Factors Influencing Performance of Suppliers: An Empirical Study in Jakarta

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ABSTRACT
The aim of the study was to investigate the development of domestic supplier performance as the result of modern retailer-supplier business relationships which was controlled by the effect of combination of factors such as regulation, competition and buyer power. The study presents the results of a survey of packaged processed foods suppliers which was formed as part of a wider study of buyer-supplier business relationships in modern retailer supply chains. The method used in this study is quantitative research with questionnaires sent to 97 companies which consist of large, medium, small and micro scale suppliers. Structural equation modeling analysis was utilized by using partial least square. The findings of this study indicate that the results demonstrate the heterogeneity relationships between supplier and modern retailer. The extent to which modern retailer challenged by competition, supply chain strategy and market share are likely to influence the way in which modern retailer deal with suppliers. A part of the suppliers indicated that they get benefited substantially from the presence of modern retailers however, they also face several challenges brought about by buyer power as imposition of several unfair relationship terms, price fixing and poorly supervision as cause of the development and growth of suppliers limitedly. This study is the first attempt to measure regulations, competition and buyer power in the relationships between suppliers and modern retailers and the impact on the performance of suppliers empirically. Further study needed to refine the results of this initial study.

Key words: Regulation, competition, buyer power, modern retailer-supplier relationships, suppliers performance

INTRODUCTION
Berasatgei (2013) concluded that in anticipating unfair trade practice, the paradigm of thinking of competition authorities in advanced and developing nations is growing from the conventional to evolution and to modern paradigm of thinking. Conventional paradigm of thinking puts forward observations about sellers’ power that includes inter-brand competition and intra-brand competition (Moraga, 2013). Inter-brand competition is a competition between suppliers and/or between modern retailers in promoting their products based on brands or labels with differentiation strategy while intra-brand competition is a competition between modern retailers in selling their products of the same brands and it concerns price and non price terms (OECD, 2013). Under such conventional paradigm, modern retailer having the strong buyer power could not only get lower buying price but also determine a lower selling price (Chen, 2008).
At the evolution paradigm, modern retailers expands market share and market concentration, resulting in an increase in buyer power that would bring about imbalance in bargaining power in supply chain (Stichele and Young, 2009). An increase in the buyer power of modern retailers results in transfer of risks and reducing the competition among suppliers and would influence consumers through reduction of innovation, long term losses, choices and higher prices. The effect are often neglected that affects sustainability on consumption and production (Nicholson and Young, 2012). Modern paradigm stated that the platform on modern retailer is place having constraint and potential to bring about unfair competition (competitive bottlenecks) and have two-sided markets (Rochet and Tirole, 2003, 2005; Armstrong and Wright, 2005).

The majority of modern retailers, in a bid to slow rising bargaining power of their suppliers, first increase their market share and market power of downstream. Control of market and dominant position could be used as an effective instrument in negotiating terms with suppliers in upstream market by setting more favorable conditions such as price discount by modern retailers (Roller, 2004; Stichele and Young, 2009). An example of two-sided market is credit card market, where banks would face two-sided markets, the market of clients holding the credit card and merchant market (Berasategi, 2013).

In the competition among modern retailers, the interest of suppliers and consumers is closely related. Losses suffered by suppliers would also causes losses to consumers and vice versa. Supplier and consumer are in the same boat. The interest of consumers in the competition among modern retailers could be seen by referring to the concept of services, price, quality and range (Nicholson and Young, 2012). Services include all that is experienced by consumers when shopping at modern retail stores including in queuing cleanliness, orderliness, readiness of the shopkeepers to offer help, convenience in parking lot and geographical location. Prices and quality are directly controlled by modern retailers through conditions. Range concerns control of modern retailers over consumers and suppliers as the "the goal keeper" in the supply chain. Modern retailers are producers of nothing but they create a situation in which suppliers will have place to keep their products under condition set by modern retailers. Consumers have difficulties in getting access to producers that they have to buy goods selected by modern retailers (Nicholson and Young, 2012).

Competition among modern retailers and their suppliers in Indonesia is very tight with the fast growing number of outlets of modern retailers and their suppliers, following the liberalization in the regulation on retail industry. Tight competition has led to concentration and strengthening of bargaining position, growing buyer power of modern retailers that result in the emergence of anti-competition move and caused an unbalanced condition in the supplier-modern retailer relationship that hurts the suppliers (Chowdhury et al., 2007; Muslimin and Nuryati, 2007; Pandin, 2009). Although, the government has sought to prevent such malpractice by issuing a series of regulations and policies including (Peraturan Presiden Republik Indonesia, 2007), Trade minister regulation (Permendag) Number 53/2008, Law Number 5/1999, Law Number 8/1999, unfair competition continues. In 2005, modern retailer Carrefour introduced business relations which was not fair to its suppliers and in 2009, Carrefour increased market concentration and exploited the surplus in its suppliers resulting in condition of being unbalanced and negative impact on competition. Competition policy could be used to cope with offences as a result of market concentration and buyer power (Dodd and Asfah, 2008). Competition authorities in Indonesia (KPPU), based on the competition policy of the Law Number 5/1999 have punished and fined modern retailer Carrefour on the two competition offences (KPPU, 2009).

The condition of being unbalanced in the supplier-modern retailer relationships concerned complex factors but what is worth research is how far the regulation, competition, bargaining power
and buyer power could determine partnership or relationships between suppliers and modern retailers and how much the; impact on the performance of the suppliers. Therefore, this study is aimed to see the; impact of regulations on competition, effect of regulations on supplier-modern retailer relationships, effect of competition on supplier-modern retailer relationships, impact buyer power on supplier-modern retailer relationships and impact of supplier-modern retailer relationships on the performance of suppliers.

