

CASE STUDY FACTORS THAT INFLUENCE CHILDREN TO WORKERS KALIDONI VILLAGE IN PALEMBANG

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Abstract. This research explains the effects of sex the child, the child's age, the presence of parents, family size, birth order of the child on the probability of child labor in the District Kalidoni Palembang. Scope of this research is to analyze children 7-15 years old who are working or not working. Data retrieval is done snowball random sampling. The results of this study indicate that the most influential factor is the factor of birth order in which the child was born first child (the eldest son) would be likely to become child laborers than children born afterwards.

Keywords: Children, Kalidoni, Workers.

I. INTRODUCTION

The phenomenon of child labor in Indonesia are still evolving. Along with that, the problem in this research is: How does the (gender of the child, the child's age, the presence of parents, family size, birth order of the child) on the probability of child labor in the District Kalidoni Palembang.

The purpose of this research is to investigate the influence know the effect (the sex of the child, the child's age, the presence of parents, family size, birth order of the child) on the probability of child labor in the District Kalidoni Palembang.

The benefits from the results of this study are expected by information about the influence know the effect (the sex of the child, the child's age, the presence of parents, family size, birth order of the child) on the probability of child labor in the District Kalidoni Palembang, can provide useful input for interested parties (government or employers) in decisions relating to the issue of child labor in the District Kalidoni Palembang. In addition the results of this study can be used as a reference for similar studies further.

Table 1
Number of Children Age 7-15 2014
Kalidoni Village in Palembang

No.	Village	Population
1	Sungai Selincih	5,306
2	Bukit Sangkal	3,452
3	Kalidoni	2,284
	Total	2,217

Source: BKKBN Palembang 2014

Describes the New Home Economics as part of economic theory deals with the theory of the behavior of households (individuals) who try to meet their satisfaction [1].

In terms of economics theory of economic value of children first popularized Leibenstein [5] which says that a person's decision to have children is based on the cost approach and the benefits of the child (The Benefits And Cost Of Children Approach).

Explaining the theory of the child in terms of supply and demand which encourages children to work [4].

Suggests that there are three theories that cultural theory, theory of poverty and economic theory [3].

Explained that economic difficulties low-income families, usually with a background of low education of heads of households with employment status such as: workers, factory workers, small traders and construction workers, will bring their children to participate work [7].

Research explains that (1) Function of Household Income derived from household capital input agriculture child labor. (2) The significance among households vary in the marginal productivity of average children [2]. Contributions total revenue labor children ranging up to a maximum of 52.3 Household income. (3) Productivity of child labor is very strong and positive compared with the number of adults in the household.

Furthermore [6] added to the research back in that (1) household is the most important factor that can explain variations in the forms of work. (2) In the household where the mother's education, the less time for children to work. (3) Domestic work depending on the age and birth order of the child. (4) When the father is not there, the children spend more time at work, and vice versa if the mother is not there then no significant effect.

Similarly, [9] explains that household income Effects of shift workers more children to work rather than school. But

revenues have negligible effect on the wages of the number of hours children.

II. RESEARCH FRAMEWORK AND METHODS

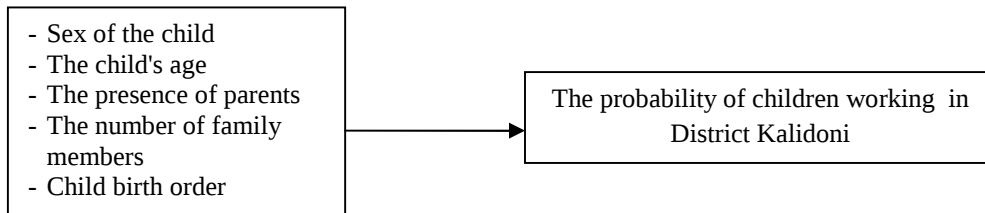


Figure 1. The probability of child labor and factors that give influence

Based on the literature review and theoretical foundation, then made the following framework: analyze the influence know the effect (sex of the child, the child's age, the presence of parents, family size, child birth order) on the probability of child labor in the District Kalidoni Palembang.

A. Hypothesis

"Allegedly factors (sex of the child, the child's age, the presence of parents, family size, birth order of children) affect the probability of child labor in the District Kalidoni significantly".

B. Research Methods

The scope of this study is to analyze the children working or not 7-15 years old. Respondents are children who work or do not work as many as 90 people aged 7-15 years. The research location in District Kalidoni Palembang. Secondary data is data from the BKKBN and BPS Palembang.

