## The Impact of Economic Crisis on Unemployment and Labor Migration in the Northeast of Thailand

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#### Abstract

This study aims to examine the characteristics of unemployment and migration of labor in the Northeastern of Thailand and to study the unemployment problems faced by local workers. The samples used in the study were 455 unemployed workers in Khon Kaen province, that is, 204 male and 251 female workers. Most workers, 36.04%, were between the ages of 26-30 years old. The unemployed were mostly single at 52.97%. Factors that relate to the severity of the unemployment problem are the number of times that one has been unemployed and the household expenditure. Factors that are associated with the severity of poverty are educational levels, the number of unemployed in a household, and the income prior to unemployment. Factors that relate to the demand for permanent job positions are age, marital status, and income prior to unemployment. Factors that relate to migration are gender, age, household size, household income, and expenditure.

**Keywords:** Unemployment, Labor, Migration, Unemployment: Models, Duration, Incidence, and Job Search

## **1** Introduction

Unemployment and migration occur in the greatest numbers in the northeastern region of Thailand. This fact was first presented by the Department of Employment on account of the numerous unemployed persons who registered to request assistance from the government and recognized the need to improve the

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working capacity in various fields. Furthermore, the National Statistical Office administered a labor force survey to investigate the unemployed workers who needed to develop capabilities in various fields. The survey was conducted simultaneously across the country through the period of the 1st to the 12th of January, February, and March, 2011. Data was collected by interviewing household heads or members. The data revealed that the Northeastern region had the highest levels of unemployment. In late 2008 to 2009, the economic crisis and unemployment problem became severe issues. These problems caused several side effects, such as the higher demand for laborers who graduated secondary school or below and the lower demand for laborers who graduated at higher education levels.

Unemployment and labor migration are the result of continuous effects, which are caused by structural changes in the economy. The impact of the economic and social changes affects society from the household level up to the institutional level. At the household level, when family members are laid off, the burden of dealing with a household's financial and psychological pressures increases, and the living conditions of families are consequently worse off. At local level, there are several effects from criminal and law violation problems. In accordance with the national level, the unemployment and migration problems cause shortages of local workers, the congestion of urban populations, poverty, investment reduction and fiscal deterioration.

The impact of these levels depends on various factors, such as the economic environment and the effectiveness of labor policies to mitigate the effects that occur in each period. Thus, the unemployment problem is undeniably important and requires more attention in order to face the challenges it presents. It can be solved through the implementation of monetary, fiscal, and labor policies together. Therefore, this research also investigates the policy recommendations needed to solve these problems.

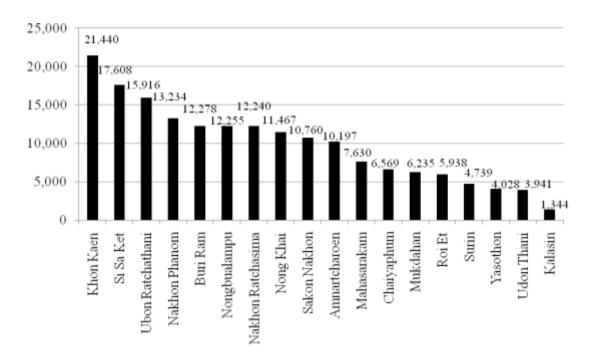
### 2 Methodology

The research in this paper is applied research. The study was carried out by using a questionnaire to interview 455 unemployed workers in Khon Kaen province. Firstly, a descriptive analysis of the characteristics of unemployment problems and the social and economic impact of the unemployed was performed. This analysis includes the frequency, percentage, mean, and standard deviation. Secondly, the poverty levels were analyzed from a comparison of the average annual per capita household income to the poverty line. Lastly, a hypothesis test was conducted based on the relationship between personal factors and the severity of the unemployment problem, the severity of poverty after being unemployed, job requirements, and

migration. In this statistical analysis, Pearson chi-squared was used to compare the variance of the sample.

## 3 Research Area

Statistical data of the number of unemployed persons who require help from the government, classified by provinces in the northeast of Thailand in 2007, indicated that there were 177,818 unemployed persons who were in need of aid from the government. Among this number, 14,419 persons came from the municipality area, and 163,399 persons came from outside the municipality area. Khon Kaen province had the greatest number of unemployed who needed help, representing 21,440 persons, followed by Sisaket province, with 17,608 persons, and Ubonratchathani, with 15,916 persons, respectively (Figure 1). Therefore, Khon Kaen province was selected as the critical area of research.



