

Sep 30th, 12:00 PM - 1:00 PM

The Impact of Social Capital and Policy Inducement on Collective Efficiency in Micro, Small and Medium Enterprises (MSMEs) Cluster

Mukhammad K. Mawardi
University of Wollongong

Follow this and additional works at: <http://ro.uow.edu.au/sbshdr>

Mukhammad K. Mawardi, "The Impact of Social Capital and Policy Inducement on Collective Efficiency in Micro, Small and Medium Enterprises (MSMEs) Cluster" (September 30, 2011). *SBS HDR Student Conference*. Paper 12.
<http://ro.uow.edu.au/sbshdr/2011/papers/12>

Description

Cluster or industrial district has long been acknowledged as firm's, in particularly micro, small, and medium enterprise (MSME) mechanism to cope their limitation. Two compelling theories explaining this phenomenon are cluster and industrial district. Although, root on common theoretical ground, these theories focus on different unit analysis and emerges in different context. This paper propose the conceptual model in interpreting the dynamics of cluster and how social capital and cluster policy impact on the collective efficiency of cluster. To support the model, literatures explaining the collective efficiency, social capital and cluster policy are critically reviewed. This paper is ended by proposing research method to apply the model in the empirical study.

Location

iC - SBS Teaching Facility

The Impact of Social Capital and Cluster Policy on Collective Efficiency in Micro, Small and Medium Enterprises (MSMEs) Cluster

by Mukhammad K. Mawardi

Abstract

Cluster or industrial district has long been acknowledged as firm's, in particularly micro, small, and medium enterprise (MSME) mechanism to cope their limitation. This mechanism also could be viewed as a form of entrepreneurial development and a manifestation of the agglomeration of the firm, hence the institutional perspective and the industrial district theory are fruitful to explore the dynamics of MSME cluster. This paper proposes the conceptual model to interpret the dynamics of MSME cluster, by exploring the institutional context of MSME cluster and examining the impact of social capital and cluster policy on the collective efficiency of MSME cluster. The social capital represents the internal characteristics of cluster, whilst cluster policy refers to external factor affecting the central competitiveness of cluster, collective efficiency. To support the model, literatures explaining the institutional perspective, collective efficiency, social capital and cluster policy are critically reviewed. This paper also proposes research method to apply the model in the empirical study.

Background

The geographical agglomeration of the firms has long been acknowledged as a firm's survival mechanism to cope their limitation in production. By locating in dense geographical location, the Micro, Small and Medium Enterprises (MSMEs) may gain collective efficiency in the form of external economy and potency to perform joint action. The former refers to the advantage provided by the location where cluster is located and it consists of pooling skilled labour, abundant raw material, and knowledge spillover. These advantages have been indicated by Marshal (1920) in his classical work as a form of agglomeration effect (Schmitz 1999). He argued that the geographical agglomeration of the firm or industrial district is able to create (1) scale economies, which result from a high degree of specialization and division of labour, (2) external economy, which arises from the existence of shared infrastructure, service, and information, and (3) availability of a special skill and the pooling of the labour force. The latter refers to the collective action performed by cluster member to obtain more advantages. Vertical and horizontal integration or bilateral and multilateral cooperation is common form of this action.

Several studies (Schmitz, 1995; 1999; Rabellotti, 1998; Nadvi, 1999a; Caniels & Romijn, 2003) recognized the importance of collective efficiency in MSME cluster. The collective efficiency is a central competitiveness of cluster in both, industrial and developing countries (Nadvi, 1999a; Caniels & Romijn, 2003). Yet the intensity and quality of collective efficiency of cluster are diverse because it affected by the core characteristics of cluster (Rabellotti, 1998). Schmitz (1999) further, identified local external economy and joint action as factors that can be brought together in the collective efficiency concept. He asserted that the former is incidentally gained by firms and the latter is consciously pursued by cluster member. Although these studies highlighted the significance of the collective efficiency as a core cluster advantage, they paid less attention on how and why the collective efficiency emerges in MSME cluster and do internal characteristics and external factor impact on the existence of this advantage. Therefore, the study exploring how collective efficiency emerges in MSME cluster and examining the impact of internal and external factor on the collective efficiency raises importance.

To fill the gap, this paper attempts to conceptualise the collective efficiency of MSME cluster. It relies on the institutional perspective (Welter & Smallbone, 2011) and the industrial district theory (Becattini, 2004). The conceptual model of MSME cluster may explore the institutional context of MSME cluster and examine the impact of internal factor and external factor on the collective efficiency of the MSME cluster. If the institutional perspective focuses on the effect of social, economical, political, and cultural institutions and values on the MSME cluster, the industrial district highlighted the impact of social capital and (cluster) policy on the collective efficiency. To achieve the goal, the paper is composed in four sections. Section two critically reviews the literature explaining the geographical agglomeration of the firm and collective efficiency of cluster and also explains the social capital and policy inducement as enabling factors of collective efficiency. The conceptual framework of the study is proposed in the end of section two. The last section advocates research methodology guiding how the study will be performed by researcher.

