

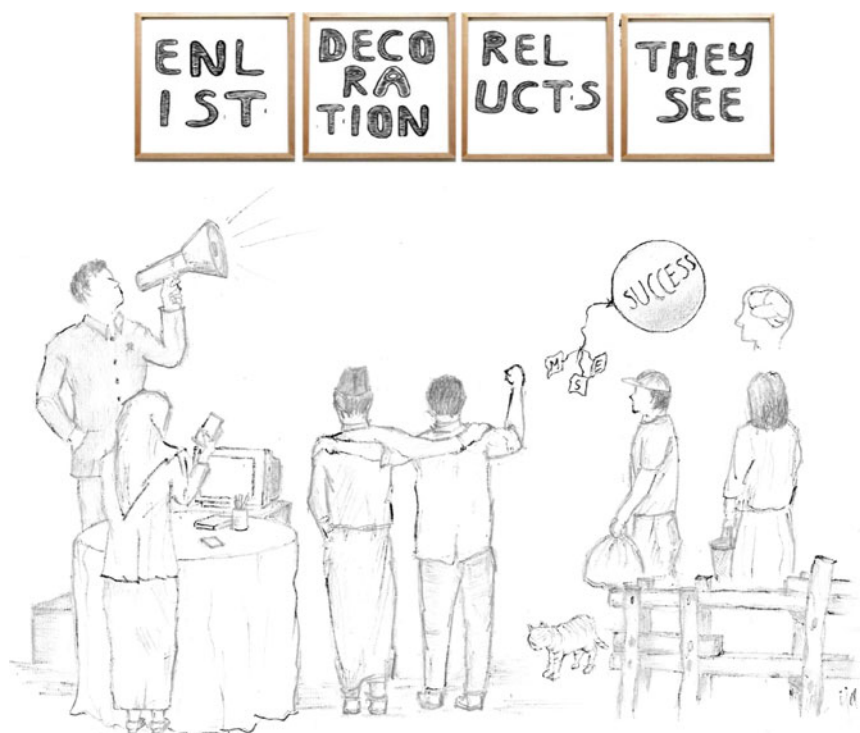
Chapter 4

Mitigating Dualism and Exploiting the Interplay of Policy-Social Capital



Abstract The centripetal forces of agglomeration, reflected among others in the structure of the economy and the nature of interrelations among regions (interregional multipliers), limit the effectiveness of spatial policies. Meanwhile, the importance of social capital is revealed from the MSE survey. Social planners could improve the design of policies by understanding the perceptions and aspirations of MSEs to make any measures more compatible with the prevailing social capital.

Keywords Quality of leaders • Hierarchy • Network • Policies • Social capital • Perceptions



Conversation

A: “We need to *ENLIST* local leaders and small businesses to support national policies to reduce inequalities and dualism.”

B: “Far more importantly, we need to *LISTEN* to those affected by the policies and the *SILENT* groups whose silence must not be mistaken for their absence.”

A: “If a small business operator *RELUCTS* to use green technology, e-commerce, and e-finance, there is nothing we can do to help.”

B: “Understanding their behavioral insights and encouraging them to work together in a *CLUSTER* will raise their propensity to adopt new technology by way of increased communication and interactions.”

A: “That is why mandating small businesses to form a cluster is not just for *DECORATION*, but it is meant to facilitate interactions among them.”

B: “While interactions in a cluster are necessary, active participation and *COORDINATION* are essential for the collective actions to work effectively.”

A: “We also used examples of success stories so that small businesses are motivated to replicate because *THEY SEE* the evidence directly.”

B: “People do not respond to what *THE EYES* and ears tell them but what the brain makes them see and hear.”

It is clear from the discussions in the preceding chapter that forces of agglomeration could risk a worsening dualism and inequality. On the other hand, potential benefits of the same forces offer incentives for MSMEs to operate in clusters, in which the effectiveness depends crucially on the interplay of policies and social capital.

One may argue that although Chap. 2 provides a clear evidence of interregional inequality in Indonesia, several factors and events unrelated to agglomeration may have caused the inequality. Disentangling sources of inequality, let alone isolating the effect of agglomeration, may not be empirically feasible. But the centripetal forces of agglomeration are undeniably at work. Other factors influencing the effect of such forces are the structure of the economy and the nature and scale of interrelations among regions, both of which are reflected in the intraregional and interregional multipliers. The first part of this chapter discusses the effect of these factors on growth and inequality between regions in Indonesia, and the second part is devoted to the analysis of survey results based on the framework discussed in the preceding chapter.

Interregional Multipliers

In conjunction with the earlier question about the role of institutional change, a more general question is what kind of policy intervention can effectively counter the forces of agglomeration? The question of interest here is whether redirecting

spending towards LDR can be effective to reduce the gap between DR (core) and LDR (periphery). To answer this question, we utilize the information associated with the structure of the regional and interregional economic relations from a series of Indonesia's multiregional input-output (MRIO) tables consisting of five regions: Sumatera, Jawa-Bali, Kalimantan, Sulawesi, and Nusa Tenggara-Maluku-Papua.

The theoretical basis of interregional multiplier rests on the idea that there is some sort of relationship between the national economic activity and the regional economy.¹ While standard I-O multipliers capture the direct, indirect, and induced effects of any changes in one sector of an economy upon other sectors, they are unconcerned with the location of the sectors. If the issue of interest is how to reduce the gap between core and periphery, location obviously matters. The location of sectors where the initial changes occur as well as the location of activities affected by those changes determine the net results of interregional inequality. To the extent increased spending in a sector located in a region will obviously boost the growth of that region but not necessarily lower the inequality between regions, in addressing the question whether redirecting investment towards periphery will reduce the gap between core and periphery cannot ignore the mechanisms of interregional multipliers.

Suppose a major infrastructure is to be built. We know that the project will boost growth of the region where the project is implemented as well as the national growth. But what about its impact on the gap between DR (core) and LDR (periphery)? Ignoring this question leaves us with criteria only about the costs and benefits of the project including the overall multiplier effects. Since DR is typically in a better position in terms of existing facilities or infrastructure (logistics, financial services, etc.) and the purchasing power that reflect market conditions, in most cases the decision ends up with DR as the preferred location of the project. The impact on inequality is addressed by the argument that infrastructure project in DR will not only boost national growth but also generate a positive impact on LDR growth, similar to the trickle-down effect mechanism. This argument, however, essentially puts growth above inequality, and it completely ignores the relative size of interregional multipliers when it is compared with a scenario whereby the project is built in different locations. That is, what about if the infrastructure is built in LDR?

One way to find out is by comparing two types of multipliers in both locations, the intraregional multipliers and the interregional multipliers in DR (μ_{DR} and $\mu_{DR \rightarrow LDR}$) and in LDR (μ_{LDR} and $\mu_{LDR \rightarrow DR}$). Even if the infrastructure project is built in LDR, the cross-regional direct and indirect effects of it could be larger in DR than the cross-regional effects in LDR if the infrastructure is built in DR, that is $\mu_{LDR \rightarrow DR} > \mu_{DR \rightarrow LDR}$.

