Human Capital, Social, Wages, and Welfare: Case of Small and Medium Enterprise Workers

Nurlina Tarmizi Muhyiddin 1, Bambang Bemby Soebyakto 1, Fauziah Asyiek 1, Aning Kesuma Putri 2,*, Idham Cholid 3, and Liliana 1

1 Department of Economics, Faculty of Economics, Universitas Sriwijaya, 30662, Ogan Ilir, South Sumatra Province, Indonesia
2 Department of Economics, Faculty of Economics, Universitas Bangka Belitung, 33172, Bangka, Bangka Belitung Islands Province, Indonesia
3 Department of Management, Faculty of Economics, STIE Multi Data Palembang, 30113, Palembang, South Sumatra Province, Indonesia

* Corresponding Author: aning@ubb.ac.id

ARTICLE INFO


DOI: 10.33019/society.v9i2.283

ABSTRACT

Capital consists of human capital, social capital, natural capital, physical capital, and financial capital, but this study will only discuss human and social capital. This study aimed to analyze the relationship between human and social capital in achieving prosperity through the level of wages and income, especially for workers in the Small and Medium Enterprises sector in Palembang City. Respondents in this research were 400 workers in the Small and Medium Enterprises sector in Palembang, in the Sub-districts of Sukarami, Ilir Barat I, Kalidoni, Seberang Ulu I and Seberang Ulu II. The method used is descriptive qualitative in path analysis, with primary data in interview questionnaires. The results showed that workers’ drinking and maximum income ranged from Rp500,000 to Rp7,500,000, with an average of Rp1,903,041. The results of the path analysis found that human capital through wages affected the income of 76.4 percent, with a beta value of 0.137 indicating that if the length of schooling were increased by 10 percent, wages would increase by 1.4 times and income by 23.6 percent. In contrast, the relationship of social capital through wages to income is very small because other factors influence, such as the work environment, place of residence, and others.
1. Introduction

Capital assets include human capital, social capital, natural capital, physical capital, and financial capital, which affect household welfare and sustainable life through individuals’ income or wages (Al-Afeef, 2017). Capital assets inherent in humans are called human capital, consisting of education, health, and migration (Krueger & Lindahl, 2001). Social capital refers to the ability of individuals and groups to work together in a community/group or between groups (Arenius, 2014). Social capital can help improve the lives of individuals or groups through networks or social cohesion, which encourages a climate of cooperation to gain benefits (Yunus & Sakaria, 2017). Natural capital is one of the assets that also greatly affects human life. For example, fertile soil, and undamaged natural biota will greatly benefit farmers and fishermen. Likewise, physical capital in the form of infrastructure and facilities can be used to support activities to be more productive. While financial capital is capital controlled by the owner (Mulder et al., 2006; Birdsall et al., 2014).

All capital assets are used to achieve prosperity, where each community group’s achievement indicators are different. For example, in an agricultural society, the farmer’s welfare indicator is measured by the Farmer Exchange Rate, which reflects the ratio between the price index received and paid by farmers in percentage terms, the number of harvests per year, and household expenditure per capita per month (Yokoyama & Ali, 2009; Badan Pusat Statistik, 2020).

Other welfare indicators can be measured through food availability, nutritional adequacy, access to food, and household behavior (Pinstrup-Andersen, 2009). Meanwhile, Badan Pusat Statistik (2020) also stipulates welfare indicators, namely: (a) family income level, (b) family education level, (c) family health level, (d) household expenditure composition for food and non-food, and (e) conditions and facilities owned by the family.

The prosperous life that the community wants is a sustainable livelihood, namely prosperity in the present and prosperity in the future. The sustainable livelihood of a community reflects the well-being of the community, either part or even the whole community (Schoonhoven-Speijer & Ruben, 2015; UNDP, 2017).

Furthermore, achieving prosperity cannot be separated from disturbances stated as vulnerability contexts. Vulnerabilities include: (a) the occurrence of economic shocks, such as rising prices, especially prices for primary needs, (b) political shocks, political changes that disrupt the economic life of the community, (c) natural disasters, which change the structure of the economy, (d) unfair competition caused by differences in wages (Madhuri et al., 2015). So to deal with this vulnerability, the government must play a role in creating conducive conditions, such as maintaining price stability, political stability, and setting minimum wages for cities, regencies, and provinces (Masud et al., 2016).

Success in improving a better life is necessary so that the sustainable development goals (SDGs) that are the Indonesian government’s commitments can succeed. As is well known, the goal of Sustainable Development is a development that meets the needs of the present without compromising its ability to meet the needs of future generations (Morton et al., 2017; Badan Perencanaan dan Pembangunan Nasional, 2019).

