

## *The Impact of an Increase in Minimum Wage in Vietnam*

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### **Abstract**

There are few studies on the implementation and effects of a minimum wage increase on low-wage workers in Vietnam. A few studies have investigated whether or not the minimum wage has had a negative effect on low-wage employment status, but, to date, no work has explicitly considered the impact of an increase in the minimum wage on working hours and allowances. The main contribution of this study is to provide empirical evidence of the effects of the minimum wage increases on wages, working hours, and allowances of low-wage workers in the formal sector of Vietnam by using the different-in-different method to analyze Vietnam Household Living Standard Surveys from 2014 to 2016. The estimator results show that most low-wage workers had received higher wages through a minimum wage, while the monthly wages of low-wage workers in the rural region remain unchanged. In addition, there is a significantly positive effect on working hours across all regions. Furthermore, the author also finds no evidence of the allowance effect on low-wage workers after the intervention. The main policy implications from these findings are that monitoring should be promoted in rural areas to ensure that the benefits from the implementation of the minimum wage reach low-wage workers. Next, the government should reduce the number of maximum working hours per week. At the same time, it is necessary to adopt hourly minimum wages for both full-time and part-time workers. Finally, the law remains ambiguous about the payment of allowances to workers and needs to be clarified.

Keywords: Impact, Minimum Wage, Increase in Minimum Wage, Vietnam

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## **Introduction**

The International Labor Organization defines minimum wages as "the minimum amount of remuneration that an employer is required to pay wage earners for the work performed during a given period, which cannot be reduced by collective agreement or an individual contract." (Minimum Wage Systems, 2014).

The minimum wage is considered as a popular tool used by politicians to intervene in the economy as well as with regard to social welfare, especially for low-wage workers. About 171 countries around the world have minimum wage regulations, which comprise about 92% of the total member countries of the International Labor Organization (ILO, 2015). A trend that emerged in recent years is that more and more countries have enacted minimum wage laws, and governments have decided on this issue to protect workers. However, different countries implement different minimum wage policies. In general, the main purpose of the minimum wage in most of those countries is to increase the living standard of workers, especially low-educated workers (Carpio & Pabon, 2014).

Vietnam is a member of the ILO and is also among the majority of members that regulate minimum wages. Recently, the objectives, criteria, and mechanisms for determining minimum wages in Vietnam follow the provisions, conventions, and recommendations of ILO. In addition, Vietnam is also known for its abundant labor supply at low wages. Therefore, an increase in the minimum wage is a sensitive issue for firms and workers. In 2015, the government adjusted monthly minimum wages for four different levels throughout Vietnam.

In the case of Vietnam, there are few studies that estimate the effect of minimum wage increases; those studies just investigated its effects on employment and wages (Carpio et al., 2013). In addition, the evidence was from a time when the minimum wage regulation was different from today. Moreover, there seems to have been no research about the impact of an increase in the minimum wage on working hours and allowances in Vietnam. Therefore, more research on the effect of minimum wage increases in Vietnam is needed.

## **Methodology**

From the literature review, there are several models used to measure the impact of minimum wage; however, the most common approach to estimating minimum wage effects is the estimates of panel data models (Dale Belman & Paul Wolfson, 2015). This study will measure the impact of an increase in the minimum wage on wages, working hours, and allowances of low-wage workers by applying the Difference in Differences (DiD) estimator and Fixed effect estimator methods. Those methods will analyse subjects into two groups; and the first group is called the treatment group which includes workers treated by the minimum wage policy, and the second group is the control group including workers who are not affected by the minimum wage policy. Workers in both groups work in the formal sector. An important assumption of the method is that those two groups have similar characteristics at the time before the policy implementation. Thus, the distinction of outcome variables between the control group and the treatment group is caused by the impact of the minimum wage increases.

In addition, in order to keep the assumption of the DiD method, the research uses a fixed effected estimator model to add more control variables which allow the research to measure

other factors that might affect workers' outcomes. Commonly, the set of control variables is limited, so this study includes most of the factors affecting the outcome variables such as gender, age, education, and marital status. After controlling the difference between the two groups, the model gets the estimation results of the effects of the minimum wage increases on low-wage workers in formal sector.