Source: National Statistical Office, 2007.

Figure 1: Number of Unemployed Classified by Need of Help from the Government and by Provinces in the Northeast in 2007

## 4 Main Results

According to the results in the graph in Figure 1, the population of interest for this study is Khon Kaen province.

### 4.1 Descriptive Analysis of Labor Unemployment

The results of the samples in this study are based on 455 laid off workers in Khon Kaen province. The majority of participants (55.16%) are female. Most have never been married (52.97%), some (35.82%) are currently married, and the remaining participants have been formerly married (11.21%). On average, participants are 29 years old and single (52.97%). The average household size is 4 persons. The education level of the unemployed is mostly at the level of a graduate degree at 48.35%, follow by those who have graduated from high school at 38.24%, respectively. 437 of the unemployed are those who have working experience, and only 18 unemployed persons have never worked before. 37.8% of the unemployed are those who have been laid off at least one time. Most of them (77.58%) do not receive any unemployment compensation. Within this number, the unemployed mostly work by operating plants and machinery, representing 23.52%. They are employed in type of work mainly via private employers, at 81.76%. It appears that 76.05% of them mostly volunteer to quit their jobs, rather than being laid off. Most of them, 82.64%, feel that it is very difficult to find work.

Occupation Before Unemployment	Frequency	Percent
Plant and Machine Operators and Assemblers	107	23.52
Elementary Occupations	103	22.64
Service Workers and Shop and Market Sales Workers	57	12.53
Clerks	46	10.11
Technicians and Associate Professionals	35	7.69
Professional, Technical Workers	33	7.25
Skilled Agricultural and Fishery Workers	25	5.49
Legislators, Senior Officials, and Managers	20	4.40
Workers in Transport and Communications	12	2.64
Craft and Related Trades Workers	10	2.20
Unemployed	7	1.54
Total	455	100

Table 1: Occupation before Unemployment

Source: Own Calculation.

Data from the survey shows that 23.52% of the unemployed worked as plant and machine operators and assemblers, and 22.64% work at elementary occupations (Table 1).

When considering the industrial classification of the unemployed, a little more than one fourth of the unemployed work in manufacturing sectors. The next biggest categories are private households with employed persons, wholesale and retail trade, repair of motor vehicles, motorcycles, and personal and household goods, working in hotels and restaurants, and construction, respectively (Table 2). The severity of the unemployed worker's problem, poverty, and the need for employment are ranked at high levels (Table 3). In order to solve some problems of the employed, when there are money shortages, money is mainly borrowed from informal systems, selling, pledging, or mortgaging assets, and borrowing from the bank (Table 4).

Industrial Classification of the Unemployed	Frequency	Percent
Manufacturing	120	26.37
Private Households with Employed Persons	52	11.43
Wholesale and Retail Trade; Repair of Motor Vehicles,	49	10.77
Motorcycles, and Personal and Household Goods	49	10.77
Hotels and Restaurants	49	10.77
Construction	37	8.13
Extra-territorial Organizations and Bodies	21	4.62
Education	20	4.40
Financial Intermediation	19	4.18
Real Estate, Renting, and Business Activities	17	3.74
Transport, Storage, and Communications	16	3.52
Electricity, Gas, and Water Supply	14	3.08
Agriculture, Hunting, and Forestry	12	2.64
Fishing	7	1.54
Mining and Quarrying	6	1.32
Public Administration and Defense; Compulsory Social	4	0.88
Security	4	0.00
Health and Social Work	4	0.88
Other Community, Social, and Personal Service Activities	1	0.22

Table 2: Industrial Classification of the Unemployed

Total	455	100
Unemployment	7	1.54

Source: Own Calculations.

Table 3: Severity of the Unemployed Worker's Problem, Poverty, and the Need for Employment

Worker's Pro	oblem, Poverty, and Need Mean DeviationStd. Level for	r
Employment		-
• 1	yment Problem 4.32 0.82 High Severity of the 08 0.90 High <u>The Need for Future Employment 4</u>	.37

Source: Own Calculations.

