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The Effect of Philippine National Wage Variation: The Top-Down Microsimulation Model

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Abstract

The study aims to investigate the effect on Philippine occupational choice of House Bill No.7787, also known as the National Wage Law, which was filled by the Philippine Congress that mandates the implementation of an across the board minimum daily wage of Php750.00 to all workers in the Philippines. This study had used the Computable General Equilibrium-Top-Down Behavioral Microsimulation approach to determine the effect of National Wage Law on occupational choice. The results of the study revealed that the implementation of said National Wage Law would affect the distribution of labor force across occupational classification such as wage workers, entrepreneurial farming activities workers, and entrepreneurial non-farming activities workers. This has resulted from a higher utility that will be derived from the wage working sector once the National Wage Law will be implemented. Further, among regions in the Philippines, the Calabarzon, National Capital Region, and Central Luzon had recorded the highest number of workers who prefer the wage income sector. The findings of the study also suggest that the Philippine agricultural sector will be greatly affected by the National Wage Law due to the preference of workers to shift from the entrepreneurial farming sector to belong to the wage sector.

Keywords: Computational, Microsimulation, Occupational Choice, Wage, Household Income

JEL Classification Code: H20, H21, O11, G38

1. Introduction

It is a universal belief that a mandate for an increase in the minimum wage is a necessary condition to assist the poor towards achieving an earning level that would give them a life that is healthy and dignified. The purpose of minimum wages is to protect workers against unduly low pay. They help ensure a just and equitable share of the fruits of progress to all, and a minimum living wage to all who are employed and in need of such protection. It is commonly believed that mandating higher legal minimum wages is needed to help the poor earn a level of income that would allow them healthy and dignified lives. It is also seen as a tool to protect the weak against exploitation. This popular belief motivates and justifies the recurrent demands for hefty increases in legal minimum wages (Paqueo et al., 2016). Minimum wages are accepted globally to be a vital means to both combating poverty and, equally crucially, ensuring the vibrancy of any economy.

In 2012, the Department of Labor and Employment (DOLE), through the National Wages and Productivity Commission (NWPC), had implemented the two-tiered wage system (2TWS). The two-tiered wage, as a policy reform measure, is aimed at minimizing the unintended outcomes of the mandated minimum wage, improving the coverage of the vulnerable sectors, and promoting productivity improvement and gain-sharing. The two-tiered wage system is a reform that maintains the mandatory minimum wage as the first tier; complemented by a voluntary productivity-based pay scheme as the second tier. In Tier 1, minimum wage rates are determined by factors such as poverty threshold, meanwhile, the prevailing wage rates are being determined by the Labor Force Survey and socio-economic indicators such as inflation, employment figures, Gross Regional Domestic Product (GRDP), among others, which ensures

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better workers' protection. However, in Tier 2, over and above minimum wage is the voluntary productivity-based pay, which encourages workers and enterprises to become more competitive and productive by rewarding employees supplementary pay based on the quality of their performance.

Data from household surveys show that household income per capita growth was much lower for the Philippines than for other countries' in the region. The impact of the minimum wage increase on income can be positive or negative depending on the structure of the market whether it is a competitive market or an imperfect competitive market. Chulanova and Ussenova (2015) stated that that formation of the competitive human capital cannot be considered in separation from development and modernization of the system of quality education, improvement of the employment sphere, worthy payment for work, Formation of competitive human capital is one of the most important goals of the modern development of a nation in the condition of the innovative economy construction. In this context, the necessity of formation and development of effective human capital considerably increases

This study aims to simulate the anticipated effect of imposing an across the board minimum daily wage of Php750.00 across the industries and the regions of the Philippines in terms of changes in household income and on occupational class mobility. Since it was anticipated that an across the board increase in daily wage has a positive effect on income, but an adverse effect on certain sectors of the economy due to occupational mobility that may be brought by the implementation of the across the board minimum wage. Studying the possible implications of this across the board increase in the minimum wage is important since imposing such law may result in an imbalance in the distribution of workers across industries such as wage sector, entrepreneurial farming, and non-entrepreneurial farming due to anticipated mobility of labor.

