Assessment of Indonesian Social Capital Index

Alex Oxtavianus
BPS- Statistics Indonesia, Indonesia; leaxoct@gmail.com

Abstract

Social capital is one of development capital. This study calculates the quantity of social capital in Indonesia by using an index. Social capital index is calculated at a national and provincial level. Social capital components in social capital index are trust, norm and network. The result showed that social capital in Indonesia is supported by the trust and norm. Networks component is very low. Social capital in Indonesia is also determined by the degree of society homogeneity, informal leadership and level of development. Homogeneous society and the existence of informal leaders have a positive impact on social capital. Development has a negative impact on social capital, especially in trust and norms components. Otherwise, development has a positive impact on the networks expansion.

Key Words:
Social capital index, trust, norm, network, development

I. Introduction

Spangenberg and Bonniot (1998) identified four development capital, which are man-made capital, human capital, natural capital and social capital. Three first capital very popular and much studied, whereas social capital is rarely discussed and empirically studied, especially in Indonesia. Paradox with these conditions, theory about the role of social capital in development has grown fast. The results of studies in various countries shows that strong social capital will stimulate the growth of various sectors of the economy because of the high level of trust and closeness of relationships within a broad network grows among economic actors (Fukuyama, 1995). Fauzi (2007) states that social capital can play a role in sustainable development, because it has an important role in economic growth through: (a) the information flows will move faster between economic agents if social capital is quite good; (b) trust as a major component of social capital will reduce information search costs, thereby reducing transaction costs; and (c) social capital will reduce government control of the economy so that exchange more efficient.

Social capital is a missing link among natural capital, physical/produced capital and human capital (World Bank, 2008). Emphasized social capital, including trust, norms and networks, is a prerequisite for sustainable development. Rydin and Holman (2004) even state that social capital can solve the problems to achieve sustainable development. Social capital acts through two different things; first, social capital plays a role in tackling the problems of collective action; second, social capital can reduce transaction costs between actors of sustainable development. The use of social capital can solve the problems of lack of participation, conflict of desire, lack of resources, as well as barriers to cooperation between the parties relating to sustainable development.
Svendsen and Svendsen (2004) states that social capital increases control system against opportunistic behaviour, free rider and rent-seeking. Individual is likely opportunistically, selfish and will strive to achieve a common goal when individual goals are met. The tendency will be suppressed when strong social capital as the control system will increase the additional cost to behave opportunistically.

To get an idea of social capital, it needs to analyze how much the stock of social capital in a region. Stock of social capital is early information to learn social capital as well as indication of development impact on social capital. Related to the statement, the study aims to calculate and analyze the social capital stock in Indonesia.

### II. Method

Components of social capital in this study are trust, norms and network. Social capital is measured using several indicators that a relation of these components. Social capital indicators selection refers to social capital research has been done by some researchers previously and adapted to data. The data used in this study is the National Socio-Economic Survey, Culture and Education Module (SUSENAS MSBP) in 2012.

Stock of social capital is expressed in the form of social capital index. Steps being taken in the calculation of social capital index are as follows: (1) data preparation, (2) calculation average score, (3) normalization, (4) determination of weights and (5) aggregation. All steps are performed sequentially. Step 1 and 2 are the basic data preparation for calculating social capital index. Preliminary data then normalized by using the maximum method minimum (Step 3). The maximum value of the average score was 4 with a minimum value of 1, if $I_n$ is an average of the normalized scores for each indicator, then the normalization formula is follows:

$$I_n = \frac{(Actual \ Score - 1)}{(4 - 1)} \times 100$$

Weighting (Step 4) is an important step in calculation social capital index. Weight of each indicator is determined by using
correlation matrix. The weight is proportion of each indicator correlation over the total value of the correlation. Correlation matrix is formed on each component. While, the weight of each social capital components (trust, norm and network) are set uniformly for all.

Step 5 (aggregation) is a stage to calculate social capital index and its components. Social capital component index is performed with the weighted average method; summing the multiplication of all indicators score that have been normalized to the weight of each indicator on each component of social capital. After all social capital component index is obtained, and then social capital index was calculated using equal weights for all components.

III. Findings and Discussions

This study is intended to measure the amount of social capital at provinces level throughout Indonesia. Given the breadth and diversity characteristics of the study area, the indicator used should be general and applicable in all regions. In addition to indicators selection, the coverage areas also need special attention. Referring to the Statistics Indonesia (BPS) study, the measurement of social capital in rural communities is the simplest thing to be done. Village social capital is an accumulation of individual social capital in related region. Furthermore, social capital in higher hierarchy territory is accumulation of social capital in village communities.