The research uses panel data from two surveys of Vietnam Household Living Standard Surveys (VHLSS) in 2014 and 2016. Based on the minimum wage increase in 2015, the author selected certain individuals in the treatment group and the control group. This included basic demographics, wages, working hours, working days, and allowances.

These estimation results, such as changes in wages, working hours, and allowances of low-wage workers in the treatment group, the research suggests how the minimum wage can be adjusted to make it more effective.

## **Results and Discussion**

By using two different models to estimate the impact of an increase in the minimum wage on workers' outcomes in the formal sector of Vietnam, the estimator results from the two models are quite similar. The analysis discovered that raising the minimum wage increased monthly workers' wages in most regions, with the exception of workers in level 4, where small and micro small firms perform poorly to comply with the minimum wage policy. In addition, while there is no evidence of an increase in working hours per day in the treatment group, one issue to consider is that employers increased total worker working hours per year by increasing the number of working days in response to higher minimum wages. Furthermore, employers did not reduce allowances of low-wage workers after the government adjusted new minimum wage levels in 2015.

### **▪ The Impact of the Minimum Wage Increases on Wages**

The intervention to raise the minimum wage levels was implemented to improve the living standard of workers, through which the government expected low-wage workers to receive higher wages. Using the different-in-different technique, the estimator result suggests that, in general, an increase in the minimum wage has a positive effect on the wages of workers who are covered by the minimum wage policy. Since the minimum wage level is fundamental in calculating the total wages of workers, so an increase in the minimum wage leads to an increase in the total wages. The result of this study is in line with a recent study in Vietnam (Carpio et al., 2013) and Gindling and Terrell (2004) in Costa Rica.

In contrast, in this study, there is no significant difference in monthly wages between workers in the treatment group who were covered by the policy and workers in the control group who were uncovered by the policy in the rural region of Vietnam by increasing the minimum wage. One possible reason to explain this result is that firms in region 4 are almost all medium, small and micro firms, of which medium firms account for only 1.6% of the total number of firms located in the region (Chu, 2020). In addition, according to the latest ILO Wage Report, the case study in Thailand shows that micro and small firms are the most non-compliant with the minimum wage law. Similarly, Nguyen (2013), using the kernel destiny method, also found that employers in Vietnam have low compliance with the minimum wage regulation. As a result, this issue of firm size is likely to explain why workers' wages in the rural region did not affect after the minimum wage increase in Vietnam.

### ▪ **The Impact of the Minimum Wage Increases on Working Hours**

Working hours of low-wage workers in treatment group across all regions of Vietnam increased significantly after the government implemented the new minimum wage levels in 2015. Although the number of working hours per day of workers was unchanged, total working hours per week increased due to an increase in total working days. Through raising minimum wage intervention, the government expects employers to pay a higher wage to low-wage workers in the formal sector, but places pressure on the employer to deal with increasing labor costs. As a result, they might find some way to avoid an increase in production costs caused by higher minimum wages. In such cases, employers increase working hours to offset the amount of raising wages causing by higher minimum wage levels. That result is similar to a case study in China where the government applied a monthly minimum wage like Vietnam (Jia, 2014). In contrast, a negative impact on working hours was found in countries where the government set hourly minimum wages (Zavodny, 2000; Burauel et al., 2018).

There are possible explanations for these effects of the minimum wage. First, it comes from the wage law of Vietnam. Although the government has not applied an hourly minimum wage for workers, they introduced a regulation for paying for working extra hours. Particularly, working one extra hour is calculated by multiplying the employee's actual wage for one hour of work by the lowest factor of 150 percent. The actual wage for one hour of labor is calculated by dividing the total monthly wage by the number of working days in a month and then by the number of working hours in one day (usually 8 hours). Therefore, the cost of one hour of overtime is higher than the cost of one hour of work at the minimum wage. As a result, employers will not increase workers' working hours beyond the specified number of hours (usually 8 hours per day) in response to a minimum wage increase.

