# Informal Worker Preference on Health Care Insurance in the Northeastern Region of Thailand

Thitiwan Sricharoen

***Abstract*—**The analysis of demand on health care insurance of 772 informal workers in the northeastern region of Thailand, applies conjoint analysis to find out the demand on health care insurance. The result shows that the coverage of health care that include accident and operation is most selected with 26% of all occurrence situation of all choice of 0.48. For the payment of health insurance, research results shows that annual payment is most popularly choose with 28%. Refer to insurance plan, it is interesting that most of informal workers choose to buy health insurance together with life insurance with 48%. Note to the payment for hospital room service, food and health care service, it concludes that the coverage of both inpatient and outpatient cost are most selected with 32%. Lastly, the rights of choosing insured hospital, respondents express the result that they choose to insured with public hospital with high percentage of 27%.

***Keywords*—**Micro Insurance, Health Insurance, Informal Worker Preference, Informal Worker Welfare Arrangement.

## I. Introduction

THE informal sector is a pervasive and persistent economic feature of most developing economies, contributing significantly to employment creation, production, and income generation (The World Bank, 2012) [4]. A recent estimate of the size of the informal sector in Thailand has a large share of population. When comparing data between the year 2007 and 2012, it found that the proportion of informal workers did not have much change. During 2008 to 2009, the numbers of informal workers were quite high, about 63.7% and 63.4% but its number declined to 62.3% in 2010. Two years later, its number increased to 62.6% and 62.7%, respectively (Fg 1).

National Statistical Office was conducted to collect data of informal worker in the 3rd quarter during July to September 2011. The survey in 2012 found that Thailand had 39.6 million employed populations, which could be classified into 24.8 million informal workers, accounted for 62.6% and the rest of the workforce was the formal workers about 14.8 million workers or 37.4%. Considering the informal worker by gender, it showed that there were 13.4 million male workers, about 54% and 11.4 million female or 46% of total informal worker.

Thitiwan Sricharoen is with the Department of Economics, Faculty of Management Science, Khon Kaen University, Khon Kaen, Thailand 40002 (corresponding author's phone: 66 86 4562950; e-mail: thitiwans@gmail.com).

The greatest number of informal worker worked in the northeast, accounted for 41.5%, following by the north with 21.7%, the central with 18.1%, the south with 13.6% and Bangkok with 5.1%. The informal workers were unsecured. They did not receive any employment collateral, protection and social welfare from working. They had an inequality in work (Table I) (National Statistical Office, 2012) [2].

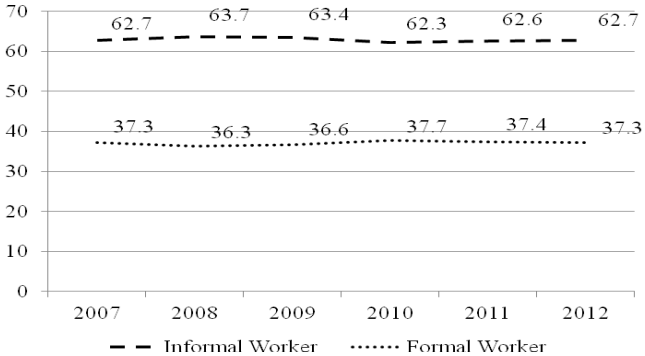


Fig. 1 Percentage of formal and informal worker in Thailand between 2007 and 2012

TABLE I
NUMBER OF INFORMAL WORKER CLASSIFIED BY GENDER IN 2012
Unit: Million Persons

| | Total | Percent | Male | Female |
|---|---|---|---|---|
| Total Workfore | 39.6 | | | |
| Formal Worker | 14.8 | 37.4 | | |
| Informal Worker | 24.8 | 62.6 | 13.4 | 11.4 |

**Source:** National Statistical Office, 2012.

There are various reasons why governments may be concerned about large informal sectors. These include potentially negative consequences for competitiveness and growth, incomplete coverage of formal social programs, undermining social cohesion and law and order, and fiscal losses due to undeclared economic activity. For most governments, these concerns outweigh any advantages that the informal sector offers as a source of job creation and as a safety net for the poor (The World Bank, 2012) [4].Therefore, the study of micro insurance in the case study of the demand on health insurance of informal sector in the northeast of Thailand is particularly important. It is significance to study the needs of informal workers on social welfare system, and the benefit of recipients accessing to welfare services.

