

Occupational Gender Segregation in Rural Urban Economy

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Abstract

Occupational Segregation by gender is an improved labor market based on gender equality. This study uses an index-D to measure segregation that occurred in four rural areas categorized urban districts and counties Banyuasin Ogan Ilir South Sumatra Province. It was found that in all four regions of the occupation by gender still be integrated because the value of the index-D approaches 1. Meanwhile, based on the Pearson correlation coefficient is known that occupational segregation by gender has a significant relationship, very strong and negative direction with the percentage of women in the workforce and age, while the direction of the opposite relationship with the difference in the percentage of men and women who have a high school education and above.

Keywords: *Rural-Urban; Occupational Segregation; Female Labor Force Participation; Age; Post High School Education*

JEL Classification: J31

INTRODUCTION

Occupational Segregation concern of public policy if segregation indicates barriers to the mobility of factors of production. Public policies designed to deal with barriers of action the parties agree to adjust to equalize the characteristics of human capital. Remains a concern that the real difference occupational distribution of men and women is a sub-optimal outcome labor market that cause systemic barriers to occupational choice. Thus occupational segregation is significantly responsible for the inequality of wages and income (Bridges, 2003; Fortin and Huberman, 2002).

The division of labor is expressed through occupational each a collection of tasks and roles that are marked with a label as doctors, lawyers, computer programmers, teachers, nurses, carpenters, plumbers and so on. Therefore, the occupation is the source of identity and determine access to economic and non-economic reward, it is important to question whether women and men end up with the same occupation. In other words, if there are a lot of occupational segregation.

In a hypothetical world without occupational segregation, probably about 48 percent of workers in every occupation filled women, because about 48 percent of paid workers are women. Hope this is off the mark. In fact, occupational vary greatly in women's share of occupations filled, ranging from about 3.5 percent in

employment as home appliance repairman to 95 percent in jobs such as secretaries and child care workers.

Measurements of the most common occupational segregation is Duncan dissimilarity or D-Index. When measuring occupational segregation has been the subject of serious research and continuous, empirical studies are less focused on the estimation of measurement indicator determinant. An explicit estimate of the relationship between occupational segregation by the determinant measurement will lead to a better understanding of the determinants of occupational choice and policy instruments.

Furthermore, although the D-Index has included the location of the population as a determinant of occupational segregation, a systematic consideration of the spatial dimensions of occupational segregation between urban rural circuit is largely found in the literature. Urban rural fringe spatial variables as determinants allowing an explanation of segregation occupational continuously.

Rural Urban Fringe (RUF) is the transition of land use is characterized by the transition from agriculture to non-agriculture. Agricultural patterns began to set on the request for the village (Rural) by counting the number of functions that are oriented with the city (Urban). Demand lot with respect to the process of urbanization, industrialization, land speculation and increased mobility of the population. Each of the regions (rural and urban) could both berkomplementer and opposite as a city and parts of the country and the whole economic and social system of the same. By inserting an explanatory variable as a measure of "Rurality", of the areas studied, this study aims to measure in addition to occupational segregation also to capture the effect of the spatial variation of access to services and employment opportunities.

The occupational distribution of men and women is an outcome that reflected the labor market on the supply side and occupational choice influence on the demand side. On the supply side, the individual making the choice contingent upon the quantity and quality of time allocated to the maximum utility. Number of hours break trade off with the income earned by the individual preferences will. Constraints are defined by the market value of your hours or wages (Nurlina, 2012; Borjas, 2013).

Household time allocation model originally was to explain the labor force participation, he is also a framework for deciding on the occupation. Preference will be influenced by the number of children, education level, flexibility, terms of travel and others. Obstacles are sometimes represented by a reservation wage, including access to goods and services that affect the time, the amount of time spent on computing, non-labor income, income spouse (if any). Occupational preferences of individuals, together with the labor supply decisions, are part of the decision of the individual utility maximization.

On the demand side, labor productivity (often represented by the individual level of human capital) is the main influence. Human capital itself is a personal investment which makes individuals increased productivity. Human Capital cannot be transferred from one person to another and there is a limited supply for stiap people. Investments that can increase a person's human capital including formal education, formal on the job training, work experience, health expenditures, and migration. The government contributes to the formation of

human capital through education and health service delivery. Company employees invest human capital through training benefit associated with the job, a fitness program or employee relocation assistance program.

