Wealth and Happiness: Empirical Evidence from Indonesia

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Abstract

Looking at the economics of happiness is an interesting way to provide a broader concept of wealth. It gives insight on relative utility that does not depend exclusively on income as mediated by individual choices or preferences within monetary budget constraints but also considers non monetary factors. Recent economic studies on happiness or subjective well being, most in developing countries, give us some insight on what contributes to individual's satisfaction with their lives. Some studies in developed countries also found that within countries, a higher level income contributes to higher levels of reported well being. Unfortunately, economic studies on happiness in developing countries, including Indonesia, are limited because of data limitations. Therefore, this paper analyzes the determinants of subjective well being in Indonesia to assess whether there is positive association between individual wealth and happiness. Using the Indonesia Family Life Survey Data Set, logistic regression analysis is used to identify sources of happiness from both economic and non- economic variables.

Keywords: Happiness, Wealth

1. Introduction

> *"Those who say that money can't buy happiness don't know where to shop."*
> *- Anon-*

Does money buy a lot of happiness, not much, or none? Is economic growth really leading Indonesians to better off? These are important but ticklish questions. Life has ups and downs. It would not be thought profound to say that someone who becomes unemployed or looses income generally becomes less happy, or that someone who gets married or becomes richer generally becomes happier. Which is better: a large pay rise or getting married? Until recently, there has been no way to assess the relative impact of different life events upon psychological health and well-being.

Since the publication of Easterlin Paradox by Richard Easterlin, he makes prominent use of happiness data when he reported that despite increases in personal income over time, people were not reporting an increasing level of happiness. The focus of significance between wealth and happiness economics has raising more attention from economists around the world as an important subject in scholarly research. If we back to twenty-five years ago, Easterlin (1974) posed an important question, "Will raising the incomes of all increase the happiness of all?" Though most citizens and economists have implicitly assumed that the answer is 'yes', theories of relative preference predict that the answer may be 'no'. Intuition may often contrast against theoretical answers, and this raised interesting research question in this paper, particularly to a developing country like Indonesia. Happiness surveys can also be utilized to gauge the welfare effects of various public policies. How does a tax on addictive substances, such as tobacco and alcohol, for example, affect well-being? Gruber and Mullainathan (2002) has done on this study on cigarette taxes suggests that the negative financial effects may be outweighed by positive self-control effects.

Working on happiness research has involved large number of authors, some are Rayo and Becker (2007), Graham and Felton (2005) sketch theories of happiness adaptation. The research highlights factors other than income that affect well-being. The economics of happiness is an approach to assessing welfare which combines the techniques typically used by economists with those more commonly used by psychologists.

The economics of happiness does not purport to replace income-based measures of welfare but instead to complement them with broader measures of well-being. These measures are based on the results of large-scale surveys, across countries and over time, of hundreds of thousands of individuals who are asked to assess their own welfare. The surveys provide information about the importance of a range of factors which affect well-being, including asset but also others such as health, marital, education, and age.

The only comprehensive evaluation of quality of life that does not require mixing various indicators in a more that individuals make themselves when asked about their level of happiness or how satisfied they feel with the life they lead. However, for these very reasons, politicians and leaders must try to understand how perceptions are formed and how they influence the attitudes of individuals and their relations with institutions and public policies.

To answers the questions, this paper is divided into 5 sections. Section 1 provides a brief introduction about happiness. Section 2 discusses how a happiness index is usually measured and constructed, followed by results. Section 3 outlines the data used in this paper and presents some validations for the data used. Section 4 provides findings. Section 5 concludes the article.

2. Literature Review

Together with other social scientists, economists have begun to research the patterns in subjective well-being data. Easterlin (1974) suggested a test for whether greater riches had made Americans happier. He looked at whether reported happiness rose as national income did. His paper concludes: "... in the one time series studied, that for the United States since 1946, higher income was not systematically accompanied by greater happiness" (p. 118). This result would suggest that economic growth had failed to buy well-being. A number of social observers have pointed out that the enormous increases in income in the industrial democracies over the last century do not seem to be accompanied by differences in levels of happiness. In a seminal paper, Easterlin (1974) showed that one could approach these issues using what are now called "happiness data", namely the responses that individuals give concerning a simple well-being question such as "*Are you Happy?*" Using data for the US, he showed that happiness responses in a particular year were positively correlated with an individual's income. But over time, the average happiness response was untrended in spite of a sharp increase in average income levels. More recently, Blanchflower and Oswald (2000) have showed a similar pattern for the period following the publication of Easterlin's paper (see also Easterlin (1995)). Similar findings, or findings with very slight detectable trends, have been observed in a variety of countries (see, for example, Veenhoven (1993), Inglehart and Klingemann (2000), *inter alia*).