¹ One of the issues of interest in regional growth theory concerns with the activities in a region that could be the source of regional growth. Focusing on the size of demand as key determinant, the "economic base" theory distinguishes internal and external demand (exports). The postulate is, export is the main driver of regional growth. Hence, the expansion of a sector whose products are largely exported (the "basic sector") will stimulate production of the non-exporting or "non-basic" sector through some sort of multiplier. Another theoretical basis rests on the idea that any dynamic sector located in a certain region, called the "growth pole," will create an impact on local and broader regional economies also through a multiplier.

We can think of a scenario whereby increased demand and production in LDR leads to a larger increase of demand and production in DR. The same applies to the effect of increased income and consumption (part of the final demand) in LDR on DR. It is not uncommon to find that residents in LDR prefer to spend their increased income for products and services produced in DR. At any rate, comparing interregional multipliers is an important step for addressing the question whether a policy to redirect spending towards LDR be effective to reduce the gap between core and periphery. To do so, we essentially conduct two different scenarios of regional investment allocation policy and compare their results. This is different from the “before-and-after” approach used in the discussions of Chap. 2.

Measuring the interrelationships between regions based on the coefficient of interdependence (COI) from Indonesia’s MRIO in 2005, 2010, and 2015, without looking at the detailed print the interactions within each region and between regions have generally increased, although by using different measure Anglingkusumo et al. (2014) found that regions throughout the country is far from being integrated. However, looking at the trend by pairs, the economic interactions between Jawa and non-Jawa except Sumatera have declined over the years, and so have the interactions between Sumatera and other non-Jawa regions. Increased interactions are most notable between Sulawesi and other regions.

A different trend is detected between interregional backward linkages and forward linkages; the two have not been moving in the same direction. On the one hand, the benefits from backward linkages received by regions outside Jawa from increased final demand in Jawa have been on the rise; that is, more activities in Jawa demand more inputs from outside Jawa. The opposite trend holds when the increase of final demand is reversed. The demand for inputs from Jawa mostly declines, with notable exceptions if the increase of final demand occurs in manufacturing and “other” sectors in Sumatera, as well as in mining sectors in Bali-NT and Maluku-Papua (Table 4.1). On the other hand, the interregional forward linkages show an opposite trend (growing activities in Sumatera generate greater consumers-oriented activities in Jawa).

Given the above trends, the overall net outcome shows that the benefits accrued to non-Jawa from increased activities in Jawa remains much smaller than the benefits received by Jawa from increased activities in regions outside Jawa. From the perspective of regional investment allocation, this can be interpreted as follows.

Since the interregional multipliers received by regions outside Jawa from adding investment in Jawa are much smaller than the interregional multipliers received by Jawa if the augmented investment is made in outside Jawa (compare the bar charts on the right with those on the left in Fig. 4.1), the cross-region gains enjoyed by Jawa from investing in outside Jawa are greater than the cross-region gains reaped by regions outside Jawa if the location of investment is reversed. As shown in the figure, although fluctuating the gap stood out persistently from 2005 to 2015.² This

² By 2015, the largest gains enjoyed by Jawa is when the new investment is made in Sulawesi followed by Sumatera, whereas the largest gains from adding investment in Jawa are enjoyed by Sumatera.

Table 4.1 Percentage of inputs demanded by non-java sectors from Java 2010 and 2015

Non-java sector	2010				2015			
	Agric	Mining	Manuf	Others	Agric	Mining	Manuf	Others
<i>Sumatra</i>								
% of total input from Java	2.40	3.38	6.82	3.57	2.01	1.47	4.32	3.68
% of inter. input from Java	7.89	12.06	12.03	10.64	5.40	6.45	7.85	8.75
<i>Kalimantan</i>								
% of total input from Java	8.72	8.30	8.56	6.31	1.70	2.68	4.03	3.07
% of inter. input from Java	25.93	27.15	13.00	17.36	5.00	14.47	6.39	9.51
<i>Sulawesi</i>								
% of total input from Java	5.23	10.26	5.85	6.88	2.39	2.93	3.19	2.79
% of inter. input from Java	22.40	43.83	8.48	22.52	10.86	19.29	4.95	7.63
<i>Bali-NT</i>								
% of total input from Java	5.47	0.17	19.76	11.60	3.00	1.24	13.96	5.71
% of inter. input from Java	17.67	3.23	27.86	29.25	10.16	10.10	21.70	16.32
<i>Maluku-Papua</i>								
% of total input from Java	11.47	0.02	5.55	7.43	1.99	2.07	2.57	4.25
% of inter. input from Java	38.36	0.06	9.15	18.90	6.62	5.73	5.22	12.68

Notes The value for a sector-region is calculated by dividing the sum of intermediate inputs from Jawa for that sector-region, divided by either total inputs or total intermediate inputs for that sector-region. Higher value means higher % of inputs demanded by non-Jawa from Jawa. Bold cells in 2015 columns indicate that the value increases from 2010

Source Calculated from Indonesia's MRIO tables, 2010, 2015

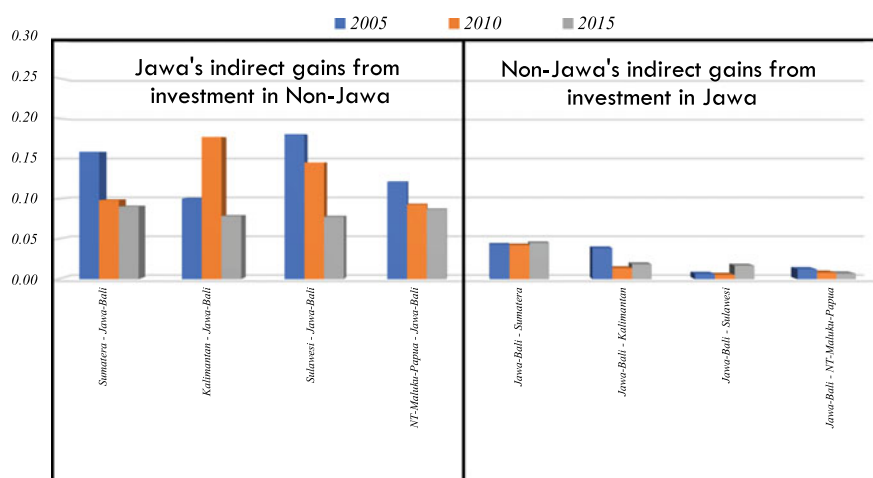


Fig. 4.1 Interregional multipliers: Jawa and regions outside Jawa. *Source* Calculated from Indonesia's MRIO tables, 2005, 2010, 2015

may come to a surprise for those who think that investing in outside Jawa at once will automatically reduce the gap between non-Jawa (LDR) and Jawa (DR).

As explained earlier, the main problem lies in the structure of the prevailing economic interrelationships between Jawa and non-Jawa. Depending on the size of the within-region effect (intraregional multiplier), simply reallocating more investment to non-Jawa without altering that structure will not guarantee a reduced gap between the two regions. The difference in the interregional structure combined with the forces of agglomeration are too strong for the policy to counter the divergence.