Table 4: Source of Funds in case of Income ShortagesSource of Funds in case of Income ShortagesFrequencyPercent				
Income Cover with Expenditure	146	32.09		
When Income Shortages Occur, Source of Funds from:				
Informal Loan				
	77	16.92		
Sell, Pledge, Mortgage Assets	56	12.31		
Bank and Financial Institution Loans	47	10.33		
Family Savings	43	9.45		
Own Savings	39	8.57		
Relatives Loan	37	8.13		
Others: Unemployed Compensation Money	10	2.20		
Total	455	100		

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Source: Own Calculations.

When analyzing the family finances before and after unemployment, nearly half of the unemployed families express the opinion that their income has not changed, while their expenditure has increased. When reflecting on the adequacy of family income, a few (12.53%) feel that their family income is enough, but 32.31% of them think that their family income is not enough. Note about the family's debt:

it has not changed after unemployment as well as the ability to repay the debt (Table 5).

When mentioning the attitude towards unemployment, the participants responded with the significance of the causes of unemployment, such as economic recession, migration, labor age, production demand, wages, demand on labor, labor's qualification, and the mobility of the free labor movement (Table 6).

The primary factors in determining employment are domestic price, tax revenue, government expenditure, and the savings of commercial banks, respectively (Table 7). Firstly, the increase of domestic prices creates an incentive for real economic sectors to increase employment positions in order to increase production and decrease unemployment rates. When dealing with tax revenues, an increase of tax collections will reduce private sectors' spending. When goods cannot sell, businesses will reduce the production, which consequently is another cause of unemployment. As for government expenditure, when the government has higher spending tendencies, the economy will be stimulated, and then unemployment will decline. Note: the higher net income from aboard will lead to better trade balances and a balance of payment, higher economic growth, and lower unemployment rates. Lastly, the higher foreign direct investment is, as a result of higher domestic employment by multinational enterprises, the lower the unemployment rate will be.

Comparison Pre and Post Unemployment	Income	Expenditure	The Adequacy of Family Finance	Debt	Ability to Repay Debt
	Percent	Percent	Percent	Percent	Percent
Increase	18.68	47.47	12.53	33.41	4.4
Not Change	45.05	42.86	55.16	59.56	65.49
Decrease	36.26	9.67	32.31	7.03	30.11
Total	100	100	100	100	100

Table 5: Comparison of Household's Income, Expenditure, and Finances Before and After Unemployment

Source: Own Calculations.

Table 6:	Attitudes	towards	Unemp	loyment
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Attitudes towards Unemployment	Mean Deviation Std.	Level
Rank		

Economic Recession Causes	4 1 1	0.07	· · · ·	4
Unemployment	4.11	0.97	High	1
Labor Migration from Rural to Urban	3.99	0.94	High	2
Areas Causes Unemployment				
Older Labor has Higher Risks of	3.96	0.99	High	3
Unemployment			-	
Lower Demand on Production, Lower Demand on Employment	3.86	0.94	High	4
Low Wages Give Low Incentive to				
Employment and Then Lower	3.82	1.07	High	5
Employment			8	-
Employer does not Hire More Labor,				
Which Causes Some Laborers to Stop	3.82	1.01	High	6
Looking for Work				
Laborer's Qualification does not Match the				
Need of the Employer				
Some Areas Have Oversupply of Labor,	2.01	0.12	TT: - 1-	7
	3.81	2.13	High	7
	3.80	0.91	High	8
	3.80	1.04	High	9
Opportunity to Refuse to Work Rather				
than the Single One				
Business/Factory Move from Local A	rea3.77	1.05	High	10
Causing Unemployment				
The Need for Help with Family Work	3.75	5.17	High	11
Leads to Lack of Participation in the				
Labor Market	2 70	1.06	IIIah	10
Technological Progress Causes Unemployment	3.72	1.06	High	12
For the Wife with a High Income, Not	3.64	1.08	High	13
Some Areas Have Excess Demand for	5.01	1.00	mgn	15
Labor, But Labor is Limited by				
Movement				
Woman with Little Child Have				
Necessary for Husband to Join Labor		nily Labor	r Has No Ne	ed to
Market	Look	1.67		
Women Take More Risks with	3.50	1.07	Medium	14
Unemployment than Men				

#### 3.37 1.18 Medium 15 for Work

Source: Own Calculations.