In response, employers will instead increase the number of workers' working days to offset the costs incurred by the minimum wage increase. Thus, the average total number of working hours in a day does not change, but the total number of working hours in a year increases as working days increase. With this response, the employer will not increase the labor costs as a result of the increased number of working days. The reason is that according to labor law, an employee's standard working time cannot exceed 8 hours per day and 48 hours per week. In fact, according to the 2014 analysis results of workers in the treatment group, the average number of working hours per day is about 7.9 hours, and the average number of working days in a week is only 4.5 days. Therefore, the employer can increase the employee's working days without breaking the law with the current wage.

Another possible explanation comes from a practical issue. Carpio et al. (2013) claim that raising the minimum wage reduced Vietnam's formal sector employment. Thus, employers tend to demand more work from employees who remain on the job. As a result, they increase total workers' working hours to respond to changes in minimum wage levels.

### ▪ **The Impact of the Minimum Wage Increases on Allowances**

An increase in minimum wage levels in 2015 did not have a significant effect on the monthly allowances of low-wage workers who were covered by the minimum wage policy. However, some workers have claimed that as a result of raising minimum wage levels, there are employers who somehow find ways to cut down labor costs by reducing workers' allowances.

In fact, monthly allowances of workers were unchanged after the government implemented the new minimum wage levels.

The possible explanation for that result comes from a practical issue. One could argue that minimum wage levels in Vietnam remain relatively low, meeting only around 80% of workers' basic living needs (Labor Newspaper, 2018). As a result, if employers reduce allowances, they may face potential risks regarding future labor supply. Furthermore, because minimum wage levels are deemed insufficient to meet a basic living standard, the low-wage workers may be enticed to seek out a new job market with higher wages. According to the Ministry of Labor-Invalids and Social Affairs statistics, from 2010 to 2016, the total number of workers exported to Northeast Asian markets such as Japan, Korea, and Taiwan were 9,8776 per year, a 69 percent increase from 2000 to 2009, of which unskilled labor accounts for half of total employment. Therefore, it may be a risk of a labor supply shortage in the domestic market in the future.

### **Recommendation**

(i) The main policy implication deriving from these findings is that in order to protect the benefit for low-wage workers in terms of wages across all regions of Vietnam, policymakers should determine labor market profiles and consider employer subsidies if it is necessary. This is because firms in rural areas tend to have low productivity and would not be able to afford higher minimum wage. Additionally, in order to adjust minimum wage levels, it is important to have a clear formula that takes into account many factors.

(ii) To ensure employers' compliance with the minimum wage policy, policymakers should increase the allocation of resources for labor inspectors. At the same time, penalties of non-compliance should be strong enough and described clearly in the minimum wage regulations and be reviewed and be adjusted more often. In addition, both employers and employees should have wage and employment records which labor inspectors are able to monitor and determine compliance more easily.

(iii) The result found that an increase in minimum wage levels leads to dramatically increasing the number of working hours across all regions of Vietnam. However, the increase in working hours may be associated with the risk of workers' health. According to the World Health Organization, working long hours per week is associated with risks from diseases that kill hundreds of thousands of workers each year. Especially, Southeast Asia and the Western Pacific were the most affected regions. Furthermore, the Vietnamese government only adopted a monthly minimum wage; at the same time, maximum working hours per week is much higher compared to other countries. Therefore, the author supposes that policymakers should reduce the maximum working hours and also adopting an hourly minimum wage for low-wage workers in order to avoid the negative impact of the minimum wage increase on low-wage workers. At the same time, it is necessary to increase the monitoring of employers about enforcement and compliance with the minimum wage policy.

(iv) Looking at the characteristics of workers who were covered by the minimum wage policy, it is clear that they are less-educated, and most of them are married. Therefore, to alleviate the negative effects of minimum wage increases, the Vietnamese government should support them by other policies such as investing in education, training, and medical services that will contribute to improving their productivity to avoid the negative effect.