Literature Review

To support the feasibility of the study, sufficient theoretical underpinnings and previous relevant studies are critically reviewed in this part. The literature review addresses the institutional perspective toward entrepreneur development, the development of theory explaining the geographical agglomeration of the firm, including cluster and industrial district theory. These theories furthermore, are used to examine the MSMEs cluster phenomenon in the context of developing country and to investigate the impact of social capital and cluster policy on the collective efficiency in cluster.

The institutional perspective and entrepreneurship

The industrial district that commonly dominated by MSMEs could be viewed as a collective entrepreneur. It means the existence of industrial district relates to the existence of entrepreneurs in certain region. Consequently, the development of entrepreneurship can be performed through cluster development program. Related to the entrepreneurship development, Walter and Smallbone (2011) argued that understanding the context, including institutional context in society where the entrepreneur exist is significant. The institutional context influences the nature, pace development, and extents of entrepreneurship as well as the way entrepreneurs behave. They added further, that institution forms rule in society that could reduce uncertainty, risk and transactional cost in performing entrepreneur activity.

Understanding the context where MSME cluster occurs also recognized by Johannisson et al (2002), they argued that the firms in cluster do not only interact with other firms in economy motive but also embed institutionally with surrounding environment of cluster in social, cultural, and political motives. This argument is relevant to the industrial district perspective that views MSME cluster as socio-graphical entity of firms. MSMEs are not only tied by geographical density but also social, cultural and political thickness. Therefore, the institutional context perspective in viewing the MSME cluster as a collective entrepreneurship phenomenon raises the importance.

The geographical agglomeration of the firms

As it explained in previous section, to cope the business constraints caused by size limitation, firms with limited organizational resources, production capacity, and innovation capabilities, tend to locate in geographical dense location. They take advantages from abundant natural resources and pooling of skilled labours and obtain effective production scale through job sharing, joint production or sub contract mechanism. Absorbing knowledge from cluster participants and linking to the global value chain are additional benefits generated by cluster. The two most familiar theories often quoted by several scholars in

explaining the phenomenon of the firms in a geographical dense location are cluster and industrial theories.

The cluster theory was developed by Porter (1998) and used in various scholars, such as Humphrey and Schmitz (1995), Lundquist and Power (2002), Newland (2003). Porter (1998) defined cluster as a geographical agglomeration of companies, suppliers, service providers, and associated institutions in a particular field that not only cooperate but also compete (Porter, 2000). He further argued that industrial atmosphere in the form of strong association within cluster members support the firm to obtain economy scale and scope in production, while competitive business environment in cluster boosts their innovativeness and competitiveness. Cluster also generates more advantages from production mechanism that generates similar or closely related products (Humphrey and Schmitz, 1995; Sonobe & Otsuka, 2006) and by the institutional support (Porter, 1998; Lundquist and Power, 2002; Newlands, 2003; McDonald et al., 2007).

In contrast, the industrial district literature recognised the industrial district as a socio-geographical entity of micro, small and medium enterprises (MSMEs) producing a specific commodity in industrial atmosphere (Becattini, 2004; and Bianchi (1994) cited in Cainelli, 2008; Parrilli, 2009). This definition may be focused on the dominant roles of MSMEs as central actors in the industrial district and the importance of social-cultural embeddedness (Becattini, 2004; Parrilli, 2009). These issue also underscored by cluster studies in developing country, such as Nadvi (1999b), and Nam et al (2010). If Nadvi (1999b) exhibited how social network and cultural values contribute to the success of Sialkot cluster in Pakistan, Nam et al (2010) recognized the contribution of human and social capital on the internationalization of knitwear cluster in Southern Vietnam.

Although these two stance theories had different perspective in explaining the geographical agglomeration of the firm, they rooted on common theoretical ground and focus their analysis on the similar unity of analysis. The cluster and industrial theory rooted to the fundamental theory of industrial economy provided by Marshall (Belussi and Caldari, 2009) and focused their analysis on the firm and region basis (Porter and Ketels, 2009). They also used the term of cluster and industrial district interchangeably in the cluster or industrial district studies.

Collective efficiency

The collective efficiency perspective has been used in some studies to capture both, the dynamics and beneficial effect of cluster for MSME development in developing countries (Caniëls and Romijn, 2003, Nadvi, 1999a, Schimtz, 1999). Schimtz (1999) defined collective efficiencies as a competitive advantages derived from local external economies and joint actions provided by MSME industrial district. If a local external economies or agglomeration economies are automatically gained by cluster participants due to their geographical location in industrial districts, the joint action should be deliberately acquired by cluster actors to raise more potential benefits (Schimtz, 1999, Nadvi, 1999a, Parrilli, 2009, Caniëls and Romijn, 2003).

