

Thriving in the Competition? How Value Chain Governance Affects the Economic Performance of SMEs in Kasongan Pottery Cluster

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List of Acronyms

Disperindagkop	Dinas Perindustrian Perdaganan dan Koperasi Department of Industry, Trade and Cooperation
LED	Local Economic Development
NGOs	Non-Governmental Organisations
SMEs	Small and Medium Enterprises
UPT	Unit Pengendali Teknis Technical Service Unit
VC	Value Chain

Abstract

The insertion of small and medium enterprises (SMEs) in developing countries into global value chains is often associated with significant increases in income and economic growth. However, this view has been continuously challenged due to the growing inequality between lead firms in developed countries and local suppliers in developing countries. The governance within the value chain is argued to have significant influence on the distribution of economic rents among various actors along the chain. This research seeks to analyse the effect of value chain governance on the economic performance of SMEs in Kasongan pottery cluster through learning and upgrading as mechanisms to achieve higher economic rents. The research also observes how the institutional environment embedded in the cluster is operating. Furthermore, throughout the discussion, the study pays attention to the dynamics that occurred among different actors.

The research argues that given the institutional environment has not yet matured enough to promote competitiveness and prevent SMEs from market volatility; value chain governance has considerable influence on the learning and upgrading opportunities. Therefore, it has a say on the economic performance of SMEs. However, the study also finds some exceptions and dynamics that show a mixed picture of the realities. It further highlights some methodological challenges in the application of the theories and suggests modification for further research.

Relevance to Development Studies

Debate on whether globalisation brings positive impacts for the majority of people or whether it only re-affirms the power of few capitalist societies is a key theme in development studies. Many such studies are concerned with the impacts of the insertion of small producers in developing countries in the global market. This research contributes by both adding and nuancing the existing literatures on this subject. It argues that insertion into the global value chain should be promoted as an attempt to expand the market but not to depend on it. Moreover, in order not to lose in the global economy, firms in developing countries should attempt to capitalize on the highest value added activities or push towards fair distribution of economic rents along the chain.

Keywords

Value chain, value chain governance, learning, upgrading, economic performance, small and medium enterprises (SMEs), and cluster.

Chapter 1 Introduction

1.1 Research Problems

Globalisation has significantly changed the world's economy for allowing relocation of production to the cheapest possible place. As a result, many transnational corporations opted to focus on building their core competencies and outsource the non-core functions to external suppliers, mostly located in developing countries (Altenburg 2006, Gereffi 1994, Gereffi 2011, Gereffi et al. 2001, Gibbon 2001, Gibbon et al. 2008, Helmsing 2000, Humphrey and Schmitz 2000, Schmitz 2004). For the majority who live in developing world, this transfer of activities presumed as a way to lift up their industrial growth (Kaplinsky and Morris 2001: 1). Thus, insertion to global economy has been generally associated with opportunities for significant increases in income and economic growth. However, scholars (Helmsing and Vellema 2011, Kaplinsky 2000, Kaplinsky and Morris 2001) further noticed the inequality experienced within and between countries. They showed that those who loose in the globalised market are not only those who are excluded from the global market but also those who are participated in it. To understand this, value chain analysis offers insight to the issue because it 'focuses on the dynamics of interlinkages within the productive sector, especially the way in which firms and countries are globally integrated' (Kaplinsky and Morris 2001: 2).

Value chain is the full set of activities performed to make a product or service from its conception, production, delivery to end consumer, and disposal (Kaplinsky and Morris 2001: 4). The diverse actors participated in the value chain need to interact in certain way for the chain to function well. Hence, governance played an important role to the distribution of production activities and value added shares. The notion of governance in the value chain is defined by Humphrey and Schmitz (2001: 20) as 'inter-firm relationships and institutional mechanisms through which non-market coordination of activities in the chain takes place'. Gereffi et al. (2005: 83-84) identified five typologies of governance pattern in value chain, which are markets, modular, relational, captive, and hierarchy. Those typologies are based on the analysis of three factors, i.e. (i) the complexity of transaction, (ii) the ability to codify transaction, and (iii) the capabilities in supply-base, that influence the decision of lead firms whether to outsource or to keep production in-house and the degree of explicit coordination needed.

Nevertheless, unequal rents distribution among actors within the value chain implied that value chain is not merely about coordination of an integrated process of transforming idea into final product. Altenburg (2006: 517) argues that value chain governance is a matter of different power constellation among actors with diverse interests which result in various development outcomes in the areas of i) domestic consumer price and quality of supply; ii) entry barriers and opportunities for inclusion; iii) income generation and distribution; iv) allocation of risks; v) learning and upgrading; vi) public revenues; and vii) long-term competitiveness. He highlights the political economy side of value chain governance that tends to create winners and losers. As an implication, the governance style of lead firms in the global value chain has effects towards the performance of suppliers. The question that arises is whether insertion into global value chain always gives better opportunities and creates higher economic growth or does value chain governance matter.

The present research attempts to analyse how value chain governance affects the economic performance of small and medium enterprises (SMEs). The influence of value chain governance towards firm's economic performance is observed by connecting the learning and upgrading opportunities offered by lead firms. Gereffi (2005 as cited in 2014: 18) defined upgrading as 'the process by which economic actors -firms and workers- move from low-value to relatively high-value activities in global value chains'. By performing upgrading, firms shall be able to sustain their competitiveness and capture greater value added. Linking the value chain governance towards upgrading, Humphrey and Schmitz (2002: 1020) contend that governance pattern influence upgrading opportunities. Thus, different types of value chain governance lead to different upgrading trajectories, and therefore, result in different economic rents enjoyed by firms. Moreover, the research pays attention to the institutional environment embedded in the cluster as it is argued to also have influence on the chain governance and learning and upgrading opportunities.

The research chose Kasongan pottery cluster in Yogyakarta, Indonesia as a case study because the cluster is known to have a firm link with other institutions inside and outside the cluster (Ismalina 2011: 62-63, Tambunan 2008: 133-134). It was acknowledged that the development of Kasongan cluster fostered after its participation in global market. The origin of pottery in Kasongan can be dated back in 1675. Started as a survival-oriented home industry, it made first contact with global market in 1987. From then, it has become the home of the global pottery production. The long established industry and its solid link with global market, served as a fair basis to observe the different patterns of value chain governance. Moreover, according to their end customers, SMEs within the Kasongan cluster can be classified into serving domestic, international, and both markets. By distinguishing the sample of the research; analysis was done towards which type of market gives optimum economic rents for SMEs.

1.2 Relevance and Justification

Promotion of a more socially inclusive value chain with higher economic rents, wages, and competitiveness remains as high priority of policy intervention in many developing countries (Altenburg 2006: 516). Previous researches on pottery industry in Yogyakarta have been focused on the relation between SMEs and clusters (Ismalina 2011, Ismalina 2012, Tambunan 2005, Tambunan 2008, Tambunan 2009, Tambunan and Supratikno 2004). Whereas the success of Kasongan cluster is marked by its ability to participate in global market; it is important to analyse the industry through the lens of value chain analysis. However, only limited research used value chain perspective to analyse the firms in Kasongan. One recent research by Fransen (2013), linked the global value chain and local innovation as source of firms' innovation. This research aims to fill the gap, highlighting the governance patterns in value chain and its effect on the economic performance of SMEs. Analysing the dynamic flow of economic activities, resources and rents among different actors within the chain, the research is further relevant for policy makers. The research findings provide consideration for the formulation of development policies that the institutional configurations need to be set up for SMEs to be able to learn and upgrade despite their currently engaged value chain governance.

1.3 Research Objectives and Questions

The objective of the research is to analyse the effect of value chain governance patterns on the economic performance of SMEs through learning and upgrading as a mechanism which assist SMEs to capture higher economic rents. The main question of the research is:

'How does value chain governance affects the economic performance of small and medium enterprises in Kasongan pottery cluster, Yogyakarta, Indonesia?'

To further elaborate the main question, there are four sub-questions:

- 1. What are the value chains and types of value chain governance engaged by SMEs in Kasongan pottery cluster?
- 2. How is the institutional environment embedded in the Kasongan pottery cluster operating?
- 3. How value chain governance assists learning and upgrading process for SMEs in Kasongan pottery cluster?
- 4. How economic performance differs for each type of value chain engaged by SMEs in Kasongan pottery cluster?

1.4 Scope and Limitations

A desirable analysis on the value chain governance should involve all actors participating within the vertical chain. However, the sample of this research is limited to the SMEs operating in the Kasongan. Hence, the governance patterns being observed are limited to SMEs' first-tier suppliers and first-tier buyers. In addition, identification of lead firms is derived from the perspectives of the respondents.

The research attempts to study the effect of value chain governance on the economic performance of SMEs. Nevertheless, it is not possible either to measure impact precisely or to provide a definite attribution about one factor. Having acknowledged that there are other factors that might have impacts on the economic performance of SMEs, the framework being developed in this research focuses on the influence of value chain governance in assisting learning and upgrading process as mechanism to achieve higher economic rents.

1.5 Structure and Argumentation of the Paper

The paper starts with an introductory chapter that gives overview of the issue, the questions, and the scope and limitation of the research. The second chapter elaborates on the theory and concepts being contested. Unwrapping the discourse on the concepts of value chain governance, learning, upgrading, firms' economic performance and institutional environment; this chapter draws connection among theories and formulate an analytical framework. The discussion on the research method, data collection and data analysis are presented in chapter three. Chapter four analyses the value chain governance and the institutional environment observed; whereas chapter five untangles the implication of those two factors towards learning, upgrading and economic performance of SMEs. The last chapter summarizes the findings and posts conceptual reflections and developmental impacts.

In a nutshell, the research argues that value chain governance has considerable influence on the learning and upgrading experienced by SMEs in Kasongan, given that the institutional environment is not yet matured enough to promote competitiveness and prevent them from market volatility. However, the study also finds some exceptions and dynamics that show a mixed picture of the realities. It further highlights some methodological challenges in the application of the theories and suggests modification for further research.

Chapter 2 Literature Review

2.1 Illustrating the Framework

This research posts the question of whether the economic performance of SMEs is affected by the types of value chain governance that they are engaged in. The impact on economic performance is measured by three factors; the productivity, the profitability and the ability of SMEs to access the market. Value chain governance is studied using Gereffi et al. (2005: 82-88) typologies of market, modular, relational, captive, and hierarchy. To understand the relation between the value chain governance and economic performance, learning and upgrading are used to explain the relationship. By this, the research observes the degree of assistance provide by lead firms for their suppliers to gain learning and perform upgrading. The analysis on how different value chain governance leads to different upgrading opportunities is explored using the proposition by Humphrey and Schmitz (2002: 1023-1024)

Furthermore, firms are not operating in a vacuum; hence, this research also engages with the institutional environment embedded by SMEs in Kasongan. Global production network (GPN) theory emphasizes the importance of institutions surrounding the firms (Barrientos et al. 2010, Henderson et al. 2002, Hess and Young 2006), since their actions potentially influence the economic and social performance of the firms. Moreover, the research also gives attention to the dynamic dimension, which is the shift that took place in terms of governance patterns, upgrading, and economic performance. It should also be kept in mind that a single firm might be engaged in many types of value chain governance at the same time. Thus, the dynamics are not only on how firms move from one type of value chain governance to another, from time to time, but also on how firms utilize the learning from a certain type of governance to move to other types of governance on different value chain at the same time.

The following six sections elaborate each concept studied in this research. Consolidation of the concepts posted at the end of this chapter illustrates the analytical framework and concludes the expected findings drawn from literatures.

2.2 Value Chain Governance

The rise of global buyers in 1970s marked changes in the world economy as they started to relocate their production to less developed countries. Over time, firms' vertical integration, which represents a full in-house production, is increasingly abandoned. Redefining their core competencies, transnational firms capitalize more on the highest value added activities such as innovation, branding and marketing. The generic non-core functions, for example volume production, are then transferred to suppliers in the cheapest possible place. (Altenburg 2006, Gereffi 1994, Gereffi 2011, Gereffi 2014, Gereffi et al. 2001, Gereffi et al. 2005, Gibbon et al. 2008, Humphrey and Schmitz 2000). The changing nature of this global industry is mainly studied by scholars using the framework of global value chain analysis (Gibbon et al. 2008, Kaplinsky 2000, Kaplinsky 2004, Kaplinsky et al. 2002, Morrison et al 2008, Schmitz and Knorringa 2000). Value chain is 'the full range of activities which are required to bring a product or service from conception, through the different phases of production (involving a combination of physical transformation and the input of various producer services), delivery to final consumers, and final disposal after use' (Kaplinsky and Morris 2001: 4). Within a value chain, the firms that exercise more power in influencing other firms are called *lead firms* (Altenburg 2006: 499). The strategy of lead firms towards other firms in its upstream and downstream networks, showed a variety of governance patterns.

There are three main approaches to understand the notion of governance in the global value chain discourse namely (i) governance as driving, (ii) governance as coordination, and (iii) governance as normalization (Gibbon et al. 2008: 319). Governance as driving was first introduced by Gereffi (1994: 95-100) based on his studies on the behaviour of global firms in 1970s-1980s. He defines governance as the 'authority and power relationship that determine how financial, material, and human resources are allocated and flow within a chain'. Two ideal types of governance patterns arose were given term as producer-driven and buyer-driven. The producer-driven chains were commonly found in large manufacturing industries such as motor vehicles. The high technological and capital requirements of this industry created entrybarriers and reinforced the status of large manufacturer as lead firms. On the other side, buyer-driven chains were typically existed in labour-intensive industries. Here, major retailers, brand-merchandiser and trading companies set up the parameters of the production networks.