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## II. Objectives, Methodology, Data Collection And Research Area

This research has the purpose to analyze demand on health insurance of informal workers in the northeast of Thailand. The arrangement of health insurance in this study offers the new options of various health insurance schemes. The insured have the right to choose according to their own needs. This health insurance model completes the needs of the insured with the best offer of new alternatives. In general, health insurance premiums are paid annually and leave. It can not keep saving money as a life insurance, which can receive money returning after the contract expired. In addition, this study also adds the choice of the consumer or buyer of insurance by the choice desired coverage level.

The analysis of demand on health care insurance, the methodology applies the techniques of "conjoint analysis", which is multivariate technique to evaluate the satisfactory of informal workers on health insurance products in different ways. The basic conjoint analysis (CA) model may be represented by following formula (Malhotra, 2004) [1]:

$$Y = \sum_{i=1}^{n}\sum_{j=1}^{m} \beta_{ij} Xij \qquad (1)$$

Conjoint analysis in this study is used to quantify and predict client preferences for various levels of attributes. For this purpose, CA frequently employs additive models. the cluster and the componential segmentation model and depicted below (Schrieder, 1994).

$$Y = \sum_{i=1}^{n}\sum_{j=1}^{m} \beta_{ij} Xij + \sum_{i=1}^{n}\sum_{k=1}^{m} \gamma_{jk} Z_k + \varepsilon \qquad (2)$$

$Y$ denotes the clients' overall preference, respectively choice for the service alternatives under investigation. These alternatives are described in terms of $j$ -levels for $i$ -attributes $ij$. $\beta_{ij}$ is the part-worth utility associated with the $j^{th}$ –level of the $i^{th}$ -attribute. The part-worth utility measures the relative importance of $X_{ij}$ in estimating the dependent variable. $X_{ij}$ is a control variable to flag either presence ($X_{ij}$ =1) or absence ($X_{ij}$ =1) of the $j^{th}$ –level for the $t^{th}$ –attribute.

The attribute of the health insurance profile analyzed here are:

$Y$ = Informal worker health insurance profile choice. Y expressed the satisfaction of the workers to choose the form of insurance, which indicates the overall of the various alternatives choice. Alternative choices are show in level j for alternative i. Data may be metric (Interval, Ratio Scale) or Non-metric (Nominal, Ordinal Scale);

TABLE II
Health Insurance Concepts and Their Empirically Researched Attributes, Levels and Detail

| Attribute | Attribute Levels | Detail of insurance |
|---|---|---|
| Coverage | General Sickness Coverage | The coverage of insurance covers only the treatment of common disease diagnosis. |
| | Coverage include Accident and Operation | The coverage of insurance cover the treatment of common disease diagnosis, serious case like accident and cover the operation cost. The operation cost relies on the insurance premium. Wider coverage but higher price. |
| Payment | Annual Payment | Pay the insurance premium once a year. |
| | Every Half Year Payment | Pay the insurance premium two time a year. More flexible for the one who has low income or uncertainty income. |
| Insurance Plan | Buy Health Insurance Only | The insurance plan that the insurer buys only health insurance. Money payment per year and money leave. No money return in the long run. |
| | Buy Health Insurance and Life Insurance | The insurance plan that the insurer buy health insurance together with life insurance. Benefit is the insurer receives the money saving return after the maturity date and has the life insurance protection. Cost is the payment for both insurance is higher. |
| Inpatient- Outpatient Cost | OPD | The insurance payment covers only out-patient service. A patient is any recipient of health care services. The illness person need of treatment by physician or health care provider. An outpatient (or out-patient) is a patient who is not hospitalized for 24 hours or more but who visits a hospital, clinic or associated facility for diagnosis or treatment. |
| | IPD | The insurance payment covers only in-patient service. An inpatient (or in-patient), on the other hand, is "admitted" to the hospital and stays overnight or for an indeterminate time, usually several days or weeks (though some cases, such as coma patients, have been in hospitals for years). |
| | OPD and IPD | The insurance payment cover both out-patient and in-patient service. It covers the cost of treatment |
| Hospital | Public Hospital | The insurance scheme that can use the service at public hospital only. A public hospital is a hospital which is owned by a government and receives government funding. |
| | Private Hospital | The insurance that cover only private hospital. A private hospital is a hospital owned by a profit company or a non-profit organization and privately funded through payment for medical services by patients themselves, insurers, governments through national health insurance schemes, or by foreign embassies. |
| | Any Hospital | The insurance scheme that cover public, private hospital and also clinic. |

**Source:** Own Modification (2014).

Assigned

$\beta_{ij}$ = The utility measurement of the consumption on j of the alternative choice i by comparing the importance of the variables $X_{ij}$.