2. Literature Review

2.1. The Income Generation Model

To determine the effects of the implementation of national wage law on the expenditure of the household through changes in income, this study draws the model of income generation model of Ahmed and O' Donoghue (2007) and Alatas and Bourguignon (2007) in estimating the changes in wages. Their papers postulate that the income of the household is derived from wage, farming, and non-farming activity which is a function of personal characteristics such as sex (gender), geographical location, age, marital status, and the number of children. Given the downturn of economic activities in Nigeria and the agitation for the minimum wage increase, Abachi and Iorember (2017) investigated the impact of the minimum wage on macroeconomic variables such as agricultural output, industrial output, and exports and households' welfare such as income, consumption, and savings in Nigeria, using a Computable General Equilibrium Model. The simulation results of scenario one revealed that a 211% increase in the minimum wage of workers will increase agricultural output, industrial output, and exports while imports will be depressed marginally and then lead to an increase in household welfare indicators of income, consumption, and savings by 6.76%, 5.0% and 3.61% respectively. The result of scenario two revealed that increasing minimum wage by 150% will lead to an increase in agricultural output, industrial output, and exports while imports will fall and then households" welfare indicators of income, consumption, and savings will increase by 5.75%, 4.83%, and 2.96% respectively. The study concluded that an increase in the minimum wage of workers has a positive and significant impact on household welfare in Nigeria. Therefore, it is recommended among others that the government should as a matter of urgency accede to the demand of the organized labor and increase the minimum wage of and ensure that it is fully implemented across the board.

Similar to the studies of Ahmed and O' Donoghue (2007), Alatas and Bourguignon (2000), and Abachi and Iorember (2017) is the result of the study of Mwangi et al. (2015) evaluated the effects of minimum wages on labor and its impact on growth. The study used the single country static model, the PEP-1-1 model, and the Social Accounting Matrix for Kenya for the year 2009. The key research questions were to assess the effects of minimum wages on rural or urban area labor markets, labor migration, and income distribution. To achieve this, the study simulated three scenarios: increases in minimum wages for formal workers in urban and rural areas at the same rate of 5%, different rates (10% rural and 5% urban), and a cut in the minimum wages in both regions. The findings indicated that increases in wage fuel the migration of labor from rural to urban areas, and restrains the expansion of the economy. A rise in minimum wages has an overall negative effect on incomes of rural households while benefiting urban households, which contributes to increased inequality. A fall in real minimum wages, on the other hand, is supportive of output and employment growth.

The study conducted by Aaronson et al. (2011) concluded that following a minimum wage hike, household income rises on average by about $250.00 per quarter and spending by roughly $700.00 per quarter for households with minimum wage workers. Most of the spending response was caused by a small number of households who purchase vehicles. Furthermore, they found that the high spending levels are financed through increases in collateralized debt. The results of the study are consistent with a model where households can borrow against durables and face costs of adjusting their durables stock.

2.2. Effect of Wage and Household Income on Occupational Choice

Asubiojo and Ekperiware (2017) examined and appraised the effects of minimum wage on savings in Nigeria. These were to determine the long-run relationship between minimum wage and savings in respect to minimum wage legislation in Nigeria, 1980 to 2016. The result showed that wage legislation has an appositive and significant effect on savings in the long-run. This was supported by a bound test result indicating that there is a long-run relationship between the dependent variable and independent variables. The study concluded that minimum wage legislation has a significant positive effect on both savings in the long-run. Meanwhile, the study of Idiaye et al. (2018) showed how urban sector wage rigidities such as the minimum wage policy can impact the rural economy and the welfare of households. A static CGE model of the Nigerian economy was developed to examine the effects of 12%, 30%, and 68% minimum wage increases in Nigeria on the economy and the welfare of households, especially informal sector rural households. CGE simulations revealed that with a 12% increase in the minimum wage, domestic output declined in all sectors except the crude oil and mining sector. Similar impacts were observed with 30% and 68% increases but with greater changes. There was also a general decline in labor employment due to its higher price. Most macroeconomic aggregates fell, including GDP and real GDP. Household savings, however, increased in all cases but there were huge inflationary pressures represented by increases in the price index in all three scenarios.

Aitken et al. (2014) examined the effects of the UK national minimum wage (NMW) on first, the consumption patterns, and second, the savings and debt behavior of households affected by the minimum wage relative to other households. The study utilized the Family Expenditure Survey (FES) as its main source of data on consumption and its successors the Expenditure and Food Survey (EFS), which began in 2001, and the Living Costs and Food Survey (LCFS), which began in 2008. The results showed that minimum wage would boost the gross earned income and savings so it expects to generate an income effect and so change a recipients' consumption patterns relative to those who did not benefit.