The dichotomy of value chain governance as producer-driven and buyer-driven received several criticisms (Gibbon et al. 2008: 321). Firstly, it was considered to be too narrow and excessively abstract. Secondly, the buyerdriven chains were seem to be found even in capital-intensives industries as large brand of automobiles, computers, and consumer electronics increasingly outsource their production not only on the components but also on the final assembly. Thirdly, rather than being entirely producer-driven or buyer driven, a single value chain is, in fact, consisted of several distinct threads which experienced different governance. The different in product sub-type, institutional configuration, and end-market segment are affecting the governance of lead firms. Lastly, external actors outside the chain such as government, NGO, expert and certification bodies did played an important role in steering the chain governance. These critiques lead to the emergence of the other two approaches, i.e. governance as coordination and governance as normalization.

Governance as coordination, posted by Gereffi et al. (2005), was built from the definition of governance by Humphrey and Schmitz (2001: 20) as 'inter-firm relationships and institutional mechanisms through which nonmarket coordination of activities in the chain takes place'. Thus, governance characterized the form of inter-firm exchange coordination at the specific node of the chain, which is the immediate level of lead firms with their first-tier suppliers. Apart from the formerly known market and hierarchy coordination, they add three types of governance pattern – modular, relational, captive – that operates between those two extremes. Three factors, i.e. (i) the complexity of transaction, (ii) the ability to codify transaction, and (iii) the capabilities in supply-base, were argued to be the determining factor of lead firms strategy towards its suppliers (2005: 84-88). Assigning the value of low and high to the three factors, the five possible types of value chain governance are explained as follows:

Governance type*	Complexity of transactions	Ability to codify transactions	Capabilities in the supply-base	Degree of explicit coordination and
				power asymmetry
Market	Low 🔥	High	High	Low
Modular	1 High 2	A High ↓	∧ High	^
Relational	∳ _{High} I	3 Low \checkmark	5 High 6	
Captive	High	High	Low	\checkmark
Hierarchy	High	Low	Low	High

Table 2.1 Determinants and Dynamics of Value Chain Governance

* Though eight combinations can be drawn from three variables, the combination of low complex product and hardly codified transaction is less likely to occur. Thus, omit two possible combinations. Furthermore, the combination of simple and easily codified transaction with low capabilities of suppliers will result in exclusion of those suppliers from the value chain. Therefore, does not form a governance pattern.

Source: Gereffi et al. (2005)

Markets. Market coordination does not need to be fully temporary as in traditional spot market. Frequent transaction can persist as long as it is relatively easy and inexpensive for both parties to switch to new partners. Products with low complexity, easily codified, and many capable supplier will likely to be governed in market coordination.

Modular value chains. Suppliers within these networks produce a complex product as specified by buyer and are fully responsible for the technology and capital outlay to produce the product. However the transaction is easily codified mainly due to the application of standards. Hence, products fall within this type of value chain governance are usually a modules or standardises product which can be used by many buyers to further make more diverse end product.

Relational value chains. This type of governance emerges when there are capable suppliers to produce a complex product but the transaction is difficult to codify because of the tacit knowledge needed. Mutual dependence between suppliers and buyers emerges from the complex and intensive interaction. Thus, maintaining relational value chain is often regulated through trust, reputation, proximity, family, and ethnic ties.

Captive value chains. When an easily codified complex product does not have capable supplier, lead firms need to invest in assisting suppliers' competencies. Therefore, lead firms will likely to lock-in the supplier, creating high degree of dependencies in order to prevent other firms benefiting from their investment. Captive value chain is commonly characterized by lead firms performing excessive monitoring and control but also providing suppliers with adequate resources and market which make exit as an unattractive option.

Hierarchy. This vertical coordination takes place when the product is complex, hardly codified, and a capable supplier is absent. In this case, lead firms have no option but to build in-house production. The hierarchy form of governance is characterized by managerial control from headquarters to subsidiaries.

Moreover, value chain governance is dynamic, neither static nor industry specific. There are six trajectories (Gereffi et al. 2005: 90), as indicated in table 2.1, in which value chain governance can move from market towards hierarchy and vice versa. Trajectories 1 and 2 occur when the products become more or less complex and affect the suppliers' capabilities. Trajectories 3 and 4 arise due to the better codification or de-codification of transaction as a result of standards application. Lastly, trajectories 5 and 6 emerge in relation to changes in suppliers' competence. In addition, since the governance is observed in the immediate level of inter-firm exchange, different types of value chain governance might be found present in different nodes of a single value chain.

The five typologies of governance have been widely utilized (Altenburg 2006: 503, Gereffi 2014: 14) because it shows quite the changes of governance pattern as the industry evolves and how it varies from one stage to another on the chain. However, this tool is not without criticism. Methodologically, the challenge in dealing with parameters is the subjectivity of researcher when deciding whether a specific reality fits in one category or the other. In classifying the type of value chain governance with high and low value on three factors as parameters (see table 2.1), how low is low or how high is high is subject to the individual researcher's judgement, not even Gereffi et al. (2005) gave a specific classification instruction on this. Hence, researchers should deliberately disclose as clear as possible their research method so that readers are convinced by the argument in the findings and conclusions¹.

Moreover, though acknowledging the practicality of the five classifications, Altenburg (2006: 503-507) argues that it omits several other important factors which influence lead firms in their outsourcing and coordination strategy. Those factors are '(i) core competences and complementarity of production, (ii) relationship-specific investment, (iii) market transparency and search costs, (iv) uncertainty about market development, (v) the market structure, (vi) institutional framework conditions, (vii) capital intensity and the cost of capital, and (viii) consumer demands. Furthermore, he underlined that the political economy dimension of value chain governance should also be taken into account. The diverse interest and its potential conflict that might arise among actors, indicates that value chain is not merely a matter of coordination (Altenburg 2006: 517).

Another critique to the typology of governance rose by scholars (Bair and Peters 2006, Gibbon 2008, Ponte 2007), contested the exclusion of external parties in the governance analysis. These scholars contended that certain external 'actors', such as government, NGOs, and certification agencies have sufficient power to alter the governance within a value chain. This criticism leads to the third definition of governance as normalization. The term

¹ See footnote 2, page 20, for empirical implication on this research.

is understood as 'a project of re-aligning a given practice so that it mirrors or materializes a standard or norm' (Gibbon et al. 2008: 324). The argument of this approach comes from the convention theory which as 'sets of mutual expectations that draw on a variety of criteria of justice or 'worth' in order to lend normative sense to decisions and actions occurring in relation to management, production and consumption' (Gibbon et al. 2008: 325). The theory enables value chain governance to be analysed both in immediate environment where actors operate as buyers and suppliers and in wider context influencing the designation attached to the products and services. This framework provides direction for what actions should be taken by lead firms when governing the chain and the qualities should owned by suppliers if they want to be included in the chain.

2.3 Learning

According to Nooteboom (2004: 3) the process of learning requires the interpretation of information in a cognitive framework. By this, information is transferred into knowledge. It further explains how the way people interpret and evaluate is influenced by their previous contact with different social and physical environment. Thus, it determines the absorptive capacity (Cohen and Levinthal 1990 as cited in Nooteboom 2000: 71). The term 'absorptive capacity' is understood as 'the dynamic capability pertaining to knowledge creation and utilization that enhances a firm's ability to gain and sustain a competitive advantage' (Zahra and George 2002 as cited in Fransen 2013: 4). Similar to people, firms as an institution are also experienced learning. The rivalry of lead firms in capturing market shares requires them to set a distinct product specification as marketing strategy. Thus, lead firms have profound interest in protecting their reputation by maintaining their product quality and compliance with various standards. These demands indeed entail a transfer of information on the relevant parameter to suppliers.

Operating in a value chain structures, there are three mechanisms by which suppliers can gain learning (Altenburg 2006: 513-515). First is the learning through increased pressure where suppliers need to independently acquire new knowledge due to competition. In this case, suppliers are required to work by themselves in order to secure their place in the value chain. The second mechanism is learning through deliberate knowledge transfer from lead firms. This mechanism happened only when several of these conditions are met: (i) the required product is not available, (ii) vertical integration is inefficient, (iii) lead firms has the relevant expertise to offer, (iv) there are adequate gains from the knowledge-transfer investment, and (v) no risk of supported supplier to challenge and become the competitor of lead firms. Lastly, learning can also be obtained from unintended spillovers. In the situation where suppliers are able to utilize the information obtained from their cooperation with lead firms to improve their capabilities or performance in other sectors, unintended knowledge-spillovers are deemed to have occurred.

2.4 Upgrading

The actual capitalization of learning in economic activities of firms can be objectively measured by observing the upgrading that takes place. Economic upgrading is defined by Gereffi (2005 as cited in 2014: 18) as 'the process by which economic actors -firms and workers- move from low-value to relatively high-value activities in global value chains'. Humphrey and Schmitz (2002: 1020) highlighted four types of upgrading, i.e. process, product, functional and chain upgrading.

Process upgrading: firms are able to produce more efficiently by reorganizing its production line or utilizing more advanced technology.

Product upgrading: firms are competent in gaining increased unit values from the production of better quality or more diverse product.

Functional upgrading: firms are capable to perform new function such as design or marketing to increase their shares on the value chain.

Inter-sectoral or chain upgrading: firms are able to participate into new productive activities, open new market and increase their profits.

Furthermore, deduced from the experiences of clusters inserted in the global value chain, Humphrey and Schmitz (2002: 1023-1024) linked the different types of value chain governance to the different path of upgrading opportunities and concluded three different propositions:

Quasi-hierarchical or captive value chain offers favourable conditions for radical product and process upgrading but limits functional upgrading. This is due to the high level of intervention by lead firms in assisting suppliers to produce the products they need; whereas at the same time limit the knowledge transferred to the extent that the upgraded suppliers will not challenge lead firms' core competencies.

Market-based relationship will likely show slower process of product and process upgrading but offer possibilities for functional upgrading. The absence of high degree of explicit coordination from lead firms left the product and process upgrading in the hands of suppliers; resulting in incremental process of upgrading. However, the absence of dominant lead firms, open the possibilities for functional upgrading.

Balanced network or relational value chain offers ideal upgrading opportunities. The intense interaction with mutual dependence and relatively even power constellation gives the best possibilities to perform four types of upgrading. However, relational value chain emerges when suppliers have high capabilities in producing a complex product that is difficult to codify in which suppliers in developing countries are likely to be engaged in.

2.5 Economic Performance

One of the key developmental impact of value chain lays on its ability to yield new income opportunities, increase productivity and consequently profits and wages (Altenburg 2006: 511). Value chain approach recognized five alternatives to increase profits by (i) increasing the volume of sales either from increased market shares, higher selling price, or entrance to new market, (ii) increasing internal firms' productivity, (iii) triggering cost reduction in the value chain towards both upstream and downstream firms, (iv) lowering transaction costs in the supply chain, and (v) seizing greater value-added rents at the expense of other firms within the value chain (Altenburg 2006: 511).

Utilizing the definition of upgrading as process in which actors in value chain move to better position (Gereffi 2005 as cited in Gereffi 2014: 18) to the three propositions of value chain governance and upgrading opportunities by Humphrey and Schmitz (2002: 1023-1024), the logical consequence could be derived is that the more upgrading occurred, the higher is the economic performance of the firms. To measure the degree of economic performance, the research based its analysis by observing the SMEs' abilities to lower cost of production, fasten production time, increase product margin, boost volume of sales, accumulate higher income and capture new market.

In other conception, Altenburg (2006: 511-512) argued the organisation of production chain by lead firms can result in win or loss situation for suppliers. Value chain governance is considered to create favourable income distribution for both suppliers and lead firms if efficient coordination results on access to higher economic rents and increase productivity. However, negative effect prevails when lead firms succeed in enforcing cost reduction at the expense of other firms within the value chain. This strategy can be executed in the form of squeeze the margins of partner-firms, crowd-out local producers, and shift certain costs to suppliers without increasing its purchasing price. Moreover, Altenburg (2006: 512) identified three factors that have important say on whether a value chain leads to win-win or win-loss situation, i.e. the concentration of demand on limited buyers, the capabilities of suppliers, and the need of relationship-specific investment.

2.6 Institutional Environment

Business activities correspond to the surrounding institutional configuration (Altenburg 2006: 505). By this, both formal and informal institutions could alter the actions taking by firms, as well as, help to restrain opportunistic behaviour resulted from the incomplete contracts. Among the formal institutions are government regulation, commercial law, tax system, property rights act, and standard-setting agencies; whereas informal institution refers to e.g. trust, reputation, and social ties (Altenburg 2006: 505, Granovetter 1985). For instance, application of standards entails lead firms to ensure the compliance of that regulation within its whole supply-base, affecting the degree of explicit coordination need to be enforced. Another example is proximity and strong social ties might hinder exploitative-captive governance as lead firms avoid negative image from the society they live in (Altenburg 2006: 506).

The production and distribution process in the global economy as studied through the lens of value chain analysis has been criticized for being vertical and linear, i.e. only focuses on interaction among firms within the chain; whereas in fact it is a complex, multi-layered and multi-dimension relationship (Henderson et al. 2002: 442). Global production network theory emphasizes the importance of institutions surrounding the firms whose actions have potentially influenced the economic and social performance of the firms (Barrientos et al. 2010, Henderson et al. 2002, Hess and Young 2006). Those institutions are government agencies, trade unions, business associations, and NGOs (Henderson et al. 2002: 446-447). In addition, cluster literature gives emphasis on the inter-firms cooperation and local institution as a source of learning and upgrading (Nooteboom 2006, Perry 2009, Porter 1998). The object of the research is in fact limited to SMEs operating within one cluster. Thus, cluster governance might as well influence the learning and upgrading opportunities and economic performance of SMEs.

Seeking the effect of value chain governance on economic performance of SMEs, the research pays attention to the institutional set-up embedded in the surrounding environment. This context is important to avoid bias when explaining economic performance and upgrading as merely a result of value chain governance. In the closest level to firms, the institutions observed are input materials and technology, labour and skills, information technology, location, capital, and networks; whereas in the broader environment are Indonesian macro-economy conditions, regulation and bureaucracy, and direct government intervention programs.

