

# WAGE DETERMINATION OF THE THAI PEOPLE

**Siriwan Saksiriruthai**

*Suan Sunandha Rajabhat University, 1 U-Thong Nok Road, Dusit, Bangkok, Thailand*

*E-Mail: [siriwan.sak@ssru.ac.th](mailto:siriwan.sak@ssru.ac.th)*

## ABSTRACT

Abstract— This paper aims at examining current factors influencing wages of Thai people. With the estimation using Thailand Labor Force Survey data, the result declares the positive relationship between wage and income since wage takes the largest share of Thai people's earning. Education positively affects individual wages, which corresponds to the finding that higher wage earned as age rises. Workers whose occupation requiring longer years of schooling; professionals and technicians, receive greater wages. Employees in manufacturing industry comparatively gain more earnings than those in agricultural ones. People living in urban area, especially in big cities, possess greater chances for more wages. The findings lead to recommendations in further studies on wage gaps between male and female and between workers in urban and rural area. To increase wages, policymakers have to promote in-school education and provide skills that meet the need of the labor market.

Keywords— Wage, income, Labor Force Survey, Thailand

## INTRODUCTION

Wage is a common earning of people and a core element in wage and income. As individual wage and income play a crucial role for economic development, it is important to find factors affecting wages. Theoretically, individual wage is determined by education and work experiences (Mincer, 1974). However, empirical evidences confirmed the relationship between wages and other factors, including socioeconomic characteristics and work-related factors.

This paper aims at examining factors impacting wages of the Thai people. Both socioeconomic characteristics and work-related variables are included in the wage determination models; monthly income, education, gender, age, marital status, occupation, industry, firm size, region and area. The results help find out not only factors potentially influencing wage increase, but also Thailand's labor market behavior.

## LITERATURE & THEORY

A large number of research studies provide evidences in wage determinants. Those factors include education, age, gender, marital status and working hours (for example, Navarro & Selman, 2014; Bukit et al, 2018; Nurpratiwi et al, 2020). However, empirical studies also found the links between wages and other factors, e.g., area, industry (for example, Wannakrairoj, 2013; Garofalo & Agovino, 2016; Cheng et al, 2020 and Thum, 2022).

Level of education is among the factors widely stated for its effects on workers' wages and income because education is included in Mincer earning function and has long been believed to be a crucial influence of wages (Mincer, 1974; Mincer, 1975 and Agovino & Garofalo, 2016). Number of years of education attainment was found positively correlated to wage earned by each worker as education was associated with labor productivity (Wannakrairoj, 2013 and Navarro & Selman, 2014). The increasing of years of schooling was supposed to induce labor productivity and work performance. The magnitude

of the effects of education on wages depends on other factors, for example, industry (Rycx et al, 2015; Ushakov & Vanpetch, 2017), region (Garofalo & Agovino, 2016), and gender (Rycx et al, 2015).

Empirical evidences declared the existence of wage differences between genders. According to research studies in the recent years, gender wage gap was reducing in some regions while significantly widening in some others (for example, Blau & Kahn, 2016; Schifman et al, 2019 and Iwasaki & Ma). With the equivalent qualifications, male workers usually enjoyed more wages than female did. One of the reasons was that female employees were assumed to take the main responsibility in domestic works, e.g., housework, and possibly expected to allocate shorter time for working in the market. Therefore, male workers received more opportunities for promotion and earned higher wages.

The gap was found exist not only in gender, but also in people working in urban and rural area. People working in urban area typically earned higher wages because there are more firms and business units located in the area. Therefore, there are more job opportunities offered. Previous studies found the significantly larger wages for workers in urban area (Cheng et al, 2020 & Thum, 2022). Nevertheless, Verstraten et al (2018) found that only some groups of employees received urban wage growth benefits while Bower et al (2021) stated that a wage rise was resulted from urbanization process for productivity and wage growth.

How age change influence individual's wage is still widely discussed. The older possess more work experiences, leading to the increase in labor productivity and then higher wage earnings. On the other hand, older people tend to encounter physical health problems, which probably become less productive. Recent research works indicated that how age and wage changes were correlated was still inconclusive (Myck, 2007 and Bukit et al, 2014). Casanova (2012) found that full-time workers were likely to earn more wages as age increased and vice versa.

This paper applies the socioeconomic characteristics as well as individual's working hours as into models of wage determination to find whether the factors mentioned above do influence wages of the Thai people. Two models are analyzed in the next section for the wage determination, and followed by results and interpretation before conclusion and recommendations for future research.