$X_{ij}$ = Explanatory health insurance concept variable. $X_{ij}$ is the control variable of j of the alternative choice i. Data is non metric variable.

$Z$ = Respondent's explanatory background variable;

ε = Error term;

$X$ for $i$ = 1 to 3: (1) Coverage,
(2) Payment,
(3) Insurance Plan,
(4) Inpatient-Outpatient Cost, and
(5) Hospital

The levels for each attribute are:

$X_{1j}$ for $j$ = 1 to 2: (1) General Sickness Coverage
(2) Coverage include Accident and Operation

$X_{2j}$ for $j$ = 1 to 2: (1) Annual Payment
(2) Half Year Payment

$X_{3j}$ for $j$ = 1 to 2: (1) Buy Health Insurance Only
(2) Buy Health Insurance and Life Insurance

$X_{4j}$ for $j$ = 1 to 3: (1) OPD
(2) IPD
(3) OPD and IPD

$X_{5j}$ for $j$ = 1 to 3:(1) Public Hospital
(2) Private Hospital
(3) Public, Private Hospital and Clinic

The componential segmentation model emphasizes the interaction between service profile $X$, and the respondents' profile. This requires the extension of the additive model by a vector $Z_k$ that describes the respondents in terms of demographic, socioeconomic and health background variables. Interaction between a person's background variable and the attribute levels $X_{ij}$ is represented by the parameter $\gamma_{jk}$ . $Z_k$ denotes the vector of background variables (Schrieder, 1994)[3].

The demand for health insurance design studies by applying choice-based conjoint analysis to determine the health insurance. In providing health insurance, this study considers five attributes of insurance that are, coverage level, payment, insurance plan, outpatient or inpatient cost, and client's institution option or hospital (Table II).

## III. Descriptive Analysis On Health Care Status Of Informal Worker

Results on health insurance indicate that about 26.42% of the informal workers were between 21 to 30 years old. About 32.51% of respondents graduate secondary school. Most of them have income less than 10,000 Baht per month, according for 60.62% (Table III).

TABLE III
Descriptive of Informal Worker Health Insurance Age, Education, Income and Province by Gender in Percent

| | Gender | | | | Total | |
|---|---|---|---|---|---|---|
| | Male (N = 308) | | Female (N = 464) | | (N = 772) | |
| | (1) | (2) | (1) | (2) | (1) | (2) |
| **Age** | | | | | | |
| Less than 20 Years Old | 18 | 5.84 | 23 | 4.96 | 41 | 5.31 |
| 21-30 Years Old | 70 | 22.73 | 134 | 28.88 | 204 | 26.42 |
| 31-40 Years Old | 83 | 26.95 | 116 | 25.00 | 199 | 25.78 |
| 41-50 Years Old | 76 | 24.68 | 106 | 22.84 | 182 | 23.58 |
| 51-60 Years Old | 46 | 14.94 | 64 | 13.79 | 110 | 14.25 |
| Above 60 Year s | 15 | 4.87 | 21 | 4.53 | 36 | 4.66 |
| **Education** | | | | | | |
| Less than Primary School | 10 | 3.25 | 16 | 3.45 | 26 | 3.37 |
| Primary School | 58 | 18.83 | 74 | 15.95 | 132 | 17.10 |
| Secondary School | 113 | 36.69 | 138 | 29.74 | 251 | 32.51 |
| Vocationary School | 64 | 20.78 | 89 | 19.18 | 153 | 19.82 |
| Bachelor Degree | 56 | 18.18 | 136 | 29.31 | 192 | 24.87 |
| Master Degree and Above | 7 | 2.27 | 11 | 2.37 | 18 | 2.33 |
| **Income** | | | | | | |
| Less than 10,000 Baht per Month | 190 | 61.69 | 278 | 59.91 | 468 | 60.62 |
| 10,001-20,000 Baht per Month | 88 | 28.57 | 134 | 28.88 | 222 | 28.76 |
| 20,001-30,000 Baht per Month | 18 | 5.84 | 32 | 6.90 | 50 | 6.48 |
| 30,001-40,000 Baht per Month | 7 | 2.27 | 4 | 0.86 | 11 | 1.42 |
| 40,001-50,000 Baht per Month | 4 | 1.30 | 12 | 2.59 | 16 | 2.07 |
| More than 50,000 Baht per Month | 1 | 0.32 | 4 | 0.86 | 5 | 0.65 |
| **Province** | | | | | | |
| Khon Kaen | 132 | 42.86 | 254 | 54.74 | 386 | 50.00 |
| Mahasarakam | 176 | 57.14 | 210 | 45.26 | 386 | 50.00 |

