

THE INFLUENCE OF FARMER'S DEPENDENCY AND POWER TO PERFORMANCE

Diandra Adelina Hadi and Mustika Sufiati Purwanegara
School of Business and Management
Institut Teknologi Bandung, Indonesia
diandra.adelina@sbm-itb.ac.id

Abstract. This research examines the influence of dependency and power to performance in the agriculture sector, from the farmer's point of view. Indonesia's agriculture sector contributes to 33% of the GDP and absorbs 41 million farmers; most of them still live in poverty. If the performance can be increased, it is hoped that the money generated and the farmer's welfare can be increased too.

Keywords: buyer-supplier relationship, farmers, dependency, power, performance

Introduction

Agriculture business in Indonesia still face many problems, like the non-existence of variety, quality, the coherence of supply and quantity with the demand dynamics and customer preferences. In addition, the inequality of knowledge and access to technology, capital, and market access between the supplier and buyer causes the agriculture institutional structure and the interrelationship of the agriculture products supply chain management become vulnerable.

It is a pity that the institutional partnership on agriculture commodities in the main production areas has yet to show their optimal performance. There is doubt in a certain party that see the partnerships program as a pity program that is more of a social obligations rather than for economical reasons, that tend to lead to inefficiency. Consequently, it could not lead to growth and development as hoped (Saptana, 2010).

The main purpose of this study is to analyze the relationships between supplier and buyer in a business-to-business relationship, specifically in the agriculture business, and to answers these following questions: 1) How is the dependency of a party on another party in the agriculture business ecosystem? 2) How is the power of a party on another party in the agriculture business ecosystem? 3) How do dependency and power affect performance? This research is hoped to be helpful in increasing the performance and to be the first step in developing a more sustainable buyer-supplier relationship.

Theoretical Foundations

Dependency

Dependency is a condition where one party is dependent on the other, in business relationships, dependency is a relationship between conditions, events, or tasks such that one cannot begin or be-completed until one or more other conditions, events, or tasks have occurred, begun, or completed. Organizations are embedded within a network of exchange

relationships, and in order to deal with uncertain environment they are dependent on other organizations for survival (Pfeffer, Salancik, 1978).

Power

Power in supply chain relationships refers to the ability of one party to influence the other (Nyaga, Lynch, Marshall, Ambrose, 2013), and is an issue of dependency (Emerson, 1962). Firms use their power in business relationships to gain favorable exchange terms, greater share of relationship benefits, or to coerce partners to do what they would otherwise not do (Pfeffer, Salancik, 1978).

Performance

Performance is an accomplishment measured in terms of general ratings of satisfaction (Noordewier, 1990). Continuous improvement of supplier performance-defined as the trajectory of the supplier's track record in terms of meeting customer expectations on a range of performance metrics (Cannon, Perreault, 1999) – has become a main objective for manufacturing firms because it enables them to gain and maintain competitive advantage in downstream markets (Joshi, 2009). There are two types of supplier performance improvement strategies; externalized, which includes activities like the use of competitive pressure, supplier assessment, and supplier incentives (Krause, Scannell, Calantone, 2000). The other supplier performance improvement strategy is internalized, which refer to the direct involvement of the buying firm in the supplier through activities like site visits to provide guidance on performance improvement, and investment in supplier training and development (Krause, Scannell, Calantone, 2000).

The power the organization has depends on the dependency they have on other party in the relationship (Medcof, 2001). If one party is highly dependent on the other, then the other party will have the relative balance of power.

H1: Dependency negatively influence power

Power asymmetry or power imbalance occurs when one party is dependent on another but is not reciprocated (Hoejmoose, Grosvold, Millington, 2013). It is one of the defining characteristics of any supply network (Bastl, 2013).

When a buyer is relatively more dependent on a supplier, the buyer will seek to work more closely with the supplier and integrate them into their organization in order to secure stability in an uncertain and dynamic supply, which may involve sharing technology information to drive codependence (Petersen, Handfield, Lawson, Cousins, 2008). The aforementioned action will form a formal strategic partnership.

H2: Dependency positively influence performance

H3: Power positively influence performance

Research Design

This paper uses a mixed method that consists of exploratory research and descriptive survey. Exploratory research was conducted using observation and interview. Descriptive research was conducted by distributing a hundred questionnaires to farmers in three locations in West Java; Cianjur, Gunung Halu, and Garut.