Measurement of social capital is rarely done, especially to all provinces in Indonesia. Only BPS has studied to measures social capital in massive. Measurement of social capital amount in rural communities has been calculated for 2009 and 2012. This study sought to recount the amount of social capital in 2012, but using the same data that was used by the BPS. The recount was done due to the different components of social capital used by BPS with components that have been designed for this research.

3.1. Respondent Characteristics

Characteristics of the respondents could be a measurement of information quality provided by respondents. Characteristics of respondents viewed from several demographic indicators, which include gender, age group, marital status, and long lived in the village.

<table>
<thead>
<tr>
<th>Demographic Characteristics</th>
<th>Urban</th>
<th>Rural</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>64.90</td>
<td>52.70</td>
<td>58.00</td>
</tr>
<tr>
<td>Male</td>
<td>35.10</td>
<td>47.30</td>
<td>42.00</td>
</tr>
<tr>
<td>Age Group</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 30 years</td>
<td>16.10</td>
<td>16.00</td>
<td>16.00</td>
</tr>
<tr>
<td>30-40 years</td>
<td>31.50</td>
<td>30.90</td>
<td>31.20</td>
</tr>
<tr>
<td>&gt; 40 years</td>
<td>52.40</td>
<td>53.10</td>
<td>52.80</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not married</td>
<td>7.90</td>
<td>4.70</td>
<td>6.10</td>
</tr>
<tr>
<td>Divorced</td>
<td>12.40</td>
<td>13.10</td>
<td>12.80</td>
</tr>
<tr>
<td>Married</td>
<td>79.70</td>
<td>82.20</td>
<td>81.10</td>
</tr>
<tr>
<td>Long lived in the village</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 5 years</td>
<td>18.80</td>
<td>10.30</td>
<td>14.00</td>
</tr>
<tr>
<td>5-10 years</td>
<td>16.40</td>
<td>11.30</td>
<td>13.50</td>
</tr>
<tr>
<td>11-20 years</td>
<td>21.80</td>
<td>20.50</td>
<td>21.10</td>
</tr>
<tr>
<td>&gt; 20 years</td>
<td>43.00</td>
<td>57.80</td>
<td>51.40</td>
</tr>
<tr>
<td>Number of respondents</td>
<td>29337</td>
<td>38878</td>
<td>68215</td>
</tr>
</tbody>
</table>

By gender, the majority of respondents were female respondents. The proportion of female respondents was greater in urban areas. The proportion of female respondents in urban areas even reached 64.9 percent. The large number of female respondents was allegedly influenced by the data collection methods used. Data collection conducted with the households sample and conducted interviews directly. Generally, the data collection is done during the day, so that was in the house is female household members. Men household
members generally work outside the home. But with a difference of about 4 percent, then the information collected is considered able to demonstrate a balance between genders.

Highest number of respondents came from those aged over 40 years, with the proportion of more than 50 percent. Respondents were also dominated by have married person, both are married or divorced. This condition illustrates that respondents are very mature, so the answer will be able to provide more trustworthy information.

As inherent capital to the social structure, social capital is influenced by the frequency of interaction between individuals. As a proxy of interaction frequency, this study asks how long respondent have been live in the village. In general, respondents are dominated by people who have settled more than 20 years in the current village, with a proportion of more than 50 percent. With respondents who are dominated by people who did have been long enough in their current village, the social capital information given by the respondent could describe forms of social interaction.

Noting some of respondent characteristics above, it can be concluded that the respondents can provide adequate information about social capital. Respondents were well represented in terms of regionalism, gender, age and some other characteristics. Respondents were also dominated by people who are assumed to have sufficient experience of social interaction.

### 3.2. Social Capital Index

(Step 1) Data preparation is intended to synchronize the whole questions are used. Indicators to measure social capital in this study using two blocks of questions. The two blocks of the questions can be answered by different respondents, so it important to search the same respondents who answered that two blocks of questions. (Step 2) Calculation average score performed for all indicators, for provincial and national level. (Step 3) Normalization is done with reference to a defined formula in methodology section.

(Step 4) Determination of weights. Preparation of social capital index is done in two tiers, first component indexing based on social capital indicators and second social capital indexing based on all social capital components. Therefore, determination of the weights is also performed in two levels, weights for indicators and weights for components. Determination of weight for each indicator is calculated by using the correlation method. While the weights for each component is assumed to be uniform, so that each component will have a third weighing.

