Moderation Role of Size and Environmental Dynamics on Relationship of Workplace Flexibility and Performance  
(A Study at Furniture Company in Surakarta)

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Abstract—This study aims to determine the factors that affect the performance of the company’s furniture. Survey design used and the sampling based on convenience sampling. A total of 120 questionnaires were distributed and 54 questionnaires returned (return rate 45%). The analysis was done by the regression hierarchical method. Among the five types of flexibility, only the intensity of outsourcing (Io) and functional flexibility 1 (FF1) are significant effect on return on asset (ROA). Almost all types of flexibility influence on return on sales (ROS), except the Io. This means that marketing effectiveness is closely related to flexibility, especially external numerical flexibility (FNE). Overtime has negative impact on ROS. On total profit (TP), only two types of flexibility significantly, the FF1 and FNE, respectively positive and negative. Among the five types of flexibility relationship with ROA, firm size (UK) only significant moderating on two types of flexibility, the Io and functional flexibility 2 (FF2). Firm size is positively and significantly moderate the relationship between FF2 with ROS. The relationship between flexibility and TP did not differ between large and small companies. Dynamic environment does not moderate the effect of flexibility on the performance measured by ROA, ROS and TP. Smaller furniture companies are more suitable outsourcing intensity (Io), because increasing Io will increase ROA or higher efficiency. Large furniture company is better suited to the flexibility functional 2 (FF2) than smaller companies if they want to increase ROS.

Keywords: return on assets; return on sales; total profitability size and environmental dynamics

I. INTRODUCTION

In the past three decades, the focused factory concept has involved the idea of a flexible plant, has the capacity to respond the environment changes quickly [1,2]. Next, the progress of the internet prompted the company to be responsive in meeting the needs of customers who communicated at any time[3]. To be able to survive under conditions of intense competition and rapid changes in the corporate environment requires the development of appropriate flexibility strategies. With the appropriate flexibility strategy, organizations seek to have the ability to respond changes quickly in demand quality, quantity, and timeliness, to develop new products the market wants, and the other challenges of the changing environment.

Reference [4] describe flexibility in response to environmental uncertainty and improve performance. It is therefore very varied forms of flexibility. Most of the focus put organizational flexibility, consider variations or adaptations of the number and type of staff, specific tasks, and the number and work [5]. [6] choose the flexibility form by operator involvement in decision-making. While [7] takes the outsourcing form, in his research as the creation of workplace flexibility, it means that the company over most of the production process to other companies. Besides such, multifunctional team practices or employment contract temporary also helping reduce the cost or improve the flexibility of the company. Some of this year has been an increase in the supply chain outsourcing strategies. In the United Kingdom, [8] show that between 1984 and 1998 there was an increase in the purchases made by the manufacturer companies from the non-formal manufacturing sectors. The same thing happens to companies in Spain in the period 1993-2004 (INE, 2004 in [7]). Purchases made by industrial firms increased from 3.1% to 4.5%. According to [9] is included in the practice of outsourcing supply chain management has become an important business approach, where competitive advantage may be gained when the product or service is produced more effectively and efficiently by suppliers from outside the company. However, evidence of the effects of outsourcing on the performance of the company is inconclusive. In addition, many empirical studies on outsourcing have focused on internal measurements such as transaction costs, not the impact on firm performance [7].

The research based on the findings and recommendations of [7] which examines the relationship of flexibility and performance. If Sanchez et al. conducted a survey of various types of companies, the automotive supplier industry, telecommunications, software and consulting industry, this study tries to take one type of industry that is a furniture company. Taking one type of industry to find the appropriate flexibility pattern for a particular type of company in addition to supplement studied by [7]. Their
research recommendations follow up in this study by taking the size of the company and dynamic environment as moderating variables. In their study the two variables serve as control variables. Taking dynamic environment as a moderator variable was done [10], but the type of flexibility and company performance measures are different.