Income and occupational differences or due to differences in human capital investment (Becker, 1993). Similarities in human capital will carry on the similarity of occupation and income. When the occupational and income differences exist, whether due to the different attributes of human capital, such as formal education, umur health, shelter, their children and their age, and marital status. Characteristics such as attitudes and family preferences (utility households), family income, national origin, or primary language is also an important factor of human capital (Becker, 1993, Bloomquist, 1990, Kidd and Shannon, 1994).

As workers more like the number and types of human capital they have, then the wage gap and occupational domination of men or women will be increasingly less common. In the context of urban rural, urban rural labor force with similar human capital, can be expected to have the same income level and occupation of the same anyway. If there is no convergence of the occupational distribution of men and women then there must be other factors that affect occupational segregation or difference in labor income.

Within the framework of human capital, structural characteristics of the labor market is increasingly recognized importance. Factors such as wage levels, participation rates, residence (rural or urban), has been identified as a structural characteristic that is important in determining the occupational opportunities. Also included local unemployment rates, and the availability of skilled labor force (Bloomquist, 1990).

Another explanation regarding occupational segregation is that the division of labor based on gender is based on the different roles played by men and women due to biological factors. Based on this, occupational segregation declined in industry where physical attributes of workers become less important.

Empirical studies on the size and determines the most varied measurement segregation, where segregation occupational level decreases, fixed or increased (Fortin and Huberman, 2002). When the key determinant of occupational choice and therefore the occupational segregation of the level of education, age, location, so in general have demonstrated a significant (King, 1992; Spriggs and Williams, 1996).

Segregation of occupations by gender has shown the declining trends in most developed countries over the last decade (Anker, 1998; Costa, 2000), the increase in women's employment in Spain has been accompanied by a steady increase in the gender segregation that Spain is now a country where gender differences in the distribution of employment among occupations is remarkable (European Commission, 2009; Garcia-Mainar et al., 2015).

Using matched employer-employee data from the Spanish labor market in 2010, the effects of industrial, establishment and occupational segregation on the gender wage differential, disaggregating the latter contribution by different groups of workers belonging to different occupational areas and responsibility levels. These workers are employed in 61 occupations within 26,492 establishments in 51 different industries. Since the matched employer-employee data exhibit a particular type of grouped structure, which contrasts the statistical properties of

such data with the random sample case, the effects of each type of gender segregation on the wage gap using a robust specification. They find that the major part of the contribution of gender segregation is not explained by differences in the observable characteristics. Furthermore, the estimations show that the educational female advantage has helped to narrow the gender wage gap caused by occupational segregation within each establishment only for those groups of workers with the lowest educational requirements (Soria and Roper, 2015).

Occupational segregation is more severe in Latin America and the Caribbean, but less so in South Asia and Sub-Saharan Africa. In Latin America the average Duncan is the highest index (.53), followed by the Middle East and North Africa (.50), Europe and Central Asia (0.46), East Asia and the Pacific (.39), Sub-Saharan Africa (.33), and South Asia (0.30). Low occupational segregation in South Asia and Sub-Saharan Africa may be associated with limited granularity of code work in the agricultural sector (Smita, and Aphichoke, 2019).

Occupational segregation is the result of factors "push" and "pull" rooted in social interaction and social structure. These factors include discrimination against women or mothers, specific socialization gender, traits related to gender or ability "natural" cultural beliefs about the competence of men and women and evaluation standards doubles, division of household of labor, experience in the workplace, government policy banned discrimination in employment but allows different salaries for comparable work and the worker's family policy (Weeden,; Newhart and. Gelbgiser, 2018).

Orraca, Cabrera and Iriarte (2015) examines the role of occupational segregation in explaining the gender wage gap in Mexico. They are observed that male-female wage differentials increased between 2000 and 2010. For both years, within occupation wage differentials generally increased the gender wage gap, whereas between occupation wage differentials provided the opposite effect. Since within occupation wage differentials are driven by the unexplained component, the results suggest that the gender wage gap is primarily a product of differences in the average returns to productivity related characteristics within occupations. Occupational segregation does not increase male-female wage differentials since women do not appear to encounter barriers into high paying occupations.