According to Easterlin (1974), average happiness remains relatively constant over time in spite of large increase in income per capita, which means that wealth increase in life does not necessarily translate into increases in happiness (see also Campbell, Converse and Rodgers (1976)). Oswald (1997), Easterlin (2003), Layard (2004) claim that the available data do not encourage the idea that economic growth leads to greater well-being.

Figure 1: Happiness and Real Income Per Capita in the United States, 1973-2004[6]
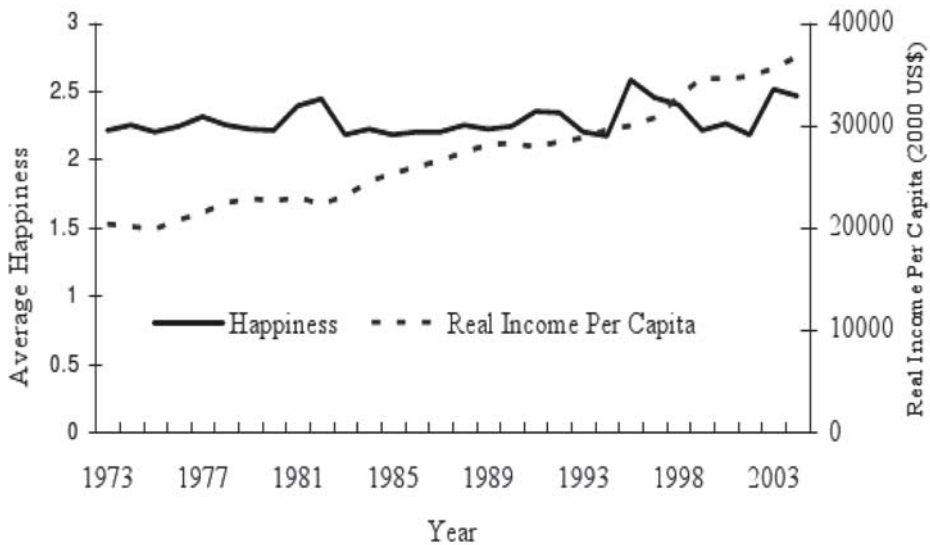
Subjective well-being research has focused largely on developed economies, simply because adequate data are more readily available from these countries. Figure 1 clearly shows an Easterlin graph for the US over the period 1973-2004. While real income per capita almost doubles, happiness shows essentially no trend. From this figure, it looks as if individuals in the US are "flat of the curve," that means additional income buys little if any extra happiness. Lane (2000) has hypothesized that once an individual rises above the poverty line or "subsistence level," the main source of increased well-being is not income but rather friends and a good family life.

Scitovsky (1976) hypothesised that, beyond a certain level of material comfort, further wealth does not add to wellbeing – and may even detract from it – unless it is accompanied by satisfying social networks and intellectually stimulating leisure activities. In contrast, a few prominent authors like Blanchflower & Oswald, (2004); Di Tella et al., (2007); and Stevenson & Wolfers, (2008) who have done research within-country cross-sectional and panel data, concluded that rising incomes "buy" additional satisfaction, although the magnitude of within-country cross-sectional effect of income on satisfaction is under dispute.

It would appear that in the USA and Europe some other factors that affect happiness also, Oswald (1997) notes that "happiness is high among those who are

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[6]   *Source*: Originally from World Database of Happiness and Penn World Tables, but cited from Clark, Frijters and Sheilds (2008b).

married, those with high income, women, whites, the well-educated, the self employed, the retired, and those looking after the home. Happiness is apparently U-shaped in age (minimizing around the 30s)." These results are consistent not only with the findings on the literature of psychology (for instance, see Wilson, 1967) but also seem to hold across different countries, different time periods and even related to different measures of well-being (see, for example, Frey & Stutzer, 2000 for Switzerland; Gerdtham & Johannesson, 2001 for Sweden; Frijters et al., 2004 for Germany).