**Source:** Own Survey, 2013.
**Note:** (1) is number. (2) is percent.

## IV. Main Effects And Two-Way Effects Of Multi-Attributes Of Health Care Insurance Concepts

The analysis of demand on health care insurance of informal workers applies conjoint analysis to find out the demand on health care insurance. The results present the coverage of health insurance classifies into general sickness coverage and the coverage of health care that include accident and operation. The result shows that the coverage of health care that include accident and operation is most selected with 26% of all occurrence situation from the total of all choice of 0.48. For the payment of health insurance, this separates into annual payment and every half year payment. Research results shows that annual payment is most popularly choose with 28%. Refer to insurance plan that can be classifies into buy health insurance only and buy health insurance with life insurance. It is interesting that most of informal workers choose to buy health insurance together with life insurance with 48%. Note to the payment for hospital room service, food and health care service, which are the coverage for outpatient cost, inpatient cost and the coverage of both inpatient and outpatient cost. It concludes that the coverage of both inpatient and outpatient

cost are most selected with 32%. Lastly, the rights of choosing insured hospital, that are, public hospital, private hospital and any hospital. Respondents express the result that they choose to insured with public hospital with high percentage of 27% (Table IV).

TABLE IV
ATTRIBUTE MAIN EFFECTS IN PERCENT, SIGNIFICANCE LEVELS OF ATTRIBUTES, BY GENDER

| Attribute Levels & Chi-square Significance | Gender | | |
|---|---|---|---|
| | Total | Male | Female |
| | 772 | (N=308) | (N=464) |
| **Coverage** | | | |
| General Sickness Coverage | 0.22 | 0.22 | 0.22 |
| Coverage include Accident and Operation | 0.26 | 0.25 | 0.26 |
| Within Att. Chi-Square | 13.78 | 4.77 | 9.05 |
| D.F. | 1 | 1 | 1 |
| Significance | p < .01 | p < .05 | p < .01 |
| **Payment** | | | |
| Annual Payment | 0.28 | 0.27 | 0.28 |
| Every Half Year Payment | 0.16 | 0.16 | 0.16 |
| Within Att. Chi-Square | 195.54 | 73.77 | 121.84 |
| D.F. | 1 | 1 | 1 |
| Significance | p < .01 | p < .01 | p < .01 |
| **Insurance Plan** | | | |
| Buy Health Insurance Only | 0.22 | 0.22 | 0.22 |
| Buy Health Insurance and Life Insurance | 0.26 | 0.25 | 0.26 |
| Within Att. Chi-Square | 27.79 | 8.92 | 19.05 |
| D.F. | 1 | 1 | 1 |
| Significance | p < .01 | p < .01 | p < .01 |
| **Inpatient-Outpatient Cost** | | | |
| OPD | 0.16 | 0.16 | 0.16 |
| IPD | 0.21 | 0.21 | 0.21 |
| IPD and OPD | 0.32 | 0.31 | 0.32 |
| Within Att. Chi-Square | 277.33 | 98.48 | 179.34 |
| D.F. | 2 | 2 | 2 |
| Significance | p < .01 | p < .01 | p < .01 |
| **Hospital** | | | |
| Public Hostpital | 0.27 | 0.26 | 0.27 |
| Private Hospital | 0.22 | 0.21 | 0.22 |
| Public, Private Hospital and Clinic | 0.20 | 0.21 | 0.20 |
| Within Att. Chi-Square | 46.09 | 17.89 | 28.35 |
| D.F. | 2 | 2 | 2 |
| Significance | p < .01 | p < .01 | p < .01 |