Occupational segregation by gender in Australia, however, remains quite high. Men and women predominantly work in different occupations. A standard Duncan and Duncan measure of occupational segregation for Australia reveals that over 50 per cent of women would have to change occupations in order to have the same occupational distribution as men (Coelli, 2014).

The role of industrial and occupational segregation in explaining the gender wage gap and its evolution in Georgia between 2004 and 2015 examines by Khitarishvili, Chamussy and Sinha(2018). It first documents the declining trends observed in the gender wage gap in Georgia during this period, commenting on some of the possible underlying factors driving such trends. It then presents evidence that employment patterns by industry and occupations are highly concentrated in the country and measures the degree of segregation using the Duncan index. Next, it analyzes if and how much industrial and occupational segregation have contributed to the gender wage gap and its decline by decomposing the gender wage gap into the within-category and between-category

components. The results point to existing gender wage gaps within sectors, industries, and occupations being the primary drivers of the wage gap in Georgia, and find a smaller role of gender segregation per se in these categories.

The correlation between occupational segregation and the gender wage gap suggests that just as fifty years ago, both improving career advice about nontraditional fields and tackling discrimination in nontraditional fields remain important building blocks for women's economic equality. Equally important are finding ways to raise pay in jobs traditionally held by women and improving the quality of those jobs, through such policies as increasing the minimum wage, providing paid sick days and paid family leave, assuring collective bargaining, enforcing equal pay laws (these address similar as well as identical jobs), and pursuing further comparable worth remedies that recognize that women's jobs are frequently underpaid simply because women do them (Hegewisch and Hartmann, 2014). Meanwhile, unequal pay between women and men drags down the growth of the U.S. economy and threatens the economic security and retirement security of working families. Building a strong economy that works for everyone is not possible unless gender pay discrimination is fully addressed. Adequately addressing gender wage inequality will require taking an all-inclusive approach, simultaneously focusing on discrimination alongside factors such as occupational segregation and the United States' lack of work-family policies (Glynn, 2018).

From various available literature, in general only measure the degree of occupational segregation, and mostly in urban areas, or the agricultural and industry sector. This study looks at how segregation occurs in areas between urban and rural areas with the characteristics of the agricultural and industrial sectors simultaneously. Therefore, the focus of this study is not only to measure the degree of gender differences that form the basis of occupational segregation for workers in rural urban fringe areas. It also examines how the correlation between rurality factors, labor market characteristics and human capital with occupational segregation.

METHOD

The research was conducted in the area categorized Rural Urban Fringe (RUF), which is directly adjacent to the provincial capital of Palembang in South Sumatra, i.e directions to Ogan Ilir and Banyuasin, with criteria livelihoods of agricultural and non-agricultural. The study site is subdistrict Pemulutan, Ogan Ilir located in transportation lines Palembang - Inderalaya. Subdistrict Rambutan, Banyuasin in the path of transport Palembang -Banyuasin-Ogan Komerling Ilir.

The unit of analysis is the Head of Household (KK) in Ogan Ilir and Banyuasin District South Sumatra Province. A total of 1480 households, divided into: 691 households in the village of Pemulutan Ulu and 789 households in the village of Pelabuhan Dalam. The number of samples for Ogan Ilir District 314 respondents consisting of 148 respondents in Pemulutan Ulu village, and 166 respondents in the Pelabuhan Dalam village. The population in district Rambutan as many as 1728 households were divided in two villages. 901 households in the village of Sungai Dua and 827 households in the village of Rambutan. The number of samples in Rambutan Subdistrict was 325 households, i.e 170

households in Sungai Dua and 155 households in the village of Rambutan. Respondent conducted with purposively sampled based on the type of work.

Measurement of occupational segregation based on the link between occupational groups and the spatial location of households described by Duncan and Duncan (1955). A dissimilarity index constructed to measure the spatial distribution of occupation. First the percentage of all workers in each area where each occupational group is calculated. This index then is half of the absolute value of the difference between the specific location of the distribution,

$$D = \frac{1}{2} \sum \left| \frac{W_{1i}}{W_1} - \frac{W_{2i}}{W_2} \right| \quad (1)$$

where W_1 is working in area 1, W_2 is working in area 2 and i is occupation.