Determinants of Employment	Mean	Std. Deviation	Level	Rank
Domestic Price	4.32	0.86	High	1
Tax Revenue	4.08	1.02	High	2
Government Expenditure	3.71	1.08	High	3
Commercial Bank Saving	3.58	1.21	High	4
Net Income from Aboard	3.49	1.15	Medium	5
Foreign Direct Investment	3.38	1.32	Medium	6

#### Table 7: Determinants of Employment

Source: Own Calculations.

The impact of unemployment that is present at significance levels is comprised of the lack of liquidity, suffering on the cost of living, disorganization with family problems, receiving unwilling future employment, and being under pressure, stress, and lack of self-confidence (Table 8). However, when workers adjust for these factors after unemployment, they mostly place emphasis on adjusting themselves to be more patient, confronting the problem, endeavoring to apply for work, looking for extra work, saving money, and assenting to underemployment work, respectively.

#### Table 8: Impact of Unemployment

Lack of Financial Liquidity	4.29	0.83	High	1
Endurance of High Cost of Living	4.32	0.85	High	2
More Family Problems	3.88	1.01	High	3
Lack of Satisfaction with Future	3.85	1.01	High	4
Work	5.05	1.01	Ingn	

The Pressure, Stress, Lack of Self- <u>Confidence</u>	3.83	1.02	High	5
Impact of Unemployment	Mean	Deviation <sup>Std.</sup>		Level
Rank				
Source: Own Calculations.				

The priority of demand for assistance from the state are ranked as followed: the demand for employment within the province where they live, the demand for working skills development, the demand for financial support for private occupations, the demand for unemployment compensation, the demand for information about the labor market, the demand for help to find a job in any province, the demand for providing financial support for agricultural work, and the demand for supporting children's' tuition fees (Table 9).

Std. Mean Rank **Demand for State Assistance Deviation** Need of Working Positions at Hometown Province 0.50 0.56 1 Need of Improving Skills 0.55 0.50 2 Need of Finances for Self-employed 3 0.55 0.50 Need of Unemployment Compensation 0.54 0.50 4 5 Need of Providing Information about Labor Market 0.49 0.50 Need of Working Positions in any Province 0.38 0.49 6 7 Need of Support Funds for Agriculture Work 0.35 0.48 Need of Support for Tuition Fees 0.32 0.47 8

#### Table 9: Demand for State Assistance

Source: Own Calculations.

#### 4.2 The Poverty within the Unemployed Group

An analysis of poverty among the unemployed demonstrates that there are 46 out of 455 persons whose household income per month is less than the poverty line. The poverty line in the Northeast in 2010 was equal to 1,583 Baht/person/month. The poverty ratio is equal to 0.1. This infers that 10.1% of the unemployed persons are poor.

$$P_0 = N_p / N = 46/455 = 0.1010989$$
(1)

 $\mathbf{P}_0$ is Ratio of Poor Household

N<sub>p</sub> is Household that has Income below Poverty Line N is Total Population

For the analysis of the balance or the adequacy of current income and expenses, the research outcome indicates that more than half of the unemployed households have average incomes higher than their average expenditure (Table 10).

Table 10:         Adequacy of Current Income and Expenses						
Adequacy of Current Income and Expenses	Frequency	Percent				
Unemployed Household that has Average Income Less than	195	42.86				
Expenditure per Month per Capita						
Unemployed Household that has Average Income More	260	57.14				
than Expenditure per Month per Capita						
Total	455	100				
Total	455	100				

Source: Own Calculations.

# 4.3 The Relationship between Personal Factors and the Severity of the Unemployment Problem

The hypothesis test on the relationship between personal factors and the severity of the unemployment problem are as followed (Table 11):

 $H_0$ : Different personal factors of the unemployed persons, which have no difference impact on the severity of the unemployment problem at the significance level of 0.05.

 $H_1$ : Different personal factors of the unemployed persons, which have a difference impact on the severity of the unemployment problem at the significance level of 0.05.

	Pearson Chi-Square		Sig.
Table 11: The Relationship of Personal Fact Unemployment	ors and the Severity of	of the	
Severity of the Unemployment Problem	Value Asymp. Si	ig. Result	

Gender	8.06	0.09	1	2.03	0.09
Age	13.54	0.33	1	0.19	0.94
Marital Status	11.01	0.81	1	1.64	0.16
Educational Level	14.30	0.58	1	0.49	0.74
Household Size	7.42	0.83	1	1.04	0.39
Number of the Unemployed in Household	23.31	0.11	1	1.75	0.14
Experience/Number of Times of Unemployment	47.62	0.04	2	2.83	0.02*
Income Prior to Unemployment	24.17	0.24	1	1.54	0.19
Household Income	23.36	0.10	1	0.92	0.45
Household Expenditure	28.49	0.03	2	1.97	0.10

Source: Own Calculations.