## DATA AND EMPIRICAL SPECIFICATION

In order to identify factors determining wages of the Thai people, this research work employ Thailand National Statistical Office's Labor Force Survey for estimation. As the data were collected from Thai people in every part of the country, the findings can explain factors influencing wage of Thai people for the whole kingdom.

The wage determination is estimated by using the variables which potentially affect individual wage. The variables include age, number of years educated, gender, marital status, occupations, industries, area (municipal and non-municipal), region, and work time. Two models are constructed to estimate wage and wage change respectively. Model (1) estimates factors affecting individual wage ( $wage_i$ ) whereas Model (2) examines factors influencing individual wage changes ( $\ln wage_i$ ) as follows,

$$wage_i = \alpha_0 + \alpha_1 \text{monthly income}_i + \alpha_2 S_1 + \alpha_3 \text{work}_i + \varepsilon_i \quad \text{--- (1)}$$

$$\ln wage_i = \gamma_0 + \gamma_1 \ln \text{monthly income}_i + \gamma_2 S_2 + \gamma_3 \ln \text{work}_i + \mu_i \quad \text{--- (2)}$$

where  $wage_i$  represents individual  $i$ 's wage rate,  $\ln wage_i$  is individual wage change; whereas  $\text{monthly income}_i$  and  $\ln \text{monthly income}_i$  include individual non-labor earnings.  $S_i$  is vector of socio-economic characteristics;  $\text{work}_i$  and  $\ln \text{work}_i$  are number of work hours,  $\varepsilon_i$  and  $\mu_i$  are the error terms.  $\alpha_0$  and  $\gamma_0$  are coefficients for the estimation of  $wage_i$  and  $\ln wage_i$  respectively.

## RESULTS

The results from model estimation for wage determinants of the Thai people illustrate relationship between wage and other variables. The regression for wage changes as in Model (2) provides more obvious relationship between wage change and other factors. Individual wage is positively correlated to monthly income because wage takes the highest proportion of Thai workers' income. On the contrary, number of working hours is inversely related to wages. While the estimation does not confirm the existence of influence of age on wages in Model (1), the regression result in Model (2) indicates positive change of each person's wage in response to age increase.

The estimation findings also confirm the impact of education on individual wage earning as years of education indicate labor productivity recognized by Thailand's labor market. Whether workers in dissimilar marital status earn different wages is indetermined. From the two models, the difference between wages of the two genders is also detected, which lower pay for female.

When dummy variables relevant to area and work are included, the findings significantly show substantial differences of wage received by dissimilar groups. According to the results, professionals and technicians earn more than others whereas those working in manufacturing industry possess more wage earnings. In addition, people working in a larger firm are likely to earn more wages. Employees working in Bangkok are provided by higher wages than those in other regions. This corresponds to the findings of greater wages received by workers in municipal area.

## CONCLUSION AND FUTURE WORK

The association between wage and monthly income reflects the substantially high proportion of wage earning on total income. This shows the dependency on wage income of Thai workers. As higher education induces wage, the older are more likely to receive greater earnings. This finding is supported by the greater wages for professionals and technicians, who spent longer time in schooling to be qualified for their jobs. The positive correlation between wages and education indicates that promotion in education helps enhance wages.

The interesting issues from the findings are that there is a substantial wage difference between male and female earners while workers in urban area also receive greater wage. It implies the tendency of the existence of wage gaps between genders and different areas, which can be the topics for further investigations. As the result declares the greater wage for manufacturing industry, while those in agricultural industry, which is Thailand core competency, earn lower wages, it clarifies the need in develop agricultural industry in order to attract productive workers for industry growth. When wage earnings of employees in a larger firm becomes greater, it symbolizes the need in smaller-sized business; SMEs and startups, development for greater business profits and income, which leads to wage and employment increases.

## ACKNOWLEDGMENTS

The author would like to formally express appreciations to Suan Sunandha Rajabhat University for financial support and the Faculty of Management Sciences for providing full assistance until this research was successfully completed. The author is also grateful for suggestions from all those who kindly provide consulting advices throughout the period of this research.