The index shows the percentage of workers in the Pemulutan Ulu village that must change in order to occupational distribution equal to the area of the Pelabuhan Dalam village, which is to reduce occupational segregation becomes zero. This index does not indicate the direction of separation, only the degree of dissimilarity occupational distribution.

The index value can be interpreted to indicate the percentage of the female labor force (males) who have to change occupation so that the separation is lost. Therefore, equation (1) is empirically written as follows:

$$Dr = \frac{1}{2} \sum \left| \frac{Mir}{Mr} - \frac{Fir}{Fr} \right| \quad (2)$$

Where: Dr = index of occupational segregation for the village r ; Mir / Mr = proportion of the male labor force in occupation i in village r ; and Fir / Fr = proportion of the female workforce in occupational $r i$ in the village. The absolute value of the difference between the percentage of the amount of the distribution of men and women in each occupation divided by two (because there are two groups of men and women) to produce the value of the index ranges from 0 (perfect integration) to 1 (perfect segregation).

Determinants of occupational segregation is shown in equation (3) below:

$$Dr = f(Rr, LMR, HCR) \quad (3)$$

where Dr is a measure of occupational segregation by gender for the region r ; Rr is a measure of the spatial or location characteristics, in this case Rurality of region r ; LMR is characteristic of labor markets in the region r ; and HCR is the human capital characteristics of the labor force in the region r .

Location or spatial characteristic here is the rural or urban nature. The more rural, more within so would increase barriers to labor force participation. These barriers can affect differently between women and men in terms of occupational choice and flexibility as well as the intensity of demand associated with a particular occupation. Characteristics of the labor market to enter the labor force participation rate of women. While the human capital variable is the level of education, the presence of children and the aged. Gap attained education of men and women will represent the difference in human capital as an explanation for occupational segregation.

Relationship or correlation between occupational segregation by Rurality, the characteristics of human capital and labor market characteristics indicated by the Pearson correlation coefficient. Region *r* is Pemulutan Ulu village, Pelabuhan Dalam, Sungai Dua and Rambutan; *R_r* measure ruralitas be a certain number of goods and services in the form of access to markets, health services, public transport and terminal trajectory; LMR consists of: (1) PIR is the percentage of the labor force working in primary industry; and (2) PLFFr is the percentage of the workforce is female. HCR characteristics include: (1) The EDR is the difference percentage of men and women who have a high school education to the top; (2) CHr is the percentage of the labor force who have children who live at home; and (3) Age is the average age of the workforce.

RESULT AND DISCUSSION

Characteristics of Respondents

Work and Age

The results showed that half and more than half of respondents in the village Pemulutan Ulu, Pelabuhan Dalam, Sungai Dua and Rambutan village is the respondent in the productive age category (25-44 years) (Table 1 and Table 2). Respondents who are in the productive age group (25-44 years) in the Pemulutan Ulu village dominate a job as a trader / entrepreneur, and in the Pelabuhan Dalam village laborers (village), and only about 7-10% work as farmers. While in Sungai Dua and Rambutan, nearly 45 percent of the productive age group to work as a laborer. Furthermore, the dominance of the field of work that was involved age group 45 years and above can be seen in Table 1.

Table 1. Percentage of Respondents by Occupation and Age Group

Village / Occupation	25-44	45-64	65+
Ulu Pemulutan			
a) Farmers	10.1	19.6	4.1
b) Trader / Self Employed	23.7	14.8	1.4
c) Labor	12.9	6.1	0
d) civil servant / Private Employees / Pensions	2.7	0	0
e) Other	0	4.7	0
Total	49.4	45.2	5.4
Pelabuhan Dalam			
a) Farmers	7.8	13.8	2.4
b) Trader / Self Employed	9.0	6.0	0.7
c) Labor	33.2	23.5	0
d) civil servant / Private Employees / Pensions	1.8	0	0
e) Other	0	0.6	1.2
Total	51.8	43.9	4.3
Sungai Dua			
a) Farmers	17.1	16.5	3.5

b) Trader / Self Employed	4.1	1.8	0
c) Labor	43.5	8.2	0.6
d) civil servant / Private Employees / Pensions	3.5	1.2	0
Total	68.2	27.6	4.1
Rambutan			
a) Farmers	15.5	14.8	5.2
b) Trader / Self Employed	3.9	3.2	0
c) Labor	44.5	10.3	0.6
d) civil servant / Private Employees / Pensions	1.3	0.6	0
Total	65.2	29.0	5.8

