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## Sufficiency Economy Philosophy and Happiness of Farmers in Thailand<sup>†</sup>

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### Abstract

Although Thailand has previously applied the Sufficiency Economy Philosophy in its development paradigm, few quantitative studies focus on the magnitude of the effect of Sufficiency Economy Philosophy on happiness. This focuses on the farmers who live in upper northern Thailand. Result from Ordered Logit regression shows that Sufficiency Economy Intensity (SEI) has a strong positive relationship with subjective happiness. The more the SEI adaptation, the happier the farmers are. Subjective happiness is also positively correlated with objective happiness and absolute income. Comparing the effect of all including variables, SEI is the most powerful variable to increase happiness while the power of objective happiness and absolute household income are limited. While real relative income variables are insignificant, attitude toward relative income has a strong positive significant relationship with the subjective happiness level. That means “attitude or perception” is more important than “real situation” in the view of farmers. Moreover, farmers with less income aspiration or ambition seem to be happier than those with more. After the effects of objective happiness, household income, relative income, and income aspiration were controlled through the research model, SEI still affected subjective happiness. This result confirms that Sufficiency Economy Philosophy can effectively affect one’s mental happiness, which is the core concept of the Sufficiency Economy Philosophy.

Keywords: Happiness, Sufficiency Economy, Ordered Logit Model, Thai Farmer, Satisfaction

JEL Classification: C35, D01, O13

### Introduction

Before the economic crisis in 1997, the development of Thailand under conditions of rapid economic growth has generated numerous problems, such as social and economic inequality problems (Thailand Future Foundation, 2014), cronyism, bribery and corruption (Monataraphadung, 2012), ultimately creating an unhappy society. This crisis was a major lesson, prompting the Thai people to realize that the previously unbalanced country development was not founded on adequate preparedness and strength. After economic crisis, the development policy paradigm has changed from economic-led growth to a new concept of alternative development based on the “Sufficiency Economy Philosophy” (henceforth SE).

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The SE is rooted from the Thai culture and the doctrine of Buddhism; furthermore, it has been developed based on the accumulated knowledge and long, direct experience of His Majesty King Bhumibol Adulyadej (Bunnag, 2013). The philosophy incorporates three major components, namely, moderation, reasonableness, and immunity, with the two underlying conditions of wisdom and moral conditions (Naipinit et al., 2014).

Since the Eighth Economic and Social Development Plan, SE becomes the principle of the country's development strategy, and it is adopted in all levels of Thai society (Bunnag, 2013) especially in agriculture sector.

Nowadays, there is still few quantitative evidences which confirm the effect of SE on happiness especially for the people in agriculture sector. Therefore, this paper aims to provide a significant answer if "Sufficiency Economy Philosophy can satisfy human happiness". This most interesting finding is very important and useful for Thai government agencies, academicians and other policy makers to make and drive Sufficiency Economy with suitable policy to stimulate sustainable happiness for all people.

## Data and Measurement

### Sampling Methods

The sampling process involved two steps. The first step entailed the selection of provinces in the upper northern region. This study selected three provinces; Chiang Mai, Chiang Rai, and Lampang, because these provinces had the largest number of agricultural households in the upper North of Thailand.

The second step involved the use of geographical concept in selecting a representative for each province. This paper classified amphoe in each province into three layers, namely, core, middle, and outer layers. Only farmers in amphoe under the middle layer were subsequently selected because of the mix between urban and rural areas.

The sample size was calculated by using the method proposed by Schumacker and Lomax (1996) which specified the ratio between the numbers of estimated parameters and the numbers of samples. They usually suggest approximately 10–20 samples per parameter.