## **Conclusion**

The main purpose of raising the minimum wages of Vietnam is to improve the living standard of low-wage workers so that they can meet their basic needs (Minimum wage regulation, 2013). However, this positive effect can be negated if the higher minimum wage levels lead employers to exploit labor. Based on the minimum wage literature, although many studies suggested that raising minimum wages brought benefits to low-wage workers, others showed a negative effect on labor outcomes after implementing the minimum wage increases due to employers' response to reduce production costs. In Vietnam, the debate about the impact of an increase in minimum wage levels still continues even with the lack of empirical evidence.

The purpose of this quantitative study was to estimate the impact of raising minimum wage levels on different aspects, both financial benefits and labor exploitation. Based on the empirical evidence of the analysis, the study was able to make some recommendations to adjust the minimum wage regulation for more effectiveness. Three conclusions can be made from this study.

The first conclusion is that raising the minimum wage levels have increased the monthly wages of most low-wage workers in the formal sector in general but did not affect workers' wages in the rural region. Although this result is in line with previous empirical evidence, this study also indicates that minimum wage did not have a significant impact on low-wage workers in the rural region. This means those workers have not benefitted from higher minimum wage. However, in this study, by measuring the wage effect in different regions, the impact of the new minimum wage regulation can be seen.

The second conclusion is that the effect of the minimum wage increases on working hours was significant across all regions of Vietnam. Although there have been some studies on the impact of minimum wage increases in Vietnam, there is no empirical evidence on the working hour effect of raising minimum wages. Therefore, this study contributes to the research on the impact of an increase in minimum wage levels on the working hours of low-wage workers in the formal sector. The result shows that there was a dramatic increase in the number of hours worked in the formal sector following a minimum wage increase. The author argues that based on the minimum wage regulations, employers might have different responses to a higher minimum wage. For example, because the government of Vietnam set only a monthly minimum wage, in order to reduce production costs caused by raising the minimum wage, an employer might increase hours of work. This contrasts with some countries where governments adopted an hourly minimum wage, and the evidence mentioned in the discussion part of this study shows that there was a decrease in working hours after implementing a new minimum wage.

The third conclusion is that there is no evidence to justify the often-made argument that employers reduced allowances of low-wage workers after implementing higher minimum wage levels. However, it is necessary to have a clear list of allowances to protect the benefit for low-wage workers.

The main implication from these findings indicates that, first and foremost, the government should promote monitoring in rural areas to protect low-wage workers. Second, the government should reduce the maximum number of working hours per week. At the same time, hourly minimum wages for both full-time and part-time workers are required. Finally,

allowances should be addressed clearly to mitigate the negative impact of minimum wage increases. Thus, the findings of this research may also have implications for contexts similar to Vietnam.

## References

- Alatas, V. and L. Cameron, "The Impact of Minimum Wages on Employment in a Low-Income Country: A Quasi-natural Experiment in Indonesia," *Industrial and Labor Relations Review*, (Jan, 2008), Vol. 61, n. 2, pp 201-223.
- Burauel, P., Caliendo, M., Grabka, M. M., Obst, C., Preuss, M., & Schröder, C. (2020). The Impact of the Minimum Wage on Working Hours. *Jahrbucher Fur Nationalokonomie Und Statistik*, 240(2-3), 233-267.
- Card, David, and Alan B. Krueger. (1994). "Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania." *American Economic Review* 84 (September): 772-793.
- Carpio, D., del Carpio, X., Nguyen, C., Nguyen, H., & Wang, C. (2013). *The Impact of Minimum Wages on Employment, Wages and Welfare: The Case of Vietnam*.
- Carpio, X. del, & Pabon, L. (2014). *Minimum Wage Policy: Lessons with a Focus on the ASEAN Region-2 4-\$c Minimum Wage Policy: Lessons with a Focus on the ASEAN Region*. World Bank, Washington, DC.  
<https://openknowledge.worldbank.org/handle/10986/19027>
- Chu, H. (2020). Development of small and medium-sized enterprises in Vietnam today. (n.d.). Retrieved from <https://vass.gov.vn/nghien-cuu-khoa-hoc-xa-hoi-va-nhan-van/Phat-trien-doanh-nghiep-nho-va-vua-96>
- ILO. (1970). *Convention C131 - Minimum Wage Fixing Convention, 1970 (No. 131)*. (n.d.). Last accessed on July 1, 2021. Retrieved from [https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100\\_IL O\\_CODE:C131](https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_IL O_CODE:C131)
- Decree No. 05 / CP of January 26, 1994 temporarily provided for the temporary implementation of new salaries for incumbents in State agencies, the Party, mass organizations, the armed forces and in other enterprises, adjusting pension rates, subsidy levels for social policy beneficiaries.
- Devereux, S. (2005) 'Can Minimum Wages Contribute to Poverty Reduction in Poor Countries?' *Journal of International Development*, 17: 899-912.
- Dinkelman, T. and V. Ranchard, "Evidence on the Impact of Minimum Wage Laws in the Informal Sector: Domestic Workers in South Africa," *Journal of Development Economics*, (2012), Vol. 99, pp. 27-45.
- Dube, A., T. W. Lester, and M. Reich. 2010. "Minimum Wage Effects Across State Borders: Estimates Using Contiguous Counties." *The Review of Economics and Statistics* 92 (November): 945-964.
- Elek, P., J.Kollo, B. Reiszser, and P. Szabo. (2011). "Detecting Wage Under-Reporting Using a Double Hurdle Model", IZA Discussion Paper 622.