2.7 Consolidation

Patterns, as resulted from comparative analysis among the five different type of value chain governance, are expected to prevail in this research. Examining the propositions discussed in the existing literatures, i.e. (i) the three factors used to distinguish five types of value chain governance (Gereffi et al. 2005), (ii) the conditions of value chain governance for transmission of knowledge within the chain (Altenberg 2006), (iii) the different upgrading trajectories offered by different value chain governance (Humphrey and Schmitz 2002), and (iv) the logical consequence of upgrading toward economic performance, the expected findings of this research are (1) relational value chain governance offers more opportunities for learning and upgrading, (2) the more type of upgrading took place, the higher is the economic performance, thus (3) relational value chain offers higher economic performance. The illustration of the analytical framework used in the research is presented as follows:



Figure 2.1 Analytical Framework

The operationalization of this analytical framework to the research method is presented in chapter 3. The findings of the first and second subresearch question regarding the type of value chain governance and institutional environment are discussed in chapter 4. Further exploration in chapter 5 analyses the actual utilisation of learning to perform upgrading and the implication towards economic performance. Moreover, throughout the analysis, the research underlines the dynamic dimension that occurred among different actors. Incorporating all findings and answering the main question, chapter 6 concludes the study and draws reflections of the research.

Chapter 3 Research Method

3.1 Case Study Selection

The research utilizes case study approach as it is considered to be the most preferable method for answering 'how' or 'why' questions, in which researcher has limited control over the events and thus particular events are a contemporary phenomenon in a real-life context (Yin 2009: 2). It chooses the pottery industry in Yogyakarta as a case study because it fits to the concepts and theories challenged. This industry has both global and domestic market, is capitalized by a significant number of SMEs and contributes substantially to the local economy. Specifically, it chooses Kasongan cluster because it is acknowledged as one of the most dynamic clusters in Indonesia that has prominent link with many institutions outside the cluster both in national and international level (Ismalina 2011: 63, Tambunan 2005: 143-144). The interaction of SMEs within the cluster to the local and global buyer serves as an appropriate case to observe the different type of value chain governance to the learning and upgrading process.

3.2 Data Collection Method

Interviews

Semi-structured interview is used as the main technique of data collection. This technique allows researcher to get all the data required without a strict order of the question list; hence, open a space for other information to emerge (O'Leary 2010: 195). The research design planned to interview the owner of at least twenty SMEs. The sample would be divided into two groups to capture the dynamics of value chain governance. The first group consists of fifteen firms that have many distribution channels. Hence, it is possible for them to be engaged in many different governance types. The second group consists of five firms which focus to supply specific market, for example domestic buyers, European buyers, US buyers, Asian buyers, and Australian buyers. In choosing respondents, the design proposed the use of snowball sampling and key informants, which are chair of local business association, local political leaders, and head of UPT Kasongan.

However, the challenge faced during the fieldwork was that from the three key informants, only the chair of the local business association gave referral for respondents. The head of UPT Kasongan suggested contacting the local political leader; whereas the local political leader was doubtful about the interview technique due to the reluctance of entrepreneurs. He suggested that the interview questions should be transformed into questionnaires so that respondents will have more flexible time to answer the questions. Nevertheless, considering the topic of the research, using questionnaires is less favourable to obtain the data needed. Hence, the sample selection technique was adjusted by using other insiders which are the researcher's acquaintances who live in the area. The selection of respondents still considered the criteria of sample as formulated in the design. During the fieldwork, data were gathered from twenty five SMEs' interviews. The composition of the list of questions that was prepared before fieldwork was slightly adjusted to make it easier to be understood by respondents. A worksheet table was used during interviews to collect common information (see Appendix C). In addition, notes were taken for unique and explanatory information. Reflection was carried out after the interviews to classify the information obtained. Interviews were also conducted with the Chair of the local business association, the Head of the handicraft sub-section of Disperindagkop Yogyakarta Province, the Head of the trade and cooperation section of Disperindagkop Bantul Regency and the Head of UPT Kasongan to understand the institutional environment.

Observations

Observations of the Kasongan cluster were performed five times. The first observation was conducted on the first day of the fieldwork to get familiar with the environment. The other four observations could be called as 'rapid retail appraisal' because they were done by visiting retails, observing the size of the shop, interior, and variety of products, and also asking the shopkeepers on general information regarding their buyers, design, quality, workshop, and marketing activities. The second and third observation were performed in the during the peak sale of Eid holiday towards pottery retail shops; whereas, the last two observations were carried out later towards retails that sell other products. In addition, observation was also conducted to Pundong cluster in order to get comparative knowledge of the pottery industry.

Desk Study

Secondary data was collected from the government agency, such as the data of the SMEs in Yogyakarta from Disperindagkop Yogyakarta Province, strategic planning of the Disperindagkop Bantul Regency, as well as booklets and reports on Kasongan cluster from UPT Kasongan. Literatures review was also carried out in the library of University of Gadjah Mada, Yogyakarta with the purpose to study previous researches that were done on the Kasongan cluster.

3.3 Data Analysis Method

Qualitative data analysis (QDA) approach was utilized to analyse the data obtained mainly gathered during fieldwork. The method involves the process of (i) organising raw data, (ii) reducing and coding into themes, (iii) looking for patterns and interconnections, (iv) mapping and building themes, (v) building and verifying theories, and (vi) drawing conclusions (O'Leary 2010: 256-257). The framework to connect research questions with the concepts and its data source are summarized in the table below.

No	Research Question	Aspect of Analysis	Data Source
1	What are the value chains	Value chain of pottery	Interviews with SMEs, local
	and types of value chain	industry	business association, and
	governance engaged by	Value chain governance	UPT Kasongan
	SMEs in Kasongan pottery	engaged by SMEs	
	cluster?		

Table 3.1 Aspect of Analysis and Data Source

2	How is the institutional environment embedded in the Kasongan pottery cluster operating?	Institutions that shaped and influence the firms' strategy and production chain	Interviews with SMEs, local business association, UPT Kasongan, Disperindagkop Bantul Regency, and Disperindagkop Yogyakarta Province Observation to the cluster Desk study to government regulations, reports and booklets on Kasongan, and others related research
3	How value chain governance assists learning and upgrading process for SMEs in Kasongan pottery cluster?	Learning process (source and form) Upgrading (process, product, functional, chain) occurred	Interviews with SMEs, local business association, UPT Kasongan, Disperindagkop Bantul Regency, and Disperindagkop Yogyakarta Province Observation to the cluster Desk study to the previous research
4	How economic performance differs for each type of value chain engaged by SMEs in Kasongan pottery cluster?	Economic Performance: - volume of sales - profit margin - sustainable market - overall economic look	Interviews with SMEs Observation to cluster, workshops and retail shops

3.4 Consolidation

The present research applies a qualitative research method. The research is a single case study because the respondents are limited to SMEs operating in Kasongan cluster. The unit of analysis in this research is the effect of value chain governance on economic performance of SMEs. Literature review is used to formulate the theoretical framework followed by seven weeks fieldwork to gather primary data and other relevant unpublished materials. The main technique for data collection is semi-structured interview. The challenge faced during fieldwork was related to the respondents' selection. From the three key informants proposed, only one was willing to give referrals of respondents. Hence, insiders that are the researcher's acquaintances who live in the area were approached to advise the sample selection. Furthermore, observations and secondary data analysis were carried out to triangulate the data. Details on the data collections during fieldwork, list of questions and worksheet are attached at Appendix A, B, C and D.

Chapter 4 The Pottery Industry, Value Chain Governance and Institutional Environment

4.1 The Pottery Industry

Capitalizing on their factor endowment, i.e. clay, pottery has become the main source of living for people in Kasongan. The origin of the industry can be traced back in 1675 with basic kitchenware as its main commodity. The cluster began to make decorative art products in 1970s and continued to develop until it entered the global market in 1987. Nevertheless, it was the Asian crisis in 1997 which served as a momentum to create prominent links with the world's pottery market. The depreciation of Indonesia's currency attracted global buyers to source their product from Kasongan. Being known for their quality and capabilities, global buyers kept outsourcing from Kasongan even after the benefit from the currency depreciation faded away. The industry enjoyed rapid development until it was hit by the global crisis in 2008. Mostly produced for the European market, the sudden drop on demand severely harmed the industry. SMEs had to slice down their production line and numbers of them could not escape from closing down their businesses. Currently, the industry is recovering but has not yet reached the levels that it had before.

The cluster is registered to be home of 581 pottery SMEs and employs 2,299 workers; though not all of them are employed full-time (UPT Kasongan 2009: 3). The variety of products produced by artisans in Kasongan range from tableware, cookware, table, chairs, candle holders, wedding souvenirs, piggy bank, pot plants, ornamental vases, tiles, to sculptures. Apart from the domestic market, the products are exported to countries such as Australia, The Netherlands, Spain, Italy, France, US, Singapore, Korea, and Middle East. Although started with pottery, the cluster has currently evolved into host of various creative home-deco industries. Those industries, such as furniture, recycled materials furniture, seashell lamp, wood craft, and stone craft, found that the reputation of Kasongan as a craft centre helped them to secure orders from domestic and international buyers.

4.2 The Pottery Value Chain

The pottery value chain can be classified into four phases, (i) pre-production, (ii) production, (iii) marketing, and (iv)-shipping. The pre-production stage involves the development of design and the sample of the product. The next stage of the chain is the volume production of pottery according to the product sample. Within this production process more actors are involved due to the sub-contracting scheme normally utilized for shaping and moulding the pottery. Once the production is finished, the pottery is being sold through retail shops or directly from the workshop. Aside from spot transaction on the retail shops, most of the products are produced based on order. The shipping of the pottery to buyer is handled by a third party on the responsibility of the customer. The following figure depicts the flow of the Kasongan pottery value chain. The actors involved in the chain and their roles are described further.



Figure 4.1 The Kasongan Pottery Value Chain Source: Analysis (2014)

Clay and other inputs suppliers. Clay suppliers sell a ready to use milled mixture that consists of clay and sand to pottery makers. These suppliers extract clay not only from Kasongan but also from other regions. The other input suppliers provide materials for finishing process such as paint, rattan, wood, glass, and ornamental sand.

Raw pottery makers. Raw pottery makers make the first phase of pottery which is the shaping or moulding of the clay and then sell it after being dried. Most of them make the product only if they received an order from the finished pottery makers within the cluster. Among SMEs in Kasongan, raw pottery makers are considered to be the smallest enterprises.

Fired pottery makers. This type of SMEs sells pottery that has gone through the firing process without any further finishing touch-up. Their buyers are normally the finished pottery makers which come from other regions such as Jakarta, Bali, Malang, and Kalimantan. These buyers outsource their supply in Kasongan because it is known for the quality of semi-finished product compared to other pottery clusters in Indonesia (Resp. #7).

Finished pottery makers. This type of SMEs produced the final pottery. They usually outsource the production of raw pottery and focus only on the finishing activity. Various designs of colouring and painting are normally used to embellish the products. Finishing can also be done by adding materials such as rattan, glass mosaic, wood, and ornamental sand. Within the production stage, finishing is considered to be the highest value added activity. SMEs are competing in developing innovative design and sample to attract buyers and

create product differentiation. In other cases, they received design from their buyers in the form of picture and transform it into a product sample. The final volume production begins after getting the approval from buyers.

Retailers. Retailers open their shop in the main street of Kasongan. They display various products to be sold to the individuals or the wholesalers who comes to the cluster. Most of the retail shops in Kasongan are owned by finished pottery makers. Only few are pure retailers with limited production activity.

Wholesalers. Wholesalers purchase finished pottery in large quantity with the purpose to be sold again to the end-customer. They usually come to Kasongan in regular basis to observe the latest products' design, make new orders and check their finished orders before final delivery. In few cases, they negotiate orders through phone or email. Wholesalers can be found in both domestic and global market. They order product from their own design or choose from the various sample provided by the suppliers.

Buying agents. Buying agents can only be found in the global value chain. They have knowledge on SMEs and cluster in Indonesia. Their basic services are to guide international buyers to visit SMEs, assist the negotiation process as language translator and help with shipping and export permits matters. In addition, some buying agents act as representative of international buyers. They do the visit to SMEs, appoint suppliers to submit product samples, organize meeting with international buyer to select product from the samples submitted, coordinate with the selected suppliers in the production process, control the product quality before delivery, and arrange the shipment process.

Shipping and cargo companies. Shipping and cargo companies are responsible for delivering products from SMEs' warehouse to buyer's destination. For international shipment, they also deal with the export license. Shipping is on the responsibility of buyers; hence they are appointed and paid by the buyers.

End-consumers. End-consumers buy pottery from the wholesaler or directly from the retails in Kasongan and consume the value of the product.

The classifications of the twenty five respondents according to the value chain structure are described in table 4.1 below. The identification of market type is based on the SMEs' first-tier buyers.

$\downarrow_{\text{Market}}^{\text{Type of SMEs}}$	A Raw Pottery Makers	B Fired Pottery Makers	C.1 Finished Pottery Makers	C.2 Finished Pottery Makers & Retailers	D Retailers
Domestic	7 SMEs	3 SMEs	1 SMEs	3 SMEs	2 SMEs
Export	-	-	2 SMEs	2 SMEs	-
Domestic and Export	-	-	2 SMEs	3 SMEs	-

Table 4.1 Types of SMEs and Market

Source: Analysis (2014)

To simplify the terms in further discussions, it should be noted that type A SMEs are raw pottery makers, type B are fired pottery makers, type C are finished pottery makers and type D are retailers.