Bourguignon et al. (2007) developed a micro econometric method to account for differences across distributions of household income. Going beyond the determination of earnings in labor markets, they also estimated statistical models for occupational choice and conditional distributions of education, fertility, and non-labor incomes. The authors imported combinations of estimated parameters from these models to simulate counterfactual income distributions. This allows them to decompose differences between functionals of two-income distributions (such as inequality or poverty measures) into shares because of differences in the structure of labor market returns (price effects), differences in the occupational structure, and differences in the underlying distribution of assets (endowment effects). The authors apply the method to the differences between the Brazilian income distribution and those of Mexico and the United States and find that most of Brazil's excess income inequality is due to underlying inequalities in the distribution of two key endowments: access to education and sources of non-labor income, mainly pensions.

Paqueo et al. (2016) found that in the Philippines, higher legal minimum wages are likely to reduce the work hours of average workers; can be disadvantageous against the very groups that legal minimum wages are intended to protect; decrease the employment probability of the young, inexperienced, less educated, and women laborers; and tend to ironically reduce average income and raise household poverty rate. These results illustrated how rapid rises in legal minimum wages can be counter-productive and can go against the spirit of equal protection principle of the Constitution. If the goal is to help the poor and protect the weak, then these findings warrant the need to think more deeply and prudently about the use of legal minimum wages and to consider other tools for achieving decent wages.

Lee and Lee (2020) examined the factors that drive temporal income diversification in rural areas of the Mekong River Delta in Vietnam, based on a framework that conceptualized diversification as a function of a household's capacity to diversify and incentives (both push and pull factors) to diversify. The main points that emerged from the analysis is that income diversification is strongly influenced by household labor capacity. The relationship between household labor capacity and increasing insertion in non-farming wage activities is not driven by unobserved time-invariant factors such as household ability and motivation but is instead driven by the higher labor capacity of households. In terms of the other household capacity variables, the effect of farm size is much larger in terms of retaining households in traditional occupations as compared to pushing them towards non-farm wage employment. Other variables such as household access to financial capital do not play an important role (Do et al., 2020).

3. Research Methods and Materials

3.1. The Microsimulation Using the Top-Down Behavioral Approach

This research had utilized the quantitative research design by applying both descriptive and inferential statistics. Descriptive statistics has been used to describe and explain the behavior of the explanatory and explained variables such as household income and wage across regions. Meanwhile, the Top-Down Behavioral microsimulation has been used to estimate the anticipated effects of the proposed

National Wage in the Philippines on household income and occupational mobility across different sectors such as wage, entrepreneurial farming, and non-entrepreneurial farming. The study had utilized the data in 2009, 2012, and 2015 of the Family Income and Expenditure Survey (FIES) and the minimum wage which was taken from Philippine Statistical Authority (PSA) specifically the Minimum Wage (WAGE), Household Income (HI), and occupational choices across different sectors.

3.1.1. The Microsimulation Using the Top-Down Behavioral Approach

This study implemented a three-tiered procedure in determining the effects of the implementation of National Law on Income and Occupational Choice. The three-tiered procedure involves: (1) The determination of the policy proposal specifications (2) the microsimulation model by estimating income before the national wage law and (3) integration of policy proposal to microsimulation using the top-down behavioral approach that determines the effect of the policy proposal on occupational choice (Figure 1).

The microsimulation involves the estimation of total household income before the implementation of the national wage law. The total household income at time $t(Y_{h,\ t})$ is estimated as follows:

$$Y_{h,t} = \sum_{i=1}^{N} w_t^{sk} I(E_{i,t}^{sk} = 1) + \sum_{i=1}^{N} w_t^{unsk} I(E_{i,t}^{sk} = 1) + \sum \pi_{h,t}^{j} N_{h,t}^{j,sk/unsk} + y_{h,t}^{ex} \quad (1)$$

where the first term represents the total income from wages at the household level for skilled and unskilled wage workers.