To solve the challenge of how to measure an intangible, in this case HAPPINESS, the literature has so far relied primarily on self-reported measures of happily and has employed survey data (see Frey and Stutzer 2002a, 2002b; Clark et al., 2008). The literature has attempted to fill utility with content and has assumed that utility can be cardinally measured in the form of subjective well-being (Frey and Stutzer 2002a). Easterlin (1974) first used cross-sectional comparison across nations with differing levels of GPD per capita.

2.1 Measurement of Happiness and its Limitation

In thinking about happiness measurement, there is no obvious alternative to self-reported data. Conventionally, survey evidence has its limitations, of course, and we may wonder whether there is really any relationship between how happy people say they are and how happy they actually feel. Despite a large limitation to the happiness measurement, there is a vast literature on the measurement of subjective well-being and psychologists have long been eliciting information by using responses to questionnaires[7].

For the usual unit-root measurement, we can hardly regress happiness on trended variables such as Gross Domestic Product. The paper experiments with equations in which there are (i) year dummies, (ii) country-specific time trends, and (iii) change-in-GDP variables. The second conceptual problem is that variables such as GDP per capita, unemployment and inflation are not exogenous. These variables are influenced by politicians' choices; their choices are shaped by re-election probabilities; those probabilities in turn can depend on the feeling of contentment among a country's citizens. A further possible source of simultaneity is that happier people may work harder and thus produce more output, and this is not straightforward to find believable macroeconomic instruments that can identify the well-being equation. Instead, the paper experiments with different forms of lag structures, to attempt to see if movements in macroeconomic forces lead, later on, to movements

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[7]   See Fordyce (1988) and Konowand and Earley (1999) for excellent literature surveys on the history of investigations using subjective happiness measures. Measurement of subjective well-being has been ongoing in psychology at least since Wilson (1960).

in well-being (Di Tella, MacCulloch, and Oswald, 2003). Moreover, in measurement with the cross-sectional data, it can't control for cultural and institutional factors that covary with national income, such as increased freedom, improved public services, and possible cultural biases toward happiness.

2.2 Data Collection and Modelling

Data Collection

The major data source for this thesis is Indonesian Family Life Survey (IFlS) from RAND Corporation in Santa Monica, USA. The data is longitudinal survey data at household and community level. To investigate the sources of happiness, the fourth wave of the Indonesia Family Life Survey (IFlS4) is used because availability of the question about respondents' happiness. The IFlS4 consists of two surveys – one household and one community and facilities. The data for this study is constructed based on variables that were combined from two data sets. After combined and cleaned, the data of 29,013 respondents age 15 years old and more were analyzed.

This study use data on age, education, health, asset, marriage, household expenditure and sex which are determined in happiness. Measuring in national level, try to addressing what determined happiness in Indonesia and how strong its determinant in their activity.

Data Modeling

To indentify the determinants of happiness, we adopt a happiness model function comes from Blanchflower and Oswald (2004) in the following form:

(1) $$r = h(u(y,z,t) + e)$$

we take the terms well-being, utility, happiness, life satisfaction, and welfare to be interchangeable and measured by the answer to a question such as that asked in the Indonesian Family Life Survey (IFlS). Because there are some independent variables that not captured in the models, so we adopt it and become a following form:

(2) $$r = h[u(education,health,lnasset,marriage,age,lnexpen,sex) + e]$$

- Where r denotes individual self reported happiness whether happy or not.
- $h(.)$ denotes a non-differentiable function relating to actual well-being to reported well-being;
- $u(...)$ denotes the individual's true well-being or utility;
- *education* denotes individual's highest education level. We divide education into two groups -- basic education and high education. "Basic education" includes elementary school and junior high school.. "High education" includes senior high

school and college/ university.

- *Health* denotes individual's health status. With reference to health, the critical issue is whether significant changes in health have a lasting effect on happiness.
- *lnasset* denotes a logarithmic natural (*ln*) of total assets that represent a proxy of the wealth of each household. What is the (total?) value of jewelry, savings, land, vehicles, and other asset of households.
- *Marriage* denotes marriage status of each individual. Regarding the effect of marriage and dissolution of marriage: it can be assume that establishing close, intimate relations of the sort represented by marriage would typically make the partners in such a relationship happier and more satisfied with life in general.
- *Age* denotes age of each individual.
- The total expenditure, *lnexpen*, denotes logarithmic natural (*ln*) of total consumption of household. This variable acts as a proxy of income of household.
- *Sex* denotes gender of each individuals.
- The error term, *e*, subsume among other factors the inability of human beings to communicate accurately their happiness level.