Source: Data processed

Employment and Education Level

In terms of education, almost half of the respondents had elementary education in both rural Pemulutan Ulu, Pelabuhan Dalam, Sungai Dua and Rambutan villages (Table 2). If the respondent on the various types of work distributed by level of education, respondents with elementary (SD) education mostly work as farmers, 20.3% in Pemulutan Ulu and 19.3% in Pelabuhan Dalam. Different conditions with these both villages, Sungai Dua and the Rambutan respondents with elementary school education mostly work as laborers.

For respondents who have completed high school (SMA) and above, in the village of Ulu Pemulutan worked as a trader (15.5%), while in the village of Pelabuhan Dalam, Sungai Dua, and Rambutan more work as laborers, respectively 7.2%, 10.0 % and 10.3%. It is still a concern that is not school and do not complete primary school in the range of 4.5% to 10%.

Table 2. Percentage of Respondents by Occupation and Education

Village / Occupation	Education Attainment			
	SD	SMP	SMA +	Morbidly School / Elementary School Morbidly
Pemulutan Ulu				
a) Farmers	20.3	7.4	0.7	5.4
b) Trader / Self Employed	13.5	8.1	15.5	2.7
c) Labor	9.5	6.8	2.7	0
d) civil servant / Private Employees / Pensions	0	0	2.7	0
e) No answer amount	2.7	0	0	0
	45.9	22.3	21.6	10.1
Pelabuhan Dalam				
a) Farmers	19.3	1.2	1.8	1.8
b) Trader / Self Employed	6.0	6.6	2.4	0.6
c) Labor	33.7	9.6	7.2	6.0
d) civil servant / Private Employees / Pensions	0	0.6	1.2	0
e) No answer	1.8	0	0	0

amount	60.8	18.1	12.7	8.4
Sungai Dua				
a) Farmers	20.6	7.1	4.7	4.7
b) Trader / Self Employed	2.4	0.6	2.9	0
c) Labor	29.4	11.8	10.0	1.2
d) civil servant / Private Employees / Pensions	1.8	0	2.9	0
amount	54.1	19.4	20.6	5.9
Rambutan				
a) Farmers	21.3	6.5	5.8	1.9
b) Trader / Self Employed	2.6	0.6	2.6	1.3
c) Labor	34.8	9.0	10.3	1.3
d) civil servant / Private Employees / Pensions	0.6	.0	1.3	.0
amount	59.4	16.1	20.0	4.5

Source: Data processed

Work and Income

In general, 30% to 42% of respondents in four villages of this study earn Rp 1.700.000- Rp 4,000,000, and in the highest income group's work as laborers (Table 3). Respondents who are farmers, most are at intervals of income of Rp 625,000 to Rp 1,650,000. Quite worrying still are the respondents who received income of between Rp 100,000 - Rp 600,000.

Meanwhile, respondents with income of between Rp 4,500,000 to Rp 9,000,000 is relatively small, only 8.1% of respondents in Ulu Pemulutan village who all work as traders, 3% of Pelabuhan Dalam respondents (2.4% merchant and 0, 6% as farmers), 1.2% in Sungai Dua, in fact none of the respondents in Rambutan.

Table 3. Percentage of Respondents by Occupation and Income

Village / Occupation	Incomee group (rupiah/Rp)			
	100000-600000	625000-1650000	1700000-4000000	4100000-9000000
Pemulutan Ulu				
a) Farmers	8.1	17.6	8.1	0
b) Trader / Self Employed	9.5	4.7	17.6	8.1
c) Labor	0	2.0	16.9	0
d) civil servant / Private Employees / Pensions	2.7	0	0	0
e) Other	4.7	0	0	0
Total	25.0	24.3	42.6	8.1
Pelabuhan Dalam				
a) Farmers	9.6	9.0	4.8	0.6
b) Trader / Self Employed	2.4	3.6	7.2	2.4
c) Labor	6.0	21.1	29.5	0
d) civil servant / Private Employees / Pensions	0.6	0	1.2	0