Meanwhile, the second term represents the total household profits and the third term represents public and private transfers to households. Similar to the wage estimation, the wage predicted variations in the household profit was then integrated directly into the base value as predicted in the microsimulation procedure. The total income from wage is estimated using the Heckman Two-Step Procedure of estimation of wage. The procedure involved first is to estimate the total income from wages at the household level using the probit logistic regression estimation technique. After determining the total household income, the occupational choice of the house was estimated using multinomial logistic regression. The occupational choice of the household is composed of four (4) categories which are: (1) wage worker; (2) entrepreneurial self-employment; (3) farming; and (4) unemployed. The individual household labor supply was estimated using a multinomial logistic regression model which represents the discreet- utility-maximizing framework. The reduced form of the estimation equation of the individual labor supply is shown below:

$$\ln \frac{P(E_i = m)}{P(E_i = 4)} = \alpha_m + \sum_{j=1}^{J} \beta_{mj} X_{ij} + u_{ij} = Z_{mi} \quad (2)$$

Where, Z_{mi} represent the actual individual utility function associated with each occupational choice.

The notation X_{mi} represents the individual's characteristics such as area classification (urban/rural), number of children, marital status, gender, education, and estimated income due to working in the particular sector. Moreover, the procedures stated by Bourguignon et al. (2001) were followed in calculating the individual residual terms, where, it is assumed that the distribution of error term using the multinomial model is independent, random, and possessed, and exponential form.

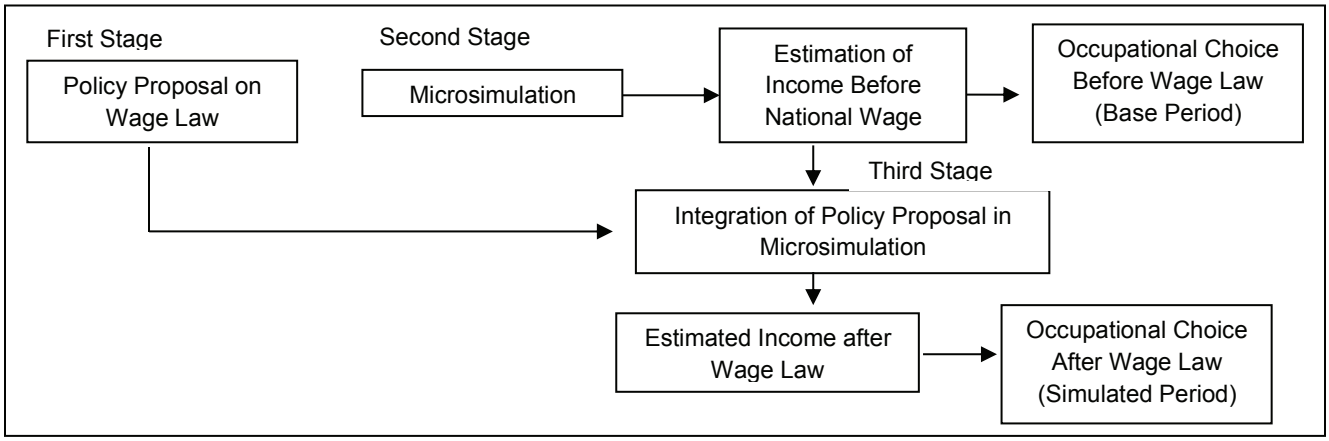

Figure 1: The Top-Down Behavioral Microsimulation Approach

4. Results and Discussion

4.1. The Philippine Minimum Wage before the Implementation of National Wage Law

Table 1 shows the minimum wage per region per sector for the years 2009, 2012, and 2015, and it shows that the behavior of minimum wage in the Philippines is on average is increasing. However, the increase in amount varies per sector per region. The National Capital Region (NCR) recorded the highest minimum wage in 2015 across three sectors such as non-agriculture (Php512.00), agriculture (Php475.00), and retail/service sectors (Php475.00), and this high minimum wage is due to rising costs of living in the metro. Among sectors of the economy in the Philippines, the non-agriculture recorded the highest minimum wage, and this record is then followed by the retail/service sector, and the last in rank is the agricultural sector.

Compared to the NCR, the Autonomous Region in Muslim Mindanao (ARMM) has the lowest minimum wage in the Philippines with Php250.00 in 2015. The increase in earning of the oil companies and decrease in oil prices led to a decrease in the prices of goods and services, which eventually pushed the Regional Tripartite Wage and Productivity Board NCR to grant the petition for minimum wage increase by the Trade Union Congress of the Philippines and Association of Minimum Wage Earners and Advocates-Philippine Trade and General Workers Organization (AMWEA-PTGWO).