Due to this study uses Ordered Logistic regression with 4 levels, 9 parameters, and a ratio of 18. Thus, the samples should be 648. Finally, 700 farmers were interviewed in 2013 to reduce any error. However, after eliminate 29 incomplete and inconsistent questionnaires, 671 data were analyzed. The characteristics of samples present in Table 1

### Subjective Happiness Level

Subjective happiness is defined as the degree to which an individual favorably judges the overall quality of his/her own life as a whole (following Rojas and Veenhoven, 2011) and evaluates happiness level by self-report which is not only credible and acceptable, but also

comfortable and easily deployable (Diaz et al., 2009; Liaghatdar et al., 2008). The survey asked the respondents to perform a self-evaluation on their overall happiness in the last 12 months no matter what creates happiness. Simultaneously, the respondents were shown a picture with a seven-point numerical scale (1 = “very unhappy” to 7 = “very happy”).

The result shows that the self-reported subjective happiness level of farmers ranges from moderate to high. The level of subjective happiness is almost normally distributed and is left skewed, which is a standard determinant cited in many previous studies.

Following the survey 42.18% of farmers are quite happy (subjective happiness level 5), and 37.85% of them are happy (subjective happiness level 6). Only a few farmers admitted that their happiness level is at its minimum (subjective happiness level 2). The median of the data was 5, and the mean was 5.35 (Figure 1).

### **Objective Happiness Level**

Objective happiness pertains to the degree to which the requirements for having a high quality of life, such as basic needs, home ownership, health, and education. Objective well-being theory is typically supported by a list of requirements that people should have to lead a good life. These requirements are universal and constant across societies (Guillen and Velazco, 2006). When individuals have a high level of objective well-being, they are supposed to have a high level of subjective happiness. In this paper, objective well-being is a composite index that represents the level of well-being from factors that are unrelated to income. This index is calculated from seven dimensions: economics (except income), social status, family, health status, culture and religion, education, and freedom.

The results indicated that 37.85% of farmers have an objective happiness index ranging from 5 to 6, and 35.47% have an objective happiness index varying between 6 and 7. The mean objective happiness index was 6.18 with minimum at 4.08 and maximum at 8.50. (Figure 2).

### **Sufficiency Economy Philosophy Level**

To evaluate the degree of SE applied by each farmer, this study developed an index named “Sufficiency Economy Intensity” (SEI) to assess the farmers’ adoption degree of SE. SEI was calculated from two components, namely, agricultural practice and livelihood.

To evaluate the consonance of agricultural practice and SE, the respondents were asked to complete a self-assessment form consisting of 15 criterions regarding SE suggested by Wiboonpongse et al. (2009). A five-point Likert scale was then applied to estimate the level of SE in agricultural practice. This Index called SEI in Production.

To evaluate the consonance of livelihood and SE, this study applied the 22 criterions proposed by Linhavess (2008). The index from these criteria called SEI in Livelihood.

Over all SEI or SEI was calculated by summing up the SEI in production and SEI in livelihood with the same weight (10 points). If SEI increases, then people follow the SE

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procedure more strictly. Figure 3 presents the distribution of SEI from field survey. Most farmers (53.65%) have rich SEI level ranging from 6 to 7 (middle to middle-high intensity), and 22.21% have an intensity level varying between 7 and 8. The mean of SEI was 6.52, with minimum at 3.58 and maximum at 9.11.

### Absolute Household Income

Monthly household income (thousand baht/month) refers to the current purchasing power. It is hypothesized to be directly proportional to the subjective happiness.

### Relative Income

According to relative utility theory proposed by Duesenberry (1949), people often compare themselves with their reference group. An increase in income of reference group can reduce the happiness of an individual even if his/her income remains unchanged or increases because these situations induce psychological stress and diminish happiness (Oshio et al., 2011). Therefore, relative income is hypothesized to have a negative relationship with the level of subjective happiness.

This study referred the reference group to farmers who lived in the same amphoe based on the assumption that the respondents generally interacted with other people at the amphoe level and compared themselves with those people. Thus, reference income pertains to the average household income of the reference group, and relative income is the difference between household income and the average household income of the reference group.