REGULATIONS
A number of researchers have identified the main characteristics of regulation. Ariffin (2010), Baldwin et al. (1998) and Amod (2009) stated that regulation is; imposition of rules by the government with mechanism in control and its upholding normally applied through public agency, regulation is a direct intervention in economy and the intervention could be in any forms; regulation is all mechanisms of social control, consisting of all mechanisms of social control and have impact on all aspects of characteristics of sources intentionally or unintentionally.

In addition, Stigler (2003) stated that regulation is an act of the pressure group and produces law and policy supporting the business sector and protecting consumers, workers and the environment. Udayasankar et al. (2008) stated that regulation is a mandate, designed to protect shareholders or investors. Regulation could also be interpreted as a restriction on efficiency in business.

Nugroho (2012) stated that regulation is issued by the government to serve the public, to control market competition, prevent monopoly which could endanger the country's economy.

Soekanto (1985) stated that effectiveness of regulation or law is reflected by the condition having been created and how far the target has been reached. From the point of views of culture, law, a regulation is effective if implementation of the regulation is backed up by commitment, no conflict of interest, understanding of all concern, consistency, professional integrity or honesty, without discrimination (Sosiawan, 2011). Maloni and Benton (1999) stated that regulation would have impact on relationships between suppliers and buyers that could seen in the transactions they made.

OECD (2007) stated that regulation could hamper and reduce the intensity of competition between business players in a market. This is potential to trigger price hike and reduce the variety and quality of goods and services. The factors hampering the effectiveness of regulation and implementation in Indonesia are; contradiction between the law and implementation regulations, difference between law regulations and government policies, difference between law regulations and jurisprudence and circulars of the supreme court, conflicting policies of government agencies, difference between the policy of the central government and regional administrations, difference between law regulations and interpretation, distribution of authority being not systematic and clear (BAPPENAS, 2010).

**Competition:** Porter (1980, 1985) and Hunt (2001) stated that competition is a continued attempt by corporations to grab comparative advantage in resources that will give leading position in market competition and most important to have a super financial performance. Udayasankar et al. (2008) stated that competition is a mechanism of market operation that allows a company to operate naturally and has a tendency, if competition is tighter creating greater market efficiency. Competition is a match between companies in selling goods and service they produce (KPPU, 2009).

Competitive market structure can be divided into four categories that include perfect competition, monopoly, monopolistic competition and oligopoly. In markets characterized by perfect
competition, there are many firms, each of which small relative to the entire market. A monopoly is a firm that is the sole producer of a certain type of goods or services in the relevant market. In a market characterized by monopolistic competition, there are many firms and consumers, just as in perfect competition. In an oligopolistic market, a few large firms tend to dominate the market. Concentration ratio measure how much of the total output in an industry is produced by the largest firms in that industry. The most common concentration ratio is the four-firm concentration ratio. Herfindahl-Hirschman Index (HHI) is the sum of the squared market shares of firms in a given industry, multiplied by 10,000 (Baye, 2009).

The model of Porter's five forces explained that structure of an industry determines the characteristics of competition between companies, bargaining power of suppliers, bargaining power of buyers, threat of new entrants, threat of substitute products or services and competition among existing firms and would make industry more attractive and potential to gain profit. Therefore, competition in an industry will depend on the five basic forces of competition (Porter, 2004). In competition, suppliers could have weak or strong bargaining power which will have its impact on the terms and conditions of transactions made. Transactions between suppliers and buyers will create value for both sides. However, if the buyers have better bargaining power, the possibility of suppliers to earn a higher proportion of value would be smaller and the profit would be lower. The bargaining power of buyers would determine the amount of profit earned by suppliers. The bargaining power of buyers is one of five forces that determine the intensity of competition in industry. Buyers could reduce the bargaining power of suppliers by strengthening the loyalty to them (buyers) through partnership or loyalty program, direct sales to consumers or strengthening of intimacy or value of acceptance of products by increasing features and brands (Porter, 2004; Ehmke et al., 2009).

Threats of new entrants include testing barrier to entry and reaction of company to new competitors. Hindrances faced by new entrants to enter a competition in the market are; economic scale, differentiation of products, capital requirements, cost of transition, access to channel of distribution, scale of independent losses in cost and government policy (Porter, 1990, 2004). The threats from new entrants could be reduced by: Improving the image of brands, utilizing patent and joining product association. Competition among companies in the market constitutes a fight for a position with various tactics such as price competition, advertisement war, product introduction (Porter, 2004; Ehmke et al., 2009).

Companies are interdependent in the market. Normally, a competitors would react to any action by other competitors. Competition between companies tend to be more intense when a company is under competition pressure. The competition pressure would be used as an opportunity to improve its position. Intensity of competition is the level of market competition. The larger the number of suppliers of the same products, the tighter the intensity of competition among suppliers would be. Competition could also cause difficulty to enter the market. The characteristics of high intensity of competition is short life cycle of products, consumers are more critical of cost and quality and quick to launch of new product (Porter, 2004).

The intensity of competition among rivals often lead to strengthening of five competing forces but widely varying in different markets. If the competition is not too tight, companies would likely raise their prices, reducing supply to push up prices to gain greater profit. If competition is tighter, companies would increase offers to maintain market foothold by cutting prices (Porter, 2004; Ehmke et al., 2009).

**Buyer power:** Specifically a number of researchers describe the buyer power as a bargaining power or a countervailing power. But a number of other researchers define buyer power as a
strength of demand for lower price that; the buyer power is wider than the strength of monopsony; the buyer power is more than just the ability to cut prices (Chen, 2008). Dodd and Asfaha (2008) cited a number of definitions of buyer power from three researchers: (1) There will be buyer power when a company has dominant position as a buyer of goods or services or because the company has a strategic advantage and leverage because of its economic scale or other factors, that it would have more favorable conditions of trade transaction with suppliers than other buyers from suppliers (OECD, 1981), (2) There is buyer power when a company or group of companies have more favorable conditions of trade transactions with suppliers than other buyers or are given lower prices or more favorable non price conditions than under normal competition (Dobson et al., 2001) and (3) Buyer power is a bargaining power of buyers, facing suppliers in business negotiation. With economic scale and the significance of purchases, the buyers have the ability to change alternative suppliers (European Commission, 2003).