In July 1989, the Philippine Congress enacted into law Republic Act No. 6727, also known as the "Wage Rationalization Act." The Act established a new mechanism for minimum wage determination through the creation of the Regional Tripartite Wages and Productivity Boards (RTWPBs) in all regions of the country. The Autonomous Region in Muslim Mindanao (ARMM) was the fastest-growing region with an average annual population growth rate (PGR) of 2.89 percent, which is speculatively the reason for the lowest minimum wage due to the abundance of a viable labor force. The NCR had recorded the highest aggregated household income with Php1,282,822.78 thousand, and this was followed by the Calabarzon with Php with 1,013,942.34 thousand, and next was Central Luzon with Php750 million.

The NCR is the hub of economic activity that benefited nearby regions such as Calabarzon and Central Luzon with the improved infrastructure linkages and relocation of industries in areas outside Metro Manila. Cagayan Valley had registered an income in 2009, 2012, and 2015 with Php118.19 million, Php150.09 million, and Php193.59 million, respectively.

Table 1: Minimum Wage Per Sector Per Region in the Philippines

Regions	Non-Agriculture			Agriculture			Retail/Service		
	2009	2012	2015	2009	2012	2015	2009	2012	2015
NCR	382	456	512	345	419	475	382	419	475
CAR	252	272	284	234	254	284	234	238	284
I-Ilocos	234	238	260	208	220	248	234	239	260
II-Cagayan Valley	231	251	340	219	239	320	219	229	340
III-Central Luzon	275	317	353	245	281	325	229	267	313
IV-A-Calabarzon	278	284	325	246	253	300	245	253	284
IV-B-MIMAROPA	246	258	269	188	205	269	246	258	269
V-Bicol	218	255	285	202	228	285	218	228	285
VI-Western Visayas	245	256	298	213	240	277	245	256	298
VII-Central Visayas	245	303	333	226	281	310	245	303	333
VIII-Eastern Visayas	238	241	285	219	239	251	238	240	245
IX-Zamboanga	240	267	296	205	232	283	240	247	283
X-Northern Mindanao	249	279	327	237	267	315	249	279	327
XI-Davao	250	301	340	255	291	355	242	286	333
XII-SOCCSKSARGEN	245	270	295	223	251	272	233	248	272
XIII-Caraga	233	258	290	213	238	290	210	243	290
ARMM	210	232	250	210	232	250	260	232	250

The main crops are rice, corn, and tobacco. Fishing is prevalent on the coast of Cagayan, Isabela, Batanes, and Magat Dam in Isabela. The region exports fresh mangoes which posted an impressive growth due to the improved production capability of farmers. Palay production had been increasing significantly due to the increase in the harvested areas, specifically in the province of Isabela brought about by farmers' adjustment of their cropping period to coincide with the availability of irrigation waters from the Magat River Irrigation System (MARIS). The aggressive campaign to use high-yielding and certified seeds likewise contributed to the increase in Palay production.

In Visayas, the Bicol region had increasing behavior of income in 2009, 2012, and 2015 with Php162.57 million, Php189.19 million, and Php236.48 million, respectively. The largest component of the region's economy is agriculture. It is known for pili nuts, coconuts, abaca, banana, coffee, jackfruit, rice, and corn. The Bicol region caters to other industries such as commercial fishing, mining, handicrafts, jewelry manufacturing, among others. Region VI or Western Visayas earned an aggregate household income of Php231.48 million, Php324.13 million, and Php384.04 million in 2009, 2012, and 2015, respectively. In this region, the agricultural sector plays an important role in their regional economic activity. One of the prominent places in the Western Visayas is the Boracay which is known worldwide, and it has been attracting tourists from all over the world. The Boracay has been a major source of income and employment in the region.

Table 2: The Estimation of Individual Wage

Dependent Variable: Natural Logarithm of Individual			
	Coefficient	**Standard Error**	**Probability**
Constant	4.5492	0.0569	0.0000
Education	0.1064	0.0048	0.0000
Age	0.0101	0.0008	0.0000
Region	(0.0041)	0.0006	0.4600
Salaried			
Constant	1.8101	0.0521	0.0000
Sex	(0.3029)	0.0186	0.0000
No. of children	0.0323	0.0045	0.0000
Urban	(0.2655)	0.0156	0.0000
Education	0.2052	0.0042	0.0000
Age	(0.0101)	0.0005	0.0000
Married	0.0929	0.0141	0.0000
Inverse Mill	(1.5523)	0.1098	0.0000
Rho	(1.000)	Wald Chi-Square 684.29	
Sigma	1.5523	Probability Statistics 0.000	