Externalities exist where the utility functions of consumers or the production functions of producers are affected not only by their market activities but also by the activities of other economic agents (producers or consumers)(Stewart and Ghani, 1991). Papandreou (1994) cited in Schimtz (1999) asserted that external diseconomies are when social costs are higher than private costs. In contrast, if the social benefits are higher than private benefits, it is called external economies. Those two definitions of externalities lead to a conclusion that externalities are advantages consumed by cluster participants due to their dense geographical location and inter-related relationship in certain industrial district regions. External economies may be classified onto real and pecuniary external economies. Stewart

and Ghani (1991) asserted that the real externalities are the effects of the production function toward of a firm other firm's production function, while the pecuniary externalities affect the price (including input price and output price) set by other firms. Caniëls and Romijn (2003) further categorized, the real external economies as a spillover effect and pecuniary external economies as a cost reduction effect. Those two general types of external economies have already been recognized by Marshal (1920) cited in Schimtz (1999) and have been echoed by several studies (Nadvi, 1999a, Parrilli, 2009, Giuliani et al., 2005), as a form of agglomeration effect

Even though external economies presented by industrial districts raise the efficiency, accelerate the learning and upgrading, and enable MSME to face external challenges, there is more opportunity to reach greater advantages through collective action with other actors in cluster (Schimtz, 1999, Giuliani et al., 2005, Nadvi, 1999a). Joint action could be in the form of horizontal and vertical ties. If the horizontal linkages connect the firm with the competitor individually or collectively, the vertical ties could link backwardly with supplier and forwardly connect with buyers (Giuliani et al., 2005).

Considering the forms of those inter-actors cooperation, Schimtz (1999) identifies some forms of horizontal bilateral (horizontal ties within individual firms), such as joint purchasing of input, joint production, joint marketing, order sharing, sharing equipment, exchanging information of market and know how, and also recognizes the existence of cooperative as a horizontal multilateral relationship. Parallel with those forms, Sandee and Roetveld (2001) identified the horizontal relationship occurring in a roof tile cluster in Karanggeneng-Central Java in the form of upgrading traditional technology. Furthermore, Caniëls and Romijn (2003) also recognized other forms of horizontal linkages, such as the existence of private-public project and vocational training initiatives in Bangalore cluster, India. Horizontal linkage is also often collectively constructed by some firms in the form of industrial and trade association, such as *Confartigianato* (craft and industry association) in Italy (Parrilli, 2009) or SIMA (Surgical Instrument Manufacturers Association) in Sialkot cluster in Pakistan (Nadvi, 1999a). Those collective co-operations might play mutual role as a pressure group and also provider of supporting service for MSME.

In addition to the horizontal relations, joint action could be in the form of vertical linkage that connects firms with suppliers or buyers in the same value chain. The sub-contract linkages between SME and large enterprises are common forms of vertical network used by SME to distribute the product or absorb new information about market (Sato, 2000, Nadvi, 1999a, Berry et al., 2002, Nam et al., 2010, Giuliani et al., 2005, Andadari, 2008). Moreover, the vertical linkage between SMEs and the supplier are able to reduce input cost and minimise uncertain risks. Therefore, horizontal and vertical linkages as forms of collective action could provide greater benefit for clustered SMEs, in addition to advantages provided by external economies.

Social capital

Social capital refers to the common norm or value influencing the interaction between individual-social network (Bowles and Gintis, 2002, Putnam, 2000). Practically, social capital can be in the form of social interaction, trust, and shared vision (Molina-Morales and Martinez-Fernández, 2010). Social interaction is a contact or relation between actor from one firm and other actors from other firms in the community. Nadvi (1999b) indicates social network often relies upon kinship, family, and localness. If kinship value forms social relation from tribal lineage, family value bounds actor in community base on immediate or extended family lineage, while local community and neighbourhood formed local social network. The other type of social capital is trust. Morales and Martinez-Fernández (2010) defined trust as a degree to which an actor or a firm is considered to be fair and honest in the

interchange of whatever resources. Parrilli (2009) further argued that trust relies on cultural values of the society and becomes key aspect of social cohesiveness. Finally, social capital in cluster may be in the form of shared vision that refers to an attribute of people and firms that can facilitate and offer them certain benefits (Morales and Martínez-Fernández, 2010). Parrilli (2009) has acknowledged the existence of shared vision in cluster dynamics as a self-realisation. He asserted that this spirit bounds cluster members in same professions and encourages the emerging of new firm.