Relative income was calculated by two methods. The first method follows the approach of Ferreri-Carbonell (2005) (and is constructed by the difference between the rich and the poor relative to the average values, denoted as Richer1 and Poorer1, respectively). The reference income of the individual as the average income of reference group is  $y_r = \frac{1}{n_i} \sum y_i$ , where,  $i$  = individual who belongs to the same amphoe and  $y$  = income of respondent. Richer1 and Poorer1 variables are created as follow,

If  $y > y_r$ , then

$$\text{Richer1} = \ln(y) - \ln(y_r)$$

$$\text{Poorer1} = 0$$

If  $y < y_r$ , then

$$\text{Richer1} = 0$$

$$\text{Poorer1} = \ln(y_r) - \ln(y)$$

The second measure is the ratio concept between the rich and the poor relative to the average values, denoted as Richer2 and Poorer2, respectively. The richer and poorer variables are created as follows:

If  $y > y_r$ , then

$$\text{Richer2} = \frac{y}{y_r}$$

$$\text{Poorer2} = 0$$

If  $y < y_r$ , then

$$\text{Richer2} = 0$$

$$\text{Poorer2} = \frac{y_r}{y}$$

The difference between the effects of the rich and those of the poor is expected to be different. Individuals may feel unhappy if their income is lower than that of their reference group, whereas those with income higher than that of their reference group are not sensitive to income comparisons (Oshio et al., 2011).

### Attitude toward Relative Income

This study examines the influence of attitude toward relative income on the subjective happiness level. The dummy variable was coded from an answer to the question, "How would you describe your family income compared with that of other families in your society?" The answers were ranked at five levels, ranging from far below average to far above average.

Having even more income than average income very much 4 =

Having more income than average income 3 =

Having income equal to the average income 2 =

Having less income than the average income 1 =

Having even less income than average income 0 =

People who feel that they have more income than others in the same society should be happier, and thus so the coefficient of attitude toward relative income on happiness level should be positive.

### Income Aspiration

According to aspiration level theory, individual well-being is determined by the gap between aspiration and achievement (Stutzer, 2004). The level of income aspiration of the respondents was calculated by the difference between the minimum household income and the



(real) absolute household income .This variable is a proxy for the aspiration level of individuals. Minimum household income pertains to the household income level that the respondents believe that enable them to meet their expected welfare .This study hypothesizes that higher income aspirations are expected to reduce happiness.

### Gender

A dummy gender variable is coded as 1 = female and 0 = male .

### Age

An age of respondents is in year.

### Health

Health is used as a categorical variable .By comparing the respondent's health with that of others of the same age, the respondent has to indicate his/her answer using a scale of one to five )1 = very poor, 2 = poor, 3 = average, 4 = good, and 5 = excellent .(Healthy people or those who think that they are healthy are hypothesized to be happier because strong physical health without any illness leads to a vigorous mind.

### Methodology

The dependent variable (subjective happiness level) is observed from a field survey as an ordinal, and thus it is suitable to be analyzed through the Ordered Logit regression .To estimate the logistic probability models for self-reported happiness, this study enables the probability of being happy to be a function of observable factors X and assumes that the level of (perceived) happiness can be modelled as an unobserved (latent) continuous variable.

From the survey, only a few farmers have a happiness level below the ranges of 2 and 3. Thus, we adjusted a new level of happiness into four levels as follows:

Subjective happiness level 1 = farmer with subjective happiness level 1 - 4

Subjective happiness level 2 = farmer with subjective happiness level 5

Subjective happiness level 3 = farmer with subjective happiness level 6

Subjective happiness level 4 = farmer with subjective happiness level 7

The standard Ordered Logit method is used to estimate overall effects among categorical variables .Four self-reported subjective happiness levels are function of observable factors X defined by Equation (1) .It indicates directions and magnitudes of each factor in X to all happiness levels in general (Guyen and Sørensen, 2007).