Finally, the regions that registered the lowest income were the ARMM, Cordillera Administrative Region (CAR), and Caraga. Caraga had aggregate household income in 2009, 2012, and 2015 of Php69.86 million, Php95.81 million, and Php114.74 million, respectively. The sources of revenue are from the major products include seafood, rice, abaca, oil palm, bananas, mangoes, coconut, calamansi, coffee, rubber, livestock and poultry, plantation-species lumner, arts and crafts, fashion accessories, housewares, and high-value crops.

4.2. The Estimation of Income After the Implementation of National Wage Law

The Heckman Two-Step Procedure was used to estimate the individual wage. These procedures involved are (1) the selection equation of the individual using probit logistic regression estimation technique which was used to estimate the probability of joining the salaried sector or not, and (2) the use of Ordinary Least Square to predict the natural logarithm of wage (See Table 2).

The result of the selection equation indicates that explanatory variables such as sex, number of children, urban, education, age, and married have significant effects on the probability of joining the wage sector. This is reflected in the respective *p*-values which are less than a 5% level of significance. The coefficient of regression of –0.3029 indicates that men have a greater chance of joining the wage sector compared to women. The statistical result is consistent with the findings of Polavieja (2008) who suggested that the effect of occupational sex-segregation on wages could be explicable by workers' sex-role attitudes, their relative input in domestic production, and the job-specific human capital requirements of their jobs. Of these three factors, job-specialization seems the most important one. This is consistent with the study of Ledic (2012) who illustrated the static labor supply model using a large cross-sectional data set encompassing the countries of Great Britain. They found that semi-elasticities of labor supply on the extensive margin with respect to gross wage are 0.09 and –0.03 percentage points for men and women, respectively. Using the net effective wage rate these elasticities are 0.10 and –0.01 for men and women, respectively. Both estimated elasticities are marginally larger in the net effective wage specification which they interpreted as a marginal incentive for men to join the labor market and less disincentive effect for women to withdraw from the labor market.

The coefficient also indicates that the first region has a higher probability of joining the wage sector compared to other regions. Meanwhile, the positive coefficient of 0.0323 for 'the number of children' indicates that the higher the number of children the higher the probability of joining the wage sector. This indicates that those who have more children are more likely to join the wage sector rather than those who have no children or fewer children.

Further, those who are residing in urban areas have a higher probability of joining the wage sector compared to those who are residing in rural areas. This reflects the concentration of wage workers in urban cities in the Philippines since the concentration of jobs is usually located in busy city areas of the Philippines. Moreover, those who have higher educational attainment, younger age, and married individual have a higher probability of joining the wage sector. This is consistent with the study of Breece et al. (2015) who emphasize that older workers have higher income compared to the younger workers since the younger workers typically do not have perfect information about their occupational fit and learning takes place, hence, companies offer them much lower monthly basic salary compared to the older workers who have ample experience.

Table 3 depicts the income, expenditure, and savings before and after wage variation in Region 1 to 16, and 41 to 42. It shows that the income before the wage variation was higher than after the wage variation. Before the wage variation, Region 13, 41, and 3 had the highest income and savings with Php1,738,131,172.00, Php1,262,400,365.00, and Php947,995,504.00, respectively.

Table 3: The Household Income Before and After the Implementation of Wage Law

Regions	Income After National Wage Law	Income After National Wage Law
1	559,001,167.00	54,313,612.12
2	525,430,330.00	56,351,513.60
3	947,995,504.00	70,553,918.50
5	459,966,121.00	52,625,227.26
6	629,158,699.00	66,704,202.53
7	596,556,725.00	60,998,792.79
8	459,769,404.00	56,955,712.47
9	341,372,654.00	40,851,714.39
10	403,669,530.00	44,297,890.34
11	582,585,610.00	58,481,610.90
12	388,200,258.00	49,768,729.84
13	1,738,131,172.00	97,825,702.80
14	465,101,920.00	39,632,831.75
15	302,949,812.00	46,994,466.16
16	350,804,084.00	39,682,450.59
41	1,262,400,365.00	94,214,390.42
42	270,309,857.00	24,517,741.28

4.3. The Comparison of the Philippine Occupational Choice Before and After National Wage Law

Table 4 shows the occupational choices before the proposed and after the proposed national wage. It shows that before the proposed, wage worker was the number one (1) choice for the majority of the regions, second was entrepreneurial non-farming activities, third was the entrepreneurial farming activity, and last is to be unemployed.