Altering the structure of a region's economy and the economic interrelationships among different regions is not an easy task. It involves changes in the institutional arrangement that go beyond strictly economic matters. Since the effectiveness of any policy intervention is influenced by how communities respond to the policy, social capital is playing an important role. To be effective, therefore, a policy ought to be designed such that it will be compatible with the prevailing institutional arrangements. Undermining the role such institutional arrangements can leave a well-intentioned policy ineffective, or it can even make the policy backfire.

Survey Results and Analysis

As described through the framework in Chap. 3, understanding the interactions between institutional arrangements and policies could be key for the efforts to improve MSME performance. By emphasizing the need for 'cooperation' and 'collective actions' among MSEs, the main focus of the survey is to delineate the mechanisms by using the perceptions and opinions of MSEs on how such interactions determine the type of cluster deemed suitable for making cooperation and collective actions effective to improve the competitiveness.³

To capture perceptions, we utilize both the AHP and the ANP. The starting point is to distill MSEs' current conditions and their experience and aspirations for cooperation in a cluster. In particular, given the prevailing conditions we wish to capture the respondents' preference towards different types of cluster deemed most relevant for improving their business performance. Three types of cluster are considered: clusters mandated by either local or central government, cluster formed for purely business purposes, and cluster for social and other purposes not directly related to business operations. To adopt a balance approach, two sets of hierarchy are built: one for the upside (benefit) another for the downside (cost). The prevailing conditions are exemplified by a set of factors or elements in each hierarchy: those leaning towards

³ Note that all samples used in the survey are obtained from, and suggested by, the SMEs Development and Consumer Protection of Bank Indonesia. According to the definition adopted by the 'Statistics Indonesia,' which is the country's Central Agency on Statistics (known as BPS or *Badan Pusat Statistik*), based on assets (outside land and building) and the size of sales, only 1 of all samples we used in the survey meets the BPS definition of 'medium' enterprise, i.e., > 500 million rupiah and > 2.5 billion rupiah, respectively. Hence, the survey analysis reported in this chapter applies more appropriately to the case of micro and small enterprises (MSEs).

the benefits of a cluster type (Fig. 4.2) and those towards the cost of such a cluster (Fig. 4.3).

Prior to the survey, during the process of structuring the hierarchies we conducted informal interviews with some MSMEs, from which we learned among others that during the Covid-19 crisis some MSMEs began to produce masks to compensate for the substantial decline in sales of their main products. As many MSMEs are hit hard

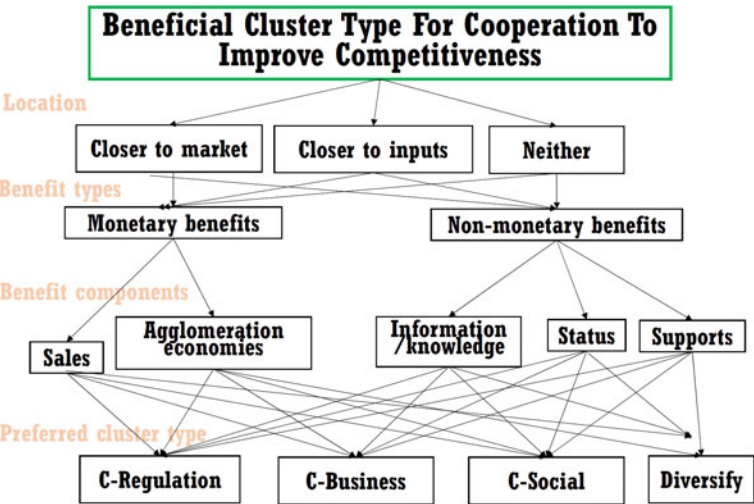


Fig. 4.2 Benefit hierarchy. *Source* Author's own creation

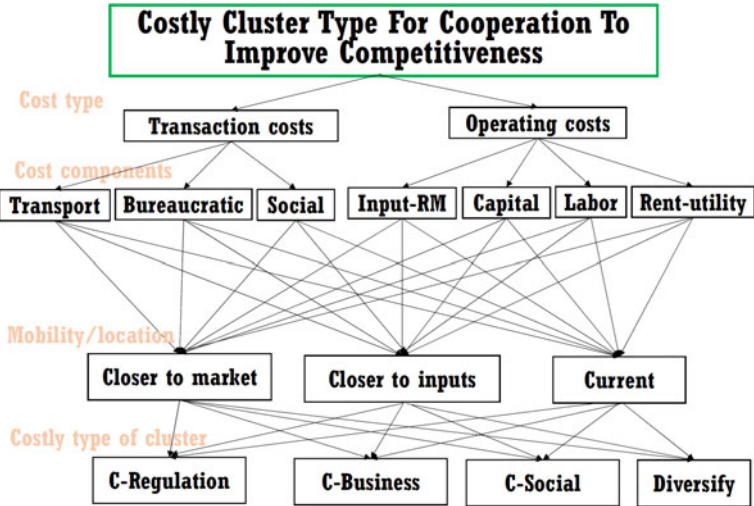


Fig. 4.3 Cost hierarchy. *Source* Author's own creation

and struggling to survive, diversifying products is one of the changes they feel they have to make. Even among MSMEs who are not much impacted by the pandemic, some decide to do product diversification. But not all MSMEs are in a position to do so, depending on the nature of their business and other binding constraints. Nonetheless, we decided to include ‘diversification’ as another alternative option along with the three cluster types shown at the bottom level of hierarchies in Figs. 4.2 and 4.3.

Note that the options of cluster type and ‘diversification’ are intended to represent respondents’ preferences which may or may not reflect the current conditions. For example, it is possible that some MSEs who prefer a business-oriented cluster may currently belong to a government-mandated cluster, or not a member of any cluster. Similarly, some who express to prefer diversifying their products may have not done so currently.

In the benefit hierarchy, we begin with the spatial dimension of MSE by identifying their location of operation, whether they are closer to the market, closer to the inputs and other raw materials, or neither (footloose). The benefits are distinguished into two types, monetary and non-monetary. Under the monetary benefits, given their location the size of sales and the gains accrued from being concentrating in adjacent location (agglomeration economies) are ranked. Under the non-monetary benefits, three advantages are identified, ease to acquire information and knowledge, getting a good standing or status from being involved in the business, and receiving non-monetary supports from the community and family. By ranking the importance of the above elements in a pairwise fashion, and considering the relations between elements in one level of the hierarchy and other elements in the level below it, the preference of the respondents towards different types of cluster including the most beneficial type is determined (Fig. 4.2).

In the cost hierarchy (Fig. 4.3), we begin by identifying whether transaction costs are less or more burdensome than operating costs. There are three types of transaction costs to be considered, transport costs, costs associated with bureaucracy (e.g., to get license or permit, and to receive government supports and assistance), and social costs (e.g., community dissatisfaction due to pollution of all sorts and other negative externalities). Operating costs consist of cost of inputs and raw materials, cost of capital in terms of difficulty to access and interest rates, labor costs in terms of quality and wages, and utility costs including rent. Their locational preference is subsequently ranked. However, unlike in the benefit hierarchy, this time the respondents will make the ranking based on the prevailing cost structure, implying that they may feel it would have been less costly if they move either to a closer-to-market location or to a closer-to-inputs location, or they may feel that the current location is more preferable. Given such a preference, the ranking of cluster type is subsequently made.