$$Happy_i^* = \phi X_i + \xi_i \cdot \quad (1)$$

To estimate the happiness equation of farmers .The function can be written as following:

$$H_i = f(SEI_i, Y_i, O_i, R_i, A_i, P_i, Z_i) \quad (2)$$

where  $H_i$  is subjective happiness level of farmers for individual i,  $SEI_i$  is the SEI index,  $Y_i$  is the absolute household income,  $O_i$  is the objective happiness index,  $R_i$  is the relative income,  $A_i$  is the attitude toward relative income,  $P_i$  is the income aspiration,  $Z_i$  is a vector of the variable of personal characteristics )age, gender and health.(

## Results

Table 2 shows the descriptive statistics of the variables and the estimation of ordered logit regression is reported in Table 3, which shows the estimates of nine different specifications. Columns 1–3 are the baseline equations linking the subjective happiness level to the main variables of interest: SEI, objective happiness, absolute household income, and relative income. Columns 4–6 are additionally controlled by inner thoughts: attitude toward relative income and income aspiration. Columns 7–9 are additionally controlled by personal characteristics: age, gender, and health. The statistics for each equation is reported at the end of each column.

**SEI :**The result from column 1 in Table 3 shows that SEI has a strong positive relationship with subjective happiness at the 99 %confident level .After adding the relative household income, attitude toward relative income, and income aspiration variables )columns 2–6(, the results slightly change in magnitude but remain to have a strong positive relationship . After adding the control variables of age, gender, and health, the results remain unchanged )columns 7–9 .(Therefore, the result is robust whether relative income, income aspiration, or demographic characteristics are controlled .

Table 4 reports the average marginal effect and the marginal effect of each category of subjective happiness .The average marginal effect of SEI is approximately 0.0785, which means that an increase in SEI by one unit affects an increase in subjective happiness at 7.85 .% Compared with the average marginal effect of other independent variables, SE is the most important determinant of subjective happiness for the farmers in the upper north of Thailand .

**Objective happiness :**The results indicate that objective happiness is positively significant .In the same specification, the selected specification in Equation 7 reveals that objective happiness has a positive relationship with subjective happiness at the %90confident level .The average marginal effect is approximately 0.0165, which indicates that adding one unit of objective happiness increases subjective happiness by approximately .%1.65Marginal effects in each category of happiness in Table 4show that the effect of objective happiness on happiness increases with the level of objective happiness .However, the effect of objective happiness is the strongest among people with a middle happiness level .This finding suggests





that the power of physical well-being is the strongest when people pass the basic level of human needs and that a high objective condition does not effectively influence inner happiness.

**Absolute household income** :As expected, absolute income is a significant source of subjective happiness )columns 1 and 4 in Table .(3Net of controls, the estimated effect of absolute income on subjective happiness remains statistically significant )column .(7This correlation suggests that richer farmers tend to be happier than poorer farmer .The average marginal effect is approximately 0.000, which means that increasing the absolute income by a thousand baht can add to subjective happiness by approximately .%0.01

In comparing the effect of SEI, objective happiness, and absolute household income, the findings reveal that adopting SE in the agricultural sector can increase happiness and that the power of objective happiness and absolute household income to overcome unhappiness is limited .Therefore, SEI can promote real inner happiness.

**Relative income and attitude toward relative income** :This study considers relative income from two aspects :realized relative income and attitude toward relative income .These measures are separated from each other because realized relative income and attitude about relative income may have difference effects on the subjective happiness level in direction or in magnitude or both .

For relative income factor, the results in Table 3 show that the coefficients of richer variables )Richer1 and Richer2 (have a positive relationship with the subjective happiness level, whereas the coefficients of the poorer variables )Poorer1 and Poorer2 (are negative )columns 2–3 and 5–6 .(However, all realized relative income variables are insignificant even after adding the control variables )columns 8–9 .(The finding indicates that both poorer and richer farmer groups seem not to be concerned about the real situation or their realized relative income .