The extent to which welfare can be achieved can be seen from the income per month or the average income per family member. Several studies in the Province of South Sumatra found
that the head of the family’s average income was low. Research by Tarmizi et al. (2014) found that the average monthly income of the head of household in Palembang is Rp2,185,575, in Lubuk Linggau Rp2,374,930, in Prabumulih Rp1,694,000, and in Pagar Alam Rp1,023,437. Also, research by Efrianti et al. (2018) in Pemulutan and Sungsang villages, South Sumatra Province, found things that were not much different: the average income received by family heads in Pemulutan and Sungsang villages was relatively low, ≤ Rp2,000,000.00.

The low income is caused by many factors, including (a) the number of family members is relatively large, (b) the business space is still in a limited area, (c) low mobility, especially mobility to market its business results, (d) low capital assets. Not only focusing on the four factors above, (Muhyiddin et al., 2017) investigated further the index of each capital asset. Three capital assets with a low index were found: the human capital, social capital, and financial capital indexes were less than 0.5, while the physical capital and natural capital indexes were high: 0.794 and 0.961, respectively. A high index is beneficial for life. A low index is detrimental to life and will hinder sustainable life.

So based on this background, this research will focus on discussing human capital and social capital on wages and welfare of workers in the Small and Medium Enterprises sector in Palembang City.

2. Literature Review

2.1. Sustainable Livelihood

Sustainable Livelihood (SL) is a concept developed by Chambers & Conway (1992). SL approach is an alternative to the per capita income approach. The income per capita approach does not reflect the success of development that every member of the community can enjoy. Even this approach creates inequality in income distribution between individuals and between groups of people. This approach does not touch on the issue of sustainable livelihoods.

There are five components related to sustainable livelihoods (Morton et al., 2017; UNDP, 2017; Mkuna et al., 2020), first, asset capital, which consists of human capital (HC), social capital (SC), natural capital (NC), physical capital (PC) and financial capital (FC). Each component of asset capital affects the other and is reflected in the form of a pentagon. Thus, the SL concept is an operational framework that links the interrelationships between the components of livelihoods.

Second, the vulnerability context (Madhuri et al., 2015; Nissa et al., 2019): such as rising prices, unfavorable political situations, natural disasters, unfair competition. Third, policies and institutions (rules, customs, habits, and organizations), such as providing access so that people’s capital assets are increased, policies that reduce unproductive habits, and rules that set prices that must be stable and not fluctuate all of this mean eliminating vulnerability. Fourth, livelihood outcome: welfare. According to the provisions of Badan Pusat Statistik (2019), welfare indicators are family income, family education, family health, the composition of consumption of food and non-food, and conditions and facilities owned by the family. Fifth is a strategy to achieve prosperity.

2.2. Wage

Wages are remuneration or prices given by the employer to workers. Wages are given based on the work (per day or week). Wages are compensation in the form of material (money). In contrast, non-material forms of compensation are stated as non-wage compensation, including providing facilities, food and transport fees, and training that can support careers. Workers’ wages are also income in the ‘non-labor income’ category. Wages in various business
activities ‘should’ be based on the minimum wage that has been set by the government (Tarmizi, 2012).

There are several wage theories (Muhyiddin et al., 2017): natural wages, iron wages, marginal revenue productivity theory of wages, discrimination wages, hedonic wages, and minimum wages. Natural wages are determined by labor supply and demand in the market. The natural wage theory was put forward by David Ricardo (Ehrenberg, 2009); Natural wages are wages used as a reference for workers to live decently. The market wage or market price of labor will always, or almost always, tend towards the minimum necessary for the livelihood of workers.

The employer determines iron wages, work limit productivity, and non-discriminatory wages. The iron wage theory was put forward by Ferdinand Lasalle (McConnell et al., 2017); Iron wages are wages that must be received by workers even though the amount is below the natural wage and is the minimum wage. The iron wage law asserts that the real wage always tends towards the minimum wage in the long run, and the minimum wage is necessary to sustain workers’ lives.

The theory of labor limit productivity wages was first introduced by Thunnen, which was later developed by Wicksteed, Walras, J. B. Clark (Neoclassical group) (Ehrenberg, 2009). This theory states that workers are paid according to their contribution to production. If the worker makes a large contribution to the production, they will be paid a higher wage, and if their contribution to production is low, their wages will fall.

Wage discrimination shows that wages are not the same for every worker even though the level of work is the same. Several factors cause differences in wages, including differences in (a) gender, (b) race (skin color), (c) education level, (d) skill level, (e) type of work (whether risky job or safe job), and (f) labor unions (Campos-Soria et al., 2015; Mainali et al., 2017).