## REFERENCES

- Agovino, M. & Garofalo, A. (2016). The Impact of Education on Wage Determination between Workers in Southern and Central-Northern Italy. *Panoeconomicus*. 63 (1), 25-43
- Blau, F. D. & Kahn, L. M. (2016). *The Gender Wage Gap: Extent, Trends, and Explanations*. NBER Working Paper 21913. Retrieved from <http://www.nber.org/papers/w21913>
- Bower, J.; Gupta, S. & Menon, C. (2021) *Is There an Urban Wage Premium in Rwanda?* Working Paper Number C-20061-RWA-1. International Growth Centre. Retrieved from <https://www.theigc.org/sites/default/files/2021/03/Bower-et-al-2021.pdf>
- Bukit, I. N. M.; Ismida, Y.; Maulana, R. & Nasir, M. (2018). The Influence of Wage, Age and Experience to Labor Productivity in Construction Works in Kota Langsa, Aceh. *MATEC Web of Conferences*. 147 (06004), 1-4. Retrieved from [https://www.matec-conferences.org/articles/mateconf/pdf/2018/06/mateconf\\_sibe2018\\_06004.pdf](https://www.matec-conferences.org/articles/mateconf/pdf/2018/06/mateconf_sibe2018_06004.pdf)
- Casanova, M. (2012). *Wage and Earnings Profiles at Older Ages*. Working Papers 2012-001. Human Capital and Economic Opportunity Working Group. Retrieved from <https://ideas.repec.org/p/hka/wpaper/2012-001.html>
- Cheng, H.; Hu, D. & Li, H. (2020). Wage Differential between Rural Migrant and Urban Workers in the People's Republic of China. *Asian Development Review*. 37 (1), 43-60.
- Iwasaki, I. & Ma, X. (2020). Gender Wage Gap in China: A Large Meta-Analysis. *Journal for Labour Market Research*. 54 (2020) Retrieved from <https://doi.org/10.1186/s12651-020-00279-5>
- Mincer, J. (1974). The Human Capital Earning Function. In J. Mincer (ed.), *Schooling, Experience, and Earnings* (pp. 83-96). NBER. Retrieved from <https://www.nber.org/system/files/chapters/c1767/c1767.pdf>
- Mincer, J. (1975). Education, Experience, and the Distribution of Earnings and Employment: An Overview. In J. Mincer (ed.), *Education, Income and Human Behavior* (pp. 71-94). NBER. Retrieved from <https://www.nber.org/system/files/chapters/c3693/c3693.pdf>
- Myck, M. (2007). *Wages and Ageing: Is There Evidence for the "Inverse-U" Profile?* IZA Discussion Paper No. 2983. Retrieved from <https://docs.iza.org/dp2983.pdf>
- Navarro, L. & Selman, J. (2014). Wage Differentials between the Public and Private Sector in Chile: Evidence from longitudinal data. *Capel Review*. 112, 90-106.
- Nurpratiwi, I.; Ak, S. & Yunisvita. (2020). Factors that Influence Wages Differences in Formal Sector on Male and Female Workers in Palembang City. *Theoretical and Applied Economics*. XXVII (1), 147-158.
- Rycx, F.; Saks, Y. & Tojerow, I. (2015). Does Education Raise Productivity and Wages Equally? The Moderating Roles of Age, Gender and Industry. *IZA Discussion Paper No. 9043*. Retrieved from <https://docs.iza.org/dp9043.pdf>
- Schifman, L.; Oden, R. & Koestner, C. (2019). Gender Wage Gap: Causes, Impacts, and Ways to Close the Gap. In W. Leal Filho et al. (eds.), *Gender Equality*, Encyclopedia of the UN Sustainable Development Goals, [https://doi.org/10.1007/978-3-319-70060-1\\_50-1](https://doi.org/10.1007/978-3-319-70060-1_50-1)
- Thum, J.S. (2022). Urban and Rural Wage Disparities in Illinois. *The Park Place Economist*. 29. Retrieved from <https://digitalcommons.iwu.edu/parkplace/vol29/iss1/6>
- Ushakov, D. & Vanpetch, Y. (2017). Education Funding as a Source of Economic Growth: Guidelines for Governance Reforming. *The EUrASEANs: Journal on Global Socio-Economic Dynamics*. 5 (6), 93-102.

- Verstraten, P.; Verweij, G. & Zwaneveld, P. (2018). *Why Do Wages Grow Faster in Urban Areas? Sorting of High Potentials Matters*. CPB Discussion Paper 377. CPB Netherlands Bureau for Economic Policy Analysis. Retrieved from <https://www.cpb.nl/sites/default/files/omnidownload/CPB-DiscussionPaper-377-why-do-wages-grow-faster-in-urban-areas.pdf>.
- Wannakraijoj, W. (2013). The Effect of Education and Experience on Wages: The Case Study of Thailand in 2012. *Southeast Asian Journal of Economics*. 1(1), 27-48