Note: \* At Present, the Relationship has a Significance Level of 0.05.

From the results column, 1 means accept the null hypothesis and reject the alternative hypothesis. 2 means reject the null hypothesis and accept the alternative hypothesis.

The results of the Chi-square test point out that personal factors, which are gender, age, marital status, level of education, household size, number of unemployed in household, income before unemployment, and household income, do not correlate with the severity of the unemployment problem at the significance level of 0.05. The experience or number of times of unemployment and household expenditure are the factors that have a significance level of less than 0.05, which allows one to reject the null hypothesis and accept the alternative hypothesis. Both factors correlate with the severity of the unemployment problem at the significance level of 0.05.

In addition, the results of the F-test denote that the experience or the number of times of unemployment has been correlated with the severity of the unemployment problem due to the significance level of less than 0.05. One would reject the H<sub>0</sub> (accept H<sub>1</sub>) if F> F crit. In this case, F crit = 2.37 at df1 = 4, df2 = 450 and  $\alpha$  = 0.05, and the experience or number of times of unemployment is F = 2.8317, which is greater than 2.37, so we, therefore, reject the H<sub>0</sub>. It can be

concluded that number of times of unemployment has an effect on the severity of the unemployment significantly at the level of 0.05. The other variables have a significance level greater than the statistical significance set at 0.05, such as gender (0.0894 <0.05), so one must accept the key assumptions and the H<sub>0</sub>. Thus, the gender difference of the unemployed in the province has no effect on the severity of the unemployment.

## 4.4 The Relationship between Personal Factors and the Severity of Poverty after Unemployment

It is hypothesized that personal factors, such as gender, age, marital status, education, household size, number of unemployed members in household, number of times of unemployment, income before unemployment, household income, and expenditure, have become increasingly accepted as the justification for the severity of poverty.

The personal factors that have been correlated with the severity of poverty are education level, number of the unemployed in the household, and income before being unemployment (results of the Chi Square test), while age and educational level of the unemployed have been correlated with the severity of poverty (results of F-test). The education variable is significant, which is consistent with both tests (Table 12).

Personal factors, including gender, age, marital status, size of household, the unemployment experience, household income, and expenditure, have a significance level greater than 0.05, which corresponds to accepting the null hypothesis and rejecting the alternative hypothesis. Thus, these personal factors do not correlate with the severity of poverty at the significance level of 0.05. As for education, number of unemployed in the household, and income before unemployment, each has a significance level of less than 0.05. Therefore, one should reject the null hypothesis and accept the alternative hypothesis. It can be concluded that these personal factors correlate with the severity of poverty at a significance level of 0.05.

Furthermore, the analysis of variance (ANOVA) reveals that age and education are correlated with the severity of poverty with a significance level less than 0.05. The calculated significance value of the age variable is 0.0361. So, we will reject the H<sub>0</sub> when the significance value is less than the statistical significance or F value > F crit. In this case, F crit = 2.37 at df1 = 4, df2 = 450 and  $\alpha$  = 0.05. The age variable has a value of F = 2.5921, which is greater than 2.37, and therefore we reject the H<sub>0</sub>. The education variable has a value of F = 2.6107, which is greater than 2.37, so we reject the H<sub>0</sub>. Thus, age and educational levels will also affect the severity of poverty differently at significant levels of 0.05. The other factors have significance levels greater than 0.05. According, it can be concluded that gender,

marital status, size of household, number of unemployed in the household, number of times of unemployment, income prior to unemployment, household income, and expenditure will not significantly affect the severity of poverty at the 0.05 significance level.