The analysis of social capital as an enabling factor of cluster dynamic is not merely focused on the type of social capital, but also emphasized on how social capital impact on the collective efficiency in cluster. Strong social network, trust, and shared vision have an impact on the social-transactional relationship (Bowles and Gintis, 2002) and facilitates connection among the members of cluster, Nadvi (1999b) and Nam et al (2010) indicated that close social relation between actors cluster and agents out of cluster contributes significantly in transfer of innovation and market information. Parrilli (2004;2009) further asserted the significance of the trust in inter-firms connection. He argued when trust and social cohesion are not open, the participations of external actors are not going to be smoothly absorbed by the local community, which may lead to higher transaction costs (contracts, employment). Higher transaction cost may limit the increasing number of firm in cluster (Parrilli, 2009). Conversely, close relations between actor that relied on social ties and trust may reduce significantly transaction cost in economy activity in local inter-firm network (Johannisson, 2002). Lastly, shared vision or self-realisation encourages entrepreneurship, innovation, firm creation, and spin off in cluster (Parrilli, 2009).

Cluster policy

As the emerging of industrial district, as a collective entrepreneurship is embedded in the institutional context (Johannisson, 2002), interpreting the dynamics of industrial district through institutional perspective raises importance. The institutional perspective viewed that institutional context has an impact on the nature, pace of development, and extent of entrepreneurship as well as the way entrepreneurs behave (Welter & Smallbone, 2011). Porter (1998b) further argued that cluster policy as a form of institutional approach in cluster development become important because basic macro economy and general micro economy policy may not be sufficient to enhance the competitiveness of cluster. He asserted the economic role played by government in the macro and micro level solely creates precondition and shapes the conducive environment for the initial development of cluster.

Cluster policy is defined as a set of policy or measurement aiming to induces and supports inter-linkage between cluster participants and to increases value added of their activities (Boekholt and Thuriaux, 1997; Fromhold-Eisebith and Eisebith, 2005). Despite aimed to enforce inter-actors link and enhances value added, cluster policy also designed to overcome market failures and provides public good and service (McDonald et al., 2007). Although this definition of cluster policy unable to provides certain forms of cluster policy, it underscored that cluster policy is aimed to strengthen the inter-firm network and advantages of cluster. On the other word, cluster policy is implemented to induce the collective efficiency of cluster.

The Conceptual model

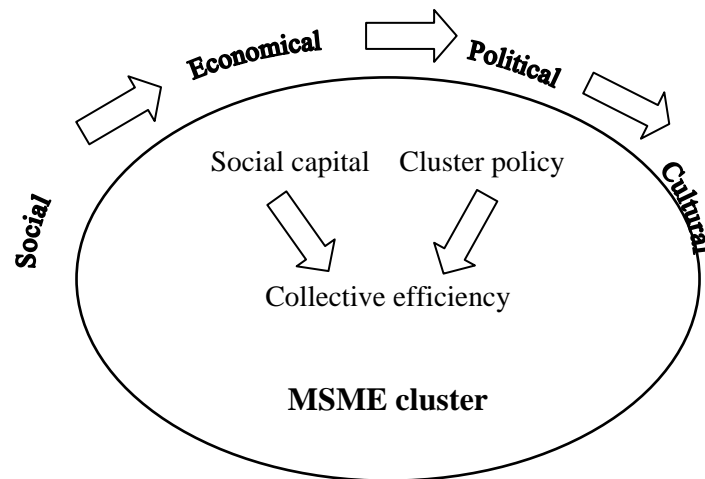


Figure 1

The conceptual Model of Micro, Small, and Medium (MSME) Cluster Dynamics

Based on the literature review, it could be propose the conceptual model explaining the dynamic MSME cluster. The context of cluster adapted from the institutional perspective proposed by Welter and Smallbone (2011) that explain the urgency of context that is composed of the social, economical, political, and cultural environment in understanding the dynamics of MSME cluster. In addition, to exhibits the dynamic of MSME cluster, several theories support the industrial district perspective, such as collective efficiency perspective (Nadvi,1999a), Social capital theory (Parrilli, 2009; Morales and Martinez-Fernández, 2010), and cluster policy approach are used in this model. Nadvi (1999a) argued that local external economy and joint action constitute the collective efficiency of cluster. He further argued that existence of collective efficiency represent the dynamic of cluster member. Two factors contribute to the existence of collective efficiency in cluster are social capital that embedded cluster member in certain ties and cluster policy that embodies the external forces to support inter-firm network.

Methodology

This section explains the research methodology used in the study. It compose research paradigm, justification of the research method, research design, scope of the research, unit analysis, sampling design, data collection methods, instrumentation, validity and reliability, and data analysis.