Hedonic wages are determined by the employer and the bidder for labor services. The determination of wages by these two parties is because they are faced with a trade-off between wages and work comfort (job safety) or between wages and the probability of injury (probability of injury). Workers will refuse work if work comfort is low or the probability of risk is high, and this refusal will make the employer recalculate the exact amount of wages (Masery, 2012; Tanojohardjo et al., 2014)

The minimum wage is the wage that is determined by government regulation based on the results of research conducted by the Wage Council with the Manpower Office. According to the International Labor Office (2010), the minimum wage is the minimum wage required by employers/employers to pay wage earners for work performed during a certain period which cannot be reduced by mutual agreement or individual contracts.

Determination of the minimum wage aims (Widar, 2006; Maulida, 2013; Kawata, 2015): (a) maintain employment growth and economic growth, (b) protect the level of income and living standards of workers, (c) maintain the purchasing power of workers. Referring to this goal, usually, minimum wage earners get peace of mind at work. But some argue that the minimum wage is not strong enough to maintain the purchasing power of workers. For this reason, it is necessary to classify whether the minimum wage is below or above the market wage (actual wage) so that the positive and negative impacts of the establishment of the minimum wage can be identified.

If the minimum wage is below the market wage, there is excess demand greater than supply. On the other hand, if the minimum wage is above the market wage, it will benefit the community. Because with high wages, workers will have a higher motivation than before and will further increase productivity. According to Card & Allan (1994), as cited in Ehrenberg
(2009), an increase in the minimum wage will make employers take detrimental actions to workers, including reducing the number of workers. Even though the minimum wage is low and always below the actual wage, it is still enforced. The function of the minimum wage is as a safety net so that people or individuals do not fall into more severe poverty. It is hoped that, as a safety net, the minimum wage should be a strong moderator of the relationship between asset capital and welfare (Susanti, 2017).

The provincial minimum wage differs from one province to another. The regency/municipality minimum wage differs from one regency/municipality to another, and the provincial sectoral minimum wage differs between the same sector in different provinces. The provincial minimum wage for South Sumatra Province in 2020 has been set at Rp3,043,111 per month. This figure is relatively low for a prosperous life because secondary and tertiary needs are not fulfilled (Antiyatna et al., 2016; Muhyiddin & Miskiyah, 2017).

2.3. Welfare

Welfare (which is included in the Social Progress Index (SPI) is an indicator used by the Central Statistics Agency to see the level of sustainability of life using family income indicators and indicators of the proportion of food and non-food consumption. If family income has increased, it means that family welfare will increase. If the proportion of consumption is Non-food consumption is greater than food consumption, meaning that the family is no longer disturbed in pursuing food needs, and further means that the family is experiencing an increase in welfare (Badan Pusat Statistik, 2019).

In a few decades, GDP (gross domestic product) has become the prima donna as a welfare measure. Essentially, GDP is an indicator of aggregate economic activity, but it is also always used to measure social welfare. As a measuring tool for welfare, GDP has limitations, as stated by Zeder (2015), namely:

a) GDP does not describe the inequality of income distribution
   The relatively even distribution of income illustrates better social welfare. While this is not included in GDP.

b) GDP does not represent what is produced
   GDP measures the value of all finished goods and services in an economy and does not specify whether the products included in the GDP calculation negatively affect social welfare, such as drugs products.

c) GDP ignores externalities
   Economic growth usually goes hand in hand with increased exploitation of renewable and non-renewable resources. This excessive use of resources will negatively impact, and consequently, social welfare will decline. This effect is not included in GDP at all.

The various weaknesses of GDP have led to efforts to develop more accurate and reliable indicators to measure social welfare, such as HDI, SPI, and GNHI (the Gross National Happiness Index) (Budiantoro et al., 2013; Vikash, 2019). HDI, or Human Development Index, measures successful human development through three dimensions: health and life expectancy, education, and living standards (gross national income per capita) (Grech et al., 2020).

SPI (Social Progress Index) is based on three main dimensions: basic human needs, foundations of well-being, and opportunity. Social progress for each dimension is measured by many indicators, including nutrition, medical care, safety (basic human needs), education, well-
being and sustainability (the foundation of well-being), personal rights, freedom, and tolerance (opportunities) (Jacobs & Slaus, 2010; Lumintang, 2015).

Welfare (included in the SPI) is an indicator used by BPS to see the level of livelihood sustainability by using indicators of family income and indicators of the proportion of food and non-food consumption. If family income has increased, it means that family welfare will increase. Suppose the proportion of non-food consumption is greater than food consumption. In that case, it means that the family is no longer disturbed in pursuing food needs and further means that the family is experiencing an increase in welfare (Stiglitz & Sen, 2009).

3. Research Methodology
3.1. Population and Sample
The population in this research is formal sector workers who work in SMEs (Small and Micro Enterprises) in Palembang City, which is as many as 450,930 people (BPS Provinsi Sumatera Selatan, 2018). Based on the population, the number of samples was determined using the Slovin formula and with an error rate of 5% (Durlauf et al., 2020).

\[ n = \frac{N}{1 + Ne^2} = \frac{450930}{1 + 450930 (0.05^2)} = 400 \]

Furthermore, the total sample of 400 people was divided according to the selected area using proportional random sampling with details of the sub-district and sample shown in Table 1.