By comparing the ranking of the type of cluster including ‘diversification’ from the benefit hierarchy and that from the cost hierarchy, we can deduce the true (net) preference of the respondents. This is done by taking the ratio of the resulting weights assigned to each option from the benefit hierarchy and those from the cost hierarchy. The most preferred choice is the one with the highest ratio.

The following are the summarized results from the survey based on the benefit/cost framework above. Given their current location, most urban-based MSEs are of the opinion that monetary benefits are greater than non-monetary benefits, where sales increase is considered the most important of all. The exceptions are for MSEs in Kalimantan who rank agglomeration economies to be more important than sales. A relatively high concentration of MSEs in low-density yet large area of Kalimantan may have been the reason why the gains from agglomeration are perceived greater than the gains from sales.

Unlike their counterparts in urban areas, majority of rural-based MSEs feel they obtain non-monetary benefits more than monetary benefits. The most important non-monetary benefits is the ability to acquire information. It is likely that in terms of making profits most rural-based MSEs have been doing less well compared to urban-based MSEs, but their persistence to improve, including through learning from new information, make them more resilient. There are quite a large number of rural-based MSE (62%) who consider that monetary benefits are smaller than non-monetary benefits. The spectrum ranges from male-owned, with education lower than average, household size is smaller than average, not yet successful, having a large number of employees, operate longer than the average period, using digital technology, not yet a member of any cluster, located in Jawa, Sulawesi, and operate in trade and services. Given the above prevailing conditions, the type of cluster that all categories of MSEs feel most beneficial is the business-oriented one (as an example, see the testimony from woven fabric MSM in Tidore in Appendix A.6).

On the cost side, all MSEs express that operating costs are more burdensome than transaction costs, and majority (30 out of 41 categories) believe that the costs of inputs and raw materials are most burdensome. The categories that consider costs of capital are more taxing consist of rural-based, age lower than average, education lower than average, household size is smaller than average, not yet successful, operate longer than the average, received supports from BI for a longer period than average, member of larger cluster, located in Sulawesi, Sumatera, and operate in the agriculture sector. Only MSEs in Kalimantan feel that the cost of labor is most burdensome. Again, this is likely due to the region's low population density that makes the cost of labor relative higher than in other regions (see the testimony of MSME rendang in West Sumatera and MSME red chili in Lhokseumawe in Appendix A.6).

Given the above, majority of MSEs perceive that the type of clusters not strictly intended for business purposes would be costly, especially if they are meant to serve only for social function. On the option of diversification, MSEs in Jawa, rural-based MSEs, and those operating in the agricultural sector feel that diversification is not a viable option. They even consider it as the costliest of all options. In the eyes of MSEs that have already used digital technology and those that operate in trade and services sector, the costliest option is to have a government-mandated cluster. There seems to be a strong perception among MSE in this category that such a cluster allows government controls and intervention that could hinder their business.

It is interesting to note that if we consider only the results from the benefit hierarchy, a government-mandated cluster is actually ranked second from the top (by more than half, or 26 out of 41 categories). Hence, it is also highly preferred by

the majority. However, given the potential costs of the option, a number of MSE categories (as mentioned above, the digital technology users and trade sector MSEs) feel at the same time that it is too costly. These both categories rank government-mandated cluster as the costliest option. This example demonstrates crucially the reason why we always need to consider the upside and the downside of perceptions when trying to acquire human preferences. At any rate, after considering the overall results from the benefit and the cost hierarchies, the benefit/cost ratio show that the majority of respondents pick business-oriented clusters as their top preference. Note again that this choice is irrespective of the clusters they are currently member—or not member—of.⁴

The reason why diversification does not seem to be preferred by most MSEs despite the difficulties caused by the Covid-19 crisis is because the nature of their business does not make such an option feasible. Rural-based MSEs, Jawa-based MSEs, and MSEs operating in the agricultural sector are particularly not in favor of diversification. For them, the possibility to do so is second to none.

Having revealed MSE's preference towards the type of cluster given the prevailing conditions, we now investigate the role of policies and social capital by unravelling their perceptions towards the relevant components, as well as the feedbacks or internal and external interrelations (the inner dependence and outer dependence) of these components. The previous approach cannot be used when feedbacks or interrelations are present. Therefore, we use a network system to allow for the feedback effects to operate (using ANP instead of AHP). As mentioned earlier, the ranking derived from using the ANP is more stable and robust than using the AHP. Figure 4.4 depicts the framework of the network.

To the extent both policies and social capital influence the effectiveness of a cluster for engaging cooperation and collective action, respondents are first asked to rank and weigh the importance of a set of policies and components of social capital. The framework of the network is structured such that the resulting ranking is eventually linked to the type of cluster. The results may or may not be different from the earlier ranking derived from using a hierarchy approach.

As described before, three categories of policies are selected based on their potential in providing—jointly with social capital—an enabling institutional arrangement. In the first category (linkages/interactions), there are four components deemed relevant to support cooperation and collective actions: policies to facilitate and enhance interactions among MSEs and between MSEs and larger firms/industries, policies to link MSEs with financial institutions, and policies to enable MSEs to access and use the product and services of supporting industries (e.g., packaging, logistics).⁵ Interactions among these policies are also considered, because in practice the effects of one

⁴ Two minor exceptions are: MSEs who generate highest benefit/cost ratio for diversification (urban-based, located in Kalimantan, Papua, and Sumatera), and MSEs whose benefit/cost ratio is highest for the government-mandated cluster (those operated by older people).

⁵ A survey on 1000 MSMEs across 9 major cities in Indonesia conducted in 2018 shows that MSMEs that joined a multi-service tech platform providing access to transport, payments, food delivery, and logistics find their partnership useful in raising their transaction volume and revenue. Moreover, majority MSME also viewed that the merchant management technology of the tech platform played