The movement in occupational status is being determined by comparing the utility generated from each occupational choice. The individual will choose an occupational choice that will yield the highest level of utility. Being a wage worker is the highest choice in regions of Calabarzon, NCR, and Central Luzon. This has means that in this region the utility being generated by workers in the wage sector is higher than the utility (satisfaction) derived from working in other sectors such as entrepreneurial farming, non-entrepreneurial farming, and being unemployed. This is because the wage worker sector offers much higher satisfaction due to accessibility, and the higher-income that generates from the wage sector. However, the regions that had the lowest choice to be a wage worker are IV-B Mimaropa and the Zamboanga Peninsula. The next occupational choice by the worker is the entrepreneurial non-farming activity wherein this was mostly the choice of regions of NCR, Calabarzon, and Central Luzon with 1500, 1,374, and 1067 households, respectively. The statistical result further revealed that the implementation of the National Wage Law (wherein the across the board Php750.00 will be implemented across the regions and industries) will harm the agriculture sector. It is anticipated in the microsimulation, that the farming sector workers will transfer to either wage workers or entrepreneurial non-farming.

5. Conclusions

The individual's educational attainment, marital status, and the number of children influence the chances of joining the wage workers. It implies that as the level of education increases, as individual change his/her marital status, and as the number of children increases, the probability of entering the wage worker sector increases. Furthermore, age and education had a significant effect on the wage workers. It implies that as the level of education increases, the wage will also increase. After the proposed national minimum wage, people abandoned the entrepreneurial farming activity and preferred being a wage worker, engaged in entrepreneurial non-farming activities, or being unemployed. It implies that our economy will suffer since the majority of the workers in the provinces are engaged in agriculture.

Table 4: The Change in Household's Occupational Choice due to TRAIN Law

Region	Before the implementation of National Law				After the implementation of the National Wage Law			
	Wage	Non-Farming	Farming	Unemployed	Wage	Non-Farming	Farming	Unemployed
1	1,012	774	156	406	1,182	789	0	377
2	999	699	142	379	1,133	773	0	313
3	1,349	1067	211	610	1,565	1,190	0	482
4-A	993	785	201	493	1,217	877	0	378
4-B	1218	917	203	513	1,460	925	0	466
5	1062	847	184	448	1,191	1,000	0	350
6	990	714	175	458	1,286	715	0	336
7	735	608	123	322	912	590	0	286
8	767	645	133	342	965	644	0	278
9	1,040	755	247	404	1,225	888	0	333
10	838	759	131	394	1,089	758	0	275
11	1,675	1,500	208	747	2,163	1,341	0	626
12	690	563	132	340	880	565	0	280
NCR	1,023	711	141	373	1,199	679	0	370
CAR	749	570	105	358	897	643	0	242
ARMM	1,750	1,374	309	729	1,879	1,716	0	567
CARAGA	472	478	79	220	262	437	0	186
Total	**17,362**	**13,766**	**2,880**	**7,536**	**20,869**	**14,530**	**2,988**	**6,145**

This study recommended that the Philippine government must decrease the proposed amount of Php750.00 on a level that would not affect the natural selection of worker's occupational mobility. Moreover, the information obtained during the course of this study may be used to conduct further analysis using SWOT (Strength, Weaknesses, Opportunities, and Threats) and PESTLE (Political, Economic, Sociological, Technological, Legal, and Environmental) and make policy recommendations, such as but not limited to, (1) Recommend a Bill based on corporate social responsibility that will require public and private institutions to offer courses and scholarships related to agriculture; (2) To analyze the long-term benefits or impact of government-funded grants or cash reward to families with children who choose to enroll in courses related to the entrepreneurial farming activity; and (3) Government grants, awards, and incentives for farmers who come up with new farming techniques and technologies. Finally, future researchers may explore the proposal of decreasing the proposed Php750.00 Philippine National Wage and conduct another simulation at different rates until the "number of entrepreneurial farming activity will be preferred" is reached, and determine at what level will the number of workers preference for the entrepreneurial farming activity will be acceptable.

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