Buyer power is the ability of buyers to cut selling prices of suppliers to below the normal price level that the buyers would earn larger profit or the ability of buyers to demand more favorable trade terms. Normal selling prices are prices that give maximum profit for suppliers under a situation when buyers have no power. Under perfect competition market structure among suppliers, the normal selling price of suppliers is a competitive price and buyer power is a monopsony power. Under an imperfect competition market structure among suppliers, the normal selling price is above the competitive price and buyer power is a countervailing power (Chen, 2008).

Buyers will have the biggest power when making big purchases. If suppliers sell to large scale buyers, the buyer will have a greater leverage to force suppliers to lower the price and give more favorable conditions for the buyers as the suppliers do not want to lose potential buyers. Buyers also have certain level of power facing suppliers but the bargaining power is not always the same. They are not the same in sensitivity to prices, quality and services. The presence of powerful buyers would reduce the potential price for suppliers. By demanding price cut, negotiating improvement of quality, increasing the services and arranging suppliers, the buyers would be able to increase their market competition and reduce the profit of industry (Porter, 2004; Ehmke et al., 2009).

Suppliers could be in the position of under pressure to accept with various costs in trade terms including promotional costs demanded by modern retailers and the costs have to be paid immediately. The condition could be considered as a transfer of risks from modern retailers to suppliers. Buyer power comes from a number of factors including business scale, competition being not very tight in the market, dependence of suppliers that prompt buyers to act as the 'goal keeper' between suppliers and consumers. Buyer power could absorb the surplus of suppliers through discount and costs being charged to the suppliers. Such condition could weaken the competitiveness of the suppliers and distortion in competition in the supplier market that suppliers would reduce investment, development of new products and innovation. As a result, the quality of products would be lower and there would be less choices for the consumers (Dodd and Asfaha, 2008; Nicholson and Young, 2012). A competition policy would be needed to prevent distortion of fair competition. Competition policy could be; through regulation aimed at maintaining continuation of market mechanism; by adoption of competition law to regulate procedure and activities in competition or even to replace or support existing regulations (Lubis et al., 2009).

**Buyer-supplier relationships:** Relationship marketing is a concept that includes interaction between buyers and sellers at a point where relationships or partnership is developed to provide room for future business deals. The goal of marketing relationship marketing is to expand and serve the consumers through partnership or relationships between suppliers and buyers.
Buyer-seller relationships is mutually beneficial relationships or partnership. It would expand through exchange of mutual benefit. In order that the relationships could last, harmony, interaction, lasting period of exchange would be needed. Relationships is developed with interactions in a certain period. Relationships between two units (units could be organizations, persons, communities even states), each unit has a role to play and expected norms of characteristics (Fournier et al., 1998; Bhattacharya and Bolton, 2000; De Wulf et al., 2001; Ross and Robertson, 2007; Walz, 2009).

The main definition of buyer-seller relationships is that there is at least an economic interaction. Further interactions are expected to take place. The parties involved must keep the identities of each other, they must be convinced that there are relationships, interdependence. Definitions of relationships is that parties must share information, must trust each other, must be convinced that there is relationships, at least there is one economic interaction, parties must keep the identities of each other (Walz, 2009).

There are a number of main factors determining relationships between suppliers and modern retailers to be integrated. They are commitment, conflict, conflict resolution, cooperation, trust (Maloni and Benton, 1999). Business needs other companies as partners, to share cost, risks, increase core competence and speed to reach the market (Reagan, 2002). The minimum degree of cooperation needed in relationships and closer cooperation reflects the degree of trust and mutual help. Interdependence is determined by competition institution, market structure and resources of bargaining power of prospective partner in the market (Scott, 2004). Relationships between suppliers and buyers is relationships between two or more companies, cooperating and involved in information sharing, harmonization of decisions and incentives aimed at achieving super performance (Simatupang and Sridharan, 2005).

Relationships between suppliers and modern retailers in supply chain is determined by five external powers characteristics of consumers, competitors, social economic environment, technology regulations and policy and internal factors. Suppliers and modern retailers change operation and marketing activities backed up by information technology, that interdependence tends to change (Dinne and Lusch, 2005). A supply chain has to be created by taking into account the cost of provision, facility, and process of developing the chain. An integrated information system is needed to collect, process and disseminate information to all stakeholders (Daryanto, 2007).

Modern retailers must develop closer partnership with suppliers and have to develop infrastructure before applying the concept of management and encourage vertical integration of supply chain (Hanf, 2008). Companies improve their weaknesses by using partnership relationships management to maximize the performance of supply chain. It has been proved by the results of surveys that by sharing information resources and the use of e-process, a company could strengthen its relationships with partners to increase competitiveness and maximize the performance of its supply chain (Wu et al., 2011).

In business context, power could be defined as the strength of the influence of a company (sources) on the goals and activities of other companies (target) (Maloni and Benton, 1999). The asymmetry of powers or imbalance in powers is difference in power between one and other parties. Asymmetric relationships of power is a relationships when one party has stronger power than other parties and there is imbalance that potential to trigger conflict and hamper business cooperation (Casciaro and Piskorski, 2005; Schepers, 2007).

There is hindrance in the relationships or partnership because a party strongly insists realization but other parties may lose trust (Dwyer et al., 1987; Mitrega, 2009).
Strategic partnership of modern retailers with suppliers could forestall restrictive change. It is important to differentiate strategic partnership and operational partnership in determining trust and commitment in collaboration and its influence on the performance of supply chain. Developing trust and commitment in useful work to be able to form strategic partnership of supply chain and useful for the partners (Ryu et al., 2009). Conflicts would hamper relationships between buyers and sellers such as delay in payment, poor quality of products or services, problem in communications and problem with maintaining relationships or partnership (Mitrega, 2009).