Research Paradigm

Burns and Burns (2008) defined paradigm as a particular way of viewing the world, a framework of assumption that reflect shared set of philosophic beliefs about the world which places strict guidelines and principles on how research should be conducted (pp.13). Furthermore, they classified a paradigm onto positivist and interpretivist paradigms. The former assumes that the environment or the social reality in which we all operate is objective and external to the individual. Hence, the quantitative research methods are employed to establish general laws or principles through rigorously controlled experiment (Burns & Burns, 2008). In contrast, the latter in which the qualitative approach to research is based reflects a much lower degree of control over the research context and subject involved. Its

basic assumption is that the world is socially constructed and subjective. The previous discussion raises the understanding that these contrary paradigms could not be judged that one is better than the other. This study, however, relies on the interpretivist paradigms because it views MSME cluster as a phenomenon that is embedded in its contexts. This study uses the institution perspective proposed by Welter and Smalbone (2011) to explain the economic, social, politic, and culture context of MSME cluster, while collective efficiency views is used to explain the MSME cluster dynamics (Nadvi, 1999a).

Justification of the research method

The choice of a research strategy, design, and methods has to be dovetailed with specific research question being investigated (Bryman & Bell, 2007). As the study is aimed to answer the research questions regarding with what is the context of MSME cluster and how certain driving factors (social capital, and policy inducement) impact on the collective efficiency of clusters, case study is used in the study. Moreover, the use of this research strategy also supported by the absence of researcher control over the phenomenon being studied. The suitability between these conditions and the requirement of case study applications are justified by Yin (2009). He asserted that the use of case study could be relies upon three conditions: (1) the type of research questions posed are “how” and “why” question, (2) the investigator has little or no control over actual behavioural events, and (3) the study focuses on contemporary events. In addition, Parrilli (2009) argued that case study allowed the cluster study identifies the inner and often hidden dynamism of cluster. Moreover, case study also able to explore the influencing factors of cluster dynamics (Bair & Gereffi, 2001;Caniëls & Romijn, 2003). It can be highlighted that case study likely proper for research that attempts to explore the cluster dynamics and its driving factors.

Research design

This study is aimed to investigate the contemporary phenomenon of MSME cluster by describing the context of cluster under studied and explaining how certain factors (social capital, and policy inducement) affect the collective efficiency of clusters. A case study will be applied in this study because it enable to seek the answer for “how” and “why” research questions in the study (Yin, 2009). Moreover, as the dynamics of cluster could not be separated from its social and economic contexts, Parrilli (2009) argued that a case study allows the cluster study to identify the inner and often hidden dynamism of locality and its firms. In spite of identifying internal features of cluster, a case study may either clearly described the types of inter-firm linkages (Bair & Gereffi, 2001) and deeper explanatory analysed firm governance within industrial district (Parrilli & Sacchetti, 2008).

The design of this study is illustrated in Figure 2. The study initiated by *the first stage* consists of theory development, cases selection and data collection protocol design. The development of cluster theory is fruitful for selecting cases under studied, defining a complete description of SME cluster, and stipulating rival theories in explaining why efficiency collective, social capital, and policy inducement do or do not affect the development of cluster (Yin, 2003). Furthermore, developing theory will allow researcher to measure constructs more accurately and in turn to design data collection protocol properly (Eisenhardt, 1989).

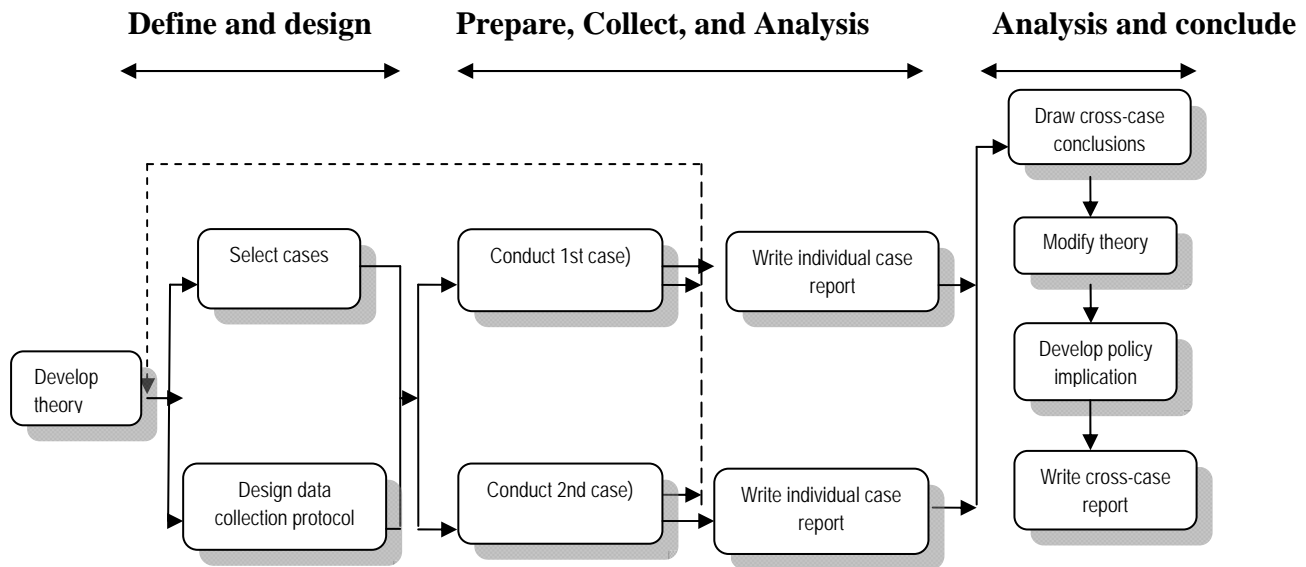


Figure 2; Research design

Adapted from Yin (2009)