 Table 12: The Relationship between Personal Factors and the Severity of Poverty after Unemployment

Severity of Poverty after	ChiPears	son -Square				
Unemployment	Value	Asymp.	Result F-test		<b>C!</b>	
	value	Sig.	Kesun	r-test	Sig.	
	(2-side	ed)				
Gender	2.84	0.58	1.00	0.71	0.59	
Age	17.16	0.14	1.00	2.59	0.04*	
Marital Status	15.51	0.49	1.00	0.49	0.75	
Educational Level	29.14	0.02	2.00	2.61	0.04*	
Household Size	11.71	0.47	1.00	1.55	0.19	
Number of the Unemployed in Household	55.54	0.00	2.00	2.21	0.07	
Experience/Number of Times of Unemployment	33.81	0.38	1.00	0.79	0.53	
Income Prior to Unemployment	38.50	0.01	2.00	0.95	0.44	
Household Income	14.37	0.57	1.00	0.42	0.79	
Household Expenditure	16.95	0.39	1.00	0.66	0.62	

Source: Own Calculations.

Note: \* At Present, the Relationship at a Significance Level of 0.05. From the results column, 1 means accept the null hypothesis and reject the alternative hypothesis. 2 means reject the null hypothesis and accept the alternative hypothesis.

## **4.5** The Relationship between Personal Factors and the Demand on Employment in the Future

It is hypothesized that personal factors have an effect on the future demand on employment significantly.

Factors that are correlated with the personal factors and the needs of future employment are age, marital status, and income prior to unemployment (results of the chi square test). Other factors have a significance level greater than 0.05, so the null hypothesis is accepted and the alternative hypothesis is rejected. In summary, these other factors are not correlated with the demand on future work.

 Table 13: The Relationship between Personal Factors and the Demand on

 Employment in the Future

	Value	Asymp. Sig.	Result	F-test	Sig.
	(2-sided	·			
Gender	9.46	0.05	1.00	2.39	0.05
Age	26.20	0.01	2.00	2.42	0.04*
Marital Status	28.86	0.02	2.00	2.00	0.09
Educational Level	13.00	0.67	1.00	1.51	0.20
Household Size	13.58	0.33	1.00	2.49	0.04*
Number of the Unemployed in Household	15.45	0.49	1.00	1.08	0.36
Experience/Number of Times of Unemployment	35.22	0.32	1.00	3.44	0.01*
Income Prior to Unemployment	44.54	0.00	2.00	1.70	0.15
Household Income	10.71	0.83	1.00	1.54	0.19
Household Expenditure	9.56	0.89	1.00	0.84	0.50

Demand on Employment in the Future ChiPearson -Square

Source: Own Calculations.

Note: \*At Present, the Relationship at a Significance Level of 0.05.

From the results column, 1 means accept the null hypothesis and reject the alternative hypothesis. 2 means reject the null hypothesis and accept the alternative hypothesis.

Furthermore, a comparison between personal factors and the needs of future employment using a one-way analysis of variance (ANOVA) indicates that sex, age, household size, and the number of times of unemployment are correlated with the needs of future employment. The significance level is less than the statistical significance value at 0.05. For this case, F crit = 2.37 at dfl = 4, df2 = 450 and  $\alpha$  = 0.05. Gender (F = 2.3889), age (F = 2.4195), household size (F = 2.4867), and the number of times of unemployment variables (F = 3.4425) have F values more than 2.37. Thus, we reject the H<sub>0</sub> (accept the H<sub>1</sub>) since F> F crit. Hence, gender, age, household size, and the number of times of unemployment variables are correlated with the need on future work differently at the statistical significant level of 0.05. The variable that is consistent with both tests is the age variable (Table 13).

## 4.6 The Relationship between Personal Factors and the Demand on Migration

It is hypothesized that personal factors of the unemployed workers influence the demand on migration in the future of the unemployed workers differently.

Demand on Migration	Pearson	<u>Cl</u> <u>-Square</u>			
	Value	Asymp. Sig. (2-sided)	Result	F-test	Sig.
Gender	4.74	0.03	2.00	4.77	0.03*
Age	12.29	0.01	2.00	11.65	0.00*
Marital Status	5.16	0.27	1.00	0.67	0.41
Educational Level	1.77	0.78	1.00	0.00	0.94
Household Size	11.40	0.01	2.00	1.34	0.25
Number of the Unemployed in Household	5.13	0.27	1.00	1.13	0.29

Table 14: The Relationship between Personal Factors and the Demand on Migration

Experience/Number of Times of Unemployment	14.38	0.07	1.00	7.40	0.01*
Income Prior to Unemployment	7.30	0.20	1.00	3.80	0.05
Household Income	27.71	0.00	2.00	23.56	0.00*
Household Expenditure	19.23	0.00	1.00	14.34	0.00*

Source: Own Calculations.