II. HYPOTHESIS DEVELOPMENT

As mentioned earlier, for example, [7] take on outsourcing as flexibility of the selected type. Review of previous literature indicates that the relationship between outsourcing and firm performance is not convincing, that is, there are studies that show a positive relationship, there are not significant and even negative. [11] found that there was no significant direct effect of outsourcing on corporate performance. [12] found that outsourcing for training activity and payroll as a significant predictor of the enterprise stakeholder performance and innovation. [13] also found a correlation between good outsourcing practices and high corporate performance. Seeing the increasing development of outsourcing, the study proposes:

Hypothesis 1a.

There is a positive relationship between the outsourcing intensity and firm performance.

As flexibility typology proposed by [14], in addition to outsourcing, there is another dimension of flexibility that used as a mechanism to implement the company's operations. Other dimension of workplace flexibility can be a change or addition of outsourcing and could affect the company's performance. Empirical studies show that the use of these practices internal numerical and functional flexibility had a positive impact on company performance as employee commitment and operational performance [15-17]. The effect of external flexibility is not so obvious, but empirical studies often find a negative effect on employee and team performance in the later stages also negatively impact the company's performance [18-20]. Based on these studies it is:

Hypothesis 1b.

There is a positive and significant relationship between functional flexibility and firm performance.

Hypothesis 1c.

There is a positive and significant relationship between internal numerical flexibility and firm performance.

Hypothesis 1d.

There is a negative and significant relationship between external numerical flexibility and firm performance.

About dynamic environment, [21] distinguishes between environmental changes are not predictable (unpredictable) and fast but predictable (volatility). Unpredictable environments require adaptive maneuverability, managers with higher authorities to innovate, and guidance on non-routine technology. Meanwhile, volatility condition only requires the ability to respond quickly to changes in product features and volume. By using the difference in the environmental dynamics, [10] found a moderating role of environmental dynamics in the relationship between flexibility and performance. Therefore, the next hypothesis formulation;

Hypothesis 2a.

Dynamic environment moderate the relationship between the outsourcing intensity and firm performance

Hypothesis 2b.

Dynamic environment moderate the relationship between functional flexibility and firm performance

Hypothesis 2c.

Dynamic environment moderate the relationship between internal numerical flexibility and firm performance

Hypothesis 2d.

Dynamic environment moderate the relationship between external numerical flexibility and firm performance

In research of [7], dynamic environment and the size of the company becomes a control variable in view of the intensity of outsourcing. The results obtained indicate that company size has a stronger influence than the dynamic environment in determining outsourcing strategy. In line with this result, the proposed:

Hypothesis 3a.

Firm size moderates the relationship between the intensity of outsourcing and firm performance.

Hypothesis 3b.

Firm size moderates the relationship between the functional flexibility and firm performance.

Hypothesis 3c.

Firm size moderates the relationship between the internal numerical flexibility and firm performance.

Hypothesis 3d.

Firm size moderates the relationship between the external numerical flexibility and firm performance.

III. RESEARCH METHOD

A. Population and Sample

The research population is a furniture company in Surakarta (Solo Raya). The population data taken from the Association of Indonesian Furniture Entrepreneurs (Asmindo). One hundred and twenty (120) questionnaires were distributed to the company. Until the specified deadline only 54 incoming (return rate 45%). Sampling technique was based on convenience sampling.

B. Measurement

- Measurement of outsourcing intensity adopted from a method developed by [11]. First, respondents were given
Among five types of flexibility, only two have a significant effect on ROA. This means that the efficiency of investment (ROA) in furniture company only influenced by the intensity of outsourcing (IO) and the functional flexibility of the first kind (FF1). A positive relationship between IO and FF1 with ROA shows that policies to give up some furniture company's activities to outsiders have a positive impact on corporate performance. Similarly, the rotation system, the planning / design and multiple skills, have positive impact on ROA.