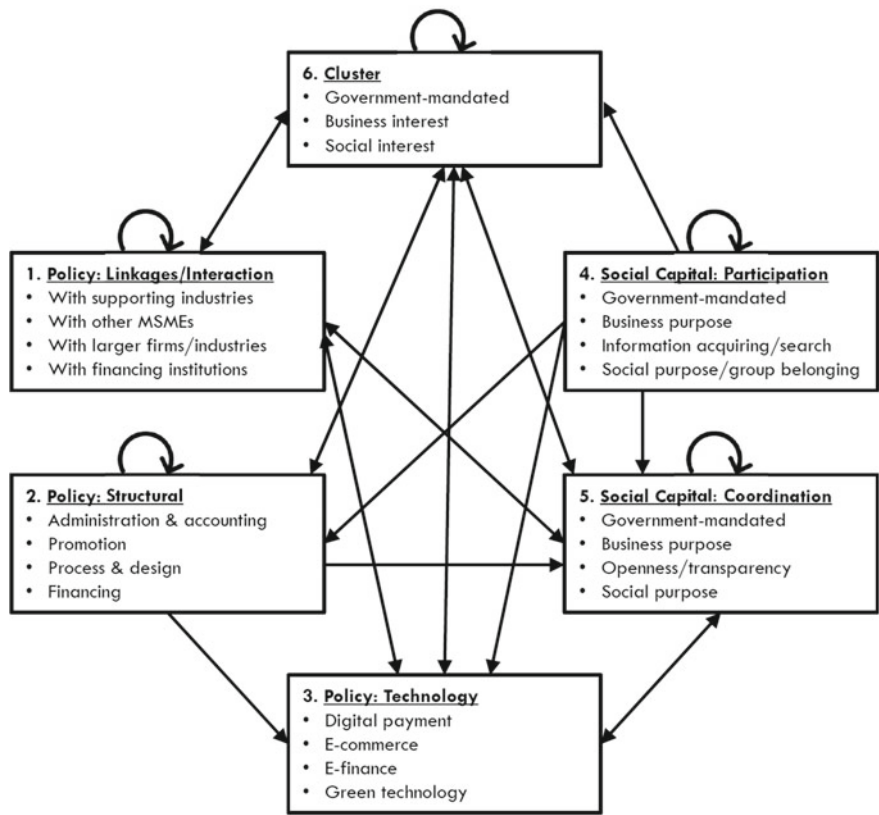


Fig. 4.4 Interplay of policies and social capital: A Network of feedback and interrelations. *Source* Author’s own creation

policy can influence—and be influenced by—the effects of other policies. For example, larger firms may help provide the financing facility and cooperation between several MSEs, and the presence of supporting industries allows several MSEs to jointly utilize the industries’ products and services. Such internal effects are denoted by circling arrows at the top of each policy box in Fig. 4.4.

Similar effects, albeit with a different degree of completeness that may also include feedback influences, are applied to the structural category of policy consisting of measures to strengthen the administrative and accounting capacity, policies to promote MSE, to assist MSE to improve the production process and product design, and to increase MSE’s access for low-cost financing. The feedback effects occur, for example, between promotion and product design where the preparation for promoting events may lead MSEs to come up with a new or modified design (e.g., matching

an important role in accelerating and improving MSME growth and competitiveness in the digital era (Lembaga Demografi FEB-UI, 2018).

with the taste of consumers), on the other hand the new design may change or refocus the type and content of the promotion.

In the category of technology policy, no feedback links are expected. There are four components in the category: digital payment, e-commerce including the use of social media, e-finance, and green technology. It is important to note that policy categories can be interrelated in one way or another. In the case of technology policy, for example, it is both affecting and affected by some components in the linkage policy, but is only affected by some components in the structural policy category. More crucially, they are all interrelated with the social capital components. These particular interrelations capture the core structure of systemic framework in our survey. The working of the interplay between policies and social capital determines the type of cluster where cooperation for collective action is expected to improve MSE performance.

As has been discussed earlier, there are two categories of social capital influencing the nature and quality of cooperation for collective action: participation and coordination. Under the participation category, there are four types to be ranked: participation mandated by regulation, participation for strictly business affairs, participation for acquiring information, and participation for social interactions. Related to this classification is the categorization under coordination, which also consists of four components similar to those under participation: coordination mandated by regulation, coordination for purely business purposes, coordination for transparency (where the role of information and communication is key), and coordination for social interactions purpose.

Similar to the policy categories, there are interactions among—and feedbacks between—all these components (see circling arrows above the participation and coordination boxes in Fig. 4.4). However, those interactions should be interpreted differently from the earlier case. For example, if individuals have chosen to participate in a cooperation for strictly business purposes, they may also wish to participate—or already participated—in different cooperation (through a different cluster) for other purposes, say, acquiring information or having social interactions. Which between the two is most preferred reflects how the business-oriented participation “influences” their preference towards participating for other purposes. On the other hand, if individuals have participated in a cooperation for, say, a social interaction purpose, they may wish to participate—or already participated—in another cooperation that is strictly business oriented. This example represents the interactions and feedback effects in the relations between participation for business purpose and participation for social interaction purpose.

Due to this distinctive nature of relations, and the possibility that MSEs participate in more-than one cooperation, we structure the internal feedbacks within the social capital categories in way that is depicted in Fig. 4.5. Similar explanations can also be used for the coordination category (Fig. 4.6).

Using the frameworks in Figs. 4.4, 4.5 and 4.6, results of the systemic survey are as follows. The first stage is to determine the respondents’ views towards the importance of policies viz social capital. This stage is used to test the hypothesis that

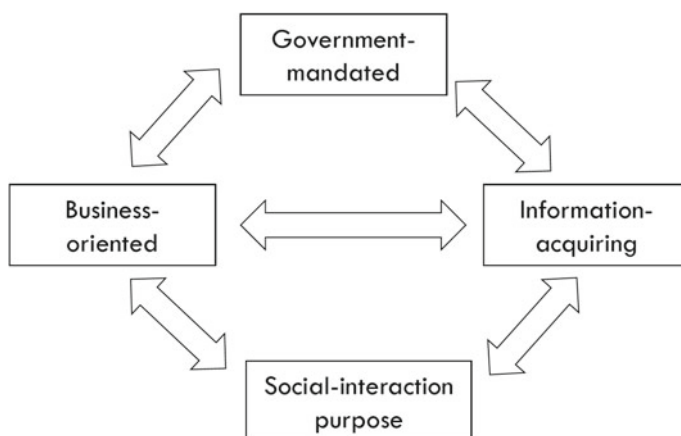


Fig. 4.5 Interactions within ‘participation.’ feedback in near completeness. *Source* Author’s own creation

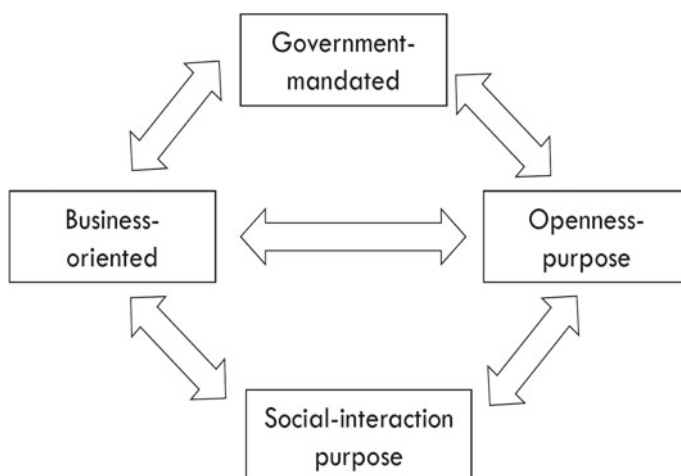


Fig. 4.6 Interactions within ‘coordination.’ feedback in near completeness. *Source* Author’s own creation

‘policy’ dominant scenario (policy is more important than ‘social capital’) does not suffice to ensure MSE improvement.