Note: \*At Present, the Relationship at a Significance Level of 0.05.

From the results column, 1 means accept the null hypothesis and reject the alternative hypothesis. 2 means reject the null hypothesis and accept the alternative hypothesis.

F crit =3.84 at df1 = 1, df2 = 453 and  $\propto = 0.05$ .

The correlation between personal factors and the needs of migration in the future are represented by gender, age, household size, household income, and expenditure and are significant (results of the chi square test), while gender, age, number of times of unemployment, income prior to unemployment, household income, and expenditure are also significant as well (results of the F-test). For the analysis of variance, F crit = 3.84 at dfl = 1, df2. = 453 and  $\alpha$  = 0.05. Gender (F = 4.7716), age (F = 11.6482), number of times of unemployment (F = 7.4008), income before unemployment (F = 3.7975), household income (F = 23.5598), and household expenditure variables (F = 14.3405) have values of F > F crit. Thus, we will reject the H<sub>0</sub>. The variables that are consistent with both tests are gender, age, household income, and expenditure (Table 14).

## 5 Conclusion and Discussion of Results

This study aims to examine the characteristics of unemployment and migration of labor in the Northeastern part of Thailand and to study the unemployment problems faced by local workers. The samples used in the study were 455 unemployed workers in Khon Kaen province, that is, 204 male and 251 female workers. Most workers, 36.04%, were between the ages of 26-30 years old. The unemployed were mostly single at 52.97%. The educational levels of the unemployed were mostly at the level of a graduate bachelor's degree, representing 48.35%, and graduate secondary school, representing 38.24% respectively. The first 437 unemployed have working experience, while the rest have been unemployed for the first time. The unemployed who have been unemployed for at least one time, amount to 37.8%. Most of the unemployed, about 77.58%, do not receive any unemployment compensation funds. The unemployed who have past working

experience, mostly worked at operating and machinery plants at 23.52%. Most of them were hired by private enterprises, at 81.76%. The majority of the unemployed were voluntarily unemployed rather than being laid off, representing 76.05%. Yet, 82.64% of the unemployed have difficulties finding jobs. The severity of the unemployment problem, the poverty problem, and the demand for future work are ranked at high levels. The main unemployment problems, which are ranked at the highest levels, are the lack of financial liquidity problem, the high cost of living problem, family problems, the expectation of future work problem, and the stress and lack of self-confidence problem.

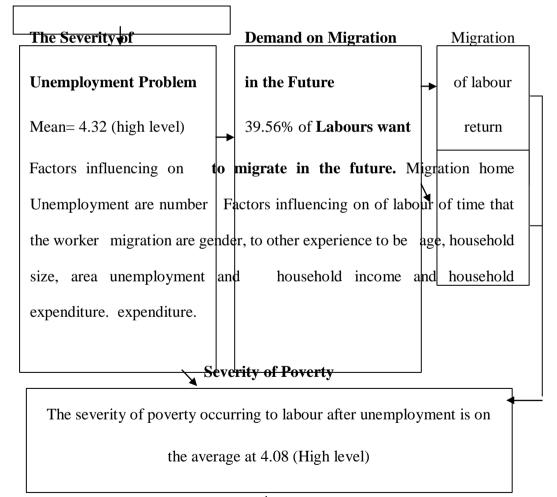
The priority of demand for assistance from the state are ranked as followed: the demand for employment within the province where they live, the demand for the development of working skills, the demand for financial support for private occupations, the demand for unemployment compensation funds, the demand for information about the labor market, the demand for help in finding jobs in any province, the demand for providing financial support for agricultural work, and the demand for supporting childrens' tuition fees. An analysis of the poverty within the unemployed household shows that those households have an average income per capita per month below the poverty line, which accounts for 10.1% of the population.

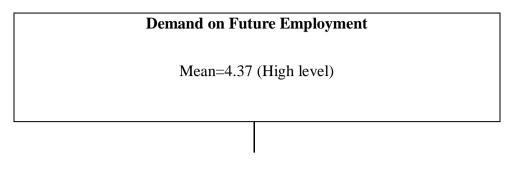
Factors that relate to the severity of the unemployment problem are the number of times that one has been unemployed and the household expenditure. Factors that are associated with the severity of poverty are educational levels, the number of unemployed in a household, and the income prior to unemployment. Factors that relate to the demand for permanent job positions are age, marital status, and income prior to unemployment. Factors that relate to migration are gender, age, household size, household income, and expenditure.