C. Analysis method

The model used in this study is a logistic regression model. Selection of logistic regression model or a logit model in this study is due to logistic regression is more easily applied and interpreted. The following definition:

$$P_i = E(Y = 1 | X_i) = \frac{1}{1 + e^{-(\alpha + \beta X_i)}} \dots \dots (1)$$

in which P_i refers to probability. In this research, the model can be simplified as follows:

$$\ln\left(\frac{P_i}{1 - P_i}\right) = \alpha + \beta EX_{1max} + \beta EX_{2max} + \beta EX_{3max} + \beta EX_{4max} + \beta EX_{5max} + e \dots \dots (2)$$

$$\ln\left(\frac{P_i}{1 - P_i}\right) = \alpha + \beta X_1 + \beta X_2 + \beta X_3 + \beta X_4 + \beta X_5 + e \dots \dots (3)$$

where:

1. $\ln\left(\frac{P_i}{1 - P_i}\right)$ = Variable probability of children 7-15 years old who work to earn income and children 7-15 years old who are not working.
2. EX1 = sex of the child
3. EX2 = age of children
4. EX3 = presence of the parents

5. EX4 = the number of family members
6. EX5 = child birth order
7. e = error term

III. RESULTS AND DISCUSSION

The sample size for this study is as much as 90 samples.

Table 2.
The Omnibus Tests of Model Coefficient

	Chi-square	df	Sig.
Step	11.777	5	.038
Block	11.777	5	.038
Model	11.777	5	.038

Source: Research results 2016 (SPSS 20 Output)

Table 2, explained that sig = 0.000, where less than 0.05 95 percent confidence level ($\alpha = 5$ percent), there is one

independent variable affecting the dependent variable. And the model can be used concluded subsequent analysis.

Table 3.
The Wald Test, Significance, and Old Ratios

	B	S.E.	Wald	df	Sig.	Exp(B)
Constant	-.795	.228	12.189	1	.000	.452

Source: Research results 2016 (SPSS 20 Output)

Table 3 describes the significant influence of independent variables on the dependent variable occurs if the value sig < 0.05 in Table 3 is 0.000, meaning that simultaneous independent variables affect the dependent variable. Column Exp (B) explain the variables significantly affect the value is

greater than one, then the probability of a child to work is greater. Exp (B) in Table 3 is equal to 0,452 means that the probability of child labor is greater than 0,452 times the children who are not working.

Table 4.
Value Nagelkerke R Square

-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
99.821 ^a	.123	.173

Source: Research results 2016 (SPSS 20 Output)

Table 4 illustrates the value of R Square is 0,173, which means that 17.3 percent of the influence of all independent variables on the dependent variable, while the remaining 82.7

percent is influenced by other variables outside the model. This means that for this research needs to be done further research to add another variable.

Table 5.
Classification

Observed		Prediction		Percentage Correct
		Child		
		Child not working	working	
Child	Child not working	56	6	90.3
	Child working	21	7	25.0
Overall Percentage				70.0

Source: Research results 2016 (SPSS 20 Output)

Logistic model used is quite good, is able to guess correctly 70.0 percent of the conditions shown in Table 5.

Table 6. Estimation Results Probability Model Against Children Work

Variabel	B	S.E.	Wald	df	Sig.	Exp(B)
sex of the child	.338	.515	.432	1	.511	1.403
the child's age	.081	.092	.778	1	.378	1.085
the presence of parents	.561	.428	1.723	1	.189	1.753
family size	.328	.223	2.152	1	.142	1.388
child birth order	-.604	.276	4.772	1	.029	.547
Constant	-2.828	1.578	3.213	1	.073	.059

Source: Research results 2016 (SPSS 20 Output)

A. Influence Factor Probability Gender Children Against Child Labour

Table 6 informs, the sex of the child is not significant at $\alpha = 5$ percent level of probability affect child labor. The result indicates that there is no difference in the probability of child labor male and female.

B. Effect of Probability Factor Age Children Against Child Labour

Table 6 explains, the child's age is not significant at $\alpha = 5$ percent level of probability affect child labor. The result indicates that there is no difference in the probability of child labor for the first child and subsequent children were born.

