, as a coordination mechanism between businesses, filled gaps, both infrastructural and institutional, to safeguard business relations.

[11] assert that personal capitalism, widely adopted in Asia, manifests itself through organisational decision-making. In personal capitalism the position and role of owner-managers within organizations is very important and, indeed, often exceeds the role of the organization itself. In this system, organisational decision-making reflects the interests of the business
owner, accommodated by a “one-way” authority structure. Concentration of ownership facilitates decision-making based on strongly subjective, individual judgement. This tendency can be seen in staff recruitment processes which are based on fraternity rather than expertise. [14] connect these issues with the tendency of family businesses to pursue non-economic goals which include providing employment to family members. In Indonesia, [8] notes, these recruitment practices of family businesses are often connected to their non-sustainability.

In Southeast Asia, including Indonesia, personalism is strengthened by a paternastical culture. Paternalistic practices in Indonesia often relate to “Bapakism” where ultimate authority is held by certain men. The term “Bapakism” reflects obedience of individuals within the community to a symbolic “father” figure. An individual regarded as a “Bapak” confers protection and security to those around him. The advice and views of a “Bapak” often have more influence than formal rules and procedures, so that informal processes are created in business relations. In family businesses dependence upon a “Bapak” figure, represented by a manager-owner of the business, is very evident, where their preferences strongly influence the method of business organisation and its modus operandi.

In situations where people hold a low level of trust in institutions, as in Indonesia, personal relationships are important to mitigate uncertainty. Maintaining good relations with government officials is a way of safeguarding businesses against future business realities. These good relationships provide opportunities for businesses to obtain better treatment which is not available to all parties, because officials have the power to control and influence business activities. Although that is so, relations between business people themselves can also become a source of corruption and can have a negative impact upon business performance, including after a regime change.

Family considerations often become significant in business decision making [6] contend that family businesses in Indonesia want to avoid erosion of control of their enterprises and of their human resources. Because of this, they tend to avoid funding from new investors and prefer institutional debt financing, such as loans from banks. This tendency can also be seen in family businesses that have gone public, where ownership concentration is still in family hands. Through a centralised structure, they retain enough voting rights to control their business and its management.

The effectiveness of formal and relational supply chain strategy differs, depending on cultural and institutional contexts. In Indonesia for example, cultural background penetrates and influences supply chain strategy practices of businesses. Tsamenyi et al. (2008) studied the structure and dynamics of control of family businesses in the education sector. They found that formal control was difficult to implement because the community was often reluctant to report misbehaviour in the business because it could escalate conflict. This approach is typical of Javanese culture that is said to be harmonious – meaning, to maintain calmness and harmony with each. When conflict arises people try to hide it from public view.

Based on previous empirical and theoretical studies, the hypotheses are formulated below.

H1: In inter-business transactions that involve asset specificity, family businesses will tend to use formal contracts.

H2: In the context of inter-organisational relationships, environmental uncertainty will lead the family firm to adopt relational supply chain strategy.

2. RESEARCH METHOD

This study used a quantitative approach where data were codified, calculated and quantified in a framework to understand the concepts they represent [7]. The data were collected by questionnaires delivered to owner-managers of small and medium scale family enterprises. A total of 400 of the largest family businesses in two provinces in Indonesia – Central Java and the Special District of Yogyakarta – were asked to participate in the research. Central Java and Yogyakarta were chosen because they constitute centers of many small and medium scale family businesses. Of the 400 family businesses contacted, 350 were prepared to participate in this research. Of the 350 businesses prepared to participate, 23 were not processed further, for several reasons, including that the business had operated less than five years and/or had less than five staff. From the 327 respondents utilized in the research, the end only 314 provided data which were able to be used for further analysis.

The research surveyed small and medium scale family businesses that operated in the manufacturing and services industries. In these industries relations between stakeholders – such as suppliers, producers and consumers – were seen to be close-knit. This closeness was also confirmed by earlier studies, such as those carried out by [5]. The study did not include manufacturing or service businesses that operated under franchising arrangements because the
characteristics of franchise businesses generally differ from the characteristics of family businesses. The study used various analytical and statistical techniques such as hierarchical regression, descriptive statistics, and factorial and correlation analysis. Hierarchical regression is one of the models of multiple regressions which test the relationship between multiple variables [16]. Hierarchical regression can be utilized to test the interaction of key variables discussed above [19]. Analysis of the interaction between variables in the research was crucial to help answer the research questions about supply chain strategy mechanisms. Correlation analysis in the research was used to test the strength of relationships between variables.

3. RESULTS AND DISCUSSION

Table 1 shows the results of regression analyses for supply chain strategy relationships between businesses. These analyses show test results for model 1 and model 2. The test results indicate that both asset specificity (B=0.335, t=4.373, p<0.001) and uncertainty (B=0.282, t=4.062, p<0.001) significantly influence formal supply chain strategy. Model 2 illustrates the relationship between transactional asset specificity and uncertainty against relational supply chain strategy. The results indicate that both asset specificity and uncertainty significantly influence relational supply chain strategy. The coefficient of determination, $R^2$, in the research varied between 0.102 and 0.032. Results of the F test show that the model is generally significant.