e) Other	1.2	0.6	0	0
Total	19.9	34.3	42.8	3.0
Sungai Dua				
a) Farmers	15.3	16.5	4.7	0.6
b) Trader / Self Employed	0	1.2	4.1	0.6
c) Labor	1.2	28.2	22.9	0
d) civil servant / Private Employees / Pensions	1.8	1.8	1.2	0
Total	18.2	47.6	32.9	1.2
Rambutan				
a) Farmers	12.3	15.5	7.7	0
b) Trader / Self Employed	0	1.9	5.2	0
c) Labor	1.3	27.7	26.5	0
d) civil servant / Private Employees / Pensions	0.6	0.6	0.6	0
Total	14.2	45.8	40.0	

Source: Data processed

Furthermore, the index D representing occupational segregation in the four regions shown in Table 4 below. From the results of the index-D whose value close to 0 then the result can be explained that the four regions tend to have occupations that have not been segregated. It can even be said to occupational workers integrated. In this case the occupation of workers in the four regions is integrated between men and women in the occupational group of farmers in Pemulutan Ulu and Pelabuhan Dalam, while on the Sungai Dua and Rambutan integrated in the occupational group of workers.

Table 4. D Index Value Occupational Segregation: 4 Groups of Occupations

Village	Index-D
Pemulutan Ulu	0.17568
Pelabuhan Dalam	0.25602
Sungai Dua	0.42602
Rambutan	0.37413

Source: Data processed

The correlation of occupational segregation by determinant derived from Rurality characteristics are shown in Table 5. From the table of correlation is known that the relationship between occupational segregation by Rurality is a powerful and positive, namely 0.695. Positive sense is the relationship between the two variables in the same direction, that is increasingly available aspects that contributed to diminish Rurality (increasingly characterize urban area) then the worker occupational segregated by gender.

Table 5. Pearson Correlation Coefficient Between Occupational Segregation by Gender by Rurality

		Occupational Segregation by Gender	Rurality
Occupational Segregation by Gender	Pearson correlation	1	0.695
	Sig (2-tailed)		0,305
	N	4	4
Rurality	Pearson correlation	0.695	1
	Sig (2-tailed)	0,305	
	N	4	4

Source: Data processed

A decision on the hypothesis for this case are based on criteria that are taken according to the probability value. In Table 5 significance value of 0.305 means is greater than the value of α (0.05), so decisions hypothesis that there is no relationship between occupational segregation by gender with Rurality not rejected. Thus, the relationship between these two variables were not significant statistically real or not.

Occupational segregation relationship with labor market characteristics such as the percentage of the labor force working in primary industries are shown in Table 6. As is the case with Rurality, these two variables also showed a direct relationship but not significant. With correlation coefficient 0.444 correlation both included weak. Its significance was greater than 0.05 so it can be said that the percentage of the labor force work in the primary industry was not associated with occupational segregation.

Table 6. Pearson Correlation Coefficient Between Occupational Segregation by Gender by Percentage of Workforce Working in Primary Industries

		Occupational Segregation by Gender	Percentage of Workforce Working in Primary Industries
Occupational Segregation by Gender	Pearson correlation	1	0.444
	Sig (2-tailed)		0.556
	N	4	4
Percentage of Workforce Working in Primary Industries	Pearson correlation	0.444	1
	Sig (2-tailed)	0.556	
	N	4	4

Source: Data processed

Other variables were included in the characteristics of the labor market is the percentage of women in the workforce. In Table 7 very different results shown by the components of the labor market compared to the first labor market variables. Pearson correlation coefficient of 0.999 can be stated that there is a very

strong relationship and negative between occupational segregation by gender with the percentage of the female workforce. If the percentage of the workforce is women increases the occupational segregation by gender will decrease or become more integrated. The hypothesis that there is no relationship between the two variables was rejected because the significance value less than 0.05, even significant at the 0.01 level.