Based on the social capital index, it is known that the highest social capital index was obtained by the North Sulawesi province, while the lowest value of the social capital index remained in Jakarta. Social capital index in this study were prepared using indicators that reflect the level of trust, awareness and interaction with others. Thus,
it can be said that the level of trust, awareness and interaction with other people in North Sulawesi most excellent among the other provinces. In contrast, condition of trust, awareness and interaction with people around in Jakarta is at the lowest condition. This means that the people in Jakarta tend to be more individualistic than North Sulawesi.

The level of social capital is also influenced by the level of community homogeneity. Analyzing at some of provinces which high social capital index, should be suspected that the presence of informal leaders in the community also affect social capital. Beside North Sulawesi, the other provinces that have high social capital index are Yogyakarta and Bali. North Sulawesi has informal leaders from religious leaders. Yogyakarta has informal leaders from palace, while Bali has informal leader of religious and traditional leaders. Informal leaders like glue in the community, thus increasing a sense of trust, awareness and interaction within the community.

Table 3: Social Capital Index Indonesia 2012

<table>
<thead>
<tr>
<th>Region</th>
<th>Trust Index</th>
<th>Norm Index</th>
<th>Network Index</th>
<th>Social Capital Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>64.5</td>
<td>67.0</td>
<td>39.0</td>
<td>56.8</td>
</tr>
<tr>
<td>Rural</td>
<td>67.0</td>
<td>68.5</td>
<td>38.7</td>
<td>58.1</td>
</tr>
<tr>
<td>Indonesia</td>
<td>66.0</td>
<td>67.9</td>
<td>38.8</td>
<td>57.5</td>
</tr>
</tbody>
</table>
Description of Indonesian social capital index shows that the component with the highest score is norm with 67.9. While, trust has achievements that are not much different from norm. Trust index was 66.0. The lowest achievement is network. Network index only stood at 38.8. Taking into the indexes, the Indonesian social capital is predominantly composed by norm and trust component.

Comparison between social capital components index will be more apparent by observing the distribution in Figure 3. Norm and trust are far above network components. Norms and trust distribution are also more homogeneous than network. Therefore, it is reasonable that social capital development is more priority on developing a network.

Network development associated with developing a group or organization that is based on mutual trust and norms owned. In economic, development of network can be done by developing economic organization based on collective action. Form of organization that fits with this principle is koperasi (cooperative). Cooperative will be developed by considering the forms of engagement that already exist. The basic idea is to develop existing traditional or informal groups into the formal organization. Thus, their social capital will be start-up capital in building cooperative.

To better understand of social capital in Indonesia, in addition overall social capital index, social capital index was calculated for urban and rural regions. Calculation of social capital index by providing regional control is expected to provide general information about form of social capital on different characteristic areas. Urban area is reflection of developed area, while rural area is reflection of growing area.

In general, rural social capital index is greater than in urban area. However, if observed according to each component, it is not entirely rural index greater than urban. Rural social capital is dominance in trust and norm index, while network index is just the opposite. Urban network index is greater than rural. This condition raises a presumption that the development has a negative impact on level of trust and norm, but a positive impact on the network.

Nationally, the difference between rural and urban social capital is not too large. Rural social capital index is 58.1 while urban 56.8. The difference between the two is only 1.6 points. However, in some provinces the difference is quite large. The difference was greatest in South Kalimantan (6.3 points), followed by West Papua (5.2 points) and West Sulawesi (4.2 points). In some provinces, rural social capital index is smaller than in urban areas. These provinces are Aceh, Lampung, Southeast Sulawesi, Gorontalo, and West Papua.

IV. Conclusion

General conclusion from this study is the quantity of social capital in Indonesia is determined by the degree of society homogeneity, informal leadership and level of development. High social capital indicated by the province with a high degree of society homogeneity, have informal leadership and the level of development that is not too massive. Allegedly, development has negative
impact on trust and norm, but positive effect on network. Therefore it is necessary to design development that is able to maintain trust and norm.

One effort is strengthening of social capital in line with strengthening of human capital through education and dissemination of knowledge. Norm in the form of local wisdom is often abstract and difficult to be accepted by public mindset. With knowledge, this norm will be supported by scientific thinking is more easily digested. Besides as a platform for knowledge transfer, education is a means to interact and develop positive norms, such as professionalism, honesty, and integrity. Thus education can develop bridging social capital as a complement to bonding social capital that already exists.

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References:


