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Do Educated Wives Work Longer Hours?

Analyzing the Effect of Educational Attainment on Working Hours among Married Couples in Indonesia

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***Abstract*—This paper aims to analyze the impact of married couples' educational level on the allocation of working hours in a household. This study contributes to the literature on women's participation in employment, especially among married women, to see whether the traditional norms about gender roles in marriage still continue to shape the employment participation among married women in Indonesia despite the increase in women's human capital through education. This study utilizes the Indonesian National Socioeconomic Survey (SUSENAS) 2016 and estimates the results using the multinomial logistic model. Our results offer evidence that, compared to low-educated couples, couples with more educated wives have a higher probability that the wife works longer than the husband. However, this result is not as significant as the probability that the wife works longer hours than the husband when both partners are highly educated and when the wife is less educated than the husband. Thus, it seems that it is not the education level of the wife that affects her probability to work longer; it is the education level of her husband that plays a bigger role. Moreover, the notion of traditional family norms also seems to still play a significant role in married women's employment, particularly when a family has children under the age of five or lives in a rural area.**

Keywords*—couple employment, education, women labor participation

I. INTRODUCTION

In many countries, a central issue in labor market policies is increasing women's participation in the labor market. Women's decisions to enter the labor market are significantly influenced by the rise in women's education levels [1, 2]. In the case of married women, previous literature has also suggested that their decisions to participate in the labor market are affected by the role of their partners or husbands in the family or household [3].

Becker [4] argues that every marriage has a division of labor that affects the time allocation of work within the family. Moreover, gender still determines the division of labor under the traditional views of marriage: men are responsible to provide financially, while women are responsible for care of the home and children [5]. The traditional division of labor in the family influenced career equality for men and women into the modern era; as middle-class women entered the workforce in larger numbers, the traditional division of labor still existed in the family with women burdened with the responsibility of domestic activities [6]. Moreno-Colom [7] also state that this gendered division of labor makes women decrease their availability for work. However, more recently, household roles are becoming more egalitarian, which may be partly due women's increasing role in the workplace and rising level of women's education. In Indonesia, for example, economic development and the increasing number of educated women have led to women comprising a significant share of the formal labor market in recent decades [8]. This has turned the 'housewife' image of the 1970s into the 'working woman' trend of the 1990s [9].

With respect to the division of labor in the family, changes in the time used for paid work has led to a modernity in the allocation of working hours between spouses. The increase of women's participation in the labor market has contributed to the decline of the male breadwinner model. New family models have emerged, namely the and the dual-earner model and the one and a half earner model [10]. However, this does not directly imply that there is an equal share of working hours between a husband and wife. Despite the fact that there is a relationship between equality in employment and domestic work, women are still responsible for the largest share of housework [11, 12]. Even in developed countries, female workers usually spend less time in the labor market due to their commitment to their family [13].

In the Indonesian labor market, according to data from the Indonesian Central Bureau of Statistics, the Badan Pusat Statistik or BPS-Statistics Indonesia [14, 15], in general, women's labor force participation rate is lower than men's. Figure 1 shows that in 2005 and 2015, more than 80 percent

of men participated in the labor force; while the corresponding percentages for women in the same periods were only 50.65 percent and 54.48 percent, respectively. In addition, Figure 1 also shows that within the time span of ten years, women's labor force participation rate increased, while that of men experienced a slight decrease. Looking further at working status, namely, full-time or part-time workers, Figure 2 presents workforce participation by gender distinguished by the number of hours worked in a week. The figure shows the percentage of adult women working full-time (more than 35 hours a week) in 2012 and 2014 were 26.55 percent and 56.43 percent, respectively. Meanwhile, the corresponding percentage for men was about 72 percent in both 2012 and 2014.

The increase in the percentage of women as full-time workers from 2012 to 2014 indicates that there is a significant rise in the female labor supply in Indonesia; however this increase does not necessarily imply wage equality between women and men. In Indonesia, the average wage of women workers is lower than that of men, both in agricultural and non-agricultural sectors. In the non-agricultural sector, the female wage ratio is 75.98 of men's wages [16]. In sum, there is still a gap between women and men in Indonesia, not only in labor force participation but also in working hours and wage levels.

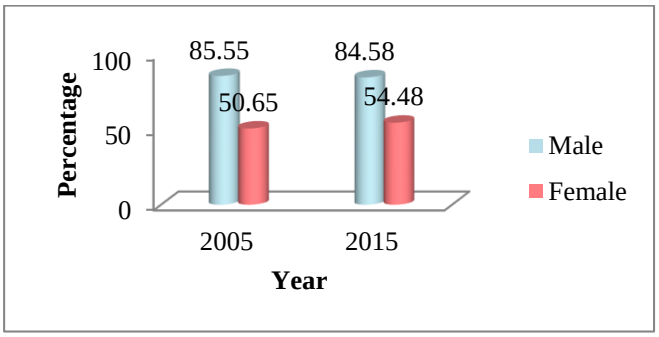

Fig. 1. Labor Force Participation Rate of Population Aged 15 and Above by Gender
Source: BPS-Statistics Indonesia (2006 & 2016)

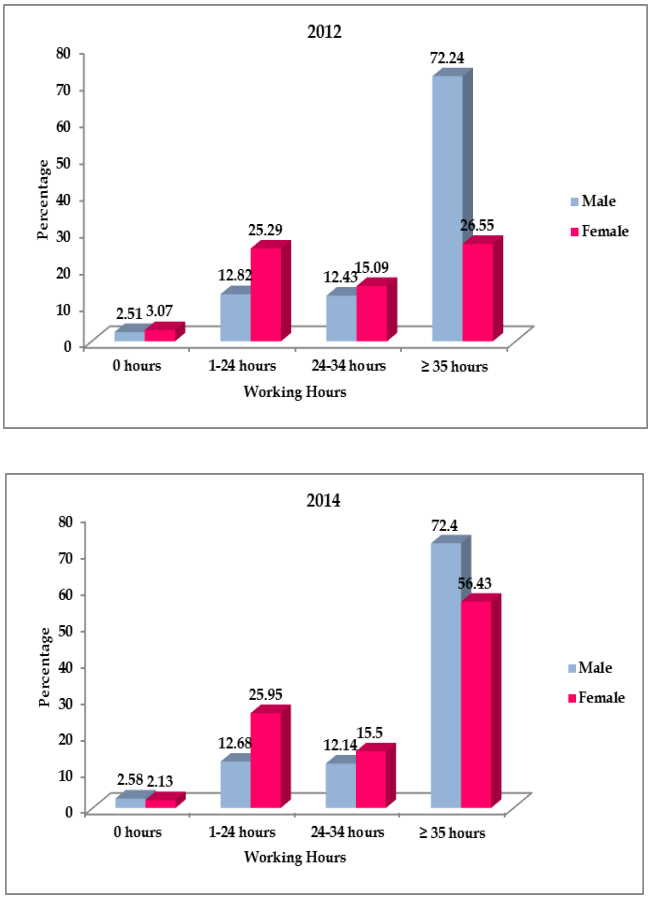

Fig. 2. Working Population Aged 15 and Above by Gender and Working Hours in a Week
Source: BPS-Statistics Indonesia (2015)

Recognizing this gap, this study aims to shed more light on the issue of women's participation in employment, particularly among married women. More specifically, this study tries to analyze how married couples' educational attainment affects the allocation of working hours between spouses. This gap in working hours between husbands and wives should reflect married women's participation in the labor market in Indonesia. Moreover, this study also examines whether traditional norms about gender roles in marriage still continue to shape the employment participation among married women in Indonesia despite the increase in women's human capital through education.

II. Literature Review

Becker [4] states that the division of labor in a family is influenced by biological differences and gender-specific investments in early life. Moreover, the comparative advantage between spouses in the labor market also influences the division of labor in the family [17]. Becker [18] explains that there are specialization and trade-offs that complement each other in marriage. This theory explains helps explain the dominance of men in economic activities and the specialization in the household. Traditionally,

married women were expected to devote most of their time to childbearing and caring for the home, while married men were expected to contribute in the labor market as the breadwinner in the family. Nevertheless, under modern norms, women are becoming less specialized in household activities and men are spending more time on household activities.

The allocation of time in the labor market between spouses is decided by comparing each spouse's marginal productivity in their employment [13]. An individual's labor market participation is positively affected by his or her own labor market resources and negatively affected by his or her partner's labor market resources. From a sociological perspective, partners' labor market resources, especially education, are social capital that can positively affects their spouses' labor market access [19]. Partners may provide skills, network, and knowledge to assist each other in finding good jobs, so that resourceful partners would help to increase one's labor supply. Kitterod and Ronsen [13] also state that educational attainment influences an individual's norms and values that contribute to modern views on women's role in the family.

Weiss [20] explains that a higher education leads to higher wages, which then results in a higher labor supply and hence, more allocation of time at work [21]. The expansion in the proportion of the population that is educated, especially women, combined with larger employment opportunities for women and a declining fertility rate have enabled women to enter the labor force more easily. Numerous recent studies in Europe and the United States show that women's employment is higher when they possess a higher level of education [22]. This finding implies that more educated women would have a higher employment rate and longer working hours than less educated women. This is also related to the concept of "price-effects" in individuals. The term "price-effects" has been offered by economic theorists to explain the relationship between education and employment. The price effect or opportunity-cost effect means women with higher educations have higher earning power; thus, their forgone earnings, if they stay at home for childbearing or housework, is greater than that of less educated women [21]. When the opportunity cost is higher, especially for better-educated women, these women are expected to have higher employment than their less educated counterparts.

In the case of married couples, educational structures result in trends of marriage behavior, where educationally homogamous couples exist. Marital homogamy refers to the concept that people tend to marry someone with a similar educational background and earning power. In the marital homogamy theory, there are two effects that may operate in opposite directions, namely the income effect and the price effect [23]. More specifically, in the educational assortative mating concept, when a highly educated woman married a similarly highly educated man, her own education level might induce a higher level of employment due to higher price or opportunity costs effects, as previously discussed. The opposite is also possible: the higher income earned by a highly educated husband may discourage her employment instead. Similarly, a less educated woman might have lower employment due to a lower opportunity cost, but also the lower income earned by a lower educated husband may instead encourage her employment. Furthermore, in a gender equality context, the comparative advantage could be balanced or reversed between men and women [24]. This indicates that the educational homogamy in marriage creates similarities in the labor market participation between spouses; it raises intra-household equality but creates disparities among some households [17]. On the contrary, educational heterogamy in marriage would generate a relatively different labor market participation between spouses, i.e. either higher for the wives (lower for the husbands), or vice versa.

In developed countries, a study by Steiber and Berghammer [25] shows that in European countries, highly educated couples are more likely to have an equal contribution to the labor market, but the strength of the education effects varies across family life cycle, e.g. when the couples have children under five years and when their children have reached the age above five years. Eeckhaout et al. [17] find that the minority of Swedish couple with children adopts a women-earner model, when the male partner is temporarily on parental leave, unemployed, or working part-time. This study is in line with Berghammer [26] who shows that the educational level of parents with children influences their work arrangements: couples adopt the men-breadwinner model when the women are highly educated and have an infant. Kitterod and Ronsen [13] in their study in Norway, show that the odds of a woman to work more than her partner increases when she has completed secondary school and a long university education, compared to having only a primary school education. Nevertheless, unlike the prediction from the comparative advantage theory, this study shows no significant effect on partners' relative education and the couples' allocation of work.

Furthermore, Klesment and Van Bavel [27] finds that highly educated mothers of school-age children whose husbands are less educated are more likely to be the main breadwinner compared to highly educated mothers without children whose husbands are also highly educated. This is in line with Konietza and Kreyenfeld [28] who found that in German couples, women experience less economic pressure to seek employment when they live with a highly educated spouse. When the spouse has a tertiary degree, the odds that a woman engages in full-time and part-time employment are reduced. Moreover, Verbakel [29] also finds that women with a highly educated husband are more likely to reduce their working hours. In contrast, this study also shows that a resourceful spouse does not restrict the other spouse's labor market contribution, instead, she or he enhances it. This study found that a woman whose husband has a high occupational status is less likely to leave the labor force and found that individual human capital enhances women's labor

market contributions and discourages them from decreasing their working hours.

III. Research Methodology

This study utilizes the Indonesian National Socioeconomic Survey (SUSENAS) 2016 conducted by the Indonesian Central Bureau of Statistics (BPS-Statistics Indonesia). This survey is a large household survey that collects social, economic, and demographic data. The dataset consists of responses regarding education, health, housing, socio-cultural activities, household expenditures, travel, and people's opinion about household welfare [15]. This survey provides couple-level data by matching the data for a husband and wife in each household. This makes this survey data an excellent source of empirical data for this study.

For the purpose of this study, selected samples include pairs of spouses: the head of household and his or her spouse. It therefore excludes those couples who live with their parents or relatives, those in one-person households, households that consists of only one married person without a spouse, and couples where only one partner is employed. As a result, the analysis is restricted to a sub-sample of 120,390 married couples aged 15 years old and above, where both spouses are employed. Moreover, the analysis uses information on the head of household and the spouse, including working hours, as well as individual and household characteristics.

As mentioned previously, the main objective of this study is to examine the effect of married couples' educational attainment on their differences in working hours. Thus, a combination of both husbands' and wives' working hours is used to calculate the dependent variable (workhourdiff). The information on working hours comes from the survey question regarding hours of work in the previous week. This variable is distinguished into three categories, i.e. couples in which the husband works longer, couples in which the wife works longer, and couples with equal sharing of work hours, which will also be the base category. In this study, the definition of an equal sharing of work hour follows that suggested by Kitterod and Ronsen [13]. Kitterod and Ronsen [13] suggest that plus or minus five hours difference in the average working hours of spouse in a week denotes equal working hours.

In the case of our sample, the average working hours difference between husbands and wives is 4.96 hours; thus the benchmark used in this study to define an equal sharing of work hours is similar to that used in Kitterod and Ronsen [13], plus or minus five hours difference. Thus, a difference of at least six hours between spouses implies that there are unequal working hours, i.e. either the husband or the wife works longer hours in a week.

The main independent variable is the composition of a couples' educational attainment (educspouse). This variable is categorized into four categories: both partners low educated (as the base category), a higher educated wife, a higher educated husband, and both high educated. These categories consider the assortative mating theory, that states that individuals search for a mate in the marriage market based on their preference for a partner with similar educational attainment [30].

Other independent variables are the number of children under five years old (childunder5) and the age of wife along with its squared (agewife and agewifesquared) as numeric variables; the age difference between the husband and wife (agediff), which is classified into three categories—similar age (as the base category), wife older, and husband older; the area where the couple resides (residence), which is disaggregated between urban (as the base category) and rural; couple work status (coupleworkstatus), which is classified into four categories—both spouses are paid workers (as the base category), the wife is a paid worker and the husband is an unpaid worker, the husband is a paid worker and the wife is an unpaid worker, and both are unpaid workers; and husband health status (husbandhealth) which indicates whether or not the husband has a chronic health problem (with the base category is that the husband has a chronic health problem).

Since the dependent variable consists of more than two categories, the estimation will use a multivariate analysis of a multinomial logistic regression model. In general, the model can be written as follows

$$P_{ij} = Pr\,[y_i = j] = Fj\,(\alpha, X_i, \varepsilon) \tag{3.1}$$

where i = 1, …, n represents the i-th couple in the sample and j = 0, …, 2 is the categories of dependent variable (workhourdiff), with j =0 if couples have an equal sharing of work hours (base category), j = 1 for couples whose husband works longer, and j = 2 for couples whose wife works longer. Moreover, α and ε represent the constant and error term respectively. In general, Equation (3.1) suggests that the probability of the i-th couple being in a particular dependent variable's j-th category (Pij) is a function of a vector of independent variables (X), the constant (α) and error (ε) terms. Moreover, the probability (P) of the i-th couple being in category j can be expressed as

$$P_{ij} = Pr\,[y_i = j] = \frac{exp\,(\alpha_j X_{ij})}{\sum_{k=0}^{2} \exp(\alpha_k X_{ik})} \tag{3.2}$$

with j = k is the dependent variable's category. Finally, in order to measure the effect of a one unit change of a particular independent variable (relative to the base category) on the probability of being in a given j-th category, the marginal effects values will be presented [31].

IV. Results and Discussion

Table 1 presents the estimation results for married couples that contain the probability of differences in working hours between husbands and wives. In Table 1, most of the independent variables are statistically significant in influencing the difference in working hours between husbands and wives. However, several other independent

variables are not statistically significant. As for our main independent variable, Table 1 shows that couples' educational attainment has a significant effect on the probability of the difference in working hours between husbands and wives in some of the categories. More specifically, the probability of couples sharing an equal working hour is lower by almost two percentage points if the wife is less educated than the husband, compared to equally low-educated couples. Similarly, relative to low-educated couples, the chance to have an equal sharing of working hours is also lower if the wife is more educated or if both husband and wife are highly educated. Thus, an equal sharing of working hours seems to only apply for low-educated couples, possibly due to the fact that low-educated couples have a similar type of job. In comparison, a study by Berghammer [26] states that an educationally homogamous relationship behaves very similarly in the labor market. In our results, however, this notion seems only to apply to couples in which both the husband and the wife are low-educated, at least in terms of difference in working hours.

Furthermore, we found evidence that a higher-educated wife has a higher probability of working longer than the husband by about 1.6 percentage points, compared to couples whose husband and wife are both low-educated,

TABLE I. MARGINAL EFFECTS RESULTS OF DIFFERENCE IN WORKING HOURS BETWEEN HUSBAND AND WIFE

Independent Variables	**Dependent Variable (*workhourdiff*)**		
	equal sharing	**wife longer**	**husband longer**
	ME	ME	ME
	(std. err)	(std. err)	(std. err)
Educcouple			
both low educated (base)			
wife low, husband high	-0.019***	0.047***	-0.029***
	(0.007)	(0.008)	(0.007)
wife high, husband low	-0.019**	0.016*	0.003
	(0.009)	(0.009)	(0.009)
both high educated	-0.016**	0.044***	-0.028***
	(0.008)	(0.009)	(0.008)
agewife	-0.004***	0.000	0.004***
	(0.001)	(0.000)	(0.001)
agewifesquared	0.000***	0.000	-0.000***
	(0.000)	(0.000)	(0.000)
Agediff			
same age (base)			
wife older than husband	-0.031***	-0.020***	0.051***
	(0.009)	(0.006)	(0.010)
husband older than wife	-0.026***	0.014***	0.012***
	(0.003)	(0.002)	(0.003)
childunder5	-0.024***	-0.004*	0.028***
	(0.003)	(0.002)	(0.003)
Residence			
urban (base)			
rural	-0.022***	-0.013***	0.035***
	(0.003)	(0.002)	(0.003)
Coupleworkstatus			
Both paid (base)			
wife paid, husband unpaid	0.041**	0.212***	-0.253***
	(0.017)	(0.020)	(0.013)
wife unpaid, husband paid	0.123***	-0.190***	0.066***
	(0.009)	(0.008)	(0.009)
both unpaid	0.202***	-0.155***	-0.047**
	(0.020)	(0.014)	(0.020)
Husbandhealth			
yes (base)			
no	0.009	-0.047***	0.038***
	(0.007)	(0.006)	(0.008)
Observations	120,390		
Log likelihood	-119291.74		
Pseudo R2	0.0427		

Note: std. err is the robust standard error; *p<0.1; **p<0.05; ***p<0.01

although the significance level is small. Similarly, couples whose wife is less educated and those who are both highly educated, relative to couples who both are low-educated, have a significantly higher likelihood that the wife works longer than the husband, by 4.7 and 4.4 percentage points, respectively. These results seem to support previous findings by Kitterod and Ronsen [13] that show that having a high education increases the odds of a woman working more than

her partner. On the other hand, relative to low-educated couples, couples with a less educated wife and those who are both highly educated have a lower probability that the husband works longer than the wife by nearly three percentage points. Meanwhile, couples whose wife is more educated do not show a significant probability that the husband works longer than the wife.

The labor market behavior in developing countries could be different than in developed countries, like those in Europe. In this study, which is specific to Indonesia, the probability of difference in working hours between husband and wife is probably influenced by the distribution of types of employment. In this case, about 58.3 percent of Indonesian wives work as paid workers, while the remaining 41.7 percent work as unpaid family workers. Meanwhile, only 1.7 percent husbands work as unpaid family workers, and the rest work as paid employees. Klesment van Bavel [27] found a positive probability that a women who is more educated than her husband earns more than her husband.1 However, in the case of Indonesia, a large number of wives work for their family without being paid, and 84.4 percent of them are low educated.

In terms of the variable regarding the age of the wife, our results suggest that the probability of sharing an equal working hour is initially lower as the wife gets older, but it does not persist for too long. The probability of sharing equal working hour continues to increase as after the wife is 16 and becomes older. In contrary, the likelihood of the husband working longer is higher when the wife has not reached the age of 27; however, after age 27, the chance of the husband having longer working hours diminishes. Meanwhile, none of the results for the age of wife variable are statistically significant for the probability of the wife working longer hours. These findings are in line with the labor supply theory by Borjas [21] that states that labor supply, including hours of work, increases as a worker ages, although the rates tend to decline after age 50.2

Considering the age of the husband, the variable of the age difference between the husband and wife shows a significant effect on the probability of a difference in working hours. In this case, when the wife is older than the husband, the probability of equal working hours is lower by 3.1 percentage points and the probability of the wife working longer than the husband is two percentage points, compared to a couple of similar age. In comparison, the probability of a husband working longer than his wife increases by 5.1 percentage points when the wife is older, compared to a couple of similar age. As for couples whose husband is older than the wife, relative to similar age couples, the probability of having an equal difference in working hours is lower by about 2.6 percentage points, while the probabilities of the wife working longer and the husband working longer are higher by about 1.4 and 1.2 percentage points, respectively. In sum, regardless of age differences, the husband tends to work longer than the wife; except when the husband is older than the wife—then the wife also has a higher probability to work longer. These results slightly contradict the previous study by Kitterod and Ronsen [13] which found that women who are younger than their partners tend to work more than their partners. Our results, on the other hand, suggest that after considering the age of both husband and wife, the responsibility to work longer is still borne by the husband regardless of age. This hold true, except when the husband is older: then, the wife is more likely to actively engage in employment to help share the burden of her family.

The presence of children under five years old also has a significant effect on the probabilities of difference in working hours. An increasing number of children under five years old in the household would decrease the probabilities of couple shares an equal difference in working hours and the wife works longer hours by about 2.4 and 0.4 percentage points, respectively. Whereas the likelihood of the husband works longer would increase by nearly three percentage points. This result supports the Becker's theory of family [18] where it is stated that traditionally, married women were expected to devote most of their times for childbearing and housework. Thus, the presence of children will decrease her time to contribute to the labor market. Moreover, Kitterod and Ronsen [13] also stated that there is a strong negative effect of having small children on the difference in working hours between spouses.

A couple's area of residence also significantly affects the probabilities in the difference in working hours. Living in a rural area, as compared to living in an urban area, is associated with a lower probability of either equal working hours or the wife working longer. On the other hand, living in a rural area significantly increases the probability that the husband works longer than the wife, by about 3.5 percentage points. Again, this result might be related to the traditional norms of family, where women are housekeepers while men are the breadwinners, which could still be highly adopted in the rural areas. Another explanation could be that a lack of facilities, such as childcare facilities, in rural areas makes an equal sharing of working hours between a husband and wife highly difficult, if not impossible, leaving the burden for childbearing and housework to the wives. Berghammer [26] in the case of developed countries also showed that an equal earner model is more widespread in bigger municipalities, where more developed childcare facilities may influence married couples' behaviors.

With respect to working status, Table 1 shows that compared to couples in which both the husband and wife are paid workers, couples with only the wife as a paid employee have a higher probability that the wife works longer than the husband and a lower probability that the husband works longer. In the same manner, when the husband is a paid

[1] Due to a limitation of data, we did not consider the wage level or salary of our sample.

[2] Since our sample consists of only married couples, the average of wife's age in our case is relatively young, i.e. about 42 years old. Thus, it may explain why the cut-off age from our results is also very young.

employee and the wife is an unpaid family worker, the probability of the husband works longer is significantly higher and the chance that the wife works longer is significantly lower. In comparison, partners who are both unpaid workers have a higher probability of sharing an equal working hour by about 20 percentage points and the probability that either the wife or the husband works longer is significantly lower. These results suggest that for a couple, a paid employee tends to work longer hours; yet, when both husband and wife have a similar work status, they are more likely to have similar working hours.

Regarding husband's health status, the results indicate that a husband with no chronic health disease, relative to a husband who suffers from a chronic health condition has a higher chance of working longer by nearly four percentage points. In comparison, the probability of the wife works longer in this case is lower by nearly five percentage points. Health condition is an important factor for people's economic activities. In previous studies, the association between a male partners' health status and wife who works longer was not statistically significant [13]. In our case, however, this variable is statistically significant. Thus, our result supports the notion that health is an important factor in performing work activities and the amount of time devoted to work.

V. CONCLUSION

The purpose of this study is to analyze how married couples' educational attainment affects the allocation of working hours between partners in a household. It focuses on the of the gap in working hours between husband and wives and therefore, it contributes to studies on married women's participation in employment, especially in developing countries. Based on the results, this study finds that most of the independent variables—the education level of the partners, the age of the wife, the partners' age difference, the presence of children under five, and the husband's health—are statistically significant in influencing the difference in working hours between a husband and wife. The main independent variable—couples' educational attainment—has a significant effect on the probability of partners' difference in working hours, in some categories. The highlight of this study is that couples with more educated wives have a higher probability that the wife works longer than her husband, relative to lower educated couples. Similarly, couples in which the wife is less educated and those in which both are highly educated, relative to couples who both are low-educated, have a significantly higher likelihood that the wife works longer than the husband. Therefore, having a high education increases the odds of a woman to work more than her partner.

The difference in working hours between husbands and wives is not only influenced by their educational attainment. It is also significantly influenced by the age of the wife, the age difference between the husband and wife, the number of children under five years old, the area of residence, the husband's health status, and the partners' work status. Furthermore, the traditional norms of a family still continue to shape women's employment, signified by the results that the number of children under age five and living in a rural area still decrease the probability a wife works longer than her husband or the couple has equal working hours.

Nonetheless, the analysis in this paper is limited to married couples who are both working. Moreover, this study does not address the selection bias problem that may occur because only working couples are selected. Despite this limitation, this study sheds more light on the issue of women's participation in employment. It suggests that traditional family norms are still influencing married women's participation in employment.

REFERENCES

[1] J. H. Gallaway, and A. Bernasek, "Gender and informal sector employment in Indonesia." J. Econ. Issues, vol. 36(2), pp. 313–321, 2002.

[2] O. Thévenon, Drivers of female labour force participation in the OECD, OECD Social, Employment and Migration Working Papers, No. 145, OECD Publishing, Paris, 2013. http://dx.doi.org/10.1787/5k46cvrgnms6-en

[3] J. De Laat and A. Sevilla-Sanz, "The fertility and women's labor force participation puzzle in OECD countries: the role of men's home production," Feminist Econ, vol. 17(2), pp. 87–119, 2011.

[4] G. Becker, A Treatise on the Family. Cambridge, MA: Harvard University Press, 1991.

[5] S. D. Desai, D. Chugh, and A. P. Brief, "The implications of marriage structure for men's workplace attitudes, beliefs, and behaviors toward women." Administrative. Sci. Q, vol. 59(2), pp. 330–365, 2014.

[6] R. Stafford, E. Backman, and P. Dibona, "The division of labor among cohabiting and married couples." J. Marriage. Fam, pp. 43–57, 1977

[7] S. Moreno-Colom, "The gendered division of housework time: Analysis of time use by type and daily frequency of household tasks." Time & Society, vol. 26(1), pp. 3–27, 2017.

[8] H. Aswicahyono, R. Atje, et al. (1999). "Gender Dimensions of Globalization and Modern Sector Employment in Indonesia." Seapat Working Paper. Manila, International Labour Office, 1999, p. 60

[9] K. Sen, Indonesian women at work: reframing the subject. Gender and Power in Affluent Asia. K. Sen, and Stivens, Maila, Eds. London: Routledge, 1998, p. 3562

[10] K. U. Müller, M. Neumann, and K. Wrohlich, The Family Working Time Model: Toward More Gender Equality in Work and Care, 2016.