**Performance:** From the point of view of suppliers, performance depends on elements of inter-relationships that is to expand closer trade cooperation to direct suppliers to boost business by focusing on management category decision related to consumer value, better understanding of the role of trade promotion, controlling management technology aspect effectively, seeking to understand concrete cost of supply chain and efficiently managing it, in line with respective targets of modern retailers (Hamister, 2007).

The performance of suppliers is determined by a number of complex factors. In connection with the aspect of performance of suppliers, performance of suppliers constitutes results of the impact of factors, that is relationships between suppliers and buyers, asymmetric powers of two parties and intensity of competition (Chuah et al., 2010). Business relationships between suppliers and modern retailers concerns transaction costs. Based on the relation contracting theory, an effective contracts could strengthen relationships between suppliers and buyers and create stronger competitiveness of buyers. If the competitiveness is applied to management of suppliers, it would increase the value of supply chain that will contribute to the better performance of suppliers (Ramdas and Spekman, 2000; Chuah et al., 2010).

Power is defined as a function, the opposite of relative dependence between buyers and suppliers. Power could and could not be mediated. Power asymmetry would result in variation in performance. Under a condition of power asymmetry, buyers would tend to maintain exploitation or integration (Maloni and Benton, 1999). Relationships between buyers and suppliers does not always without conflict. It is often that conflict would hurt the suppliers. Imbalance in power between modern retailers and suppliers would force both sides to maintain and rely on their respective powers. The power of mediation relationships tends to be bad for buyers and on the other hand the power that hurt suppliers does not always come to surface. Suppliers would look for ways of bringing balance to the asymmetric power (Maloni and Benton, 1999).

Power relationships mediates the influence of bargaining power of suppliers and buyers on performance. Power asymmetry could be controlled by buyers to improve the performance of suppliers (Maloni and Benton, 1999). Intensity of market competition has positive impact on performance. When market competition is tight, it is important to give emphasis on performance, quality, cost and shipment. Buyers must responded to operation efficiently and effectively. Intensity of competition tends to result in improvement in the performance of suppliers (Ellitan, 2003; Chuah et al., 2010).

Based on the theory and concept, industrial organization theory, particularly porter five forces model and market structure, conduct and performance as a grand theory closest to regulation influence model, competition and buyer power against relationships between suppliers and modern retailers and its impact on the performance of suppliers and regulation theory approach, concept of relationship marketing, particularly relationships between buyers and suppliers is used to approach variables of research.
Fig. 1: Conceptual framework of study

**Conceptual framework:** Those Theories, concepts and earlier study if combined are expected to support and provide a comprehensive study on models of combination of influence of regulations, competition and buyer power over relationships between suppliers and modern retailers and their influence on the performance of suppliers.

**Hypothesis of study:** The hypothesis being presented is as follows:

- $H_1$: Regulation has its influence on competition
- $H_2$: Regulation has its influence on relationships between suppliers and modern retailers
- $H_3$: Competition has its influence on relationships between suppliers and modern retailers
- $H_4$: Buyer power has its influence on relationships between suppliers and modern retailers
- $H_5$: Relationships between suppliers and modern retailers has its influence on the performance of suppliers

Figure 1 shows the conceptual framework of study.

**MATERIALS AND METHODS**

This study is a quantitative study which is descriptive and verifying in nature. Population or units of analysis are 3555 supplier companies of foodstuff, mostly based and operating in the Greater Jakarta area. Supplier companies are large scale, medium, small and micro enterprises (Undang-Undang Republik Indonesia, 2008). The 217 supplier companies are selected through sampling non-proportional strata.

**Data collection:** As part of quantitative research, 217 questionnaires were sent to each group of companies by scale and 101 of the questionnaires were returned but 4 of them were not complete. Therefore, there were 97 questionnaires which were fully and validly answered by suppliers of packaged food including 48 large scale companies, 18 medium scale companies, 10 small scale companies and 23 micro scale companies.

**Questionnaires:** Questionnaires served as an measurement instrument according to conceptual framework and practical ways. All primary data were collected from the answers to the
questionnaires (Malhotra, 2006). Questionnaires used five-point Likert scale and hybrid ordinaly-interval scale (Hermawan, 2009). This study used time coverage of one shot with the type of cross-sectional, with surveys held in May-July, 2013.

**Modeling:** This study is verifying in nature to see the relationships between variables through hypothesis and modeling as well as solution techniques using the method of Structural Equation Modeling (SEM) analysis was utilized using Partial Least Square (PLS). PLS is part of SEM but it gives an advantage of providing sample of data being not too big, theory could be in the form of government regulation, could analyze reflexively, formatively, etc. (Chin, 2000, 2001; Yamin and Kurniawan, 2011; Glachant and Perez, 2008; Mateos-Aparicio, 2011).

**RESULTS**

Table 1 shows the characteristics of suppliers including; comparison of the number and percentage of respondents holding position in the supplier companies, number and percentage of the production and trade, the scale of supplier companies among the respondents in this study.

**Results of evaluation of measurement model:** The results of processing of all constructs of studies are descriptive and factor loading and cronbach’s alpha. Test of validity and test of reliability of instrument in the questionnaires was made by using SPSS 18. The test of samples in 30 supplier respondents which gave value of factor loading of all indicators that formed dimensions, factors or constructs already had bigger value (0.553-0.960) than 0.55 (Hair et al., 2006; Cooper and Schindler, 2008). It is concluded that all indicators are valid where value at more than 0.55 means that there is internal consistency of statements in the questionnaires that construct the entire dimensions, could be formed. Similarly, with coefficient of cronbach’s alpha all dimensions or construction with a number of questions, all bigger (0.797-0.960) than 0.60 which means all constructs are reliable.