The attitude toward relative income variable reveals farmers 'inner subjective factor according to their comparative status, which should influence their subjective happiness level . Individuals who feel that they have more income than others in the same society should be happier .Therefore, the coefficient of attitude toward relative income on the subjective happiness level should be positive .Table 3 indicates that attitude toward relative income has a strong positive significant relationship with the subjective happiness level .Farmers who feel that they have more income than the others tend to be happier than others .The average marginal effect is approximately 0.0358

This result suggests that “attitude or perception ”is more important than “realistic situation ”in the point of view of farmers .Moreover, this finding suggests that individuals do not assess their life in isolation from all others .They always compare themselves with others, thus revealing the negative effect of social comparison on the happiness level .Social comparison implies a negative externality in the income-generating activity )Layard, 2006.(

**Income aspiration**: The results in Table 3 show a significantly negative effect on subjective happiness by income aspiration )columns .(6–4The gap between aspiration and

achievement leads to the negative effect on subjective happiness .After adding the control variables, the coefficients slightly increase (columns 9–7). Therefore, this correlation suggests that individuals with less income aspiration or ambition seem to be happier than those with more .A decrease in income aspiration by one thousand baht affects the increase in subjective happiness at ) %0.01average marginal effect in Table .(4

**Age :**This study finds that older farmers are likely to be satisfied with their life than younger farmers .Farmers report that subjective happiness decreases roughly by 0.10 %when age increases by one year )Table 4 .(As almost all the respondents are middle-aged, they have already passed adolescence stress and middle-age stress and are not in a situation to confront health problems in old-age .Farmers do not face health problems compared with other carriers because they work hard and always have outdoor activities.

**Gender :**The result shows no or little effect of gender on subjective happiness .The results in columns 7–9 in Table 3 confirm a negative sign, which indicates that men are likely to be happier than women, but it is insignificant .

**Health :**The results presented in columns 7–9 in Table 3 show insignificant effects . These results may be attributed to the high proportion of old population and less variation of age in respondents.

In sum, results exhibit the robust and strong effects of SEI, objective happiness, absolute household income, attitude toward relative income and income aspiration on subjective happiness level for all available specifications .All of these determinants comply with the theoretical explanation .An increase of SEI, objective happiness, absolute income and attitude toward relative income push up the subjective happiness level, while an increase of income aspiration, make their target higher, and reduce the subjective happiness level.

### Concluding Remarks

Although Thailand has previously applied the Sufficiency Economy Philosophy into its development paradigm, few quantitative studies focus on the magnitude of the effect of SE on happiness. This study analyzed the effect of SE on their happiness level by focusing on the farmers who live in upper northern Thailand. A 671 farmers were included in this study.

This paper employed Ordered Logit regression. The subjective happiness is set as a function of SEI, objective happiness, absolute household income, relative income, attitude toward relative income, income aspiration, and control variables (i.e., age, gender, and health).

The result shows that SEI has a strong positive relationship with subjective happiness. The more degree the SEI adaptation, the happier the farmers are. Subjective happiness was positively correlated with objective happiness and absolute income. Comparing the effect of all including variables, SEI is the most powerful variable in increase happiness while the power of objective happiness and absolute household income to overcome unhappiness is limited.



Relative income is considered in the two aspects: real relative income and attitude toward relative income. These measures are separated from each other because they may have difference effects on the subjective happiness level in direction or in magnitude or both. The result suggests that “attitude or perception” is more important than “real situation” in the point of view of farmers. While realized relative variables are insignificant, attitude toward relative income has a strong positive significant relationship with the subjective happiness level. Farmers who feel that they have more income than the others tend to be happier than others.

The income aspiration was defined as the different between current income and their expected income. The finding confirms that individuals with less income aspiration or ambition seem to be happier than those with more.

After the effects of objective happiness, household income, relative income, and income aspiration were controlled through the research model, SEI still affected subjective happiness. This result confirms that SE can effectively affect one’s mental happiness, which is the core of the SE function.