Results of the survey reveal that a slightly less-than half of the respondents in our sample consider ‘policy’ matters the most—more so than ‘social capital’—in affecting MSEs’ efforts to improve competitiveness. Among the other half who do think that it is not ‘policy’ that matters the most, about one-third are of the opinion that both ‘policy’ and ‘social capital’ are equally important (equally weighted), and one-sixth (17%) consider ‘social capital’ is more important than ‘policy.’ Two things influence

these results: the structural variables discussed earlier (see again Fig. 3.6), and the spatial dimension (regions).

Different characteristics of respondents (structural variables) give different results of judgement. For example, shown in Table 4.2, among MSEs operating in the agricultural sector, a considerably large share (64%) believe that social capital and its interplay with policy play a much more important role than policy-dominant scenario in influencing MSE performance. Another characteristic showing a large portion of MSE who believe that relying on policy more than social capital does not suffice to improve performance is the size or number of employee. More than 60% MSEs with a relative large number of employee hold such a view. Two other characteristics having high shares are related to the use of digital technology and the number of children in the family. MSEs that do not use digital technology and those whose operators have a relative large number of children are also of the opinion that policy-dominance cannot be effective to improve MSE performance; the corresponding shares are 57% and 56%, respectively.

Most MSEs (64%) that have been receiving assistance from BI for a longer-than-average period also believe that policy dominance is not sufficient. Looking into more details, the share of those having such a view who are both members of a cluster and receiving BI assistance is over 70%. To the extent most MSE assisted by BI-KPWs have performed well (in most cases better than those not assisted by BI-KPWs), we find this result particularly interesting. The criteria and procedure adopted by BI-KPWs to select MSE, and the comprehensive approach they use in assisting them have clearly contributed to the improved performance of those MSEs, making them understand better about the importance of social capital.

Among policy categories, majority MSE prefer linkage policy to help create and strengthen the interactions between MSEs and other relevant parties. Within social capital, coordination is considered most important partly because the majority of respondents are already actively participating in a cluster but still lack of coordination required to make the cooperation effective. For MSEs who strictly rank policy higher than social capital, the linkage policy is ranked the highest, with the exceptions of those whose owners have a large number of children, have a long relationship with BI, exporting, and those operating in the agricultural sector. According to these MSEs, policies related to technology is most important.

Among MSEs who strictly prefer social capital, the results are split equally, i.e., half prefer participation and another half prefer coordination. Only MSEs not using digital technology, exporting, member of a cluster, and operating in trade and services sector consider participation more important than coordination. Hence, while in average coordination is viewed more important than participation, for MSEs whose opinion is strictly leaning towards social capital the importance of participation exceeds that of coordination. A complete list of the ranking of policy and social capital categories broken down by “structural variables” (different characteristics of respondents) is displayed by spider charts in Fig. 4.7a–n.

The spatial/regional dimension is equally important. In contrast with urban-based MSE, the number of those in rural area who believe that policy dominance will not suffice far exceeds the number of those who believe otherwise (56% vs. 44%). By

Table 4.2 Distribution of perceptions towards the importance of policies and social capital

Categories	Urban-rural		Gender		Age		Education	
	Rural	Urban	Female	Male	Below mean	Above mean	Below mean	Above mean
Government policy	0.44	0.55	0.55	0.45	0.55	0.45	0.55	0.47
Social capital and interplay	0.56	0.45	0.45	0.55	0.45	0.55	0.45	0.53
Total	1	1	1	1	1	1	1	1
Categories	HH size		Number of children		Success		Employees	
	Below mean	Above mean	Below mean	Above mean	Not successful	Successful	Below mean	Above mean
Government policy	0.55	0.47	0.53	0.44	0.53	0.47	0.53	0.39
Social capital and interplay	0.45	0.53	0.47	0.56	0.47	0.53	0.47	0.61
Total	1	1	1	1	1	1	1	1
Categories	Years in business		Years with BI		Digital use		Export	
	Below mean	Above mean	Below mean	Above mean	Yes	No	Yes	No
Government policy	0.47	0.53	0.56	0.36	0.51	0.43	0.47	0.51
Social capital and interplay	0.53	0.47	0.44	0.64	0.49	0.57	0.53	0.49
Total	1	1	1	1	1	1	1	1
Categories	Cluster		Cluster size		Zoom		Intransitive	
	Yes	No	Below mean	Above mean	Zoom	No zoom	Intransitive	Not intransitive
Government policy	0.44	0.59	0.51	0.45	0.48	0.64	0.56	0.44
Social capital and interplay	0.56	0.41	0.49	0.55	0.52	0.36	0.44	0.56
Total	1	1	1	1	1	1	1	1
Categories			Jawa	Kalimantan	Papua, Maluku, NTT		Sulawesi	Sumatera
Government policy			0.44	0.75	0.48		0.44	0.58
Social capital and interplay			0.56	0.25	0.52		0.56	0.42
Total			1	1	1		1	1
Categories			Various industries		Consumption	Trade and services		Agriculture
Government policy			0.54		0.50	0.63		0.36
Social capital and interplay			0.46		0.50	0.38		0.64
Total			1		1	1		1