Table 7. Pearson Correlation Coefficient Between Occupational Segregation by Gender by percentage is Women Labor Force

		Occupational Segregation by Gender	The Percentage of Women Labor Force
Occupational Segregation by Gender	Pearson correlation	1	-0.999
	Sig (2-tailed)		0,001
	N	4	4
The percentage of Women Labor Force	Pearson correlation	-0.999	1
	Sig (2-tailed)	0,001	
	N	4	4

Source: Data processed

Characteristics of human capital also allegedly associated with occupational segregation by gender. In this study, a component of human capital that is used first is the difference in the percentage of men and women who have a high school education and above. Based on Table 8 the relationship between these two variables is very strong positive and indicated by the correlation coefficient 0.986. The statistical relationship is real or significant also at the level of 0.05. So the hypothesis that there is no relationship between occupational gender segregation on the terms of the difference in the percentage of men and women who have a high school education and above, was rejected. The positive direction of the correlation coefficient significantly greater difference in the percentage of men and women who have a high school education to over eat greater occupational segregation by gender is happening. In other words, the greater the occupational segregation between women and men.

Table 8. Pearson Correlation Coefficient Between the Occupational Segregation by Gender Differences in percentage of Men and Women Who Have High School Education to the top

		Occupational Segregation by Gender	Percentage difference Men and Women Who Have a High School Education and Above
Occupational Segregation by Gender	Pearson correlation	1	0.968
	Sig (2-tailed)		0,014
	N	4	4
Percentage Difference Men and Women Who	Pearson correlation	0.968	1

Have a High School Education and Above	Sig (2-tailed)	0,014	
	N	4	4

Source: Data processed

The next component that is included in the category of human capital is the percentage of the labor force who have children living at home. Unlike previous component of human capital, then this variable was not statistically significant associated with occupational segregation by gender. This is indicated by the significance greater than 0.05. Although the views of the correlation coefficient, ie 0.638, including a strong relationship between these two variables as shown in Table 9.

Table 9. Pearson Correlation Coefficient Between Occupational Segregation by Gender by Percentage of Labor force Have Children Who Live at Home

		Occupational Segregation by Gender	Percentage of Labor Force Have Children Who Live at Home
Occupational Segregation by Gender	Pearson correlation	1	.638
	Sig (2-tailed)		0.362
	N	4	4
Percentage of Labor Force Have Children Who Live at Home	Pearson correlation	.638	1
	Sig (2-tailed)	0.362	
	N	4	4

Source: Data processed

The final component of the characteristics of human capital that is used is age. It was found that there is a very strong and negative between occupational segregation by gender by age. The correlation coefficient of -0.989 means that if the age is increasing, the greater the occupational segregation by gender.

Table 10. Pearson Correlation Coefficient Between Occupational Segregation by Gender by Age

		Occupational Segregation by Gender	Age
Occupational Segregation by Gender	Pearson correlation	1	-0.989
	Sig (2-tailed)		0,011
	N	4	4
Age	Pearson correlation	-0.989	1
	Sig (2-tailed)	0,011	
	N	4	4

Source: Data processed

Table 10 indicates that the significance of 0.011, the decision on the hypothesis is rejected the hypothesis that there is no relationship between

occupational segregation by gender by age. Thus if it is connected with the characteristics of human capital, occupational segregation by gender relate very strongly to differences in the percentages of men and women who have a high school education to upper and age component, although in a different direction.

These results are in line with Smita and Aphichoke (2019) that the D-index in all villages shows low occupational segregation as in South Asia and Sub Saharan Africa. However, this result is different from Khitarishvili, Chamussey and Sinha (2018) which in the industrial and public sectors shows a high level of segregation. This result is also the opposite as shown by Hegewisch and Hartmann (2014) that the D index in industrialized countries is quite high. Likewise, the labor market in Australia shows that occupational segregation using Duncan's standards is more than 50 percent. In addition, differences in male and female high school education correlated with occupational segregation as well as the findings of Soria and Roper (2015); King (1992), Spriggs and William (1996). Hegewisch and Hartmann (2014) also found something similar to the results of this study: occupational segregation correlated with labor market conditions.

CONCLUSION

D index value close to 0 means that the four regions in this study tend to have occupations that have not been segregated. It can even be said to occupational workers integrated. In this case the occupation of workers in the four regions is integrated between men and women. The relationship between occupational segregation by gender in the labor market that is characteristic components Percentage of women in the labor force and human capital components namely Age. Statistically, very strong and negative. Similarly, conjunction with other components of human capital that is the difference percentage of men and wmen who have high school education and above but in the opposite direction.

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