The estimated Ordered Logit model was adopted as an analysis based on point-in-time; hence, research findings do not provide details about the transmission mechanisms of SE into subjective happiness. To describe these mechanisms, this study gathered a literature review, which was then synthesized and summarized in six transmission mechanisms; SE prompts the following consumption behavior: create moderate consumption, reduce conspicuous consumption, and reduce social comparison, SE develops individual immunity, helps to create social capital, and creates a giving and sharing society. Moreover, SE produces happiness through participation in religious activities and strengthening of religious beliefs, that contributes to happiness.

## Tables and Figures

Table 1 Characteristics of samples

Socio-demographic characteristics	Details	Survey number (%)
Gender	Male	424 (62.90%)
	Female	250 (37.10%)
Education level	Uneducated	10 (1.50%)
	Primary school	478 (70.90%)
	High school	15 (23.40%)
	Diploma	15 (2.20%)
	Higher than diploma	13 (1.90%)
Age	Less than 39 year	26 (3.90%)
	40-49 year	143 (21.20%)
	50-59 year	281 (41.70%)
	60-69 year	157 (23.30%)
	More than 70 year	60 (8.90%)
	Missing Data	7 (1.00%)
Household member	1 person	10 (1.50%)
	2 persons	79 (11.70%)
	3 persons	170 (25.20%)
	4 persons	206 (30.60%)
	More than 4 persons	209 (30.60%)
	Average	5.00



Table 2 Summary statistics of variables

Variable	Definition	Mean	SD.	Min	Max
Subjective happiness level	Subjective happiness level (1-4)	2.3546	0.7951	1	4
SEI	SEI index (1-10)	6.5192	0.7161	3.58	9.11
Absolute household income	Monthly household income (thousand baht/month/household)	11.5797	12.3523	1	111.00
Objective happiness	Objective happiness index (1-10)	6.1812	0.8569	4.08	8.5
Richer1	Relative Income	0.1636	0.3496	0	2.2478
Poorer1		0.4505	0.5342	0	2.6136
Richer2		0.3558	0.7164	0	1.2399
Poorer2		0.4988	0.5158	0	1.3783
Attitude toward relative income	The relative income attitude when compare with average community's income	2.9001	0.5412	1	5
Minimum household income	The minimum household income that requires to meet expected welfare (thousand baht/month/household)	12.1922	12.2469	1.0	111.00
Income aspiration	The minimum household income - absolute household income (thousand baht/month/household)	0.5648	1.6988	0.00	12.00
Age	Age (Year)	55.11	9.7439	21	86
Gender	1 =female, 0 =male.	-	0.4838	0	1
Health	Opinion of his/her own health comparing with other in the same age (1-5)	3.6974	0.6564	1	5

Table 3 Coefficients of ordered logit equation of subjective happiness

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<b>Coefficients</b>									
SEI	0.7254*** (0.1036)	0.7210*** (0.1047)	0.7144*** (0.1045)	0.6916*** (0.1048)	0.6861*** (0.1059)	0.6797*** (0.1058)	0.6994*** (0.1056)	0.6945*** (0.1067)	0.6880*** (0.1066)
Objective happiness	0.1643* (0.0876)	0.1527* (0.0877)	0.1534* (0.0876)	0.1417 (0.0884)	0.1292 (0.0883)	0.1313 (0.0884)	0.1471* (0.0918)	0.1357 (0.0918)	0.1377 (0.0918)
Absolute household income	0.0214*** (0.0001)			0.0195*** (0.0001)			0.0200*** (0.0001)		
Relative income									
Richer 1		0.3856 (0.2411)			0.3625 (0.2433)			0.3543 (0.2440)	
Poorer 1		-0.1637 (0.1480)			-0.1061 (0.1499)			-0.1359 (0.1517)	
Richer 2			0.1370* (0.0796)			0.1307 (0.0805)			0.1258 (0.0809)
Poorer 2			-0.0462 (0.0489)			-0.0338 (0.0494)			-0.0447 (0.0499)
Attitude toward relative income				0.3398** (0.1365)	0.3331** (0.1362)	0.3362** (0.1364)	0.3193** (0.1374)	0.3115** (0.1372)	0.3154** (0.1373)
Income aspiration				-0.1399** (0.0001)	-0.1480*** (0.0001)	-0.1486*** (0.0001)	-0.1533*** (0.0001)	-0.1586*** (0.0001)	-0.1595*** (0.0001)
<b>Coefficients</b>									
Age							0.0120* (0.0067)	0.0120* (0.0067)	0.0122* (0.0068)
Woman							-0.0390 (0.1532)	-0.0639 (0.1526)	-0.0607 (0.1527)
Health							-0.0197 (0.1181)	-0.0150 (0.1184)	-0.0154 (0.1185)
<b>Statistical Report</b>									
log likelihood	-755.2008	-758.2120	-757.6627	-747.2242	-749.9819	-749.2960	-745.5241	-748.2275	-747.5021
Pseudo R-square	0.0436	0.0398	0.0404	0.0537	0.0502	0.0510	0.0558	0.0524	0.0533
LR chi2	68.80	62.78	63.88	84.75	79.24	80.61	88.15	82.75	84.20
Prob > chi2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
No. of obs	671	671	671	671	671	671	671	671	671