Table 1. Research Sample

<table>
<thead>
<tr>
<th>No.</th>
<th>Sub-distRICT</th>
<th>Citizens Work in the Formal Sector</th>
<th>Number of Samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sukarami</td>
<td>116,114</td>
<td>103</td>
</tr>
<tr>
<td>2</td>
<td>Ilir Barat I</td>
<td>103,714</td>
<td>92</td>
</tr>
<tr>
<td>3</td>
<td>Kalidoni</td>
<td>82,295</td>
<td>73</td>
</tr>
<tr>
<td>4</td>
<td>Seberang Ulu I</td>
<td>78,913</td>
<td>70</td>
</tr>
<tr>
<td>5</td>
<td>Seberang Ulu II</td>
<td>69,894</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>450,930</td>
<td>400</td>
</tr>
</tbody>
</table>

Source: Processed Data (2020)

3.2. Analysis Tools
3.2.1. Path Analysis
This research analysis uses path analysis, which has the following objectives (Putri & Wulandari, 2020):

a) Explain why the variables are correlated using a temporally sequential model.
b) Draw and test a mathematical model using the underlying equation by:
   1) Identify the path of the cause of a particular variable to other variables that it influences.
   2) Calculate the effect of one or more independent variables on other dependent variables.

The path analysis method developed by Sewell Wright in the 1930s is a method that examines the direct and indirect effects of hypothesized variables as a result of the effect of
treatment on these variables (Gujarati, 2004). Using it can be calculated the magnitude of the direct effect of the independent variables on a dependent variable.

For path analysis, only two variables that affect sustainable livelihoods (SL) are used: human capital and social capital. In the short term, it is assumed that each individual’s natural capital, physical capital, and financial capital do not change significantly. Vulnerability will not affect capital assets. This is due to (a) as workers, they do not have the power to cope in case of price fluctuations, (b) there is no shock to natural conditions that cause workers not to work, (c) there is no direct influence on the political situation, (d) there is no competition between workers, and if there is competition between employees it will not have a direct impact on workers, and (e) even though there was a COVID-19 pandemic during this research, it did not make workers reduce their working hours. Thus the vulnerability is assumed to be ceteris paribus (Lautze & Raven-Roberts, 2003; Madhuri et al., 2015; UNDP, 2013).

The relationship between human capital and social capital with welfare is through the wages received by workers. Welfare is measured by the level of income received. These effects are reflected as path coefficients which are standardized regression coefficients (i.e. $\beta$), where $Y$ is income, CA consists of human capital and social capital, and $W$ is wage:

$$Y = \beta_{CA} + \mu W + \epsilon$$

The assumptions of path analysis are (Sarwono, 2011; Durlauf et al., 2020): (a) There is a linear, causal and additional relationship between variables, (b) all errors are not correlated with other models, (c) only exist a one-way causal relationship in the model, (d) measuring variables using an interval scale, (e) variables that are observed and measured without error, and (f) the model is assumed to be correct, by including all causes into the model. The path analysis formula and its assumptions in this research are as follows:

$$Y = \rho_{HC}HC + \rho_{SC}SC + \rho_{WG}W + \epsilon$$

$Y$ is income, $HC$ is human capital, $SC$ is social capital, $W$ is wage, and $\rho$ is the path coefficient. If used as a path analysis diagram, it becomes as follows:

![Path Analysis Diagram](source.png)

**Figure 1. Research Path Analysis Diagram**
Source: processed from the equation model (2020)
4. Results and Discussion

4.1. Sustainable Welfare

Two indicators to measure welfare are family income and expenditure indicators for food and non-food (Moore, 2015). If the income is above the average income, the family is said to be prosperous. Likewise, a family is declared prosperous if non-food consumption is greater than food consumption because the family is no longer disturbed in pursuing food needs (Murniningtyas & Endah, 2018).

This research assumes that the respondent’s income is family income because some respondents receive assistance from their families (from their wives/husbands, children, and parents). The research results found that the family income range was very large, ranging from a minimum of Rp500,000 and a maximum of Rp7,500,000, with an average income of Rp1,903,042. This average income is below the South Sumatra Provincial Minimum Wage in 2020, which is Rp3,250,000, below the Palembang City Minimum Wage in 2020, which is Rp3,165,519. Compared to the income received by Civil Servants with a rank/class of 2a with a working period of 0 years, which is Rp1,845,000 (conditions in 2020), the average is Rp1,903,042 is relatively good. However, it is still far from the Palembang City minimum wage standard.