As the study focuses on two MSME clusters, they are treated as either individual different cases or unit analyses. Even though several cluster studies (Nadvi, 1999a; Giuliani et al., 2005; Parrilli, 2007; Parrilli, 2009) tended to use a single industrial district as their case (unit analysis), the study uses the multiple cases because it may generate more powerful conclusion (Miles & Huberman, 1994; Yin, 2009) and better grounded, more accurate, and more generalizable theory (Eisenhardt & Graebner, 2007). *The second step* is preparing, collecting and analysing data. The activities in this step will be interwoven between data collection and analysis. It means that the data analysis is conducted when the data collection being undertaken. Hence, the data could be well organized and deeper analysed. This type of working may also be fruitful to energizes the field-work and generates interim report required in the study (Miles & Huberman, 1994).

In addition, as this study uses multiple cases, the process of the data collection and analysis will be conducted separately from one to another case because each case consists of a whole study (Yin, 2009), and thus there will be two data collections and analyses. Each case thus may emerge a significant finding during its conduct. The emerging of a significant finding may leads to the needs of redesigning the cases data collection protocol (it is described by the existence of the dashed-line feedback loop in Figure 2. To support the data collection, this study will use several sources of evidence: documentation, interview and direct observation. *The first source of evidence* is document describing the existence of clusters being studied, project reports investigating the implementation of cluster policy, and local news informing issues about cluster, each of which will be analysed. Furthermore, as the Indonesian cluster policy has been decentralized from national into local level (Marijan, 2005), exploratory interview as *the second source of evidence* will be carried out with government officers from regional level. This exploratory interview will be conducted before interviewing the managers of MSME and the supporting institution within cluster. Interviews with officers from government institutions, such as the Cooperative, Industrial and Trade service are necessary to explore information about the implementation of cluster policy and development of furniture and footwear industries. Semi structured interviews using the Indonesian language will be conducted with managers or owners of the SMEs and managers

of the supporting institutions within cluster to avoid any potential communication constrains. By conducting in-depth interviews, rich and thorough information expressing respondents' experiences, feeling, and opinions could be obtained. Finally, direct observation will be conducted to observe interactions among cluster actors in obtaining collective efficiency and social capital benefits, and anticipating the government policy.

Using multiple sources of evidence leads the study to gaining a broader range of historical and behavioural aspects of cluster actors. However, the use of multiple sources of evidence should be followed by triangulation and respondent validation. If the previous mechanism functions confirms the same fact of phenomenon (Yin, 2009), the latter procedure functions to ensure the trustworthiness criterion of credibility (Bryman & Bell, 2007). These procedures allow the researcher to associate the facts generated from different sources of evidence (document, local news, and interview) and also provide the opportunity for the participants to check whether the researcher's interpretations from the interview correctly represent them. The last includes writing individual case reports that are then considered to be the information for drawing cross-case conclusions.

The last step is analysing and concluding. This step performs cross-case analysis that relies on the individual case results. The analysis will indicate the extent of replication logic and will explain why each case has certain results. The rival theory will also be used to explain the differences between cases, if the cases generate different results (Yin, 2009). In turn, modifying theory and proposing policy implication will be performed before concluding the result. Finally the final result of cross-cases analysis will be generated from this step.

A research design is a master plan that specifies the methods and procedures for collecting and analyzing the needed information (Zikmund et al., 2010). In conjunction to the procedure of collecting and analysing data, the goal that aims to determines the impact of social capital and policy inducement on collective efficiency, the study is designed as a descriptive quantitative research.