Remarks\* , \*\* , \*\*\* indicate the level of significance at 10%, 5 %and 1%, respectively .Standard error in parenthesis.

Table 4 Marginal effects of subjective happiness equation )equation 7th(

Variables	Predicted Probability				Average marginal effect
	Happy =1	Happy =2	Happy =3	Happy =4	
SEI	-0.0785*** (0.0127)	-0.0776*** (0.0121)	0.1189*** (0.0167)	0.0372*** (0.0076)	0.0785
Objective happiness	-0.0165 (0.0104)	-0.0163* (0.0102)	0.0250* (0.0155)	0.0078 (0.0050)	0.0165
Absolute household income	-0.0023*** (0.0007)	-0.0022*** (0.0007)	0.0034*** (0.0011)	0.0011*** (0.0004)	0.0001
Attitude toward relative income	-0.0359** (0.0156)	-0.0354** (0.0153)	0.0543** (0.0232)	0.0170** (0.0077)	0.0358
Income aspiration	0.0173*** (0.0053)	0.0170*** (0.0053)	-0.0261*** (0.0078)	-0.0082*** (0.0028)	-0.0001
Age	-0.0014* (0.0008)	-0.0013* (0.0007)	0.0020* (0.0011)	0.0007* (0.0004)	0.0013
Woman	0.0044 (0.0172)	0.0043 (0.0169)	-0.0066 (0.0260)	-0.0021 (0.0082)	-0.0043
Health	0.0023 (0.0133)	0.0022 (0.0131)	-0.0034 (0.2001)	-0.0011 (0.0063)	-0.0022

Remarks: \*, \*\*, \*\*\* indicate the level of significance at 10%, 5% and 1%, respectively.