C. Effect of Presence of Parents Against Child Labour Probability

Table 6 shows, the presence of parents is not significant at $\alpha = 5$ percent level affects the probability of child labor. The result indicates that there is no difference in the probability of working children between the presence of a father who is still there with the others.

D. Effect of Number of Household Members Against Child Labour Probability

Table 6 explains, the number of household members is not significant at $\alpha = 5$ percent level of probability affect child labor. The result indicates that there is no difference between the probability of child labor first child and subsequent children were born.

E. Birth Order Effect of Children Against Child Labour Probability

According to estimates by comparing the value of statistics and Wald chi-square value (Sig.) Table 6., so that children born significant at $\alpha = 5$ percent level affect the likelihood of child labor.

Table 6 shows the value of the variable B birth for the negative coefficient. Means, a child born after the first child who has a higher probability of child labor as compared with the first child. With the value of the coefficient of 0.546, which means the value Odd Ratio / Exp (0604) = 0.546, shows a comparison of the probability of child labor for children born after the first child compared with the probability of the first child is 05:46. Thus it can be stated that the probability of

child labor for children born after the first child 05:46 time than the first child .compared to the first child.

IV. CONCLUSIONS

Based on the analysis of the problems affecting the factors that most children in child labor, namely: child birth order factors. This means that children born to a higher first probability to become child laborers than children born later. This study can be used as a reference for further research.

REFERENCES

- [1] Becker, Gary S. 1965. A Theory of Allocation Time, *The Economic Journal*, Vol. 75, No. 299 (Sep., 1965) , 493-517. <http://www.jstor.org/> (Accessed on January 12 2004).
- [2] Cockburn, John. 2002. Income Contributions of Child Work in Rural Ethiopia. CSAE WPS/2002-12. <http://www.csaee.ox.ac.uk/.../pdfs/2002-12text.pdf> (Accessed on May 15, 2011).
- [3] Irwanto, Sutrisno dan R. Pardoen. 1995. "Keadaan faktor-faktor yang mempengaruhi Pekerja Anak dan Industrialisasi". (The state of the factors that affect child labor and Industrialization) Prisma. Edition 2. Page. 17. Jakarta.
- [4] Tjandraningsih, Indrasari. 1995. Pemberdayaan Pekerja Anak : Studi Mengenai Pendampingan Pekerja Anak. (Empowerment of Child Labour: Child Labour Study of Mentoring), Bandung: Yayasan AKATIGA.
- [5] Ware, Helen. 1978. The Economic Value of Children in Asia and Africa: Comparative Perspective, *Papers of The East-West Population Institute*. [http://scholarspace.manoa.hawaii.edu/bitstream/handle/10125/22646/PapersOfTheEastWestPopulationInstituteNo.050EconomicValueOfChildrenInAsiaAndAfrica1978\[pdfa\].PDF?sequence=1](http://scholarspace.manoa.hawaii.edu/bitstream/handle/10125/22646/PapersOfTheEastWestPopulationInstituteNo.050EconomicValueOfChildrenInAsiaAndAfrica1978[pdfa].PDF?sequence=1)
- [6] Webbink, Ellen, Jeroen Smits, Eelke de Jong. 2010. Hidden Child Labour: Determinants of Housework and Family Business Work of Children in 16 Developing Countries. NiCE Working Paper 10-110. Nijmegen Center for Economics (NiCE) Institute for Management Research Radboud University Nijmegen P.O. Box 9108, 6500 HK Nijmegen, The Netherlands. <http://www.ru.nl/nice/workingpapers>. (Accessed on June 6, 2011).
- [7] White, B, Tjandraningsih, Indrasari. 1991. "Pekerja Anak dan Remaja di Pedesaan Jawa Barat: Pengantar Studi Lapangan". Makalah disampaikan pada Lokakarya Masalah Pekerja Anak dan Remaja Hasil Penelitian di Pedesaan Jawa Barat, (Working Children and Adolescents in Rural West Java: Introduction to Field Studies ". Paper presented at the Workshop on Child Labour and Youth Problems Research in Rural Jawa Barat) PSP-IPB, ISS, PPLH-ITB, Bogor, 18 Juni 1991.
- [8] Wu, Treena. Population Household Income, Joint Work- Schooling and Human Capital in Indonesia. Association of Amerika (Annual Meeting Program). 31 Maret-21 April 2011. Amerika Serikat. <http://hssr.duke-nus.edu.sg/publications/household-income-joint-work-schooling-and-human-capital-indonesia>