Unit analysis, cases and Sampling design

As a case study is used in this study, the unit analysis of this study became the cases being studied (Miles & Huberman, 1994). This study thus focuses on MSME clusters as an unit analysis and cases. The selection of these clusters relies their significant contribution to the Indonesian economy as a enormous job opportunities provider and the poverty alleviator (Kamar Dagang dan Industri, 2007). The owner or managers of firms that are located in clusters, managers of support institutions of cluster, and officers from government officers that have authority for developing SME cluster are the main actors of cluster. Due to their knowledge and experience in managing the firm within cluster, the owner or managers of these firms would provide beneficial information by answering the questions appropriately. Additionally, the managers of supporting institutions within cluster are also chosen because they have information about service that available within cluster. Finally, the officers from government officers that are responsible for the SME cluster development are selected due to their experience in cluster inducement policy. The participants of this study will be chosen through the conceptually-driven sequential sampling that usually evolves the samples during fieldwork (Miles & Huberman, 1994). This type of sampling method allows the use of the research questions and theoretical

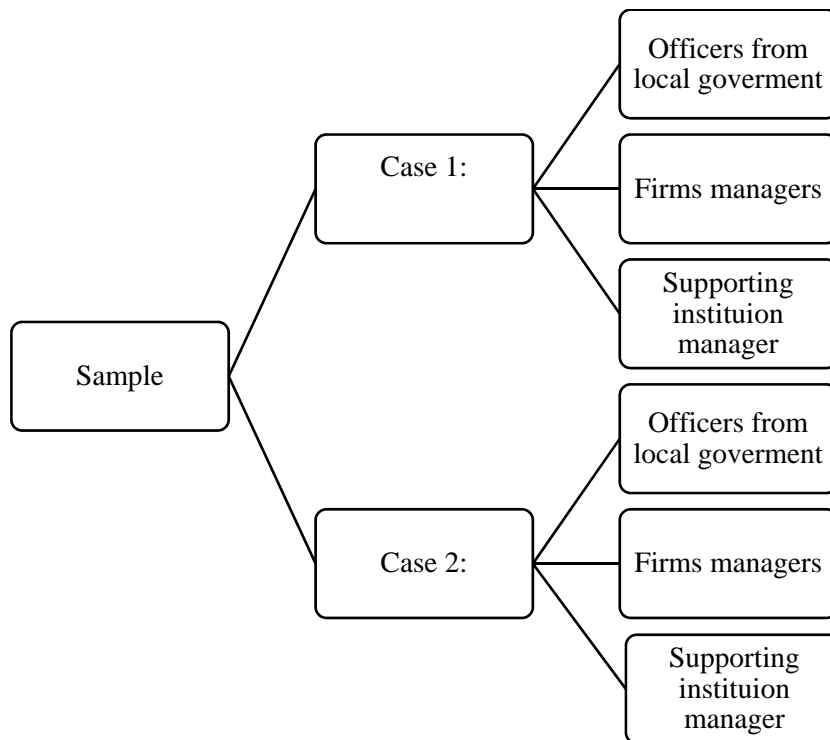


Figure 3. The sampling design

Initially, the participants are selected within first cluster. It includes ten managers of the firms that are located in the cluster, a manager of support institution of cluster, and a government officer from the Cooperative, Industrial and Trade service. A similar technique is performed in selecting participants at the second stage. Ten managers of the firms and manager of supporting institution of cluster located in second cluster are chosen. Additionally, an officer from the Industrial and Trade Service also selected at this stage.

Data collection method

Data is collected through semi-structured interview with MSME managers/owner, government officer, and manager of cluster supporting organisation. The Indonesian language is used in the interview due to the location of the research setting and the respondent's mother tongue. Thus, the use of Indonesian language may minimize the potential constraints due to different language. The instrument and the data collected from the interview are transcribed and are translated into English by a professional translator.

Bibliography

- Bair, J., and G. Gereffi. 2001. Local cluster in global value chains: The causes and consequences of export dynamism in Torreón's Blue Jeans industry. *World Development* 29 (11):1885-1903.
- Becattini, G. 2004. *Industrial Districts*. Cheltenham, Gloss, UK: Edward Elgar Publishing Limited.
- Belussi, F., and K. Caldari. 2009. At the origin of the industrial district: Alfred Marshall and the Cambridge school. *Cambridge Journal of Economics* 33:335-355