- Exchange Research. (n.d.). Last accessed on May 20, 2021. Retrieved from [www.quanhelaodong.gov.vn](http://www.quanhelaodong.gov.vn)
- ILO. (2014). General Survey concerning the Minimum Wage Fixing Convention, 1970 (No. 131) , and the Minimum Wage Fixing Recommendation, 1970 (No. 135) , Committee of Experts on the Application of Conventions and Recommendations. Geneva: ILO.
- ILO. (2019). Labor Code Amendments Help Viet Nam Get Closer to International Labor Standards. (n.d.). Last accessed on July 1, 2021. Retrieved from [http://www.ilo.org/hanoi/Informationresources/Publicinformation/comments-and-analysis/WCMS\\_721939/lang--vi/index.htm](http://www.ilo.org/hanoi/Informationresources/Publicinformation/comments-and-analysis/WCMS_721939/lang--vi/index.htm)
- Gindling, T., N. Mossaad, J.D. Trejos. (2013), "The Consequences of Increased Enforcement of Legal Minimum Wages in a Developing Country: An evaluation of the impact of the *Campaña Nacional de Salarios Mínimos* in Costa Rica" Mimeo
- Gindling, T. H., & Terrell, K. (2004). *The Effects of Multiple Minimum Wages Throughout the Labor Market*. [www.iza.org](http://www.iza.org)
- Gindling, T. H., Terrell, K., Blank, R., Ferreira, F., Hamermesh, D., Humphreys, B., Kennan, J., Ravallion, M., Lemos, S., Sauma, P., Trejos, J. D., & Rafael, J. (2005). *The Effects of Multiple Minimum Wages Throughout the Labor Market: The Case of Costa Rica* \*.
- Hahn, J., Todd, P., & van der Klaauw, W. (2001). Identification and estimation of treatment effects with a regression-discontinuity design. *Econometrica*, 69(1), 201–209.
- Harrison, A. and J. Scorse, "Multinationals and Anti-Sweatshop Activism," *American Economic Review*, (March 2010), Vol 100, n. 1, pp 247-273.
- Islam, I., & Nazara, S. (2000). *Minimum Wage and the Welfare of Indonesia Workers*.
- Jia, P. (2014). Employment and working hour effects of minimum wage increase: Evidence from China. *China and World Economy*, 22(2), 61–80.
- Leckcivilize, A., (2013) "Minimum Wage and Wage Inequality in Thailand: A Failed Instrument?" London School of Economics. Department of Economic
- Long working hours killing 745,000 people a year, study finds - BBC News*. (n.d.). Last accessed on July 1, 2021. Retrieved from <https://www.bbc.com/news/business-57139434>
- Mayneris, F, S. Poncet and T. Zhang, *The Cleansing Effect of Minimum Wage: Minimum Wage Rules, Firm Dynamics and Aggregate Productivity in China*, August, 2014, <https://ideas.repec.org/p/cii/cepidt/2014-16.html>.
- Minimum wage increase: Concerned that employers will increase costs, workers will not benefit*. (n.d.). Last accessed on July 1, 2021. Retrieved from <https://cafef.vn/tang-luong-toi-thieu-lo-ngai-doanh-nghiep-tang-chi-phi-nguoi-lao-dong-chang-loi-gi-20170807092705656.chn>