Almost all types of flexibility significant influence on ROS, except the intensity of outsourcing. This means that marketing effectiveness is closely related to flexibility, especially FNE. The relationship between the FNI and FNE with ROS marked negative. To FNI this contradicts the hypothesis. Negative relationship of FNE and FNI shows that the proportion of employees on temporary contracts, overtime, will reduce the firm performance (ROS). Based on field data obtained, among the various elements of the FNI, the system only overtime practices that almost all companies do. Negative results indicate that the system apparently is not beneficial in terms of marketing effectiveness. It might be nice to increase production, but it is not appropriate for marketing effectiveness.

On the size of total profit (TP), only two types of flexibility significantly, the FF1 and FNE, respectively positive and negative, according to the hypothesis. Means, the company's ability to generate profits is affected by the first type of functional flexibility (FF1) and external numerical flexibility (FNE).

Of the relationship between the five types of flexibility with ROA, firm size only significant moderating to two types of flexibility, the intensity of outsourcing (IO) and functional flexibility 2 (FF2). Negative sign on the beta coefficient indicates that the greater the size of the company, the relationship between IO and ROA weaker. Thus, smaller companies furniture more appropriate to use this type of flexibility, due to the increased efficiency ROA or higher. Same as IO, moderating role of firm size on the relationship between FF2 and ROA also has negative sign. The bigger the company, the effect is weaker. Thus this type of flexibility should not be overlooked role by small businesses also.

Firm size (UK) is positively and significantly moderate the relationship between functional flexibility 2 (FF2) with ROS. This means that the relationship between functional flexibility 2 (FF2) with ROS stronger if the size of the larger companies. Functional flexibility 2 (FF2) can be done through the establishment of a quality management team and problem solving.

The size of the company does not moderate the relationship between flexibility with total profitability (TP). This means that the relationship between flexibility and firm performance (TP) did not differ between large and small companies. Dynamic environment does not moderate the effect of flexibility on the performance of the company's furniture in Surakarta, whether measured by ROA, ROS and
TP. Dynamic environment as an independent variable affects only the ROS and TP.

V. CONCLUSION, IMPLICATION, AND LIMITATION

If the furniture company wants to increase ROA, the intensity of outsourcing (IO) and functional flexibility should be done because these two variables is a positive effect on ROA. To improve marketing effectiveness (ROS), all types of flexibility a concern for a furniture company in Surakarta, except intensity outsourcing (IO). For numerical flexibility (both FNI and FNE) should be careful, because this type of negative influence on the company, even FNE is the most significant variable. The increase in total profit (TP) can be done by increasing the functional flexibility 1 (FF1) and reduces external numerical flexibility (FNE).

Smaller furniture companies are more suitable outsourcing intensity (IO), because increasing IO will increase ROA or higher efficiency. The role of FF2 type should also not be overlooked by small businesses because it has the greater influence. Large furniture company is better suited to the flexibility functional 2 (FF2) than smaller companies if they want to increase ROS.

Many of the limitations encountered in this study, especially in data collection. First, the sample size is less than the original target. Second, due to time constraints of the study, samples obtained more based on willingness to fill questionnaire than the area random selection. Third, due to the limitations of the first and second, samples obtained dominated by small firms, may not correspond with the actual proportions. Fourth, because a lot of data with numbers such as the number of employees and value for money, its validity depends on the honesty and accuracy of respondents. Such data is often considered confidential companies and researchers are not allowed to see the document. Fifth, the generalizability of the results is only valid for a furniture company in Surakarta or Solo Raya.

Based on these limitations, the next research is expected to be done in a better approach with The Association of Indonesian Furniture Entrepreneurs (Asmindo) in Surakarta area and take a longer time data collection in order to obtain a proportional sample. In this way it is also expected to obtain quantitative financial data more valid. In addition, research needs to be expanded both types of companies as well as research areas, in order to generalize the results could be more widespread.

REFERENCES