The results of this research illustrate an interesting relationship between unemployment, migration and poverty. The impact of economic crisis on employment is great. Factors influencing on Unemployment are number of time that the worker experience to be unemployment and household expenditure. The unemployment problem has an effect on people's decision on migration back home or to the new area, which can create more income opportunity. Factors influencing on migration are gender, age, household size, household income and expenditure. The result of migration can be in turn of poverty in case of the migration is not successful. By the way, the unemployment problem can also cause the poverty problem. Factors influencing on poverty are educational level, number of unemployed working family member and income before unemployment. When people are unemployed and feel very poor, people demand on employment. Factors influencing on demand on future employment are age, marital statutes and income before unemployment. Moreover, the impact on social and economics are important as well. The unemployment problem cause people migrate to solve problem.

However, people also face the problem of financial liquidity, high cost of living, family problem, unsatisfied new work, and mental problem (Figure 2).

#### **Economic Crisis**





### **Impact on Social and Economics**

Lack of financial liquidity: mean=4.29 (high level)

Cannot afford on high cost of living: mean= 4.32 (high level)

Figure 2: The Impact of Economic Crisis on Unemployment, Migration and Poverty (Result from Chi-square Test)

## 6 Policy Recommendations

These findings have important implications for policy recommendations. As cited by the **young unemployed worker**, most of the unemployed workers are between the ages of 26-30 years old, followed by the ages of 21-25 years old. They mostly have graduated with a bachelor's degree at 48.35% or at least have completed high school at 38.24%, respectively. An analysis of the causes of unemployment revealed that the unemployed are frequently not invited to work due to their higher degrees, which do not match the needs of the employers and the local work. In general, local enterprises require only basic knowledge and skill of the profession. Furthermore, the entrepreneur needs to reduce the cost of hiring workers with high degrees. On the other hand, these employees are not satisfied with their low wages. The unemployed groups are young and do not have much experience, so these workers have a higher mobility to look for work. It is, therefore, difficult to create local jobs for qualified higher educational workers under such conditions of the limitations of the working position with wages that meet the needs of workers. To implement a policy that reduces the unemployment rate among the highly educated workers, the government should expand public organizations and academic departments to reduce the number of the unemployed and the problem of "brain drain," resulting from the migration of young workers.

When discussing **work experience**, most of the unemployed have been working for less than five years. This indicates that experience is a key part in

making decisions about employment. Thus, one can help eliminate unemployment by carrying out training courses to increase knowledge and skills in order to meet the needs of the employer and to increase the employee's chances of finding better employment in the future.

According to the **labor welfare arrangement** and unemployment compensation provision, this study signifies that the unemployed mostly do not receive any money at all. This may result from the scope of the unemployment insurance not covering the informal workers. Incidentally, among those who receive compensation, they express the opinion that it is such little money compared to the high cost of living. Therefore, the government should pay more attention to the informal workers and consider improving the compensation, adjusting it to the economic and social changes.

Once again, the unemployment problem solving strategies should be reviewed based on various situations, which are as followed:

1) *a temporary solution to the unemployment problem* should focus on providing information to workers and employers or hold appointments for the workers and employers to find each other in the labor market,

2) *the issue of seasonal unemployment*, where labor groups should be encouraged to do other tasks during the time of no farm activity,

3) solving the problem of unemployment due to changes in economic structure and technological changes by training and requiring workers to practice switching themselves to work in the industrial sector, instead of the agricultural sector.

Moreover, the government can impose taxes if that particular technology is not necessarily useful. Yet, the technology can still be substituted for labor in the case of labor shortages.

In addition, when mentioning **monetary and fiscal policies**, these policies should be adjusted to reflect the current economic conditions. For example, as to the monetary policy, the government should use financial measures to increase the amount of money circulating in the country, which will result in lower interest rates, higher investment and productivity, and ultimately higher employment growth. When talking about the **fiscal policy**, the government should increase spending and reduce tax rates consistent with the economic conditions to stimulate production, exports, and consumption, which will then result in higher employment. Finally, as to the **education policy**, the government should set an education plan for the people, especially those in this study and determine the educational structure best suited for the country's economic structure, which will meet the needs of the market, and the needs of the country.

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