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<tr>
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<th>Model 1</th>
<th>Model 2</th>
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<tr>
<td></td>
<td>Formal supply chain strategy</td>
<td>Relational supply chain strategy</td>
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<tr>
<td><strong>Main effect</strong></td>
<td></td>
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<tr>
<td><strong>Constant</strong></td>
<td>1.457</td>
<td>3.269</td>
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<tr>
<td><strong>B</strong></td>
<td>4.037</td>
<td>14.575</td>
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<tr>
<td><strong>Asset specificity</strong></td>
<td>.335***</td>
<td>.359***</td>
</tr>
<tr>
<td><strong>Uncertainty</strong></td>
<td>.282***</td>
<td>.119***</td>
</tr>
<tr>
<td><strong>T</strong></td>
<td>4.373</td>
<td>7.866</td>
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<tr>
<td><strong>Interaction effect</strong></td>
<td>- .067</td>
<td>.103*</td>
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<td><strong>Asset specificity X Uncertainty</strong></td>
<td>- .845</td>
<td>2.178</td>
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<tr>
<td><strong>Control variables</strong></td>
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<tr>
<td><strong>Industry type</strong></td>
<td>- .344</td>
<td>.030</td>
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<tr>
<td><strong>Firm’s Ages</strong></td>
<td>2.083</td>
<td>.016</td>
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<tr>
<td><strong>Firm’s Sizes</strong></td>
<td>4.098</td>
<td>.087</td>
</tr>
<tr>
<td><strong>Generational leadership</strong></td>
<td>.290</td>
<td>.129</td>
</tr>
<tr>
<td><strong>R^2 (adj R^2)</strong></td>
<td>0.26 (0.243)</td>
<td>0.268 (0.251)</td>
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<td><strong>F-Statistic</strong></td>
<td>15.352***</td>
<td>16.018***</td>
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<tr>
<td>*p&lt;0.05</td>
<td>** P&lt;0.01</td>
<td>***p&lt;0.001</td>
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To reduce multi-collinearity, testing of the interaction with the mean value was undertaken. This testing shows that asset specificity positively interacts with uncertainty influencing the supply chain strategy mechanism between businesses (B=., t=<0.01). Other testing shows that asset specificity and uncertainty interacted negatively when connected with formal supply chain strategy. This study has generated several findings. In the context of inter-business relations, the study shows that asset specificity and uncertainty influences both formal and relational supply chain strategy. The research supports the complementary view rather than the substitution view of the relationship between formal and relational supply chain strategy. In the complementary view relational supply chain strategy supports formal supply chain strategy elements (eg, formal contracts etc) and vice versa. This research shows that in a situation of asset specificity, family businesses did not only utilize formal contractual arrangements to guard business relations but it also utilized relational supply chain strategy, such as information sharing, joint planning, and joint problem solving.

For small and medium scale family businesses the combination of formal and relational supply chain strategy makes sense. Family firms, particularly those of small and medium scale, often develop long-term relationships with stakeholders such as suppliers, customers and workers. Because they develop good relationships with their business colleagues, relational supply chain strategy is appropriate for handling issues which occur in business transactions. Indeed, the use of formal contracts only could damage business relationships because it could be viewed as reflecting distrust of business colleagues who have already
developed good relationships. The family businesses, however, also have consideration for the continuity of their business for the next generation. In that light they wouldn't just utilise relational supply chain strategy only in asset specificity transactions because those transactions are seen as having significantly higher risk. Several earlier studies show that family businesses tend to protect their family's leadership, including by limiting knowledge transfers and selecting lower risk projects.

The results of the research are consistent with the findings of Zhou et al. (2008) which contend that managers in China have tendency to base their businesses on personal ties and customized contracts when carrying out asset specificity transactions and in an uncertain business environment. These results, however, differ a little from research findings of [11] says that many businesses in China are abandoning informal/relational business practices which were based on relational networks in order to adapt to foreign companies’ practices. [13] says that many Chinese companies are slowly transferring away from personal trust and informal agreements, towards formal contracts – in a commensurate response to the development of institutionalization. In the Indonesian context, [17] contends that there is a difference between past practices and those now pursued which relates to support of formal and non-formal institutions in business practices. According to [27], in the past, Indonesian entrepreneurs of Chinese descent based their financial support from families to progress their businesses. This situation occurred because, in the past, the Chinese community in Indonesia paid strong attention to Confucian values. Now, in a different situation – in light of modern developments –Indonesians of Chinese descent are increasingly no longer influenced by Confucian values. In [33] contends that in the modern era, informal relationships such familial ties have become less important because of a range of developments, including urbanization, industrialization, modern education and family planning achievements. Changes in the modern concept of “family” have made Indonesians of Chinese descent less concerned about traditional family issues such as clan and ethnicity.

4. CONCLUSION

This study has analyzed factors that support the implementation of formal and relational supply chain strategy in small and medium scale family businesses in Indonesia. Both asset specificity and uncertainty significantly influence formal and relational supply chain strategy. The results of research indicate that family businesses tend to employ a combination of formal and relation supply chain strategy practices to manage inter-business relationships. This shows that both formal supply chain strategy (ie, via formal contracts, etc.) and relational supply chain strategy complement each other to manage business relationships in family firms.

This study contributes to the development of supply chain strategy framework in the Eastern culture context. Relational and formal supply chain strategy in family business in Indonesia has strengthen framework of supply chain strategy. This study has several limitations, first, most of respondents in this study are small and midsized entrepreneur (SME) are not classified by industries. This result could not show varieties of relational and formal supply chain strategy in those SMEs. We are also could not differentiate type of supply chain strategy of SME relationship with their suppliers or business partners. In the future, we suggest study on relational and formal supply chain strategy in family business conducted in a varieties of SME industry. We also suggest that there’s should be an analyses of the differences of supply chain strategy among industries.

References