- Neumark, David, and William Wascher. 1992. "Employment Effects of Minimum and Subminimum Wages: Panel Data on State Minimum-Wage Laws." *Industrial and Labor Relations Review* 46 (October): 55-81.
- OECD (2004). "Tax Administration in OECD Countries: Comparative Information Series (2004)".
- Officials Want to Limit Vietnam's Work Week to 40 Hours*. (n.d.). Last accessed on July 1, 2021. Retrieved from <https://learningenglish.voanews.com/a/officials-want-to-limit-vietnam-s-work-week-to-40-hours/5194081.html>
- Papps, K. L., "The Effects of Social Security Taxes and Minimum Wages on Employment: Evidence from Turkey," *Industrial and Labor Relations Review*, (July, 2012), Vol. 65, n. 3, pp. 686-707.
- Portal of the Ministry of Labor, War Invalids and Social Affairs. (n.d.). Last accessed on July 1, 2021. Retrieved from <http://www.molisa.gov.vn/Pages/tintuc/chitiet.aspx?tintucID=26175>
- Republic of Indonesia (2003) "Act No3 concerning Manpower", March 25, 2003 in <<http://www.ilo.org/dyn/natlex/docs/WEBTEXT/64764/65275/EO31DNO1.htm>>.
- Revolutionary Party/Thailand (1972) "Announcement No 103 B.E. 2515, March 16, 1972"; cited in the Labor Protection Act of 1998.; section 3.
- Schmillen, A. D., & Packard, T. G. (2016). *Vietnam's Labor Market Institutions, Regulations, and Interventions Helping People Grasp Work Opportunities in a Risky World*.
- Some issues raised in determining the minimum wage. (n.d.). Last accessed on May 30, 2021. Retrieved from <https://sonoivu.sonla.gov.vn/1282/30665/64468/504543/tin-cai-cach-hanh-chinh-cua-so/mot-so-van-de-dat-ra-trong-viec-xac-dinh-muc-luong-toi-thieu>
- Strobl, E. and F. Walsh, "Minimum Wages and Compliance: The Case of Trinidad and Tobago," *Economic Development and Cultural Change*, (January, 2003), Vol. 51, n. 2, pp. 427-450.
- The Law on Manpower Affairs (2003). Last accessed on July 1, 2021. Retrieved from <https://www.ilo.org/dyn/travail/docs/760/Indonesian+Labour+Law+-+Act+13+of+2003.pdf>
- The third meeting discussed the regional minimum wage increase in 2018 | Latest News 24h - Read Labor Newspaper online - Laodong.vn*. (n.d.). Retrieved from <https://laodong.vn/cong-doan/phien-hop-thu-ba-ban-muc-tang-luong-toi-thieu-vung-nam-2018-547389.lido>
- The World Bank (2011). Optimal Design for Minimum Wage Policy in Malaysia.
- The World Bank (2012). Philippines Development Report-Creating More and Better Jobs. The World Bank, Washington DC.

The World Bank (2012). *Vietnam Development Report 2012: Market Economy for a Middle-income Vietnam*.

Van der Klaauw, W. (2002). Estimating the effect of financial aid offers on college enrollment: A regression-discontinuity approach. *International Economic Review*, 43(4), 1249–1287.

Zavodny, M. (n.d.). *The effect of the minimum wage on employment and hours*. Retrieved from [www.elsevier.nl/locate/reconbase](http://www.elsevier.nl/locate/reconbase)