**Source:** Own Survey, 2013.

The analysis of two-way effects (Table V) regarding health insurance attributes can be attained by orthogonal design. The two-way effects analyzed in this section are:(1) Coverage x Insurance Plan, (2) Coverage x Inpatient-Outpatient Cost, (3) Coverage x Hospital, (4) Payment x Insurance Plan, (5) Payment x Inpatient-Outpatient Cost, (6) Payment x Hospital, (7) Insurance Plan x Inpatient-Outpatient Cost, (8) Insurance Plan x Hospital, (9) Inpatient-Outpatient Cost, and (10) None option. A large Chi Square value suggests a significant interaction effect between the two attributes. The result of the two-way effect contingency table clearly indicates that interaction effect between the attribute of are coverage level, payment, insurance plan, Inpatient-Outpatient Cost, and hospital are significant.

TABLE V
TWO-WAY EFFECTS OF ATTRIBUTE IN PERCENT OF ALL RESPONDENTS, SIGNIFICANCE LEVELS OF ATTRIBUTES, BY GENDER

| Attribute Levels & Chi-square Significance | Gender | | |
|---|---|---|---|
| | Total | Male | Female |
| | 772 | (N=308) | (N=464) |
| **Coverage x Payment** | | | |
| General Sickness Coverage x Annual Payment | 0.26 | 0.26 | 0.27 |
| General Sickness Coverage x Half Year Payment | 0.14 | 0.14 | 0.14 |
| Coverage include Accident and Operation x Annual Payment | 0.33 | 0.33 | 0.34 |
| Coverage include Accident and Operation x Half Year Payment | 0.2 | 0.2 | 0.2 |
| Interaction Chi-Square | 3.03 | 1.04 | 2.01 |
| D.F. | 1 | 1 | 1 |
| Significance | not sig | not sig | not sig |
| **Coverage x Insurance Plan** | | | |
| General Sickness Coverage x Buy Health Insurance Only | 0.22 | 0.22 | 0.22 |
| General Sickness Coverage x Buy Health Insurance and Life Insurance | 0.23 | 0.22 | 0.23 |
| Coverage include Accident and Operation x Buy Health Insurance Only | 0.2 | 0.2 | 0.2 |
| Coverage include Accident and Operation x Buy Health Insurance and Life Insurance | 0.33 | 0.33 | 0.34 |
| Interaction Chi-Square | 53.31 | 21.71 | 31.59 |
| D.F. | 1 | 1 | 1 |
| Significance | p < .01 | p < .01 | p < .01 |
| **Coverage x Inpatient-Outpatient Cost** | | | |
| General Sickness Coverage x OPD | 0.16 | 0.16 | 0.16 |
| General Sickness Coverage x IPD | 0.19 | 0.19 | 0.19 |
| General Sickness Coverage x IPD and OPD | 0.32 | 0.31 | 0.32 |
| Coverage include Accident and Operation x OPD | 0.18 | 0.19 | 0.18 |
| Coverage include Accident and Operation x IPD | 0.24 | 0.24 | 0.24 |
| Coverage include Accident and Operation x IPD and OPD | 0.31 | 0.3 | 0.31 |
| Interaction Chi-Square | 13.6 | 5 | 8.65 |
| D.F. | 2 | 2 | 2 |
| Significance | p < .01 | not sig | p < .05 |
| **Coverage x Hospital** | | | |
| General Sickness Coverage x Public Hospital | 0.25 | 0.25 | 0.25 |
| General Sickness Coverage x Private Hospital | 0.21 | 0.2 | 0.21 |
| General Sickness Coverage x Public, Private Hospital and Clinic | 0.21 | 0.21 | 0.21 |
| Coverage include Accident and Operation x Public Hospital | 0.31 | 0.3 | 0.31 |
| Coverage include Accident and Operation x Private Hospital | 0.24 | 0.24 | 0.24 |
| Coverage include Accident and Operation x Public, Private Hospital and Clinic | 0.18 | 0.19 | 0.18 |
| Interaction Chi-Square | 15.48 | 5.43 | 10.2 |
| D.F. | 2 | 2 | 2 |
| Significance | p < .01 | not sig | p < .01 |
| **Payment x Insurance Plan** | | | |
| Annual Payment x Buy Health Insurance Only | 0.24 | 0.24 | 0.24 |
| Annual Payment x Buy Health Insurance and Life Insurance | 0.32 | 0.31 | 0.32 |
| Half Year Payment x Buy Health Insurance Only | 0.18 | 0.18 | 0.18 |
| Half Year Payment x Buy Health Insurance and Life Insurance | 0.11 | 0.11 | 0.11 |
| Interaction Chi-Square | 98.83 | 33.83 | 65.32 |
| D.F. | 1 | 1 | 1 |
| Significance | p < .01 | p < .01 | p < .01 |