Standard error in parenthesis

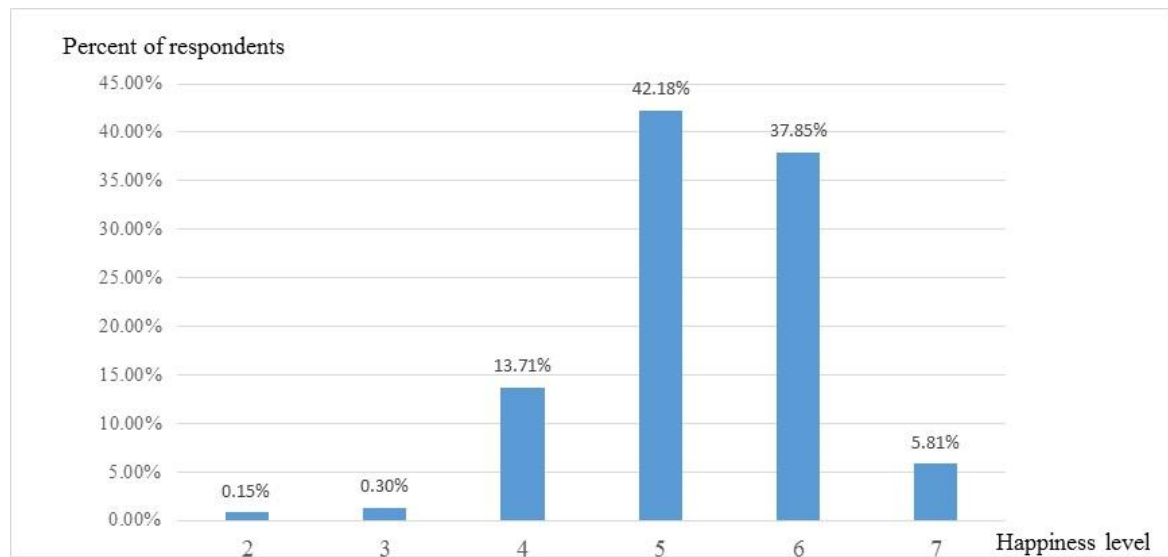


Figure 1 The distribution of subjective happiness level

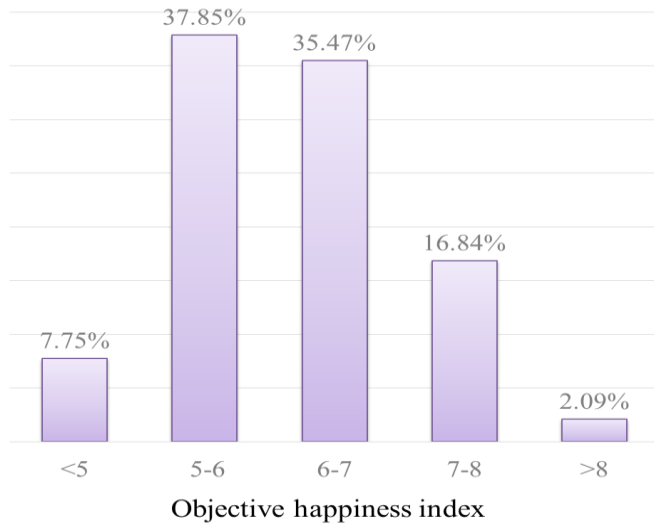


Figure 2 The distribution of objective happiness index

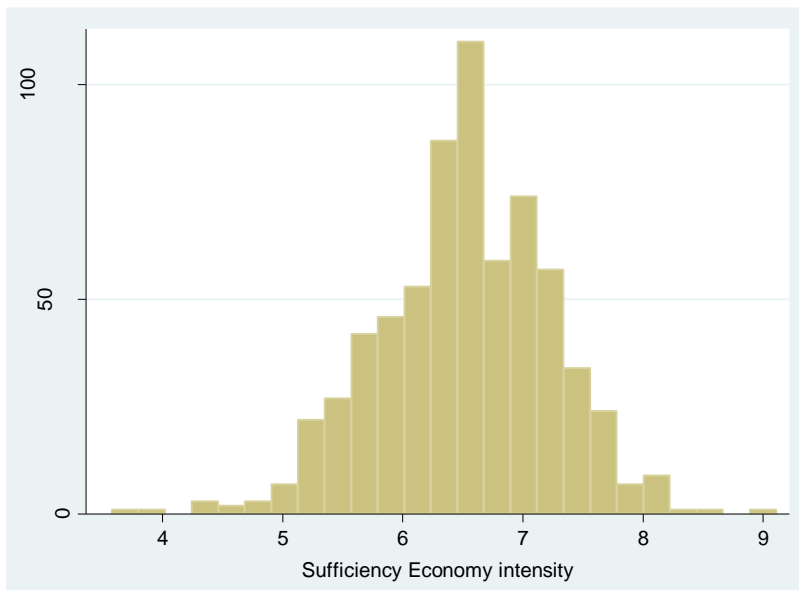


Figure 3 The distribution of SEI





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