Data Analysis

Demography Profile

The factors that will be used to analyze the demography of respondents in this study are age, occupation, and education. The age of the respondents vary from 19 to 73 years old. Most of the respondents, 38% and 37% are in the 25-40 year old group and 41-55 year old group respectively. All but four respondents are farmers. Four other respondents work as middleman, but also work or once worked as farmers. The education level of the respondents can be categorized as low, as 49% of the respondents graduated primary school, 11% graduated middle school, 25% graduated high school, and the other 25 pursued a higher education.

Validity and Reliability Test

Factor analysis was used for confirmatory purpose since the indicators and questionnaires were created based on previous researches. For validity test, Kaiser-Meyer-Olkin (KMO) was performed and has to score above 0.5 to be valid. For reliability test, Cronbach's Alpha test was used, and the result has to be above 0.6 to be reliable.

Based on the figure above, all variables in this study are valid and reliable.

Direct Influence Between Variables

Dependent Variable	Independent Variable	ANOVA		Coffecient		
		F	Sig.	Beta	Sig.	R Square
Power	Dependency	34.463	0.000	-0.506	0.000	0.256
Stability	Power	35.635	0.000	-0.359	0.000	0.419
	Dependency			0.387	0.000	
Revenue	Power	11.975	0.000	0.249	2.381	0.195
	Dependency			0.512	4.893	
Sales	Power	2.280	0.108	0.169	0.142	0.044
	Dependency			0.237	0.400	
Less Conflict	Power	2.048	0.134	-0.006	0.959	0.400
	Dependency			0.196	0.089	

From the findings, it is shown that the first hypotheses is supported, dependency does negatively affect power. The more dependent the farmers are, the less power their partners have on them. Power and dependency both affect stability, but in a different way. The more power the farmers have, the less stability there will be because they will feel less dependent. The more dependent the farmers are, the more stability there will be because when the farmers are more dependent to their partners, they will try to make the relationship work better. Power and dependency turn out to not have influence on both the financial performance variables, which are revenue and sales. Power and dependency do not also have any influence on the presence of conflict.

Conclusion and Recommendation

Power and dependency do not affect performance as much as we thought before. Other factors may be more influential in the increase of performance.

References

- Bastl, M., Johnson, M., & Choi, T. (2013). *Who is Seeking Whom? Coalition Behavior of a Weaker Player in Buyer-Supplier Relationships*. Journal of Supply Chain Management.
- Cannon, J., & Perreault, W. (1999). *Buyer-Seller Relationships in Business Markets*. Journal of Marketing Research.
- Emerson, R. (1962). *Power-Dependence Relations*. American Sociological Review.
- Hoejmose, S., Grosvold, J., & Millington, A. (2013). *Socially Responsible Supply Chain* (Vol. 18). Supply Chain Management: An International Journal.
- Joshi, A. (n.d.). *Continuous Supplier Performance Improvement: Effects of Collaborative Communication and Control* (Vol. 73). American Marketing Association, Journal of Marketing.
- Krause, D., Scannell, T., & Calantone, R. (2000). *A Structural Analysis of the Effectiveness of Buying Firms' Strategies to Improve Supplier Performance*. Decision Sciences.
- Medcof, J. (2001). *Resource-Based Strategy and Managerial Power in Networks of Internationally Dispersed Technology Units*. Strategic Management Journal.
- Noordewier, T., John, G., & Nevin, J. (1990). *Performance Outcomes of Purchasing Arrangements in Industrial Buyer-Vendor Relationships*. Journal of Marketing.
- Nyaga, G., Lynch, D., Marshall, D., & Ambrose, E. (2013). *Power Asymmetry, Adaptation, and Collaboration in Dyadic Relationship Involving a Powerful Partner* (Vol. 49). Journal of Supply Chain Management.
- Petersen, K., Handfield, R., Lawson, B., & Cousins, P. (2008). *Buyer Dependency and Relational Capital Formation: The Mediating Effects of Socialization Processes and Supplier Integration* (Vol. 44). Journal of Supply Chain Management.
- Pfeffer, J., & Salancik, G. (1978). *The External Control of Organizations: A Resource Dependence Perspective*. Harper & Row, New York, NY.