- Boekholt, P., and B. Thuriaux. 1997. Public policies to facilitate clusters: Background, rationale and policy practises in international practises. In *The OECD Cluster Focus Group Workshop Amsterdam*: OECD Publication Service, 381-412.
- Bryman, A., and E. Bell. 2007. *Business research methods*. New York: Oxford University Press.
- Burns, R. B., and R. A. Burns. 2008. *Business research methods and statistics using SPSS*. London: Sage Publication, Ltd.
- Cainelli, G. 2008. Industrial district: theoretical and empirical insight. In *Handbook of research on cluster theory* edited by C. Karlsson. Cheltenham, Glos, UK Edward Elgar Publishing Limited.
- Caniëls, M. C. J., and H. A. Romijn. 2003. Dynamic cluster in developing countries: collective efficiency and beyond. *Oxford Development Studies* 31 (3):275-292.
- Cooke, P., N. Clifton, and M. Oleaga. 2005. Social capital, firm embeddedness and regional development. *Regional Studies* 39 (8).
- Eisenhardt, KM, 1989, 'building theories from case study research', *The Academy of Management Review* vol.14,no.4, pp. 532-550.
- Eisenhardt, KM & Graebner, ME, 2007, 'Theory building from cases: Opportunitites and challanges', *Academy of Management Journal*,vol.50,no.1, pp. 25-32.
- Fromhold-Eisebith, M., and G. Eisebith. 2005. How to institutionalize innovative clusters? comparing explicit top-down and implicit bottom-up approaches. *Research Policy* 34 (2005):1250-1268.
- Humphrey, J., and H. Schmitz. 1995. Principles for promoting clusters & networks of SMEs.
- Johanisson, B., M. Ramirez, and G. Karlsson. 2002. The institutional embeddedness of local inter-firm network: a leverage for business creation. *Entrepreneurship & Regional Development* 14:297-315.
- Kamar Dagang dan Industri. 2007. Visi 2030 & Roadmap 2010 Industri Nasional. Jakarta. , Accessed on 20/12/2010, from www.kadin-indonesia.or.id
- Lundequist, P., and D. Power. 2002. Putting Porter into practise? practise of regional cluster building: evidence from Sweden. *European Planning Studies* 10 (6):685-704.
- Marijan, K. 2006. *Decentralization and cluster policy in Indonesia*. Surabaya, Indonesia: Airlangga University Press.
- Martin, R., and P. Sunley, 2003. Deconstructing cluster; Chaotic concept or policy panacea? *The Journal of Economy Geography* 3:5-35
- McDonald, F., Q. Huang, D. Tsagdis, and H. J. Tuselmann. 2007. Is there evidence to support Porter-type cluster policies. *Regional Studies* 41 (1):525-542.
- Miles, M. B., and A. M. Huberman. 1994. *Qualitative data analysis*. Thousand Oaks, California SAGE Publication.
- Molina-Morales, F. X., and M. T. Martinez-Fernández. 2010. Social networks: effects of social capital on firm innovation. *Journal of Small Business Management* 48 (2):258-279.
- Nadvi, K. 1999a. The cutting edge: collective efficiency and International competitiveness in Pakistan. *Oxford Development Studies* 27 (1):81-107.
- . 1999b. Shifting ties: Social network in the surgical instrument cluster of Sialkot, Pakistan. *Development and Change* 30:141-175.
- Nam, V. H., T. Sonobe, and K. Otsuka. 2010. An Inquiry into the development process of village industries: The case of a knitwear cluster in Northern Vietnam. *Journal of Development Studies* 46 (2):312-330.

- Newlands, D. 2003. Competition and cooperation in industrial clusters: The implication for public policy. *European Planning Studies* 11 (5):521-532.
- Parrilli, M. D. 2009. Collective efficiency, policy inducement and social embeddedness: Drivers for the development of industrial district. *Entrepreneurship & Regional Development* 21 (1):1-24.
- Parrilli, M. D., and S. Sacchetti. 2008. Linking learning with governance in networks and clusters: key issues for analysis and policy *Entrepreneurship & Regional Development* 20 (July):37-408.
- Porter, M. 1998a. Cluster and the new economics of competition. *Harvard Business Review* 7 (6):6-15.
- . 1998b. *On Competition*. Boston: Harvard Business School Publishing.
- Porter, M., and C. Ketels. 2009. Clusters and Industrial districts: Common roots, different perspectives. In *A Handbook of Industrial Districts*, edited by G. Becattini, M. Bellandi and L. De-Propris. Massachusetts: Edward Elgar Publishing limited.
- Rabellotti, R. 1998. Collective Effect in Italian and Mexican Footwear Industrial Cluster. *Small BusinessEconomics* 10:243-262
- Sandee, H., and P. Rietveld. 2001. Upgrading traditional technologies in small-scale industry cluster: Collaboration and innovation adoption in Indonesia. *The Journal of Development Studies* 37:150-172.
- Schmitz, H. 1995. Collective efficiency : Growth Path for Small-Scale Industry. *Thejournal of Development Studies* 31 (4):529-566.
- , H. 1999. Collective efficiency and increasing return. *Cambridge Journal of Economics* 23:465-483.
- Sonobe, T., and K. Otsuka. 2006. *Cluster based industrial development, An East Asian Model*. New York: Palgrave Macmillan.
- Stewart, F., and E. Ghani. 1991. How significant are externalities for development. *World Development* 19 (6):569-594.
- Welter, F., and D. Smallbone. 2011. Institutional perspective on Entrepreneurial behavior in Challenging environments. *Journal of Small Business Management* 49 (1):107-125.
- Yin, R. K. 2003. *Applications of case study research*. Thousan Oak, California: SAGE Publication, Inc.
- Yin, R. K. 2009. *Case study research, design and methods*. California: Sage, Inc.
- Zikmund, WG, Babin, BJ, Carr, JC & Griffin, M, 2010, *Business Research Methods*, South-Western Engage Learning, Mason, USA