**Evaluation of model of measuring:** Selected statements of suppliers in answer to questionnaires by 97 respondents including 30 previous respondents are re-evaluated with PLS.

<table>
<thead>
<tr>
<th>Table 1: Characteristics of supplier companies</th>
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<tr>
<td>Positions/products/scales</td>
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<tr>
<td><strong>Positions</strong></td>
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<td>Directors</td>
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<td>Managers</td>
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<td>Staff</td>
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<td><strong>Production and trade</strong></td>
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<td>Packaged foods</td>
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<td>Bottled drinks</td>
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<td>Self treatment</td>
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<td>Packaged foods and drinks</td>
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<td>Packaged foods and drinks and self treatment</td>
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<td><strong>Business scale</strong></td>
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<tr>
<td>Large (&gt;Rp 10 billion)</td>
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<td>Medium (Rp 500 million-Rp 10 billion)</td>
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<td>Small (Rp 50 million-Rp 500 million)</td>
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<td>Micro (&lt;Rp 50 million)</td>
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</table>

Data processed using SPSS 18
The validity and reliability test of the constructs of model measurement through Confirmatory Factor Analysis (CFA). The validity test is done by assessing convergent validity and discriminant validity which is derived from PLS output (Chin, 1998; Yamin and Kurniawan, 2011).

The constructs measurement model analysis of the reflective indicators attempt to test the validity of each indicator and the reliability of the overall construct while the constructs measurement model analysis of the formative indicators measured by other criteria because the loading factor can not be used to assess the validity and reliability of the formative indicators. Therefore, the constructs of the formative indicators are evaluated on the basis of substantive content and compare the statistical significance of the estimated weight (Chin, 1998; Glachant and Perez, 2008).

The discriminant test of the validity of first phase through cross loading value produced indicators which have good discriminant validity. Second phase test to evaluate the discriminant validity of construct by seeing the value of Average Variance Extracted (AVE). Based on the root value of AVE, all constructs have good discriminant validity. Output latent variable correlation is used to compare the maximum value of construct correlation with the root value of AVE. The result is dominated by construct which has higher root value of AVE than the correlation maximum value. Therefore, all constructs of dimension have good discriminant validity. Table 2 shows the value of AVE and root of AVE.

Evaluation concerning reliability of internal consistence could be examined in the value of composite reliability and cronbach’s alpha. The output of composite reliability and cronbach’s alpha shows that the value of composite reliability for all constructs is more than 0.7, indicating that all constructs in the model is estimated to meet the criteria of discriminant validity. The lowest value of composite reliability is 0.859191 on MK dimension construct. In the cronbach’s alpha, the value

### Table 2: Value of AVE and root of AVE of study construct

<table>
<thead>
<tr>
<th>Constructs</th>
<th>AVE</th>
<th>Root of AVE</th>
<th>Reliability of root of AVE:AVE</th>
<th>Good</th>
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<tbody>
<tr>
<td>KM</td>
<td>0.812337</td>
<td>0.90139740</td>
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<td>TT</td>
<td>0.589027</td>
<td>0.76748094</td>
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<tr>
<td>PM</td>
<td>0.780790</td>
<td>0.88644797</td>
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<td>Regulation</td>
<td>0.278109</td>
<td>0.52736041</td>
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<tr>
<td>RT</td>
<td>0.599505</td>
<td>0.77427768</td>
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<td></td>
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<tr>
<td>PS</td>
<td>0.594549</td>
<td>0.77107004</td>
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<tr>
<td>Competition</td>
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<td>BB</td>
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<td>0.89760125</td>
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<td>HR</td>
<td>0.768502</td>
<td>0.87664246</td>
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<td>SS</td>
<td>1.000000</td>
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<td>Buyer power</td>
<td>0.573441</td>
<td>0.75725887</td>
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<td>KO</td>
<td>0.611776</td>
<td>0.78216111</td>
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<td>KP</td>
<td>0.593164</td>
<td>0.77017141</td>
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<td>MK</td>
<td>0.559904</td>
<td>0.74424727</td>
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<td>KJ</td>
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<td>KP</td>
<td>0.501744</td>
<td>0.70833890</td>
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<tr>
<td>Relationships between PS-RT</td>
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<td>0.47005339</td>
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<tr>
<td>KE</td>
<td>0.903957</td>
<td>0.96023411</td>
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<td>KN</td>
<td>0.806223</td>
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<tr>
<td>Performance</td>
<td>0.220952</td>
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Table 3: Value of composite reliability and cronbach’s alpha