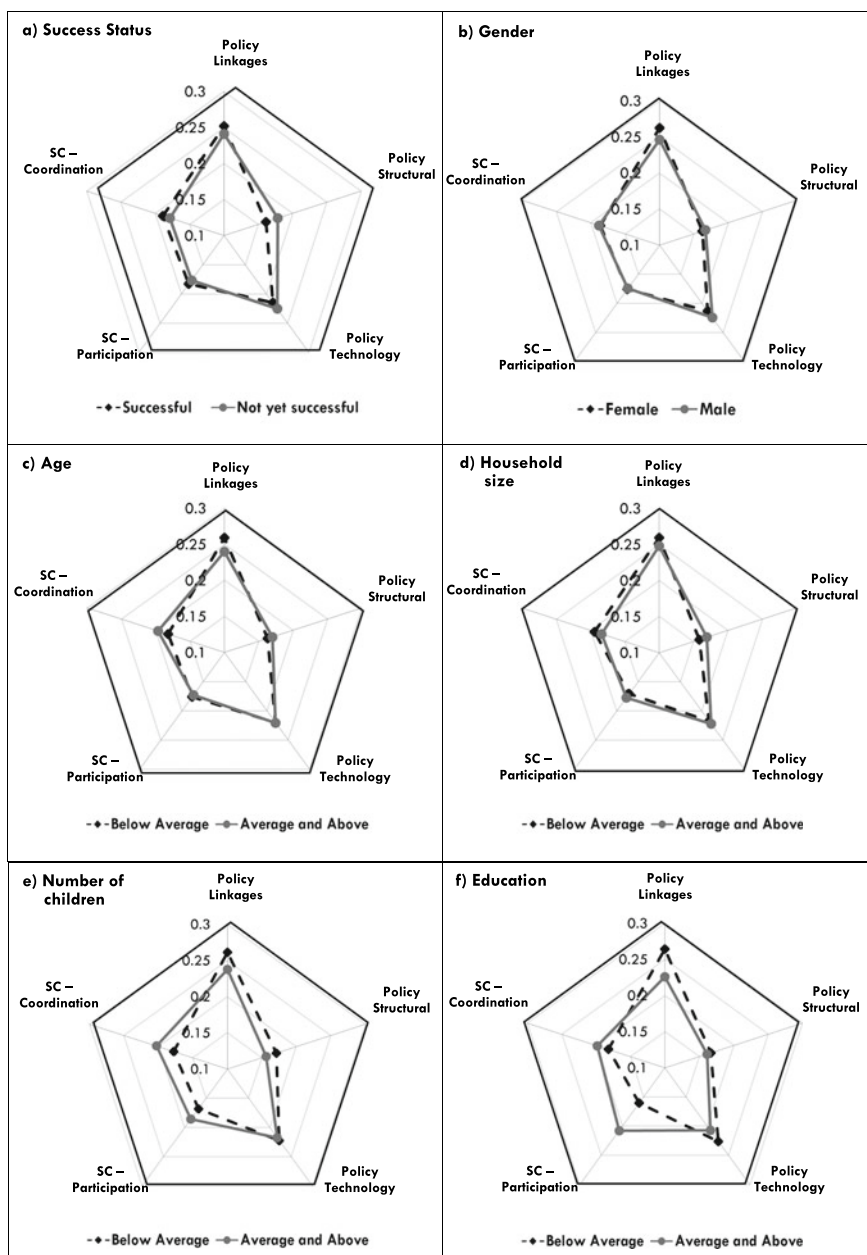


Fig. 4.7 Ranking of policy and social capital components: MSE characteristics. *Source* Compiled Survey results

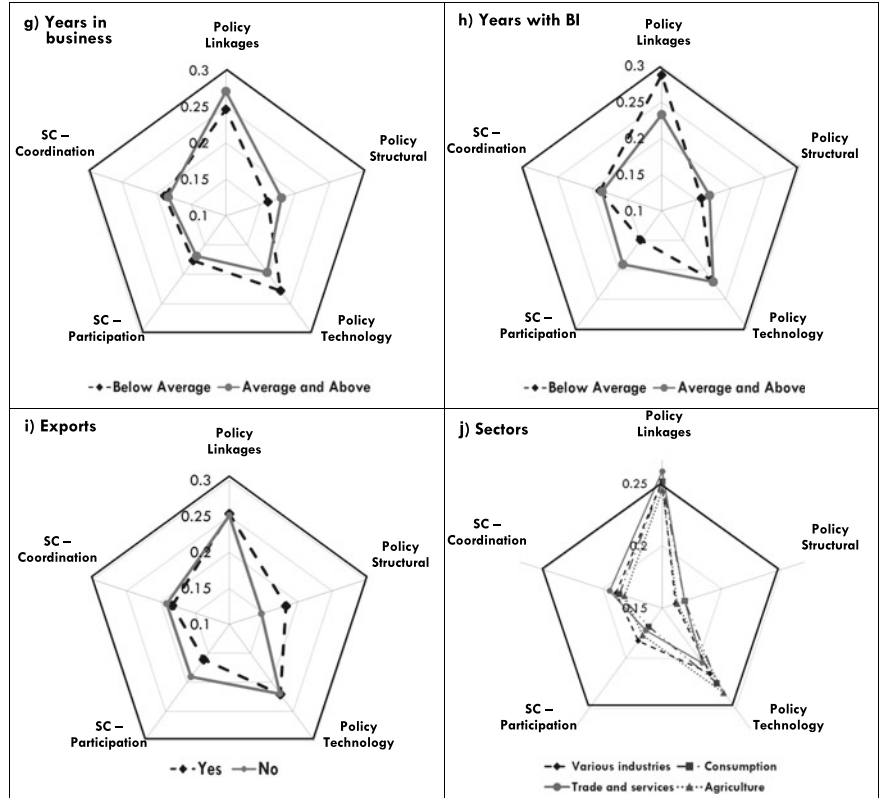


Fig. 4.7 (continued)

regions, MSEs with higher share that hold such a view are in Jawa, Sulawesi, Papua, Maluku and NTT. Figure 4.8a, b display the spatial/regional dimension of the ranking of policy and social capital categories.

Among different policies, both urban-based and rural-based MSEs prefer linkage policy, followed by technology policy. Between the two categories of social capital, the need for coordination is ranked slightly higher than for participation. By regions, MSEs in all provinces except Sumatera unanimously put the policy to strengthen linkages at the top and technology policy at the second. In the case of MSEs in Sumatera, the prioritization is reversed: technology policy at the top, followed by policy for linkages.

Next is the ranking of components. Within policy for linkages, majority MSE prefer measures to improve interactions between MSEs and larger firms. However, almost one third of all categories put policies to develop and strengthen supporting industries at the highest priority, followed by policies of linkages with larger firms. The need for supporting industries like packaging and logistics to help MSE cannot be overstated. During informal discussions with survey participants, this issue was raised

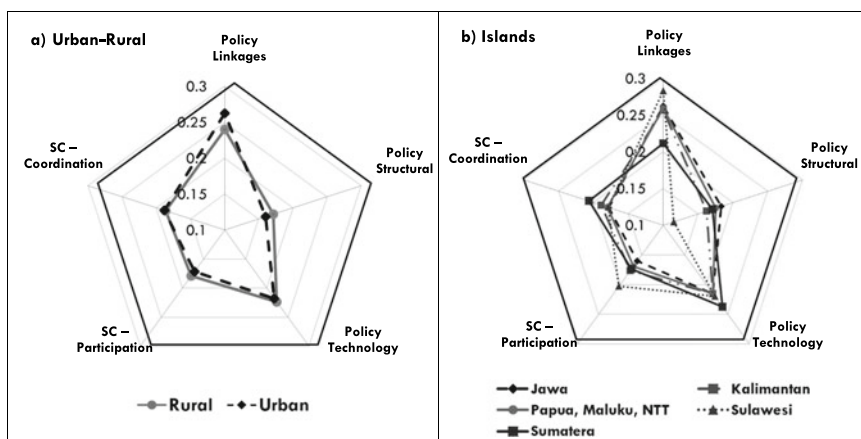


Fig. 4.8 Ranking of policy and social capital components: spatial/regional dimension. *Source* Compiled Survey results

repeatedly by them with some concrete examples. They emphasized the importance of such industries to secure and improve the supply chains, especially for MSEs operating in outside Jawa where transportation costs are expensive (see the testimony of MSE red chili in Lhokseumawe and MSE rendang in West Sumatera, in Appendix A.6).

Within structural policy, most MSEs clearly view promotion policy as the most important. Even those who do not rank it at the top, put it as the second priority. Among them are MSEs in rural areas, member of any cluster, located in Jawa, operating in the agricultural sector, and not using digital technology. For them, policies that are aimed at improving the product, process and design are more important than promotion; that is, improving quality is better than increasing quantity (sales).