4.3 Value Chain Governance

The research analyses the value chain governance patterns according to the three factors that was proposed by Gereffi et al. (2005: 84-88), i.e. (i) the complexity of transaction, (ii) the ability to codify transaction, and (iii) the capabilities in supply-base. Assigning the value of low and high, the five possible classifications emerged are market, modular, relational, captive, and hierarchy. Identification of lead firms is based on the perception of respondents because the research sample is limited to firms in Kasongan and not the whole vertical value chain. Despite the methodological challenges in dealing with the base unit of comparison², as previously discussed in chapter 2.3, the findings on the value chain governance engaged by the respondents of this research are portrayed in the following table 4.2. Basic analysis per respondent can be reviewed in Appendix D.

No	Type of SMEs	Perceived VC governance in relation to 1 st tier suppliers	Perceived VC governance in relation to 1 st tier buyers	Perceived lead firm	Exception
1	A Raw pottery makers (7; 100%)	Suppliers: Clay suppliers L-H-H Market (7; 100%)	Buyers: Finished pottery makers H-H-H* Captive (3; 43%) Captive & Relational (3; 43%)	Finished pottery makers	H-H-H (Resp.#20) Modular (1; 14%)
2	B Fired pottery makers (3; 100%)	Suppliers: Clay suppliers L-H-H Market (3; 100%)	Buyers: Finished pottery makers H-H-H Modular (3; 100%)	Finished pottery makers	-
3	C.1 & C.2 Finished pottery makers (13; 100%)	Suppliers: Raw Pottery Makers H-H-H* Captive & Relational (9; 69%)	Buyers: Retailers, Wholesaler, End- Consumer H-H-H Modular (5; 38%)	Wholesaler	In relation to suppliers: L-H-H** (Resp.#19) Hierarchy (1; 8%)

 Table 4.2 Value Chain Governance at Immediate Level

² The research chooses to use the same sub-sector of the pottery industry in Indonesia as a comparative basis instead of the firms within cluster or the worlds' pottery industry. This was because comparison inside the cluster might result in overlooking the real capability of SMEs due to the cluster advancement; whereas comparison with the world's pottery industry was not possible due to the limited knowledge on the industry's activities in other countries. Observation of the Pundong pottery cluster in Yogyakarta and interviews with SMEs, business association, and government officials provided overview on the level of SMEs in Kasongan in comparison with other clusters in Indonesia, particularly in regards to the capabilities of the supply-base.

		H-L-L Hierarchy (3; 23%)	H-L-H Relational & Modular (6; 46%)		In relation to buyers: L-H-H (Resp.#19) Market (1; 8%)
					H-H-H* (Resp.#25) Captive (1; 8%)
4	D Retailers (2; 100%)	Suppliers: Finished pottery makers H-H-H Modular (2; 100%)	Buyers: Wholesaler & End-consumer H-H-H Modular (2; 100%)	None	-

^{*}H-H-H according to the Gereffi et al. (2005) should lead to the emergence of modular governance; whereas combination **L-H-H suggest market coordination. Source: Analysis (2014)

Type A SMEs are raw pottery makers who source input from clay suppliers and sell products to finished pottery makers. They experience market governance with clay suppliers because clay mixture is a simple product which can be purchased from many suppliers without any transaction codification problems. In relation with first-tier buyers, captive and relational coordination emerge to govern the relationship. Based on the analysis of three factors, the governance pattern shows modular (H-H-H) characteristic because A are highly capable to make complex specifications by just looking at pictures or being verbally ordered. However, in reality A perceive captive and or relational governance with C because they, to large extent, depend their market on them and hardly switch to other buyers. For A, the C firms are their lead firms. C set the price, bring orders, and decide on design, volume and delivery time. Normally, when order comes, A receive pictures which then need to be transformed into 'mould'. C will provide the gypsum needed for making the mould. When the production finished the 'moulds' are handed back to C.

Half of type A respondents has captive relationship with C; while the other half experiences both captive and relational governance. Captive relationship occurs when A supply only to one buyer for long periods. For instance, Respondent #23 has been working with one buyer for about 10 years. She said that she has built a long relationship and felt satisfied with that. Therefore, she has no interest to find new buyers. Some A are in the situation of continuously supplying one buyer and at some certain times shared their production capacity to tackle orders from other buyers. Therefore, in this regard, they have captive and relational governance. One exception from this pattern applied for Respondent #20 who perceives modular relationship with buyers. This governance occurred because Respondent #20 makes products that are not produced by many firms. With more demands rather than supplies, he has several markets and relatively balanced power towards buyers.

Fired pottery makers, type B firms, engage in market governance with suppliers and modular governance with buyers. Similar with A, the suppliers of B is the clay suppliers and the governance style that prevails is also market coordination. On the upstream level, B is in modular governance with C as their buyers. Both type A and B SMEs produced semi-finished pottery and are engaged with the same type of partners, clay suppliers and finished pottery makers. However, although they both experience the same market governance with their suppliers, the mode of governance in relations with buyers is found

to be in the different direction. B receive less degree of power asymmetry and explicit coordination; whereas A are on the contrary. Observing the characteristic of A's and B's buyers, it was noted that buyers of A are C which set up their operation within the cluster; whilst buyers for B are type C SMEs that have their business activities in other regions outside the cluster.

Type C SMEs involve in captive and relational governance towards A as their suppliers. According to the three factors analysis, modular relationship should emerges because there are many highly capable A firms to make various design and the transaction could be easily codified. Nevertheless, C opted to make their suppliers captive or at least maintain relational governance. This is because there are needs to protect design and assure enough supply bases; but in-house production is too costly due to the market volatility. By outsourcing the first-step of production, C only needs to employ workers for finishing process; thus, keeping the fixed cost low. To keep the exclusivity of design, C works with limited A suppliers. They place order up to the maximum capacity so that suppliers could not receive new order from other firms. In the case of suppliers still have excess capacity; A can accept order from other C. However, trust and reputation are built to keep the exclusivity of design.

Though sub-contracting is the most commonly found system, some C firms are engaged in hierarchy governance. Respondent #11, 14, and 16 opted for full in-house production because they produce statue in which there are not many capable suppliers and specifications are hardly to codify. In addition, Respondent #14 stated that his products use special clay which is more expensive. Handling the shaping and moulding to other suppliers will cause many leftovers; an inefficient use of clay. An exception applied for Respondent #19 whose products has L-H-H (market) characteristic but being fully produced in-house instead of outsourced to suppliers. This is because the selling price of the traditional cookware pottery that Respondent #19 produces is too low. Consequently, if she opted for outsourcing strategy, the cost of subcontracting will wipe out all of the profit.

In relation to buyers, modular and relational are the most commonly found mode of governances engaged by C. Modular governance prevails because C are highly competent and able to make the complex specification without much assistance from buyers. Some other greatly innovative C set the products trend so that buyers just simply come and choose from the variety of product being displayed. The relational governance occurs when C and buyers need to exchange tacit knowledge to make the product. Generally, this happens for products which designs come from buyers. The C SMEs that engage in both modular and relational governance produce relatively equal amount of own design and buyers' design products.

Two exceptions found for Respondent #19 and #25. Respondent #19 has market relationship with buyers because her product is a simple traditional cookware pottery. An interesting case appears for Respondent #25 who possesses capacity to become modular supplier but chose to be 'captive' to one buyer. For him, gaining orders from one big buyer is enough for his firm's profitability. The buyer he currently supplies always sends order of minimum

of 2,500 pieces for each design per three months periods. Therefore, he focuses on creating sample to be submitted to the buyer.

The last type of respondents in this research is retailers. This type D SMEs, engaged in modular governance on their relationship with suppliers and buyers. Retailers outsource their product from finished pottery makers inside the area and sell it to the domestic wholesaler or individual end-consumer. The modular governance appears in the supply side because when buying product for their retail shop, D chose from variety of design offered by C firms. Thus, for D, C are considered to have turn-key capabilities in creating diverse product design. In relation with buyers, D are observed to also have modular governance for the same reason that their retail shops offers complete variance of pottery product to their consumers.

4.4 Dynamics in Value Chain Governance

Among the dynamics of value chain governance in Kasongan, it is worth to discuss the relationship between A and C. In Kasongan, C are central. They seek for orders and then start the production wheels. Under their rein are A firms. With their high capability, A could have modular governance, just like B. However, they are somehow in lock position with C. A use the term '*juragan*', instead of buyer, to addressed C. *Juragan* is a word commonly used by the servant to name their employer. There is a considerable degree of social status and power imbalance between *juragan* and those who address them. The use of this term is not without reasons. C and A are working in a spatial proximity where they are connected not only in business transaction but also in social life. For A, apart from giving order for firm' survival, C also act like patron by giving social benefits such as money lending and holiday allowances. This relationship builds loyalty for A and an implicit informal rule prevails is one *juragan* will not use the suppliers of others *juragan*.

Respondent #2, a raw pottery maker who works for the same *juragan* for all his 30 years of business, said that he has very good long ties with them. Thus, even though he is considered to be one of the best suppliers in which many *juragan* would like to cooperate with him, he felt bad if he switched to other buyers to increase his bargaining power. He expressed how his *juragan* has been very kind in helping him and his family; hence he respects the relationship. On the *juragan* side, as expressed by Respondent #13, she involves in more than just business transactions with her suppliers. She gives donation when her suppliers or suppliers' family members are sick, lend money or pay in advance when her suppliers asked to due to emergency situation, and also when the Eid holiday comes she always gives bonus. These economic and social exchange relationships strengthen the attachment of A and C.

Nevertheless, though the social ties maintain a harmonious relationship between *juragan* and their suppliers; the power asymmetry remains valid as A do not have power to negotiate price. Normally, *juragan* will raise purchasing price only if the price of clay increased. Actions to question the price decision could result in the exclusion of the suppliers from the network of the *juragan*. Respondent #5 who experienced this situation stated that her *juragan* sent one worker to her home to take all the moulds she had and terminated all orders. As a small supplier, Respondent #5 could not do many things. She is now helping her husband who is also in captive relationship with other *juragan*.

4.5 The Institutional Environment

Scholars (Altenburg 2006: 505, Henderson et al. 2002: 446-447) emphasize the role of institutions as having influence in the governance strategy and the economic and social performance of firms. Each of the following sub-sections illustrates how institution influences SMEs in Kasongan. The institutions observed in the research are Indonesian macro-economy conditions, regulation and bureaucracy, direct government intervention programs, input materials and technology, skills and labour, information technology, location, capital, and networks.

Indonesian Economy

The macro context of Indonesian economy is observed to have two pivotal conditions affecting the pottery industry in Kasongan. First, the 1997 Asian crisis, which severely damaged the Indonesian economy, on the other side had brought bliss to the pottery industry. The free-fall of Indonesia rupiah against foreign currency made the commodity price much cheaper in the eye of global buyers. Respondent #1 expressed that all of sudden in 1997-1998 the cluster was visited by many global buyers who ordered large quantity in a regular short-term basis. As for SMEs in Kasongan, the depreciation of rupiah did not really had effect on their cost of production; therefore the tremendous increase in the demand side had helped them to grow rapidly. When the benefit from exchange rate withered due to the economy recovery, the industry managed to secure its participation in the global value chain. The industry competitiveness was mainly built from its interaction with international buyers. Skills were advanced as firms gained high exposure from various product designs requested by diverse market.

Whereas in 1997 the fall of Indonesia economy that generated economic benefits; one decade later, it was the emergence economy of the country which saved the industry from further deterioration due to the global financial crisis in 2008. Largely produced for export markets, almost all SMEs experienced downsize in their production activities; some were even forced to close down. However, the rise of the domestic economy gave opportunities for the firms in Kasongan to redefine their market segment and gain economic rents from it. At the time when some firms (Respondent # 1, #15, #17, #24) split their market to supply both domestic and export, Respondent #14 took a radical step by entirely exit the global market and focus on targeting high-end domestic products. The increasing purchasing power of domestic buyers was also noticed by Respondent #15 whom in the last six months received a considerable amount of regular order of a high-end decorative product from individuals within the country.

Regulation and Bureaucracy

Regulation and bureaucracy could not be separated from firms' environment as it set the rules to almost all business activities. Currently, there is no particular law regulating the pottery industry in terms of standardisation. Bureaucracy in business license and permit has been reformed with the establishment of one-stop services. Interviews with government officials stated that both local and regional government were committed to facilitate the licensing and permit matters for SMEs. From the side of SMEs itself, complaint on the difficulty in creating business license and permit was not found. What became the grievance was the followed tax consequence. Respondent #25 expressed that after he applied for a tax payer identification number, as a requirement to obtain loan form banks, he was approached by tax officials asking for payment of income taxes. Felt as being extorted, respondents opposed that he worked to sustain the economy of his family and the neighbourhood; therefore ease the burden of government. The argument ended when respondent said that he would only paid taxes if every other SME also did the same, which is not the case. Hence, up till now, tax regulations are hardly enforced in Kasongan.

Direct Government Intervention Programs

As one of the dynamics cluster in Indonesia (Ismalina 2011: 63, Tambunan 2008: 134), SMEs in Kasongan received significant attention from the government. There are four levels of government institution which organize developmental programs for the pottery industry. The nearest institution is UPT Kasongan, a special technical services unit established in 1985 by the local government. In its structural organisation, UPT is part of Disperindag, Bantul Regency. As government representative in the area, UPT have more knowledge on the characteristic and demography of SMEs operating in the cluster. The regular quarterly program delivered by UPT is capacity building workshop on design creation, marketing and business management. In addition, UPT give assistance to other parties such as student, researcher, NGOs, and private companies who need information regarding the industry and the cluster.