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Composite reliability (&gt;0.7)</th>
<th>Cronbach’s alpha (&gt;0.7)</th>
<th>Construct reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>KM</td>
<td>0.806308</td>
<td>0.775566</td>
<td>Good</td>
</tr>
<tr>
<td>TT</td>
<td>0.918776</td>
<td>0.808037</td>
<td>Good</td>
</tr>
<tr>
<td>PM</td>
<td>0.948103</td>
<td>0.930712</td>
<td>Good</td>
</tr>
<tr>
<td>Regulation</td>
<td>0.842474</td>
<td>0.817297</td>
<td>Good</td>
</tr>
<tr>
<td>RT</td>
<td>0.936766</td>
<td>0.924943</td>
<td>Good</td>
</tr>
<tr>
<td>PS</td>
<td>0.935881</td>
<td>0.923525</td>
<td>Good</td>
</tr>
<tr>
<td>Competition</td>
<td>0.964740</td>
<td>0.949332</td>
<td>Good</td>
</tr>
<tr>
<td>BB</td>
<td>0.802251</td>
<td>0.764979</td>
<td>Good</td>
</tr>
<tr>
<td>HR</td>
<td>0.869091</td>
<td>0.698987</td>
<td>Good</td>
</tr>
<tr>
<td>SS</td>
<td>0.966869</td>
<td>0.969997</td>
<td>Good</td>
</tr>
<tr>
<td>Buyer power</td>
<td>0.868975</td>
<td>0.806915</td>
<td>Good</td>
</tr>
<tr>
<td>KO</td>
<td>0.924955</td>
<td>0.904894</td>
<td>Good</td>
</tr>
<tr>
<td>KP</td>
<td>0.877690</td>
<td>0.839065</td>
<td>Good</td>
</tr>
<tr>
<td>MK</td>
<td>0.859191</td>
<td>0.791765</td>
<td>Good</td>
</tr>
<tr>
<td>KJ</td>
<td>0.929066</td>
<td>0.916385</td>
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<td>KP</td>
<td>0.907489</td>
<td>0.928350</td>
<td>Good</td>
</tr>
<tr>
<td>Relationships between PS-RT</td>
<td>0.969759</td>
<td>0.967184</td>
<td>Good</td>
</tr>
<tr>
<td>KE</td>
<td>0.965428</td>
<td>0.946018</td>
<td>Good</td>
</tr>
<tr>
<td>KN</td>
<td>0.925301</td>
<td>0.879787</td>
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<tr>
<td>Performance</td>
<td>0.969751</td>
<td>0.967184</td>
<td>Good</td>
</tr>
</tbody>
</table>

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recommended is more than 0.6 (Chin, 2000; Yamin and Kurniawan, 2011; Glachant and Perez, 2008). The result showed that the value of cronbach’s alpha for all constructs is more than 0.6. The lowest value is 0.698987 (HR). Therefore, it could be concluded that all constructs being tested have good reliability. Table 3 shows the value of composite reliability and cronbach’s alpha.

Result of evaluation of structural model: Hypothesis test of this study used PLS method. Figure 2 shows; first order constructs/dimensions, partnership (KM), trading terms (TT), nurturing (PM), competition between modern retailers (RT), competition between suppliers (PS), additional cost (BB), price fixing (HR), sanction (SS), commitment (KO), conflict (KP), conflict resolution (MK), cooperation (KJ), trust (KP), financial performance of suppliers (KE), non financial performance of suppliers (KN); second order constructs/factors: Regulation, competition, buyer power, third order constructs/factors: Relationships between suppliers and modern retailers (PS-RT) and fourth order construct/factor: Performance of suppliers.

Latent variables in this study constitute multidimensional construct. Each of the constructs, first order dimension is each measured with indicators of KM1 upto KN3 which are fit, second order factor of regulation is measured with dimensions of KM, TT and PM, competition factor is measured with dimensions of PS and RT, factor of buyer power is measured with dimensions of BB, HR and SS, third order factor of relationships between PS-RT is measured with dimensions of KO, KP, MK, KJ, KP, fourth order factor of performance of suppliers is measured with dimensions of KE and KN. In addition competition factor is also measured with regulation factor and factor of relationships between PS-RT measured with factors of regulation, competition and buyer power and factor of supplier performance is measured with factor of relationships between PS-RT.
Fig. 2: Relationships between factors/constructs, dimensions and indicators of study

**Effect of factors, path coefficients, t-statistics and significances:** Based on evaluation of structural model coefficient, values of path coefficient, values and t-statistics of all constructs could be determined that relationships between variables and impact of variables on other variables (significance), strength of relationships between variables, effect of independent variables on dependent variables to test the hypothesis of the study, could be seen (Yamin and Kurniawan, 2011; Glachant and Perez, 2008). Table 4 shows effect of factors, path coefficients, t-statistics and significances.
Table 4: Effect of factors, path coefficients, t-statistics and significances

<table>
<thead>
<tr>
<th>Effect of factors/constructs</th>
<th>Path coefficients</th>
<th>t-stat.</th>
<th>Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effect of regulation on competition</td>
<td>0.421</td>
<td>2.191</td>
<td>p&lt;0.05</td>
</tr>
<tr>
<td>Effect of regulation on relationships between PS-RT</td>
<td>0.102</td>
<td>2.901</td>
<td>p&lt;0.05</td>
</tr>
<tr>
<td>Effect of competition on the relationships between PS-RT</td>
<td>0.366</td>
<td>5.246</td>
<td>p&lt;0.05</td>
</tr>
<tr>
<td>Effect of buyer power on the relationships between PS-RT</td>
<td>0.066</td>
<td>2.005</td>
<td>p&lt;0.05</td>
</tr>
<tr>
<td>Effect of dimensions of KO, KF, MK, KJ, KP on relationships between PS-RT:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commitment-KO</td>
<td>0.164</td>
<td>2.005</td>
<td>p&lt;0.05</td>
</tr>
<tr>
<td>Conflict-KF</td>
<td>0.064</td>
<td>2.184</td>
<td>p&lt;0.05</td>
</tr>
<tr>
<td>Conflict resolution-MK</td>
<td>0.085</td>
<td>2.804</td>
<td>p&lt;0.05</td>
</tr>
<tr>
<td>Cooperation-KJ</td>
<td>0.244</td>
<td>5.152</td>
<td>p&lt;0.05</td>
</tr>
<tr>
<td>Trust-KP</td>
<td>0.346</td>
<td>6.442</td>
<td>p&lt;0.05</td>
</tr>
<tr>
<td>Effect of relationships between PS-RT on suppliers performance</td>
<td>0.998</td>
<td>449.631</td>
<td>p&lt;0.05</td>
</tr>
</tbody>
</table>

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Effect of regulation on competition: The result of test of structural model confirms that factor of regulation has its effect on factor of competition, having positive direction and statistically significant. The path coefficient has quite high value, correlation is positive and quite strong. Result of hypothesis test in the evaluation of structural model confirms the answer to the question about the goals of study that the influence of regulation on competition is quite strong.