[11] F. Buhlmann, G. Elcheroth, and M. Tettamanti, "The division of labor among European couples: The effects of life course and welfare policy on value-practice configurations," Eur. Sociological. Rev, vol. 26, pp. 49–66, 2009.

[12] T. Van der Lippe, J. de Ruijter, E. de Ruijter, and W. Raub, "Persistent inequalities in time use between men and women: A detailed look at the influence of economic circumstances, policies, and culture." Eur. Sociological Rev, vol. 27, pp. 164–179, 2011.

[13] R. H. Kitterød and M. Rønsen, "Non-traditional dual earners in Norway: when does she work at least as much as he?" Work, employment and society, vol. 26(4), pp. 657–675, 2014.

[14] BPS-Statistics Indonesia. (2006). Keadaan Angkatan Kerja di Indonesia Februari 2006 (Indonesian Labor Force Situation in February 2006). Jakarta.

[15] BPS-Statistics Indonesia, Keadaan Angkatan Kerja di Indonesia Februari 2016 (Indonesian Labor Force Situation in February 2016), Jakarta, 2016

[16] BPS-Statistics Indonesia, Women and Men in Indonesia, Jakarta, 2015

[17] M. C. Eeckhaut, M. A. Stanfors, and B. Van de Putte, "Educational heterogamy and the division of paid labour in the family: a comparison of present-day Belgium and Sweden," Eur. Sociological. Rev, vol. 30(1), pp. 64–75, 2013.

[18] G. S. Becker, "A theory of marriage: Part I," J. Political economy,vol. 81(4), pp. 813–846, 1973.

[19] E. Verbakel and P. M. De Graaf, "Partner effects on labour market participation and job level: opposing mechanisms." Work, employment and society, vol. 23(4), pp. 635–654, 2009.

[20] A. Weiss, "Human capital vs. signalling explanations of wages." The Journal of Economic Perspectives, vol. 9(4), pp. 133–154, 1995

[21] G. J. Borjas, Labor Economics. Mc Graw Hill Education, NY, 2012.

[22] P. England, J. Gornick, and E. F. Shafer, "Women's employment, education, and the gender gap in 17 countries," Monthly Lab. Rev., vol. 135, pp. 3, 2012.

[23] M. Evertsson, P. England, I. Mooi-Reci, J. Hermsen, J. De Bruijn, and D. Cotter, "Is gender inequality greater at lower or higher educational levels? Common patterns in the Netherlands, Sweden, and the United States," Social Politics, vol. 16(2), pp. 210–241, 2009.

[24] H. P. Blossfeld and S. Drobnic, (Eds.). Careers of couples in contemporary society: From male breadwinner to dual-earner families: From male breadwinner to dual-earner families. Oxford: OUP, 2001.

[25] N. Steiber, C. Berghammer, and B. Haas, "Contextualizing the Education Effect on Women's Employment: A Cross-National Comparative Analysis." J. Marriage. Fam, vol. 78(1), pp. 246–261, 2016.

[26] C. Berghammer, "The return of the male breadwinner model? Educational effects on parents' work arrangements in Austria, 1980–2009." Work, Employment and Society, vol. 28(4), pp. 611–632, 2014.

[27] M. Klesment and J. Van Bavel, The reversal of the gender gap in education and female breadwinners in Europe, Families and Societies, 2015.

[28] D. Konietzka and M. Kreyenfeld, "The growing educational divide in mothers' employment: an investigation based on the German micro-censuses 1976-2004." Work, Employment and Society, vol. 24(2), pp. 260–278, 2010.

[29] E. Verbakel, "Partner's resources and adjusting working hours in the Netherlands: Differences over time, between levels of human capital, and over the family cycle," J. Fam. Issues, vol. 31(10), pp. 1324-1362, 2010.

[30] A. Grow and J. Van Bavel, "Assortative mating and the reversal of gender inequality in education in Europe: An agent-based model," PloS one, vol. 10(6), e0127806, 2015.

[31] A. C Cameron, and P. K Trivedi, Microeconometrics: methods and applications, P. K. Trivedi, Eds. New York: Cambridge University Press, 2005.