Table 2. Above-Average and Below-Average Income for Each Sub-district (%)

<table>
<thead>
<tr>
<th>No.</th>
<th>Sub-district</th>
<th>&gt;= Average Income</th>
<th>&lt; Average Income</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sukarami</td>
<td>30.1</td>
<td>69.9</td>
<td>103</td>
</tr>
<tr>
<td>2</td>
<td>Ilir Barat I</td>
<td>45.8</td>
<td>54.2</td>
<td>92</td>
</tr>
<tr>
<td>3</td>
<td>Kalidoni</td>
<td>38.4</td>
<td>61.6</td>
<td>73</td>
</tr>
<tr>
<td>4</td>
<td>Seberang Ulu I</td>
<td>52.1</td>
<td>47.9</td>
<td>70</td>
</tr>
<tr>
<td>5</td>
<td>Seberang Ulu II</td>
<td>25.8</td>
<td>74.1</td>
<td>62</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>37.04</td>
<td>62.95</td>
<td>400</td>
</tr>
</tbody>
</table>

Source: Research Results (2020)

Table 2 shows that the respondents of MSME workers in this research area are relatively less prosperous because 62.95% have an income below the average income of Palembang City, which is Rp3,165,519. So this condition illustrates that the profile of SME workers in Palembang City tends to be less prosperous. Nevertheless, workers are grateful for their situation because working with income is better than being unemployed but having no income.

4.2. Vulnerability Issues

During this research, the problem that nationally disrupted the activities of the community, especially workers, was the problem of the COVID-19 pandemic. This pandemic has had a huge impact on every level of society. Sectors that received a bad impact include the SME (Small and Micro) sector. Many SME owners have gone bankrupt, but many are still surviving by taking measures to save their business by taking turns taking workers off, reducing working hours, and working shifts. The most common actions taken by employers are reducing working hours, followed by work shifts, holidays, and employee initiatives by skipping work (Table 3). The actions taken by entrepreneurs are to break the coronavirus chain and carry out government instructions in carrying out large-scale social restrictions.
Table 3. Actions of Entrepreneurs during the COVID-19 Pandemic

<table>
<thead>
<tr>
<th>No.</th>
<th>Sub-district</th>
<th>Skipping Work</th>
<th>Temporary layoff</th>
<th>Working Hours Reduction</th>
<th>Shift Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sukarami</td>
<td>1.96</td>
<td>6.86</td>
<td>77.45</td>
<td>13.73</td>
</tr>
<tr>
<td>2</td>
<td>Ilir Barat I</td>
<td>1.09</td>
<td>21.74</td>
<td>72.83</td>
<td>4.35</td>
</tr>
<tr>
<td>3</td>
<td>Kalidoni</td>
<td>5.48</td>
<td>15.07</td>
<td>57.53</td>
<td>21.92</td>
</tr>
<tr>
<td>4</td>
<td>Seberang Ulu I</td>
<td>10.00</td>
<td>34.29</td>
<td>32.86</td>
<td>22.86</td>
</tr>
<tr>
<td>5</td>
<td>Seberang Ulu II</td>
<td>1.61</td>
<td>6.45</td>
<td>80.65</td>
<td>11.29</td>
</tr>
</tbody>
</table>

Source: Research Results (2020)

From field findings, the COVID-19 pandemic has had little or no impact on reducing working hours. The following table shows working hours in each sub-district (Table 4). Why is it less impactful on working hours? One thing that needs to be underlined is that most of the workers who are respondents are young workers. Allegedly, they work as secondary workers (not primary workers) as a demand to meet the family’s needs to replace the head of the family, and it is assumed that they have responsibilities towards the family.

Table 4. Working Hours Interval in Each Sub-district

<table>
<thead>
<tr>
<th>No.</th>
<th>Sub-district</th>
<th>4 to 8 hours</th>
<th>9 to 15 hours</th>
<th>&gt; 15 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sukarami</td>
<td>2.91</td>
<td>88.35</td>
<td>8.74</td>
</tr>
<tr>
<td>2</td>
<td>Ilir Barat I</td>
<td>14.13</td>
<td>71.74</td>
<td>14.13</td>
</tr>
<tr>
<td>3</td>
<td>Kalidoni</td>
<td>16.44</td>
<td>83.56</td>
<td>0.00</td>
</tr>
<tr>
<td>4</td>
<td>Seberang Ulu I</td>
<td>17.14</td>
<td>82.86</td>
<td>0.00</td>
</tr>
<tr>
<td>5</td>
<td>Seberang Ulu II</td>
<td>37.10</td>
<td>62.90</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Source: Research Results (2020)

Although 80 percent of the COVID-19 pandemic has greatly affected the activities of MSME workers, meetings with workgroups, neighbors, and recitation groups are relatively constant (Table 5), except for Kalidoni and Seberang Ulu II Sub-districts. Group meetings are held to maintain and increase social capital. The positive impact of the meeting was that they could discuss: (a) work, (b) how to increase their income, including the possibility of looking for side work opportunities, and (c) how to improve their work skills, including participating in training according to their field of work.