Effect of regulation on relationships between PS-RT: The result of tests of structural model confirms that the factor of regulation has its effect on factor of relationships between suppliers and modern retailers (PS-RT) having positive direction and statistically significant. The path coefficient has low value, correlation is positive and weak. The result of hypothesis test in the evaluation of structural model confirms the answer to the question about the goals of research that the effect of regulation on the relationships between PS-RT is weak.

Effect of competition on the relationships between PS-RT: The result of test of structural model confirms that the competition factor has its influence on factor of the relationships between PS-RT. The path coefficient has quite high value, correlation is positive and quite strong. The result of hypothesis test in the evaluation of structural model confirms the answer to question about the goals of the study that the effect of competition on the relationships between PS-RT is quite strong.

Effect of buyer power on the relationships between PS-RT: Result of test of structural model confirms that the factor of buyer power has its influence on factor of relationships between PS-RT. The path coefficient has low value, correlation is positive and weak. Result of hypothesis test in the evaluation of structural model confirms the answer to question about the goals of the study that the effect of buyer power on the relationships between PS-RT is weak.

Effect of dimensions of KO, KF, MK, KJ, KP on the relationships between PS-RT: Result of test of structural model confirms that the five dimensions (dimensions-formative form) namely, commitment-KO, conflict resolution-MK, cooperation-KJ, trust-KP have effect on factor of relationships between PS-RT. The effect of the five dimensions on the relationships between PS-RT range from weak to quite strong. Trust has the greatest effect.
Effect of relationships between PS-RT on suppliers performance: Result of test of structural model confirms that factor of relationships between PS-RT has effect on factor of the supplier performance. The path coefficient has very high value, correlation is positive and very strong. Result of hypothesis test in the evaluation of model structural confirms the answer to question about the goals of study that the effect of relationships between PS-RT on the performance of suppliers is very strong.

Evaluation of goodness of fit: Evaluation of goodness of fit with PLS method using interpretation of R-square. Based on the result of analysis, together factors of regulation, competition, buyer power, dimensions of KO, KF, MK, KJ, KP could explain the variability of factor of relationships between PS-RT upto 98.92%, with 1.08% is explained by other variables, not studied in this model. Factor of relationships between PS-RT could explain the variability of factor of performance perception as much as 99.54%, with 0.46% explained by other variables not studied in this model. Chin, (1998) in Yamin and Kurmiawan (2011) stated that the criteria of the value of R-square in three classifications including value limit 0.67 (substantial), value limit 0.33 (moderate) and value limit 0.19 (weak). Therefore, the harmony of model shows the difference between values being studied and values estimated by model well and substantially carried out.

DISCUSSION

Based on studies, empirical factors have effect on the relationships between suppliers-modern retailers and impact on the performance of suppliers in Jakarta and its surrounding areas. Regulations including (Peraturan Presiden Republik Indonesia, 2007 and Peraturan Menteri Perdagangan Republik Indonesia, 2008) have greater details on partnership, trading terms and nurturing while supervision of consumer welfare and protection with the Law Number 5/1999, on prohibition of monopoly and unfair business competition and the Law Number 8/1999, on protection of consumers. The regulations rule that cooperate between suppliers-modern retailers, must be implemented under the principle of mutual benefit, clear, reasonable, fair and transparent and trading terms must be clear, reasonable, fair, mutually beneficial and agreed upon by both sides without pressure. Regulations have effect on the relationships between suppliers and buyers in interaction of exchange between the two sides. Profit between the two sides could often be explained through bargaining power where there is transactions (Maloni and Benton, 1999; Den Hertog, 1999; Stigler, 2003; Nugroho, 2012).

In practice, modern retailers apply unilateral terms in determining partnership, trading terms, imposition of cost or discount, promotional cost and change in the form of sales contract on suppliers. The fact would have effect on partnership and competitiveness of suppliers and would distort competition in market of suppliers, on the other hand the supervision and development are not sufficiently effective. In order that the regulation is effective, it is necessary to promote the presidential regulation and the regulation of the trade minister into laws, as law regulations are more binding for business players or policy makers in retail industry. Sanctions, process of law enforcement and the law enforcers must be determine in greater details in the law regulation. As for the law enforcers, there must be an institution which functions specially to uphold the law. Through the model, the position of controlling retail industry would be very strong and would be very strong to bind all stakeholders in retail industry (KPPU, 2009).

Effect of competition on relationships between PS-RT: Result of survey confirms that competition has its effect on the relationships between suppliers and modern retailers and the
impact is strong but not sufficiently effective. The finding in the study on competition confirms the opinion that competition tends to create the potential of collaboration of closer relationships between suppliers—modern retailers in supply chain and encourage development of products and improvement of quality, price reduction, flexibility, service and innovation (Maloni and Benton, 1999; Reardon and Berdegué 2006; Zhang et al., 2005; OECD, 2007; Hill and Lladro, 2012). Structure of industry determines the characteristics of organization in competition which in the end, determines the ability to chalk up profit. The model of five forces of Porter including competition, bargaining power of suppliers, bargaining power of buyers, threat from new entrants and threat of substitution products and services, make the industry interesting and potential to earn profit to compete (Porter, 2004).

In practice, partnership often causes distortion of market mechanism because of competition among modern retailers and among suppliers, resulting in violation of regulations (Muslimin and Nuryati, 2007). Modern retail industry in Indonesia has a structure of oligopoly with a fairly high concentration. Normally, in facing tight competition, modern retailers in Indonesia would find strategic location for their outlets, provide goods as complete as possible, use high technology, offer cheaper prices, launch promotion through the mass media and hold trade in program, offer shopping card, provide private labels and trade conditions (Pandin, 2009).