The local and regional government programs support product marketing through the participation to the national and international exhibitions. Every year, one or two SMEs from Kasongan are selected as beneficiary because government should incorporate all SMEs in their region. Soft-loan capital is also disbursed through local cooperation. In the national level, the Ministry of Industry and the Ministry of Trade are the two institutions in charge for SMEs development programs. The latest strategy by the Ministry of Industry is One Village One Product (OVOP) program. This approach encourages potential villages to build specialization on one type of product for their territory competitiveness. Nevertheless, most of the respondents on this research criticize government's program because it was perceived as benefiting only few people who are close with the officials. Another critique is that many of the programs are ad hoc, not integrated into a grand design of SMEs development.

To summarize, many of the direct government intervention programs are still in the specific micro level. Both officials in local and regional level implied that government focuses on spreading supports for survivalist entrepreneurs. In their view, large growth-oriented SMEs could and should be independent; thus government resources should be attributed in assisting smaller SMEs to grow. However, given that causal relationship is so complex, chain-specific interventions are often resulted in unpredictable outcomes (Altenburg 2006: 519). Conventional programs in which government provides workshops 'they' considered to be relevant and decides on the beneficiaries are often had poor results (Altenburg 2006: 520). Interventions, therefore, should be based on comprehensive value chain analysis, taking account various interest of all actors involved.

Input materials and technology

Up to the present time, there is no shortage in the supply of clay. SMEs can easily access input from several clay suppliers within the cluster; even for Respondent #14 who uses special clay extracted 490km away from the region. What becomes the concern are the input materials for finishing process, especially paints. Though volumes are available, continuous increase in the paints price put tension to the margin of product. On the technology side, the industry, to a large extent, produces hand-made products; hence it does not utilize advanced technological machines. Pottery wheel, mould, and spray paint are the most commonly used equipment. Respondent #21 showed interest on the glass cutting machine because his prime product is glass-mosaic ornamented pottery. However, he said that the price of this machine is too expensive due to the import tax levied on it. In addition, the cluster received a digital X-ray radiology machine from Universitas Gadjah Mada that can be used to screen the quality of raw pottery. Unfortunately, up till now, it is only used for training purposes in UPT Kasongan but not for commercial activities.

Skills and Labour

Skills in making pottery in Kasongan are gained from the long-term interaction with industry. Labour for the industry is mainly supplied by the cluster itself, only about ten per cent come from outside region. Many local artisans studied how to make pottery since childhood because of their parents and neighbourhood. Skills became more advanced with routine reproduction of various design product brought by international buyers. All workers supporting in the industry are informal; hence there is no binging contract that governs the relationship between employers and workers. For very small business entities, such as type A SMEs, the workers can be considered as 'unpaid' because they are the family members of the firms itself, the husband and the wife with sometimes little support from their kids.

Information Technology

The utilisation of information technology has been proven to increase the competitiveness of SMEs. Innovative producers acknowledge internet as an important source for their design inspiration (Respondent #1, #10, #11, #14, #15, #16, and #21). Moreover, contacts with buyers from outside the region are frequently conducted through emails, including the transfer of design of the product being ordered. Some entrepreneurs, such as Respondent #15, further utilizes information technology for marketing strategy. In the last semester, he gained significant boost on domestic sales by opening an online shop through Facebook application. However, not all SMEs are able to derive economic benefits from the use of information technology. Many of them

could not understand how the technology worked and just do the business in usual ways.

Location

SMEs in Indonesia tend to be clustered in order to achieve the benefit of economic agglomeration (Berry et al. 2001: 365, Ismalina 2012: 215, Sandee et al. 1994: 118). Likewise, SMEs in Kasongan mostly benefited from the knowledge spillovers and cluster marketing because it is known as centre of handicraft and attracts buyers to regularly come. In addition, the competition inside the cluster fosters innovation. However, the downside of operating in proximity is the copycat problem which also found to be existed in Kasongan. The absence of property rights makes such free-riding behaviour inevitable. The social ties impeded the problem from rising into an open-conflict situation. Thus, many innovative SMEs, such as Respondent #1, #14, #16, and #21, react by creating new designs more regularly.

Capital

Capital is normally accessed from commercial banking loan. Lower interest rate is offered by almost all financial institutions to support productive activities of SMEs. Respondent #17, #21, and #25 testified that it relatively easy to get the loan as long as all requirements were fulfilled. For smaller size SMEs, capital remains as barrier for business expansion because banks always ask for collaterals. Other source of capital comes from credit-rolling scheme run by local cooperation such as Satya Bawana. Under this scheme, there is no collateral requirement. However, the limited funds available for loan restrict it from meaningful contribution for SMEs expansion. Expressed by Respondent #17, she had to wait in two instalments for relatively small sum of money she proposed. Moreover, free capitals in the form of grants are indeed harder to obtain. When the cluster damaged by earthquake in 2006, some grant offers came from state-owned companies. Proposals were written to access the funds but only few were approved (Respondent #17).

Networks

Network is considered to be an important factor influencing the economic performance of firms. Aside from their individual efforts to expand business networks, SMEs operating in Kasongan received the benefit from the cluster networks. Brief interview with shopkeepers of the non-pottery retails discovered that it was the cluster networks that attracted them to relocate their workshop and retail. Being incorporated within the cluster, they gain from the regular visit of wholesalers searching for unique handicraft products. For its international market, the cluster has built strong links with Australian, US and European buyers. Nevertheless, the 2008 global financial crisis still leave an injured to US and Europe market. Hence, there is need to open new networks for the expansion of the industry.

4.6 Dynamics of the Institutions

Observing the dynamics of the institutions is a challenging process as a clear pattern of interactions among them could hardly to be seen. One case that came to notice is the disconnection between actors in the different levels of government institutions which make the intended intervention programs not able to achieve the optimum result. Disperindag, both in regency and province level, is the unit department directly in charge for SMEs development. Within the organisational structure there are three sections, i.e. industry, trade and cooperation section. The industry section conducts programs aimed to improve SMEs productivity, in terms of skills and technology. The trade section mainly engages in promotion activities by providing support for participation in national and international exhibitions. Lastly, the cooperation section gives capital grant to strengthen the function of local cooperation in supporting SMEs development. With a good synergy, the series programs of those three sections should result in significant impact. However, on the actual practice their programs tend to be disintegrated. As a result, the intervention programs could not attain optimum impact. In addition, there is ambience of competition among officials in different sections which makes it more difficult to plan comprehensive strategy.

4.7 Conclusion

This chapter discusses the findings of the first and second sub-research question which are the value chain governance and the institutional environment of SMEs in Kasongan. The research found that pottery industry is a buyer-driven chain and SMEs in Kasongan are engaged in two level of value chain which are domestic and global value chain. There are mainly six actors operating within the pottery chain. Among those, four types of actors are included as sample of the research, i.e. (i) raw pottery makers, (ii) the fired pottery makers, (iii) finished pottery makers, and (iv) retailers. The other two actors, input supplier and wholesalers, are analysed from the statements and expressions of their immediate partners. The governance patterns that prevail in the pottery value chain are presented in the following table 4.3.

$\begin{array}{c} & & \\ & & \\ & \\ & \\ & \\ & \\ & \\ & \\ & $	Wholesalers	Retailers	Finished Pottery Makers	Fired Pottery Makers	Raw Pottery Makers	Input Suppliers
Input Suppliers	-	-	Market	Market	Market	
А	-	-	Captive & Relational	-		
В	-	-	Modular			
С	Modular & Relational	Modular				
D	Modular					
Wholesalers						

Table 4.3 Patterns of Value Chain Governance

Source: Analysis (2014)

In regards to the institutional environment embedded in the cluster, the study noticed that skills and labour are advanced enough to accommodate

variety in demands. The location of SMEs in the form of cluster increased innovation due to competitions. Operating in proximity area enable knowledge to disseminate freely, especially since property rights is not applicable. Thus, in order to survive the competition, firms need to continuously learn and innovate. Moreover, though limited to certain type of buyers, network of the cluster has benefit SMEs in accessing market. However, other institutional configurations such as government direct interventions and capital provision are still far from optimum. The utilisation of information technology promised innovations and marketing, yet has not been fully capitalized by all SMEs. The interpretation that could be derived from the dynamics is that the institutions has provided the basic foundations for SMEs to learn and upgrade but is not yet matured enough to develop competitiveness and prevent SMEs from the external changes of market volatility.

Chapter 5 Implication of Value Chain Governance towards Learning, Upgrading and Economic Performance

5.1 Learning and Upgrading

In order to observe the effect of value chain governance towards economic performance, the research uses the theory of learning and upgrading to link those two variables. For lead firms to get their products at exact specifications, transfer of information is a necessity. Actors within the value chain undergo a significant learning process from interpreting the information transmitted in a cognitive framework (Noteboom 2004: 3). Altenburg (2006: 513-515) identifies three ways by which suppliers can gain learning, i.e. (i) learning from increase pressure, (ii) learning through deliberate transfer knowledge from lead firms, (iii) learning from unintended knowledge-spillovers. and The actual capitalization of learning in economic activities of firms can be measured by observing the upgrading that occurred. Economic upgrading is defined by Gereffi (2005 as cited in Gereffi 2014: 18) as 'the process by which economic actors -firms and workers- move from low-value to relatively high-value activities in global value chains'.

To understand how different value chain governance offers different upgrading possibilities for suppliers, the research uses the proposition set by Humphrey and Schmitz (2002: 1023-1024). According to them, different types of value chain governance have different trajectories for learning and upgrading. Firstly, quasi-hierarchical or captive value chain favours product and process upgrading but limits functional upgrading. Secondly, market-based governance offers possibilities for functional upgrading but slower the product and process upgrading. Lastly, balance network or relational value chain governance provides ideal upgrading opportunities but this is less likely to happen for producers in developing countries. In assessing the extent of learning and upgrading, comparison was made with the same type of SMEs within the Kasongan cluster. Table 5.1 describes the findings on the learning and upgrading experienced by SMEs in Kasongan. Further detail analysis per respondent can be found in Appendix C and D.

No	Type of	Current VC	Learning from	Upgrading occurred	Others source of
	SMEs	governance	lead firms		learning
1	A (7; 100%)	- captive (3; 34%)	product design (3; 34%)	product (3; 34%)	spillovers
		- captive& relational (3; 43%)	product design (3; 34%)	product (3; 34%%)	spillovers
		Exception: - modular (1; 14%)	none (1; 14%)	none (1; 14%)	spillovers

Table 5.1 Learning and Upgrading Occurred

2	В	modular	product design	product (3; 100%)	spillovers
	(3; 100%)	(3; 100%)	(3; 100%)	1 (, , ,	(3; 100%)
3	C (13; 100%)	- modular (5; 38%)	none (4; 30%)	 product (1; 8%) product, functional & chain (3; 22%) 	 spillovers & cluster spillovers; internet; education & other products' trend
			marketing (1; 8%)	& chain (1; 8%)	& education
		- modular & relational (6; 46%)	product design (6; 46%)	 product (2; 16%) product & functional (3; 22%) product, functional & chain (1; 8%) 	 spillovers & cluster spillovers; internet & education spillovers & internet
		Exception - market (1; 8%)	none (1;8%)	none (1;8%)	spillovers
		- captive (1; 8%)	product design (1; 8%)	product & functional (1;8%)	spillovers
4	D (2; 100%)	modular (2; 100%)	none (2; 100%)	product (2; 100%)	cluster

Source: Analysis (2014)

It was observed that type A firms which are engage in captive and relational governance gain indirect learning in the form of exposure to variety of product designs. What is meant by indirect learning is that type A SMEs do not received direct technical guidance on how to make the product from C as their lead firms. Instead, A need to translate by themselves the design photos given by C into sample products and request approval before starting volume production. The more A receive new designs, the faster their learning ability grow. From the learning, A were able to perform product upgrading that is creating new products. The other three types of upgrading - process, functional, and chain - were not found to have happened. Moreover, pottery making in Kasongan is mainly hand-made with the use of a simple technology. Thus, upgrading in terms of process was less likely to be occurred. Functional upgrading was also not found since A did not manage to perform new functions such as design creation or marketing. With only the upgrading of product taking place, the learning was not enough to bring them enter new markets and attain chain upgrading.

To conclude, the captive governance engaged by A lead only to product upgrading. This finding is consistent with Humphrey and Schmitz (2002: 1023-1024) first proposition that said quasi-hierarchal or captive governance favour product and process upgrading but hinder functional upgrading. An exception was noted for Respondent #20 who is in modular governance with buyers. He did not perceive any learning from his contact with the lead firms. Instead, he gained learning from his mentor and the skills were advanced through the experience. Furthermore, Respondent #20 did not undergo any upgrading activities. He is supplier who specifically made chairs; hence he produced the same product for all buyers. Functional and chain upgrading were also observed not to have taken place.

Type B SMEs, which involve in modular coordination with C, have the same upgrading trajectory with A. Interactions with buyers had taught them skills to produce more diverse product designs. Product upgrading was happened; but process, functional and chain upgrading were not seemed to occur. For a semi-finished pottery makers like A and B, their limited access to end-market restrain them from functional upgrading. Being creative in making new design and producing stock products have a high risk of unsold products. This was confirmed by Respondent #3, an A firm, which used to make stock products but not able to sell them. Hence, it is now only produced by orders. In accordance with the second upgrading proposition which argues that more market-based relationship slower process and product upgrading but open the path for functional upgrading, the experiences of B who are in modular governance showed that functional upgrading could not flourish because of market dependency from C as their buyers.

Type C firms are in modular and relational governance with wholesalers as their lead firms. C firms engage in modular relationship because they have become turn-key suppliers for their buyers. Hence, most of them did not acquired learning from buyers particularly for design development. Nevertheless, a unique learning was experienced by Respondent #15. Within the last semester, he gained increased in domestic sales through his 'Facebook' marketing. This strategy came out fortuitously after his curiosity on one buyer who always orders many small quantity items per twice a month. One time, he noticed a small note attached on the retour product and found that it was a Facebook name of his buyer's online shop. He browsed through the page and realized potential individual market in Indonesia. Looking at the opportunity, he hired one worker who is in charge in the marketing through Facebook. For another group of C who experienced relational governance, the interaction with lead firms exposed them with various product designs which helped them to carry out product and functional upgrading.

Tracing the pattern of learning from lead firms into actual upgrading for C firms is rather complicated. Though a group of C are engaged in the same type of governance, the upgrading result is different. The many trajectories arose implied that there are other factors than just the value chain governance affecting learning and upgrading. Most of modular governance SMEs, such as Respondent #1, #14, #15, and #21, were able to transform learning into product, functional and chain upgrading. However, Respondent #13 was only able to do product upgrading. This difference leads to deeper analysis on other source of learning that might cause the variance. It was found that except from Respondent #13, others are using internet as a source for inspiration in design, for example to look at the latest worlds' trend. In addition, they also have high education background or professional experience in large innovative firms.

Furthermore, for the C SMEs who are in both modular and relational governance, the actual upgrading varied depends on their ability to derive and utilize knowledge from other sources. Those who only performed product upgrading (Respondent #17 and #24) acquired learning from cluster; the others (Respondent #6, #10, and #16) who experienced product and functional upgrading are familiar with internet; lastly Respondent #11 is able to perform product, functional and chain upgrading due to his ability in capitalizing the knowledge gained from interaction with buyers and internet to catch other market. The modular and relational governance experienced by C firms, indeed gave more opportunities for four types of upgrading. However, given the same governance type and similar other external source such as cluster and internet, the different result on the actual upgrading took place showed the importance of absorptive capacity owned by the entrepreneurs.

Exception on the mode of governance of C happened for Respondent #19 who involves in market relationship and Respondent #25 who engages in captive governance. Being in market coordination, Respondent #19 neither sourced learning from buyers nor performed any upgrading activities. On the other side, Respondent #25 derived indirect learning in product design from his 'captive' buyer and was able to do functional upgrading by creating new product designs. While the preposition by Humphrey and Schmitz (2002: 1023-1024) contend that captive relationship limit functional upgrading; the experience of Respondent #25 showed active functional upgrading in terms of designs but not marketing. The reason for this is because Respondent #25 is voluntarily 'captive' himself to one big buyer as his sales strategy.

Lastly, type D firms which have modular governance with their buyers perceived themselves as gaining no learning from lead firms. This view came up because instead of ordering their own design, their buyers choose from a diverse range of products being offered in the retail shops. Although D did not extract learning from lead firms, they observed the variety of products being produced in the cluster. They always managed to have all products sample displayed in their shops. Hence, in regard to the function of retailers, they did perform product upgrading by always being updated with the latest design.

In summary, looking at the general patterns found in the research, captive governance offers the least opportunity for learning and upgrading, i.e. product upgrading, whereas relational and modular relationships open more possibility for product, functional, and chain upgrading. However, for information to be transformed into knowledge and real upgrading process, the absorptive capacity of firms is found to be one of the determining factors. In addition, innovative firms also source learning from other institutions, such as internet, cluster, education and work experiences.

5.2 Dynamics in Learning and Upgrading

Firms are interested in building core competencies in order to gain from innovation rents; hence, there are incentives for outsourcing non-core activities and protecting core competencies from others (Altenburg 2006: 503-504). Within the production stage of pottery, finishing is considered to be the highest value added activity and be exploited to build product differentiation. The dynamics in learning and upgrading can be analysed by observing the outsourcing strategy of C firms and their efforts in protecting their original designs. Aside from few exceptions, most C cooperate with A to supply the

raw pottery. For C, finishing process is substantial factor for product identity; whereas shaping and moulding of clay is a non-core business that can be subcontracted to other suppliers. C are focusing their resources to create innovation in the finishing design and doing their best efforts to avoid leakage even to their own workers.

For instance, Respondent #25 explained his method in protecting the design of his products. He usually works to create new design at nights after daily production activities finished. He collaborates with one trusted worker for design development. After a certain mixture of paint was successfully applied in the finishing process, he would change the packaging of the mixture into different used-cans. Hence, on the next day when his workers come to work, they would not know the original composition of the finishing paints. Furthermore, in regards with preventing leakage to suppliers, Respondent #25 said that his suppliers already know their 'place' by not coming near to the finishing area when they deliver the raw pottery.

To put together, value chain structure, indeed, offers transfer of learning and opportunities for upgrading. However, lead firms will only share knowledge that would not potentially upgrade their suppliers into competitors and threaten their core competencies. Thus, the maximum learning firms normally get would only help them to expand within their current business activities. Consistent with that premise, the research found no evidence of SMEs upgraded by moving to the upper level of value added activities, for example from A to C firms. What did occurred was the establishment of new SMEs by workers who previously work in the same activities. For instance, finishing workers initiated new business as finished pottery makers (Respondent #15 and #16).

5.3 Economic Performance

This section presents an analysis on the implication of value chain governance on the upgrading and economic performance of SMEs. Utilizing the definition of upgrading as a process in which actors in value chain move to better position (Gereffi 2005 as cited in Gereffi 2014: 18) to the three trajectories of value chain governance and upgrading opportunities by Humphrey and Schmitz (2002: 1023-1024), the logical consequence emerged is that the more upgrading occurred, the better is the economic position of firms. To measure the degree of economic performance, the research based its analysis on the SMEs' abilities to lower cost of production, fasten production time, increase product margin, boost volume of sales, accumulate higher income and capture new market (see Appendix C and D for basic analysis). The unit comparison for analysing the level of economic performance experienced is the same type of SMEs within the cluster. The findings are presented on the table 5.2 below.

No	Type of	Current VC	Upgrading	Shift in	Economic
	SMEs	governance	occurred	governance	performance
1	A (7; 100%)	- captive (3; 34%)	product (3; 34%)	none (3; 34%)	low profit, full capacity, low income & stable market

Table 5.2 Economic performance of SMEs

		- captive& relational (3; 43%)	product (3; 34%)	none (3; 34%)	low profit, excess capacity, low income & fluctuate market			
		Exception: - modular (1; 14%)	none (1; 14%)	none (1; 8%)	low profit, full capacity, low income & stable market			
2	B (3; 100%)	modular (3; 100%)	product (3; 100%)	 none (2; 67%) captive global to modular domestic (1; 33%) 	competitive profit, medium (1)/large (2) sales, medium income & stable market			
3	C (13; 100%)	- modular (5; 38%)	- product (1; 8%)	- none (1; 8%)	competitive profit, medium sales, medium income & stable market			
			- product, functional & chain (4; 30%)	 none (2; 16%) relational to modular (1; 8%) modular global to modular domestic (1; 8%) 	high profit, large sales, high income & increase market			
		- modular & relational (6; 46%)	- product (2; 16%)	- more modular (2; 16%)	competitive profit, medium sales, medium income & stable market			
			- product & functional (3; 22%)	 none (1;8%) more modular (2; 16%) 	competitive profit, medium sales, medium income & stable (1)/decrease market (1)			
					competitive profit, large sales, high income & stable market			
			- product, functional & chain (1; 8%)	- more modular (1; 8%)	competitive profit, large sales, high income & increase market			
		Exception - market	none (1; 8%)	none (1; 8%)	low profit, low sales, low income			
		- captive (1; 8%)	product & functional (1; 8%)	modular to captive (1; 8%)	competitive profit, very large sales & high income			
4	D (2; 100%)	modular (2; 100%)	product (2; 100%)	none (2; 100%)	competitive profit, medium sales, medium income & stable market			
	Source: Analysis (2014)							

Being in the lowest level of the value chain, type A SMEs have captive and relational governance with their lead firms. Interaction with the value chain exposed them to various new designs; hence enabled product upgrading. However, product upgrading has little impact on economic performance because they largely depend on order from lead firms. The economic performance of A SMEs are characterised by low production capacity, low profit and low income. The variance that can be found among them is on their market stability. Some A firms who have higher capabilities or produce limited products always receive continuous orders from C; whereas the others facing fluctuate market. For example, Respondent #2 never stops supplying his regular buyers and Respondent #3 and #4 need to sometimes work in other sector such as home construction when they do not get any pottery orders.

Type B SMEs are in modular relationship with buyer not able to perform meaningful upgrading due to their limitation in market access. Nevertheless, they sell in large scale and are in modular relationship with buyers. Thus they are able to bargain for competitive profit and have more power to negotiate the price. Type B firms show medium level income and stable market.

Type C SMEs access the highest value added activities in the production line of pottery industry. Being in that node of the chain, with modular or relational governance, gives them at minimum a competitive profit margin, medium sales, medium income and relatively stable market. More innovative SMEs (Respondent #1, #14, #15, and #21) are able to perform chain upgrading in which they move to higher value added chain by targeting new or niche markets. Furthermore, C firms who also own retail shop (type C.2) have bigger chance to attract buyers but not immediately always be in better position than those who only have workshop (type C.1) as challenged by Respondents #11 and #25. An exception on the captive relationship which yields in high income applied for Respondent #25. Being 'voluntarily' captive to one big buyer, Respondent #25 capitalizes on large volume orders. For him, getting order from that buyer is enough for his profitability.

Type D SMEs are retailers who are in modular relationship due to their ability in offering diverse range of products for buyers. D firms source learning from the cluster by observing the latest design produced by C SMEs. Upgrading in the case of pure retailers refers to the diversity of products and the conditions of retail shop since they do not involved with production activity. The economic performance of retailers are characterised to be having competitive profit, medium sales, medium income, and stable market.

Furthermore, it was observed that in general SMEs targeting both export and domestic market are in a better economic position because of the larger numbers of potential buyers and the risk of one's weakening market could be compensated with the other. Exceptions happened for Respondent #14 who focuses on high-end domestic products and Respondent #25 who focuses on low-end export products. Targeting only one market, Respondent #14 enjoys high income from the high margin of his innovative products whereas Respondent #25 gains from large quantity orders. Moreover, it was also noticed that SMEs who are actively participate in the trade fairs (Respondent #1, #14, #15, #16, and #21) have bigger market shares because they are able to attract more potential buyers. Their participation in the exhibitions furthermore enhances the position Kasongan cluster since those new buyers frequently visits the cluster later on.

To sum up, the economic performance of SMEs in Kasongan pottery cluster differs depend on firms' position within the value chain structure and upgrading activities as function of value chain governance, other learning's institution and firms' absorptive capacity. Type C SMEs who capitalize on the highest value added rents in the production stage are in general in a better economic position than the other types of SMEs. Among the C firms, the ones who enjoyed highest economic performance are the most innovative firms. The experiences of some exceptional SMEs targeting high-end or large buyers showed that market segmentation is substantial towards economic gain. In addition, participation in trade exhibition has significant effect for attracting potential buyers.

5.4 Dynamics in Economic Performance

Within the dynamic dimension, it is worth observing how SMEs utilize learning to shift their governance relationship and pursue higher economic rents. There are five trajectories experienced by SMEs in Kasongan. The first common one is move towards more modular governance. This shift is experienced by Respondent #10, #11, #16, #17 and #24 due to their ability to produce their own design. At their early business time, they produced more buyers' design products. However, they now have equal buyers' design and own design orders. This change has increased their competitiveness and market. The second shift prevailed is from relational to modular governance as encountered by Respondent #1. Started with more relational coordination, this firm rapidly upgrade and become a turn-key supplier. He frequently creates new product and set trends for the cluster as many of his designs were being copied. Within the cluster, Respondent #1 is known to be the most performing entrepreneurs. His other professions as an artist and lecturer in the Institute of Arts further explained his high absorptive capacity.

Unique trajectories were faced by Respondent #14 and #25. Respondent #14 moved from modular global value chain into high-end modular domestic chain. The global financial crisis in 2008 taught him not to rely on export market. Hence, in 2009 he decided to focus on niche market which is producing statue for high-end domestic consumers. Fifty per cent of his products are now being supplied to Batik Keris, a high-segment retailer selling traditional merchandises. Another uncommon shift was opted by Respondent #25 who shifted from modular global value chain into captive global value chain. Respondent #25 focuses to secure orders form Pier1, a large US exporter. For him, having three samples chosen would grant him minimum of 5,000 pieces orders per three months. Thus, although the product is commonly a low-end with minimum margin, the huge volume is enough to make it as a profitable business. Lastly, unfavourable shift happened to Respondent #7 who went down from being C firms in captive global value chain to modular domestic type B firm. Respondent #7 stated that he used to regularly send two containers per month to his buyer in The Netherlands. However, the global crisis stopped the orders and he couldn't find other buyers. After two years of shock periods, he started his business again by being fired pottery makers.

5.5 Conclusion

Responding to the third sub-research question on how value chain governance assists learning, the research found that captive governance offers the least opportunity for learning and upgrading, i.e. product upgrading; whereas relational and modular relationships open more possibility for product, functional, and chain upgrading. Thus, the study more or less confirmed the three propositions by Humphrey and Schmitz (2002: 1020) on the implication of value chain governance towards upgrading. However, in addition to value chain governance, for information to be transformed into knowledge and real upgrading process, the absorptive capacity of firms is found to be one of the determining factors. Moreover, innovative firms are also source learning from other institutions, such as internet, cluster, education and work experiences.

The last sub-research question observed the variance in the economic performance for each type of value chain governance being engaged by SMEs in Kasongan. The research found that economic performance are varied depends on firms' position within the value chain structure and their upgrading activities as results from value chain governance, other learning and absorptive capacity. Type C SMEs who capitalize the value added rents of finishing process are generally in a better economic position than retailers, fired pottery makers and raw pottery makers. Among the C SMEs, the most innovative firms are the one who enjoy highest economic performance. The experiences of some exceptional SMEs targeting high-end or large buyers showed that market segmentation is substantial towards economic gain. In addition, participation in trade fairs has significant effect to attract new potential buyers.