Table 5. COVID-19 and Group Meetings

<table>
<thead>
<tr>
<th>No.</th>
<th>Sub-district</th>
<th>Hold a meeting</th>
<th>Not holding a meeting</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sukarami</td>
<td>61.17</td>
<td>38.83</td>
</tr>
<tr>
<td>2</td>
<td>Ilir Barat I</td>
<td>55.43</td>
<td>44.57</td>
</tr>
<tr>
<td>3</td>
<td>Kalidoni</td>
<td>43.84</td>
<td>56.16</td>
</tr>
<tr>
<td>4</td>
<td>Seberang Ulu I</td>
<td>72.86</td>
<td>27.14</td>
</tr>
<tr>
<td>5</td>
<td>Seberang Ulu II</td>
<td>27.42</td>
<td>72.58</td>
</tr>
</tbody>
</table>

Source: Research Results (2020)
Another vulnerability is price volatility. The effect of price is on family consumption and family education (including costs for those who are still in school) and on worker mobility. Table 6, Table 7, and Table 8 show the vulnerability of prices to consumption, education and mobility.

Almost all workers stated that prices had an effect and greatly influenced their consumption. Among the sub-districts that have the most impact from price changes on consumption is Ilir Barat I and Seberang Ulu I Sub-districts. While workers in Sukarami Sub-district vary, the percentage between very influential and less influential does not differ much. The interview results show that there are workers who can deal with consumption patterns so that price increases do not interfere with their consumption. To obtain clarity, further research is needed.

Price vulnerability to education is less influential. Firstly, respondents are workers who have completed their respective education. Second, most of the respondents are young, unmarried and live with their parents, so they do not have an obligation to provide education funds for other young family members.

Changes in prices did not affect the mobility of workers, and this happened to all workers in all sub-districts. This finding means that the mobility of workers is not disturbed as a sign that social activities are still running. Different meaning, social capital is maintained and can be expected to be quite conducive to maintaining the continuity of sustainable life.

### Table 6. Price Vulnerability to Consumption

<table>
<thead>
<tr>
<th>No.</th>
<th>Sub-district</th>
<th>Very Influential</th>
<th>Influential</th>
<th>Less Influential</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sukarami</td>
<td>34.7</td>
<td>29.7</td>
<td>35.6</td>
</tr>
<tr>
<td>2</td>
<td>Ilir Barat I</td>
<td>68.5</td>
<td>15.2</td>
<td>16.3</td>
</tr>
<tr>
<td>3</td>
<td>Kalidoni</td>
<td>56.2</td>
<td>35.6</td>
<td>8.2</td>
</tr>
<tr>
<td>4</td>
<td>Seberang Ulu I</td>
<td>67.1</td>
<td>24.3</td>
<td>8.6</td>
</tr>
<tr>
<td>5</td>
<td>Seberang Ulu II</td>
<td>51.6</td>
<td>30.6</td>
<td>17.7</td>
</tr>
</tbody>
</table>

Source: Research Results (2020)

### Table 7. Price Vulnerability to Education

<table>
<thead>
<tr>
<th>No.</th>
<th>Sub-district</th>
<th>Very Influential</th>
<th>Influential</th>
<th>Less Influential</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sukarami</td>
<td>13.7</td>
<td>9.8</td>
<td>76.5</td>
</tr>
<tr>
<td>2</td>
<td>Ilir Barat I</td>
<td>20.7</td>
<td>21.7</td>
<td>57.6</td>
</tr>
<tr>
<td>3</td>
<td>Kalidoni</td>
<td>9.6</td>
<td>9.6</td>
<td>80.8</td>
</tr>
<tr>
<td>4</td>
<td>Seberang Ulu I</td>
<td>15.7</td>
<td>27.1</td>
<td>57.1</td>
</tr>
<tr>
<td>5</td>
<td>Seberang Ulu II</td>
<td>25.8</td>
<td>25.8</td>
<td>48.4</td>
</tr>
</tbody>
</table>

Source: Research Results (2020)
Table 8. Price Vulnerability to Mobility

<table>
<thead>
<tr>
<th>No.</th>
<th>Sub-district</th>
<th>The Influence of Price on Mobility (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Very Influential</td>
</tr>
<tr>
<td>1</td>
<td>Sukarami</td>
<td>10.8</td>
</tr>
<tr>
<td>2</td>
<td>Ilir Barat I</td>
<td>33.7</td>
</tr>
<tr>
<td>3</td>
<td>Kalidoni</td>
<td>23.3</td>
</tr>
<tr>
<td>4</td>
<td>Seberang Ulu I</td>
<td>20</td>
</tr>
<tr>
<td>5</td>
<td>Seberang Ulu II</td>
<td>27.4</td>
</tr>
</tbody>
</table>

Source: Research Results (2020)

4.3. Quantitative Analysis: Path Analysis

4.3.1. Human Capital and Income

Human capital consists of education, health and migration variables. In this research, human capital is seen in education. The health variable is included in education because the level of education can be completed if a person is in good health. The education indicator used is the length of schooling (Schultz, 2003; McConnell et al., 2017).