| | | | |
|---|---|---|---|
| **Payment x Inpatient-Outpatient Cost** | | | |
| Annual Payment x OPD | 0.2 | 0.2 | 0.2 |
| Annual Payment x IPD | 0.23 | 0.23 | 0.23 |
| Annual Payment x IPD and OPD | 0.36 | 0.35 | 0.36 |
| Every Half Year Payment x OPD | 0.12 | 0.12 | 0.12 |
| Every Half Year Payment x IPD | 0.18 | 0.18 | 0.17 |
| Every Half Year Payment x IPD and OPD | 0.21 | 0.21 | 0.22 |
| Interaction Chi-Square | 11.29 | 5.37 | 5.98 |
| D.F. | 2 | 2 | 2 |
| Significance | p < .01 | not sig | not sig |
| **Payment x Hospital** | | | |
| Annual Payment x Public Hospital | 0.31 | 0.31 | 0.31 |
| Annual Payment x Private Hospital | 0.26 | 0.26 | 0.27 |
| Annual Payment x Public, Private Hospital and Clinic | 0.22 | 0.22 | 0.22 |
| Every Half Year Payment x Public Hospital | 0.16 | 0.15 | 0.17 |
| Every Half Year Payment x Private Hospital | 0.15 | 0.16 | 0.15 |
| Every Half Year Payment x Public, Private Hospital and Clinic | 0.19 | 0.19 | 0.19 |
| Interaction Chi-Square | 26.66 | 14.83 | 13.14 |
| D.F. | 2 | 2 | 2 |
| Significance | p < .01 | p < .01 | p < .01 |
| **Insurance Plan x Inpatient-Outpatient Cost** | | | |
| Buy Health Insurance Only x OPD | 0.17 | 0.17 | 0.17 |
| Buy Health Insurance Only x IPD | 0.22 | 0.23 | 0.22 |
| Buy Health Insurance Only x IPD and OPD | 0.26 | 0.26 | 0.27 |
| Buy Health Insurance and Life Insurance x OPD | 0.11 | 0.12 | 0.1 |
| Buy Health Insurance and Life Insurance x IPD | 0.19 | 0.18 | 0.19 |
| Buy Health Insurance and Life Insurance x IPD and OPD | 0.38 | 0.37 | 0.39 |
| Interaction Chi-Square | 101.37 | 35.53 | 67.7 |
| D.F. | 2 | 2 | 2 |
| Significance | p < .01 | p < .01 | p < .01 |
| **Insurance Plan x Hospital** | | | |
| Buy Health Insurance Only x Public Hospital | 0.22 | 0.22 | 0.22 |
| Buy Health Insurance Only x Private Hospital | 0.21 | 0.21 | 0.21 |
| Buy Health Insurance Only x Public, Private Hospital and Clinic | 0.21 | 0.22 | 0.21 |
| Buy Health Insurance and Life Insurance x Public Hospital | 0.32 | 0.32 | 0.33 |
| Buy Health Insurance and Life Insurance x Private Hospital | 0.22 | 0.22 | 0.22 |
| Buy Health Insurance and Life Insurance x Public, Private Hospital and Clinic | 0.18 | 0.18 | 0.18 |
| Interaction Chi-Square | 40.98 | 14.86 | 26.16 |
| D.F. | 2 | 2 | 2 |
| Significance | p < .01 | p < .01 | p < .01 |
| **Inpatient-Outpatient Cost x Hospital** | | | |
| OPD x Public Hostpital | 0.21 | 0.23 | 0.2 |
| OPD x Private Hospital | 0.14 | 0.14 | 0.15 |
| OPD x Public, Private Hospital and Clinic | 0.18 | 0.19 | 0.18 |
| IPD x Public Hostpital | 0.2 | 0.19 | 0.2 |
| IPD x Private Hospital | 0.24 | 0.24 | 0.24 |
| IPD x Public, Private Hospital and Clinic | 0.19 | 0.19 | 0.18 |
| IPD and OPD x Public Hostpital | 0.36 | 0.35 | 0.36 |
| IPD and OPD x Private Hospital | 0.29 | 0.29 | 0.3 |
| IPD and OPD x Public, Private Hospital and Clinic | 0.26 | 0.26 | 0.27 |
| Interaction Chi-Square | 46.95 | 21.46 | 26.18 |
| D.F. | 4 | 4 | 4 |
| Significance | p < .01 | p < .01 | p < .01 |
| **None** | 0.08 | 0.08 | 0.07 |