Chapter 6 Conclusion

6.1 Findings

The research finds empirical evidence on the impact of value chain governance towards economic performance of SMEs using the case of Kasongan pottery cluster in Yogyakarta, Indonesia. The key findings of the research are summarized in table 6.1 below.

No	Research Question	Findings		
1	What are the value chains and types of value chain governance engaged by SMEs in Kasongan pottery cluster?	Pottery industry is a buyer-driven chain with two level of value chain which are domestic and global value chain. In relation to SMEs' first-tier buyers, the research finds market, modular, relational, and captive governance to be present in different nodes of the chain.		
2	How is the institutional environment embedded in the Kasongan pottery cluster operating?	The institutional configuration has provide basic foundation for SMEs to learn and upgrade but is not yet matured enough to build competitiveness and prevent SMEs from market volatility.		
3	How value chain governance assists learning and upgrading process for SMEs in Kasongan pottery cluster?	The general patterns showed that captive governance offers limited opportunity for only product upgrading; whereas relational and modular relationships open more possibilities for product, functional, and chain upgrading. However, the absorptive capacity of firms is found to be one of the determining factors for actual capitalisation of the learning into upgrading.		
4	How economic performance differs for each type of value chain engaged by SMEs in Kasongan pottery cluster?	The economic performance differs depends on firms' position within the value chain structure and its upgrading capabilities. The most innovative firms are the ones who enjoy highest economic performance.		

Table 6.1 Key Findings

In conclusion, responding to the main question, given the institutional environment has not yet matured enough to promote competitiveness and prevent SMEs from market volatility, the five types of value chain governance have considerable influence in leading the pattern of learning and upgrading experienced by the sample of this research. Thus, they have a say on the economic performance of SMEs. However, in addition to the value chain governance, absorptive capacity is found to be crucial for firms in order to be able to transform information into knowledge and perform meaningful upgrading. Furthermore, SMEs need to be innovative in their product, market segmentation and marketing strategy in order to achieve high economic rents.

6.2 Reflections

There are four conceptual reflections drawn from the research. First, the research would agree with Altenburg (2006: 506-507), that certain combination

of three factors determining the type of governance did not always match the classification proposed by Gereffi et al. (2005). For instance, most of the highly capable type A SMEs are in captive relationship with their buyers instead of modular governance as analyse by their H-H-H characteristics. One could argue that capabilities in supply-base should not be narrowly interpreted as the ability to produce complex products but should be assessed in terms of uniqueness of the suppliers in relation to others. In this case, one type A supplier is not unique compare to others within the cluster and therefore could be valued low in terms of its capabilities and fall under the captive category.

However, that point of view leads to the second conceptual reflection which deals with the obscurity of the unit of comparison. The question that arises is what basis of comparison should be used when assigning the high and low values to the three factors. In the case of type A suppliers above, the result will be different when comparison was made with the same firms within the cluster or with the similar firms outside the cluster. There is no clear instruction given on this matter, even by Gereffi et al. (2005), whether to use global, national or local standards. Hence, each individual researcher needs to make his/her own justification regarding the base unit of comparison that is being utilised.

The third reflection is related to the definition of governance in the value chain. The empirical evidence on the dynamic between type A suppliers and their *juragan* and the actions taken by type C SMEs to prevent leakage on their unique designs showed that governance in not merely a matter of coordination as propose by Gereffi et al. (2005) but is considered to be more as power contestation between different actors within the chain and their diverse interests as argued by Altenburg (2006: 517).

The last conceptual reflection was drawn concerning the linearity of the proposition by Humphrey and Schmitz (2002: 1020) on the implication of value chain governance towards upgrading. The theory suggests trajectories in which particular types of value chain governance lead to certain types of upgrading. Nevertheless, the research finds that, apart from value chain governance, absorptive capacity is significant for the actual capitalisation of learning into upgrading. This is shown by the different upgrading trajectories experienced by C type SMEs with the same value chain governance.

Looking at the findings from a broader perspective often leads to 'so what' type questions. So what if firms are in market, modular, relational, captive or hierarchical modes of governance? What does their association with certain a type of governance has actually mean about the development of SMEs?

In this area, the research identifies three developmental implications. First, insertion into global value chain should be promoted as an attempt to expand the market but not to depend on it. The study reveals that in general firms targeting both domestic and export markets are in a better economic position whilst firms with dependency to one market are prone to market volatility. Moreover, in order not to lose in the global economy, firms in developing countries should attempt to capitalize on the highest value added activities or push towards fair distribution of economic rents along the chain. The presence of local modular turn-key suppliers in the global value chain could contest the arrangement of rents distribution made by lead firms in developed countries.

Secondly, given that lead firms are in favour on capitalizing the highest value added activities and protecting their core competencies, the transmission of knowledge to suppliers and upgrading opportunity are limited to those which will not challenge the position of lead firms. Therefore, a sensible implication for development agents is to promote such institutional configurations which made it possible for SMEs to learn and upgrade regardless of their current position within the value chain. Government, as one of the important actors, should move away from traditional specific microlevel intervention such as providing technical training and focus more to create comprehensive policies that could lower transaction cost and engage with lead firms and other development agents in the design and implementation of the policies.

Lastly, within the local economic development (LED) studies, enterprise promotion and locality development are central. They have become the basis for competitiveness in this globalised world. Numerous literatures concerned with enterprise development link SMEs with incubators, clusters, value chains and innovation systems. This research serves to both add and nuance the existing literatures on this subject. It provides a mixed picture of opportunities and risks (dependencies) experienced by SMEs in Kasongan pottery cluster. Competing in the global value chain, it suggests that both 'surviving and thriving' can and do occur.

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Appendices

Appendix A: Data Collection

Interview Details

No	Institution		Respondent	Interview Date
1	SMEs in Kasongan	1	Timbul Raharjo	05 July 2014
	_	2	Wagiman	19 July 2014
		3	Gimun	19 July 2014
		4	Giyono	19 July 2014
		5	Rita	19 July 2014
		6	Agus	19 July 2014
		7	Nur	19 July 2014
		8	Muh	19 July 2014
		9	Supri	19 July 2014
		10	Dewi	19 July 2014
		11	Wagiman	19 July 2014
		12	Eko	23 July 2014
		13	Nuryati	23 July 2014
		14	Walijo	24 July 2014
		15	Riyanto	24 July 2014
		16	Soma	24 July 2014
		17	Enik	01 August 2014
		18	Ponimin	01 August 2014
		19	Mujiyem	01 August 2014
		20	Jirih	01 August 2014
		21	Agung	02 August 2014
		22	Kasidi	02 August 2014
		23	Ribet	02 August 2014
		24	Mujiyo	02 August 2014
		25	Tri	14 August 2014
2	Local Business Association	Cha	ur of Satya Bawana	05 July 2014
		Coo	operation	
3	UPT Kasongan	Hea	id of UPT Kasongan	10 July 2014
4	Disperindagkop, Bantul	Hea	id of the Trade and	15 July 2014
	Regency	Coo	peration section	
5	Disperindagkop, Yogyakarta	Hea	nd of the Handicraft	11 July 2014
	Province	sub	-section	

Observation Details

No	Aspect to Observe	Observation Object	Observation Date
1	Cluster location	Kasongan cluster	04 July 2014
	Cluster activity		
	Conditions of retails		
	Conditions of workshops		
	Variety of products		

•		D 1 11	20.21.1.1.2014
Ζ	Rapid Retail Appraisal:	Retailers selling	50-51 July 2014
	Observation & Small talk with	pottery products	
	shopkeeper on:	in Kasongan	
	-Size and interior of the shop	cluster	
-Variety of products			
	-Products' origin	Retailers selling	07-08 August 2014
	-Workshop	other than pottery	0
	-Design creation	products in	
	-Buyers	Kasongan cluster	
	-Marketing activities	C C	
	-Owner		
3	Cluster location	Pundong cluster	28-29 July 2014
	Cluster activity	C	
	Conditions of retails		
	Conditions of workshops		
	Variety of products		

Secondary Data

No	Name	Document Type	Source
1	Book of Potential SMEs in	Government	Disperindagkop
	Yogyakarta Province Year	report	Yogyakarta
	2011; 2012; 2013		Province
2	Strategic Plan 2011-2015 of	Government	Disperindagkop
	Disperindag Bantul Regency	report	Bantul Regency
3	Profile of SMEs Centre in	Booklet	Disperindagkop
	Bantul Regency		Bantul Regency
4	UPT Kasongan at a glance	Booklet	Disperindagkop
			Bantul Regency
5	Radiology system for ceramic	Leaflet	Disperindagkop
			Bantul Regency
6	Overview on the development	Government	UPT Kasongan
	of pottery in Kasongan	report	
7	Presidential decree No 28 Year	Government law	Ministry of State
	2008 on National Industral		Secretary
	Policy		
8	Ministry of Industry regulation	Government law	Ministry of
	no 135/M-		Industry
	IND/PER/10/2009 on		
	Roadmap to Development of		
	Pottery and Ceramics Cluster		

Appendix B: Interview Questions

Respondent: SMEs

- 1. Please describe how you start your business!
- 2. What kind of products you made?
- 3. Do you produce for domestic, international or both markets?
- 4. Do you supply one or many buyers?
- 5. Do you also work with suppliers?
- 6. Do you make stock product or produce only by order?
- 7. How is the routine of your business?
- 8. Please describe how the order process usually occurs!
- 9. How was negotiation process happened? How would you like it to be?
- 10. How relationship with buyers evolved?
- 11. Do you learn something from your interaction with buyers? How do you utilize that learning?
- 12. How that learning had affected your business (production cost; margin; volume of sales; market)?
- 13. Who do you think has the most influence on your business?
- 14. Are there other factors you consider that have significant effect on your business?

Respondent: Local Business Association

- 1. How was the history of Satya Bawana as local business association?
- 2. How many members does Satya Bawana has and how is the communication mechanism?
- 3. What are the roles played by Satya Bawana for the development of SMEs in Kasongan?
- 4. What are the institutions collaborating with Satya Bawana? In what way and how?
- 5. What is the organisation view on the upgrading of SMEs and their economic performance?

Respondent: UPT Kasongan

- 1. When was the UPT established and what was the purpose?
- 2. What are the roles played by UPT for the development of SMEs in Kasongan?
- 3. Which programs were carried out by UPT for SMEs in Kasongan?
- 4. What is UPT view on the upgrading of SMEs and their economic performance?
- 5. How UPT relate with Disperindagkop of Bantul Regency and Yogyakarta Province?

Respondent: Disperindagkop Bantul Regency

- 1. What is the position of SMEs in local economic development strategy?
- 2. How was the strategic planning for SMEs development?
- 3. What programs were designed for SMEs?
- 4. Who are involved in the formulation of planning and programs?
- 5. Who are the other institutions cooperating with Disperindagkop, Bantul Regency for SMEs development? In what way and how?
- 6. Are there any special programs for pottery industry and SMEs in Kasongan?

Respondent: Disperindagkop Yogyakarta Province

- 1. What is the position of SMEs in local economic development strategy?
- 2. How was the strategic planning for SMEs development?
- 3. What programs were designed for SMEs?
- 4. Who are involved in the formulation of planning and programs?
- 5. Who are the other institutions cooperating with Disperindagkop, Yogyakarta Province for SMEs development? In what way and how?
- 6. Are there any special programs for pottery industry and SMEs in Kasongan?

Resp	Learning	and Upgradir	ng: What did	l you learn	from your in	teraction wit	h buyer?	Economic Performance: How learning had affecting your					ng your
No/	_	H	low the learn	ning has h	elped you to:		-			perfo	rmance?		
Туре	Utilize New	Re-organize	Increase	Make	Perform	Find New	Other	Product-	Product-	Profit	Sales	Overall	Market
of	Technology	Production	Quality &	New	New	Market	source of	ion Cost	ion Time	Margin	Volume	Income	Sustainability
SMEs		Process	Standard	Product	Function		learning						
1	No	No	No	Indirect	Design	Yes	Spillovers;	Increased	Relatively	High	Large	High	Increased
C.2				creative	(indirectly)	(indirectly)	internet;	with	same				(Exhibition,
				thinking			world's	inflation					Retails)
							trend						
2	No	No	No	Yes	No	No	Spillovers	Increased	Relatively	Low	Stable	Low	Yes (regular
Α								with	same	(set by C)	(tull		buyers)
	N.7.	N.7.	N.7.	* 7	N.T.	N.T.	0 11	inflation	D 1 ' 1	.	capacity)		D 1
3	No	No	No	Yes	No	No	Spillovers	Increased	Relatively	Low	Full	Low	Depend on
Α								with	same	(set by C)	capacity		order from
4	NT	NT	NT	V	NT	NT	C '11	inflation		т	т	т	C/juragan
4	INO	INO	INO	res	INO	INO	Spillovers	Increased	Relatively	Low	Low	LOW	Depend on
A								With	same	(set by C)	(excess		order from
F	No	No	Nie	Vaa	Ne	No	Smillomona	Inflation	Delativaly	Low	capacity)	Low	
5	INO	INO	INO	res	INO	INO	spillovers	mcreased	Relatively	LOW	LOW	LOW	Depend on
A								inflation	same	(set by C)	(excess		C / iumagam
6	No	No	No	Vec	Design	No	Spillovers	Increased	Relatively	Compete	Medium	Medium	Ves (regular
C_2	110	110	110	105	(indirectly)	140	movie	with	same	with	Wiedium	wicdium	buyers
0.2					(maneedy)		character	inflation	Same	others			Duyersy
7	No	No	No	Yes	No	No	Spillovers	Increased	Relatively	Compete	Large	Medium	Yes
B	110	110	110	100	110	110	opmovers	with	same	with	Large	meanum	100
2								inflation	ounie	others			
8	No	No	No	Yes	No	No	Spillovers	Increased	Relatively	Compete	Medium	Medium	Yes
В							1	with	same	with			
								inflation		others			
9	No	No	No	Yes	No	No	Spillovers	Increased	Relatively	Compete	Large	Medium	Yes
В							1	with	same	with	0		
								inflation		others			
10	No	No	No	Yes	Design	No	Spillovers;	Increased	Relatively	Compete	Large	High	Yes
C.2					(indirectly)		internet	with	same	with			
								inflation		others			