The regression results show that human capital affects income by 76.4 percent (R2: 0.764) and 23.6 percent by other variables (exogenous). The relationship between human capital and income was significant (0.006 < 0.05). The beta coefficient of 0.137 indicates that the length of schooling increases 10 times so that income will increase by 1.4 times. Furthermore, statistically, the t-table value of 1.966 is smaller than the t-count of 2.737, which means H0 is rejected. While testing the model’s suitability, the F-count is 7.492, which is greater than the F-table value of 2.68, meaning that the hypothesis H0 is rejected, so that there is an influence of human capital on income is positively related.

Table 9. Coefficient and Significance of Human Capital and Income

<table>
<thead>
<tr>
<th>Variable Dependent</th>
<th>Variable Independent</th>
<th>Standardized Beta Coefficient</th>
<th>t-count</th>
<th>Sig.</th>
<th>F-count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income</td>
<td>Human Capital</td>
<td>0.137</td>
<td>2.737</td>
<td>0.006</td>
<td>7.492</td>
</tr>
</tbody>
</table>

Source: Research Results (2020)

4.3.2. Human Capital and Wages

The effect of human capital on wages is only 20.5 percent. R-squared of human capital on wages is smaller than R-squared of human capital on income. Please note that wages are the results received per month in exchange for working time, while income is family income. In this research, wages ranged from Rp300.00 - Rp3,500.00 with an average of Rp2,100,000.00.

The results of the regression of human capital and wages show: (1) the significance value is 0.017, which is smaller than the error rate of 0.05 (5%), (2) the beta coefficient is 0.117, which means that if the length of schooling is increased by 10%, wages will increase by 1.17%, (3) the path coefficient is 0.795, which means that the relationship between exogenous variables and wages is 76.4%.
4.3.3. Social Capital, Income, and Wages

The effect of social capital on wages is only 19 percent. R-squared of social-wage capital is smaller than the R-squared of social-income capital. The relationship between social capital and income and social capital with wages is significant.

Social capital indicators in this research consist of (a) the influence of the work environment, (b) residence, (c) alumni, and (d) other social indicators such as recitation, hobbies (Bronisz & Heijman, 2010; Tjahjono, 2017; Woolcock, 2001). To test the effect of social capital on income, 3 indicators (a), (b), and (c) are used. Among the 3 (three) indicators, the place of residence contributes 50% to social capital, 25% to the influence of the work environment, and 25% is an indicator of alumni along with indicators of recitation and hobbies.

Social capital indicators were obtained using Likert data where the answers for each variable consisted of: very dissatisfied (1), dissatisfied (2), quite satisfied (3), satisfied (4) and very satisfied (5). Data with 5 answers is ordinal data which is transformed into intervals.

Table 10. The Coefficient and Significance of Social Capital on Wages

<table>
<thead>
<tr>
<th>Variable</th>
<th>Beta Coefficient</th>
<th>t-count</th>
<th>Sig.</th>
<th>F-count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Capital</td>
<td>0.139</td>
<td>2.776</td>
<td>0.006</td>
<td>7.707</td>
</tr>
</tbody>
</table>

Source: research Results (2020)

Table 11. The Coefficient and Significance of Social Capital on Income

<table>
<thead>
<tr>
<th>Variable</th>
<th>Beta Coefficient</th>
<th>t-count</th>
<th>Sig.</th>
<th>F-count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Capital</td>
<td>0.141</td>
<td>2.281</td>
<td>0.005</td>
<td>7.956</td>
</tr>
</tbody>
</table>

Source: Research Results (2020)

4.3.4. Human and Social Capital to income with Wage Intervening

The path diagram of human capital and social capital through intervening wages can be seen in Figure 2. The effect of human capital and social capital on income is obtained by comparing the value of direct influence and obtained with indirect influence through wages. Suppose the value of the direct influence is smaller than the indirect effect. In that case, it means that human capital and social capital variables can be intervening (linked) to the dependent variable.

Figure 2. Path Analysis Results
Source: Research Results (2020)
Based on the calculated results, there is a direct effect of human capital on income by 13.7 percent, which means that if human capital increases by 10 percent, income will increase by 1.37 percent. This happens because human capital cannot directly cause income to increase, because there are expenses that must be set aside from income to meet basic human needs and become the foundation of prosperity (Jacobs & Slaus, 2010; Lumintang, 2015). This income will also be redistributed to increase human capital in the form of investments or savings for education and health (Gibson, 2005; Tang et al., 2021).