In terms of technology policy, majority MSEs prefer measures to enable MSEs to use e-commerce for sales and improving access to inputs. Note that many of the respondents in our survey do not have/use digital technology. Lack of a reliable internet connection is one of the reasons. If utilization of digital technology is to be encouraged, some MSEs prefer to use it for payment purposes (e-payment). Even for that to happen, having a reliable internet connection is necessary. This was expressed particularly by MSEs with limited access to technology (no digital), those operating in trade and agricultural sector, and MSMEs located in Kalimantan and Sulawesi. A complete list of ranking of the components in each policy category for MSEs grouped according to the “structural variables” is displayed in Appendices A.3 and A.4.

Within the coordination category of social capital, the perceptions of majority MSEs lean towards transparent coordination in order to make cooperation and collective action effective. This is due to the fact that exchange of information among members are highly valued, which is also consistent with the results from the ranking of components within the participation category, where majority put searching for information at the top. For the second choice, the results vary between coordination

for business purposes and for social interactions (informal coordination), although most lean towards the latter. However, by regional dimension the difference of perceptions is quite stark. Urban-based MSEs believe that the most important kind of coordination is the business-oriented one, whereas their counterparts in rural area are of the opinion that the main purpose of coordination is to get information, hence transparency is valued the highest. Again, this is consistent with the ranking under the component of participation where searching for information is put at the top priority. By regions, the only MSEs that value business-oriented coordination as the most important are those in Kalimantan. Other MSEs in the rest of the country choose coordination for transparency and for social interactions. What is also very obvious is that, virtually all MSEs do not favor coordination mandated or conducted through government regulation.

The strong perceptions of most respondents towards transparency in coordination and searching for information are also expressed during the informal discussions after the survey. Many participants even made a request for BI to help organize zoom sessions like the one we had during the survey, in which MSEs operating in various sectors in different regions can communicate and interact with each other so that they are able to acquire information useful for their operations.

Having revealed their perceptions regarding the degree of importance of all components under policy and social capital, as well as the interplay between the two, respondents are eventually asked to rank the types of cluster deemed most relevant for cooperation and collective action to improve their performance. It turns out the preferred choice of most MSE remains the same as in the previous benefit/cost framework, i.e., a cluster for strictly business purposes. The exceptions are MSEs run by younger individuals, having relatively large number of employee, currently not a member of any cluster, and operating in handicrafts, handbags, woven fabric or tenun, furniture, perfumes, etc. These MSEs put government-mandated cluster at a highest rank. All in all, most MSEs under study are of the opinion that given the pre-conditions and interplay of policies and social capital, joining a cluster for a strictly business interest would be most fitting for improving competitiveness.

Sensitivity Analysis

The robustness of the survey results described above is tested by a series of sensitivity analysis discussed in this section. The way we conduct the analysis is by changing (mostly raising) the weight of each element in the component in every level of the hierarchy and check whether or not the final ranking of the elements in the final component at the bottom of the hierarchy change. The charts showing the full results are displayed in Appendix A.5.

In the benefits hierarchy, the ranking of the results is not sensitive to the existing location of MSE (the first level of the hierarchy in Fig. 4.2). On the other hand, the type of benefits, monetary or non-monetary, matters. If we focus only on the monetary benefits, the final ranking of perceptions shows the government-mandated cluster

being the most preferred choice. As the weight of monetary benefits gets bigger, however, the new ranking replaces the government-mandated with business-oriented cluster at the top. This is somehow expected; when the focus of MSEs strictly on monetary revenues or profits, they also tend to emphasize only the business side of joining a cluster. The reverse outcome, however, applies to non-monetary benefits. The more the MSEs feel that such benefits are more important than monetary benefits, the more they prefer to join the government-mandated than business-oriented cluster since such a cluster is expected to offer other benefits through government-assisted programs beyond just pure business benefits. What about the sensitivity of each element under those two types of benefits? Checking the final ranking of all scenarios after assigning greater weights to all elements (one at a time), we found no change in the ranking whatsoever, implying that the results from the benefits hierarchy are robust.

On the cost side, the sensitivity of operational costs and transaction costs is extremely small. Raising the weight of each does not alter the outcome that a cluster for social purposes is viewed by the MSEs to be the costliest. Even if we augment the weight of every single element under those costs, and also under the location component at the third level of the hierarchy, such a conclusion remains intact. The only exception is when the weight of closer to inputs location (“what if” type, rather than the actual location) is raised to maximum, in which case a diversification of product becomes the costliest for them, presumably due to market uncertainty surrounding the diversified products.

The robust results under the benefits and costs hierarchies above make the final ranking of the benefits/costs ratio remains the same as in the survey results, i.e., joining a business-oriented cluster being the most preferred choice.

Next is the sensitivity analysis for the survey results based on the systemic framework that involves a network. Note that since a network is designed to capture the feedback effects, there is no such thing as the “bottom level” as in a hierarchy; it essentially reflects a system where “everything depends on everything,” and hence the ultimate target to look at in conducting the sensitivity analysis depends on the specific goal that we are interested in. The analysis presented in the preceding section has made it clear that the specific goal being adopted is the type of cluster (the top part of Fig. 4.4). Looking at all the runs from augmenting the weight of each component in every category, there is no single case showing that the ranking of cluster type is altered; the business-oriented cluster remains the most preferred choice. The results of the systemic survey are therefore very robust.

Yet, more information can be acquired from the sensitivity analysis of a network system. Take the case of technology policy for e-finance. Even though business-oriented cluster continues to be at the top ranking when we raise the weight (or the importance) of e-finance, the size of the weight actually declines from 0.440 to 0.406, whereas the weight of government-mandated cluster increases from 0.319 to 0.389 (the weight of social-oriented cluster declines, i.e., from 0.241 to 0.205); see Appendix A.5 for the details. Given the fact that the analysis in the preceding chapter has shown that e-finance policy is viewed by majority of MSEs to be less important compared to the other types of technology, this suggests that intensified efforts to

boost the use of e-finance among MSEs requires a strong support and assistance from the government, for which government-mandated clusters are seen to be more appropriate to have. It is difficult to expect MSEs' shifting to e-finance technology without government's assistance, more so than their shifting towards e-commerce.

On the other hand, in the case of policies to create linkages with other MSEs, the analysis in the preceding chapter has shown that most MSEs see the importance of such policies. Yet, the sensitivity analysis also shows that raising the weight of those policies will make government-mandated cluster to take over business-oriented cluster as the most-preferred choice. Cognizant of the fact that an important message from the analysis is for policy makers to understand the perceptions and aspirations of MSEs as part of understanding the prevailing social capital, this suggests that government's assistance and supports are needed to foster closer linkages among MSEs.

References

- Anglingkusumo, R., Werdaningtyas, H., Rakhman, R. N., & Munandar, H. (2014). *Integrasi Internal Perekonomian Indonesia: Sebuah Kajian Awal*, unpublished paper. DKEM Bank Indonesia.
- LD-FEB-UI. (2018). *GOJEK's Impact on the Indonesian Economy in 2018*. Lembaga Demografi-FEB-UI.

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