Appendix C: Worksheet of SMEs Interviews

11 C.1	No	No	No	Yes	Design (indirectly)	Yes (indirectly)	Spillovers; internet	Increased with inflation	Relatively same	Compete with others	Large	High	Yes
12 D	No	No	No	No (cluster's product)	No	No	Cluster	Increased with inflation	Relatively same	Compete with others	Medium	Medium	Yes
13 C.2	No	No	No	Indirect creative thinking	No	No	Spillovers; cluster	Increased with inflation	Relatively same	Compete with others	Medium	Medium	Yes
14 C.2	No	No	No	Indirect creative thinking	Design (indirectly)	Yes (indirectly)	Spillovers; furniture trend; internet	Increased with inflation	Relatively same	High	Large	High	Increased (Exhibition, Retails)
15 C.2	No	No	No	Indirect creative thinking	Design (indirectly) Marketing (facebook)	Yes (indirectly)	Spillovers; internet	Increased with inflation	Relatively same	High	Large	High	Increased (Exhibition, Retails, Facebook)
16 C.2	No	No	No	Yes	Design (indirectly)	Yes (indirectly)	Spillovers; internet	Increased with inflation	Relatively same	Compete with others	Medium	Medium	Decreased (last semester)
17 C.1	No	No	No	Yes	No	No	Spillovers; internet	Increased with inflation	Relatively same	Compete with others	Medium	Medium	Domestic stable; Export depend on buying agent
18 D	No	No	No	No (cluster's product)	No	No	Cluster	Increased with inflation	Relatively same	Compete with others	Medium	Medium	Yes
19 C.1	No	No	No	No (spill- overs)	No	No	Spillovers	Increased with inflation	Relatively same	Low	Low	Low	Depend on market demands
20 A	No	No	No	No (spill- overs)	No	No	Spillovers	Increased with inflation	Relatively same	Compete with others	Low	Low	Yes (regular buyers)
21 C.2	No	No	No	Indirect creative thinking	Design (indirectly)	Yes (indirectly)	Spillovers; internet	Increased with inflation	Relatively same	High	Large	High	Increased (Exhibition, Retails)
22 A	No	No	No	Yes	No	No	Spillovers	Increased with inflation	Relatively same	Low (set by C)	Low (excess capacity)	Low	Depend on order from C/ <i>juragan</i>

23 A	No	No	No	Yes	No	No	Spillovers	Increased with inflation	Relatively same	Low (set by C)	Low (full capacity)	Low	Yes (regular order from C/ <i>juragan)</i>
24 C.1	No	No	No	Yes	No	No	Spillovers; cluster	Increased with inflation	Relatively same	Compete with others	Medium	Medium	Yes
25 C.1	No	No	No	Yes	Design (indirectly)	No	Spillovers	Increased with inflation	Relatively same	Low (low-end product)	Very large	High	Increased sales volume

Appendix D: Data Analysis

The following tables show the basic data analysis per respondent. The types of SMEs as respondents are classified into:

- A : raw pottery maker
- B : fired pottery maker
- C.1 : finished pottery maker
- C.2 : finished pottery maker and retailer
- E : retailer

D.1 Governance at Immediate Level

No	Type of	Respon-	Perceived		ŀ	Perce	eived VC		Р	erce	ived VC
	SMEs &	dent No	lead firm	go	vern	anc	e in relation to	g	over	nano	ce in relation
	market			0	1s	t tie	r supplier	0	to	1st t	ier buyer
1	А	Resp. #2	Finished	L	Н	Н	Market	Η	Η	Н	Captive
	domestic	-	pottery maker								
2	А	Resp. #3	Finished	L	Н	Н	Market	Н	Н	Н	Captive
	domestic		pottery maker								
3	А	Resp. #4	Finished	L	Н	Н	Market	Н	Η	Н	Captive and
	domestic		pottery maker								relational
4	А	Resp. #5	Finished	L	Н	Н	Market	Н	Н	Н	Captive and
	domestic		pottery maker								relational
5	А	Resp. #20	Finished	L	Н	Н	Market	Н	Н	Н	Modular
	domestic		pottery maker								
6	A	Resp. #22	Finished	L	Н	Н	Market	Н	Н	Н	Captive and
-	domestic	D //22	pottery maker	Ŧ	T T	T T					relational
7	A	Resp. #23	Finished	L	Н	Н	Market	Н	Н	Н	Captive
0	domestic	D #7	pottery maker	т	тт	тт		TT	тт	TT	NC 1.1
8	B	Resp. $\#/$	Finished	L	Н	Н	Market	Н	Н	Н	Modular
0	domestic	D #0	pottery maker	т	тт	тт		тт	тт	тт	AC 1.1
9	B	Kesp. #8	Finished	L	Н	н	Market	Н	н	Н	Modular
10	domestic	Daga #0	Einich ad	т	TT	тт	Maulaat	TT	тт	TT	Ma dalan
10	D	Kesp. #9	Finished	L	п	п	Market	н	н	п	Modular
11	C_1	P ose #11	Wholeseler	Ц	т	т	Hierarchy	IJ	Т	Ц	Polational
11	C.I	Kesp. #11	wholesaler	п	Г	Г	rheratchy	п	Г	п	and modular
12	C 1	Resp. #17	Wholesaler	н	н	н	Captive and	н	Т	н	Relational
14	domestic	Resp. #17	Buying agent	11	11	11	relational	11	Г	11	and modular
	export		(for export)				relational				and modular
13	C.1	Resp #19	None	L	Н	Н	Hierarchy	L	Н	Н	Market
10	domestic	100p. // 17	110110						••		11111100
14	C.1	Resp. #24	Wholesaler	Н	Н	Н	Captive and	Н	L	Н	Relational
	domestic	I III					relational				and modular
	export										
15	C.1	Resp. #25	Buying agent	Η	Η	Н	Captive and	Η	Η	Н	Captive
	export	Ĩ					relational				*
16	Ĉ.2	Resp. #1	Wholesaler	Н	Η	Н	Captive and	Η	Н	Н	Modular
	domestic	-					relational				
	export										
17	C.2	Resp. #6	Wholesaler	Н	Н	Н	Captive and	Н	Н	Н	Relational
	domestic						relational				and modular
18	C.2	Resp. #10	Wholesaler	Н	Н	Н	Captive and	Н	L	Н	Relational
	export						relational				and modular

19	C.2 domestic	Resp. #13	Wholesaler	Η	Η	Η	Captive and relational	Н	Η	Η	Modular
20	C.2 domestic	Resp. #14	Wholesaler	Η	L	L	Hierarchy	Η	Η	Η	Modular
21	C.2 domestic export	Resp. #15	Wholesaler	Н	Η	Η	Captive and relational	Н	Η	Η	Modular
22	C.2 export	Resp. #16	Wholesaler	Η	L	L	Hierarchy	Н	L	Η	Relational and modular
23	C.2 domestic export	Resp. #21	Wholesaler	Н	Η	Η	Captive and relational	Н	Н	Н	Modular
24	D domestic	Resp. #12	None	Η	Η	Η	Modular	Η	Η	Η	Modular
25	D domestic	Resp. #18	None	Н	Η	Η	Modular	Н	Н	Н	Modular

D.2 Learning and Upgrading Occurred

No	Type of SMEs & market	Respon- dent No	Current VC governance in relation to 1 st tier buyer	Learning from lead firm	Other sources of learning	Upgrading occurred	Shift in VC Governance
1	A domestic	Resp.#2	Captive	Product design	Spillovers	Product	None
2	A domestic	Resp.#3	Captive	Product design	Spillovers	Product	None
3	A domestic	Resp.#23	Captive	Product design	Spillovers	Product	None
4	A domestic	Resp.#4	Captive and relational	Product design	Spillovers	Product	None
5	A domestic	Resp.#5	Captive and relational	Product design	Spillovers	Product	None
6	A domestic	Resp.#22	Captive and relational	Product design	Spillovers	Product	None
7	A domestic	Resp.#20	Modular	None	Spillovers	None	None
8	B domestic	Resp.#7	Modular	Product design	Spillovers	Product	Captive global to modular domestic (Type C.1 to B)
9	B domestic	Resp.#8	Modular	Product design	Spillovers	Product	None
10	B domestic	Resp.#9	Modular	Product design	Spillovers	Product	None
11	C.1 export	Resp.#11	Relational and modular	Product design	Spillovers; internet	Product; Functional (design); Chain	More modular
12	C.1 domestic export	Resp.#17	Relational and modular	Product design	Spillovers; cluster; internet	Product	More modular

13	C.1 domestic export	Resp.#24	Relational and modular	Product design	Spillovers; cluster	Product	More modular
14	C.1 domestic	Resp.#19	Market	None	Spillovers	None	None
15	C.1 export	Resp.#25	Captive	Product design	Spillovers	Product; Functional (design)	Modular to captive
16	C.2 domestic export	Resp.#1	Modular	None	Spillovers; education; internet; trend	Product; Functional (design); Chain	Relational to modular
17	C.2 domestic	Resp.#13	Modular	None	Spillovers; cluster	Product	None
18	C.2 domestic	Resp.#14	Modular	None	Spillovers; internet; furniture trend	Product; Functional (design); Chain	Modular global to modular domestic (high- end product)
19	C.2 domestic export	Resp.#15	Modular	Marketing	Spillovers; education; internet	Product; Functional (design and marketing); Chain	None
20	C.2 domestic export	Resp.#21	Modular	None	Spillovers; internet	Product; Functional (design); Chain	None
21	C.2 domestic	Resp.#6	Relational and modular	Product design	Spillovers; education; movie	Product; Functional (design)	None
22	C.2 export	Resp.#10	Relational and modular	Product design	Spillovers; internet	Product; Functional (design)	More modular
23	C.2 export	Resp.#16	Relational and modular	Product design	Spillovers; internet	Product; Functional (design)	More modular
24	D domestic	Resp.#12	Modular	None	Cluster	Product	None
25	D domestic	Resp.#18	Modular	None	Cluster	Product	None

D.3 Economic Performance of SMEs

No	Type of SMEs & market	Respon- dent No	Current VC governance in relation to 1 st tier buyer	Upgrading occurred	Shift in Economic Performance	Economic Performance
1	A domestic	Resp. #2	Captive	Product	None	Low profit; full capacity; low income Δ: stable market
2	A domestic	Resp. #3	Captive	Product	None	Low profit; full capacity; low income Δ: fluctuate market

	3	A domestic	Resp. #23	Captive	Product	None	Low profit; full capacity; low income A: stable market
	4	A domestic	Resp. #4	Captive and relational	Product	None	Low profit; excess capacity; low income Δ: fluctuate market
	5	A domestic	Resp. #5	Captive and relational	Product	None	Low profit; excess capacity; low income Δ: decrease market
	6	A domestic	Resp. #22	Captive and relational	Product	None	Low profit; excess capacity; low income Δ: decrease market
	7	A domestic	Resp. #20	Modular	None	None	Low profit; full capacity; low income Δ: stable market
	8	B domestic	Resp. #7	Modular	Product	Captive global to modular domestic (Type C to B)	Competitive profit; large sales; medium income Δ: stable market
	9	B domestic	Resp. #8	Modular	Product	None	Competitive profit; medium sales; medium income Δ: stable market
_	10	B domestic	Resp. #9	Modular	Product	None	Competitive profit; large sales; medium income Δ : stable market
	11	C.1 export	Resp. #11	Relational and modular	Product; Functional (design); Chain	More modular	Competitive profit; large sales; high income Δ: increase market
	12	C.1 domestic export	Resp. #17	Relational and modular	Product	More modular	Competitive profit; medium sales; medium income Δ: fluctuate market
	13	C.1 domestic export	Resp. #24	Relational and modular	Product	More modular	Competitive profit; medium sales; medium income Δ: fluctuate market
-	14	C.1 domestic	Resp. #19	Market	None	None	low profit; low sales; low income Δ: fluctuate market
	15	C.1 export	Resp. #25	Captive	Product; Functional (design)	Modular to captive	Competitive profit; very large sales; high income Δ: increase market
_	16	C.2 domestic export	Resp. #1	Modular	Product; Functional (design); Chain	Relational to modular	High profit; very large sales; high income Δ: increase market

17	C.2 domestic	Resp. #13	Modular	Product	None	Competitive profit; medium sales; medium income Δ: stable market
18	C.2 domestic	Resp. #14	Modular	Product; Functional (design); Chain	Modular global to modular domestic (high-end product)	High profit; large sales; high income Δ: increase market
19	C.2 domestic export	Resp. #15	Modular	Product; Functional (design and marketing); Chain	None	High profit; large sales; high income Δ: increase market
20	C.2 domestic export	Resp. #21	Modular	Product; Functional (design); Chain	None	High profit; large sales; high income Δ: increase market
21	Ċ.2 domestic	Resp. #6	Relational and modular	Product; Functional (design)	None	Competitive profit; medium sales; medium income Δ: stable market
22	C.2 export	Resp. #10	Relational and modular	Product; Functional (design)	More modular	Competitive profit; large sales; high income Δ: stable market
23	C.2 export	Resp. #16	Relational and modular	Product; Functional (design)	More modular	Competitive profit; medium sales; medium income Δ: decrease market
24	D domestic	Resp. #12	Modular	Product	None	Competitive profit; medium sales; medium income Δ: stable market
25	D domestic	Resp. #18	Modular	Product	None	Competitive profit; medium sales; medium income Δ: stable market