**Effect of buyer power on relationships between PS-RT:** The result of study confirms that buyer power has its effect on the relationships between suppliers and modern retailers. However, the effect is not significant. The finding from the study confirms opinion that buyer power in relationships between suppliers and modern retailers could absorb suppliers’ surplus with discount and cost to be paid by suppliers. Such condition could weaken the competitiveness of the suppliers and cause distortion of competition in the market of suppliers. Suppliers will reduce investment and spending on development of new products or innovation, resulting in a decline in the quality of products and there would be less choices for consumers (Dodd and Asfaha, 2008; Chen, 2008; OECD, 2008; Ehmke et al., 2009; Nicholson and Young, 2012). Buyers have power especially big buyers as large purchases, concentration and bargaining power are significant to force price cut and relaxation of terms in their favor as the suppliers do not want to lose their potential customers. The suppliers are in a weak position that the relationships becomes asymmetry (UK Competition Commission, 2000; Dodd and Asfaha, 2008; Chen, 2008; Ehmke et al., 2009).

In practice, when buyers power is used, suppliers would accept unfair trade conditions demanded by the buyers. The suppliers could not reject on fears of sanction imposed by the buyers. That is a violation of competition policy (UK Competition Commission, 2000; Dodd and Asfaha, 2008).

**Competition policy, the law/5/1999 and protection of consumers Law/8/1999 in Indonesia could be used to deal with such violation as it would have negative effect on the welfare of the people and or consumers as the main objective of competition policy. Protection of consumers and competition are two different things which are interrelated and supporting each other. Cheap prices, high quality and good services are three basic things for consumers and competition constitutes the best way to guarantee creation of such condition them. Therefore, competition law certainly must be in line with or support the law on consumer protection (KPPU, 2009).**

**Effect of dimensions of KO, KF, MK, KJ, KP on relationships between PS-RT:** Result of study confirms that the five dimensions of formative forms-commitment, conflicts, management
of conflict, cooperation, trust have effect on the relationships between suppliers and modern retailers. The effect could be weak or quite strong. Results of research show that the most important dimension with greater effect among the five formative factors is trust.

The finding from the study about the dimensions of KO, KP, MK, KJ, KP, corroborate opinion that a number of main parameters that make relationships between buyers and suppliers become integrated are commitment, conflict, conflict resolution, cooperation, trust and information technology (Maloni and Benton, 1999; Duffy and Fearne, 2006; Sheu et al., 2006; Wu et al., 2011). Strategic association between modern retailers and suppliers could be used to anticipate changes and needs good management. Operational association and strategic association are needed in placing trust and make commitment in collaboration and the effect on supply chain. It is also necessary to foster trust and commitment in work to be able to form strategic association in supply chain and that would benefit the partners (Ryu et al., 2009).

**Effect of relationships between PS-RT on the performance of suppliers:** Result of study confirms that relationships between suppliers and modern retailers has effect on the performance of suppliers and the effect is very strong. The finding from the study is related to the construct of financial performance and non financial performance. Implementation of financial performance and non financial performance could improve the performance of suppliers and modern retailers. The most important factor with greater effect among the two factors of performance is non financial performance. The higher the level of integration of relationships of business players would result in better performance (Maloni and Benton, 1999; Duffy and Fearne, 2006; Ou et al., 2010).

In practice, asymmetry of powers or power imbalance is difference in powers between one and other parties. Relationships of asymmetry of powers is a relationships in which one has greater power than the other and conflict is potential hampering cooperation between both sides. The power that hurts suppliers does not always comes to surface. Suppliers would seek to correct the imbalance. Asymmetry of powers could be controlled by buyers for better performance of suppliers (Maloni and Benton, 1999; Casciaro and Piskorski, 2005; Schepers, 2007).

**CONCLUSION**

Regulations have strong effect on competition showing the importance of regulations in determining whether competition is good or bad. However, the impact of regulations is not effective partly because the regional administrations have not succeeded in fully or effectively arranging zonation and distance between retail modern outlets and weak regulation on licensing procedure that competition is not conducive.

Regulations have weak effect on the relationships between suppliers and modern retailers as indicated by the domination of the bargaining power of modern retailers resulting in imbalance in the relationships between suppliers and modern retailers despite the regulation on competition. The weak impact is caused by regulation being not effective, not firm in slapping sanctions and implementation being not clear.

Competition has fairly strong impact on the relationships between suppliers and modern retailers. The tighter the competition the closer would be the relationships between suppliers and modern retailers. However, the effect of competition in its implementation is determined more by the characteristics of modern retailers in competition which are expansive in building up its bargaining power that the bargaining power of supplier is weak facing modern retailers.
Buyer power has weak effect on the relationships between suppliers and modern retailers. As shown by the study, not all aspects of the relationships between suppliers and modern retailers are influenced by the buyer power. The effect of buyer power is marked only by the big cost burden imposed on suppliers.

Relationships between suppliers and modern retailers has strong impact on the performance of suppliers. Asymmetry in power which is controlled by modern retailers causes strong effect of relationships between suppliers and modern retailers on the performance of suppliers in improving the performance of suppliers.

Further studies are recommended to analyze the effect of buyer power on small and medium scale suppliers and to see the variations of the relationships between suppliers and modern retailers. Other studies needed include factor making regulations not effective on zonation, operating time of stores and distance between outlets of modern retailers.

Big suppliers and those selected by modern retailers have showed an improvement in performance but other suppliers such as micro and small suppliers have remained in the doldrums. Therefore, improvement is necessary in (Peraturan Presiden Republik Indonesia, 2007; Peraturan Menteri Perdagangan Republik Indonesia, 2008) and in the implementation of the competition policy UU6/1999. The regulations have to be properly implemented and there should be coordination between the central government and the regional administrations. Socialization needs to be intensified and violations should be strictly dealt with sanction.

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