**Source:** Own Survey, 2013.

Results of the two-way effects between the attributes by gender determine the possible difference in the preference of health insurance concept between genders. At the first sight, the high preference for "coverage include accident and operation and annual payment", account for 33%. The next attribute of coverage and insurance plan, it becomes evident that the availability of "coverage include accident and operation and buy health insurance and life insurance" prompts a highest share of the respondents, account for 33%. According to the attribute of coverage and inpatient-outpatient cost, it is the high preference for "General Sickness Coverage and IPD and OPD", amount for 32%. Next, the attribute of coverage and hospital can explain the higher acceptance rate of "coverage includes accident and operation and public hospital, account 31%. Note to the attribute of payment and insurance plan, "annual payment and buy health insurance and life insurance contain high percentage of 32%. Refer to the attribute of payment and inpatient-outpatient cost, the popular selection are "annual payment and IPD and OPD" with 36%. For the attribute of payment and hospital, it presents the high rate of 31% on "annual payment and public hospital" attribute. Concerning to the insurance plan and inpatient-outpatient cost attribute, the "buy health insurance and life insurance attribute and IPD and OPD" attribute is most choose with 39%. Notice to the attribute of insurance plan and hospital, it is the highest percentage of 32% on "buy health insurance and life insurance and public hospital". Finally, the attribute of inpatient-outpatient cost and Hospital identifies that the attribute of "IPD and OPD and public hospital" has very high percentage of 36% (Table V).

## V. Conclusion

Informal workers are large number and have an important role in driving the economy of the country. Thailand consists of a numerous informal workers who lack of social security. When population gets sick whether heavy or serious illness, they should be protected and treated in accordance with international standards. The welfare arrangements for the informal workers are under paying attention. This welfare system has been continuous improvement from the past to the present. At present, the ministry of labor let the labor to apply social security to get the benefits for two choices in case of sickness. However, the implementation of this project requires huge amounts of public funds to subsidize the project.

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**Assist.Prof.Dr.Thitiwan Sricharoen**, Economist (PhD-Agricultural Economics) present is an Assistant professor of Economics at Department of Economics, Faculty of Management Science, Khon Kaen University, Thailand. She was born in Chonburi province in 1974. According to educational qualification, she received her B.A. in Economics in 1996 from Thammasat University, Thailand, M.A. in Economics in 1998 from Chulalongkorn University, Thailand, Ph.D. in Agricultural Economics in 2007 from University of Hohenheim, Germany. She eventually earned her spot as a lecturer at Khon Kaen University. She also works for Graduate School, Khon Kaen University. She has developed a number of graduate level courses. She has more than 12 years of teaching and research experience. Her fields of specialization are International Economics, Development Economics and Agricultural Economics. She is the author of books of International Trade Theory and Policy, Khon Kaen University Press, 2011. She has also published many research papers and articles in different national and international journals. She has presented papers in national and international conference, i.e. Germany, Switzerland, Singapore, Hong Kong and so on. Currently, Dr. Thitiwan Sricharoen researches focus on poverty, vulnerability measurement, elderly welfare arrangement, labor migration, impact of unemployment, micro insurance, pattern of paddy storage, and international economy