It is different when human capital is linked indirectly to income through wages. The effect is 61.9 percent, meaning that when human capital increases by 10 percent, wages will increase by 1.17 percent and even income rises to 6.19 percent. Increased human capital indicates worker productivity. For example, workers with a bachelor’s degree in education will certainly have higher wages than workers with a high school education. When the wages of workers with S1 education are higher than workers with high school education, their income will automatically be high, and they tend to be prosperous because they can better meet their food and non-food needs (Bagliano et al., 2021; Jacobs & Šlaus, 2010).

The direct effect of social capital on income is as small as the indirect effect of the wage linking variable. This happens because not everyone can form a social community. After all, SME workers’ free time is limited. Around 80 percent of their working time is 9 to 15 hours (Table 4), especially during the COVID-19 pandemic. There was a reduction in working hours (Table 3). Social capital indicators that have more influence on work are the living environment 50% compared to the work environment (25%) and the alumni environment, recitations and hobbies (25%). Increasing social capital in the work environment, such as forming a workers union, will impact the welfare of SME workers. One of the most influential functions of trade unions in developed countries is maintaining minimum wages for workers (Bryson et al., 2011; Khan, 2016; McConnell et al., 2017).

5. Conclusion
The direct effect of human capital on income is 13.7 percent, which means that if human capital increases by 10 percent, income will increase by 1.37 percent. This happens because human capital cannot directly cause income to increase. After all, some expenses must be set aside from income. Human capital is linked indirectly to income through wages, where the effect is 61.9 percent. When human capital increases by 10 percent, wages will increase by 1.17 percent, and incomes will increase to 6.19 percent. This is because increased human capital indicates worker productivity. The direct effect of social capital on income is as small as the indirect effect of the wage linking variable. This happens because not everyone can form a social community.

6. Acknowledgment
This research is a competitive grant funded by Universitas Sriwijaya through the Institute for Research and Community Service through the Lecturer Research Program for Professional Excellence Scheme for Professors with a Special Lecturer Identification Number, based on Decree Number 0683/UN9/SK.BUK.KP/2020. The authors express their gratitude to Universitas Sriwijaya and the Institute for Research and Community Service of Universitas Sriwijaya.
7. **Declaration of Conflicting Interests**
The authors have declared no potential conflicts of interest concerning this article’s research, authorship, and/or publication.

**References**


Human Capital, Social, Wages, and Welfare: Case of Small and Medium Enterprise Workers


Madhuri, M., Tewari, H. R., & Bhowmick, P. K. (2015). Livelihood vulnerability index analysis:
An approach to study vulnerability in the context of Bihar. *Jamba: Journal of Disaster Risk Studies, 6*(1). [https://doi.org/10.4102/jamba.v6i1.127](https://doi.org/10.4102/jamba.v6i1.127)


About the Authors

1. **Nurlina Tarmizi Muhyiddin** obtained her Ph.D. in Economics from Universiti Kebangsaan Malaysia in 2003. The author is a Professor at the Department of Economics, Faculty of Economics, Universitas Sriwijaya, Indonesia.
   E-Mail: nurlinat@unsri.ac.id

2. **Bambang Bemby Soebyakto** obtained his Ph.D. in Economics from Universiti Utara Malaysia in 2010. The author is a Lecturer at the Department of Economics, Faculty of Economics, Universitas Sriwijaya, Indonesia.
   E-Mail: bambang@unsri.ac.id

3. **Fauziah Asyiek** obtained his Ph.D. in Agricultural Science from Universiti Utara Malaysia in 2009. The author is a Lecturer at the Department of Economics, Faculty of Economics, Universitas Sriwijaya, Indonesia.
   E-Mail: fauzia@unsri.ac.id

4. **Aning Kesuma Putri** obtained her Master’s degree in Economics from Universitas Sriwijaya, Indonesia, in 2010. Currently the author is pursuing a doctoral study in Economics at Universitas Sriwijaya, Indonesia. The author is a Lecturer at the Department of Economics, Faculty of Economics, Universitas Bangka Belitung, Indonesia.
   E-Mail: aning@ubb.ac.id

5. **Idham Cholid** obtained his Master’s degree in Economics from Universitas Indonesia, in 2003. Currently the author is pursuing a doctoral study in Economics at Universitas Sriwijaya, Indonesia. The author is a Lecturer at the Department of Management, Faculty of Economics, STIE Multi Data Palembang, Indonesia.
   E-Mail: idham@stie-mdp.ac.id
6. **Liliana** obtained her Master’s degree in Economics from Universitas Gadjah Mada, Indonesia, in 2009. The author is a Lecturer at the Department of Economics, Faculty of Economics, Universitas Sribijaya, Indonesia.
E-Mail: liliana@unsri.ac.id