Ferreri-Carbonell & Frijters (2004) reported that qualitatively similar results can still be obtained by using OLS (ordinary least squares) but there are limitations to econometric inferences at the cross-section. One issue is the problem identification involved in the modelling of happiness regression equations such as that of equation (1). For example, are people more satisfied with their life because of their economic situation or do happy people assess their economic conditions more favourably? The problem of reversed causality may also exist at the individual level in the relationship between marriage and happiness. Does marriage make people happy or are intrinsically happier people more likely to find a partner, get married and experience happiness? Likewise social and cultural norms may exercise considerable influence over an individual's perceptions and reporting of satisfaction or happiness in life. This is obviously expressed by Manski (1993), with the influence of changes characteristics in the community, unemployment or crime will affect the reported life satisfaction at the household level directly, rather than indirectly, as we have portrayed them throughout our analysis.

More importantly, cross-sectional studies on happiness may be unreliable if individuals' subjective responses are dominated by latent personal psychological differences (Powdthavee, 2007). The concern is that cross-sectional equations might be biased any time unobserved personality traits are correlated with observable socio-economic factors (unemployment or education) and subjective well-being responses. As a result, interpretation of cross-sectional estimates should always be treated with care, keeping in mind Layard's observation (2005), that we need

a "revolution" in academia, where every social scientist should attempt to understand the determinants of happiness, and it should be happiness which is the explicit aim of government intervention.

3. Operational Definition

In this paper we estimate what may be the first econometric happiness equations in which education, total consumption, sex, age, marital status, and asset that they have, are independent variable. Like the rest of the recent wellbeing literature, we study the numbers that people report when asked questions about how happy they feel with their life. To identify the source of happiness, we classify variables as two. First are dependent variables, second are independent variables. Here they are:

Dependent Variables	Description	Level of Measurement and Data Management
Happiness	This variable measure respondents' subjective well being through indentify their self perception on happiness. Whether they are feeling happy or not.	Nominal 1 = Happy 0 = Not Happy
Age	Age is related to maturity, experience and the way to see live. Age also related to physical condition of respondent.	Ratio
Education	This variable refers highest formal school attended by respondents. In Indonesia, basic education is nine years education (graduate from junior high school or equivalent).	Nominal 1 = have minimum basic education 0 = not achieve basic education
Health	This variable is self perception of respondents' health status. It measure what is respondents' feeling about their health.	Nominal 1 = Healthy 0 = Not Healthy
Asset	This variable provide total value of non-business assets (e.g., land, livestock, jewelry), as well as asset ownership and ownership shares. To control variation between households, logistic natural are being used for regression analysis.	Ratio
Marriage	Formal Marital status related to secure relation between couples. This relation are protected by law and should provide more stable relation.	Nominal 1 = Formal Marriage 0 = Unmarried, Non formal marriage and ever married
Household Expenditure	This variable combine expenditures for a variety of food and nonfood goods and services, including foods purchased and the value of foods consumed from self-production or transfers in the last week, personal care and household items bought during the last month, and durable goods bought in the last year. Quantities and purchase prices for the last purchase of several staples were also collected for various foods. To control variation between households, logistic natural are being used for regression analysis.	Ratio
Gender	Gender related to difference physical condition between male and female. In some culture, gender related to difference gender role.	Nominal 1 = Male 0 = Female

Methodology

In this paper, we use two methods of analysis employed in this study. First, descriptive statistics described how characteristics in level individual and household, the descriptive statistics cover uni-variate and bi-variate analysis. Second, inference statistics cover bi-variate and multivariate analysis. The multivariate analysis focuses on examining the effect of intervention and independent variables on dependent variables. Logistic Regression is a major approach for multivariate analysis.

4. Findings

Table 1: Descriptive Statistics

Variable	Obs	Mean	Std.Dev.	Min	Max
Happy	29013	0.913	0.282	0	1
Education	29013	0.391	0.488	0	1
Health	29013	0.105	0.307	0	1
lnasset	28842	17.09	1.642	9.210	21.53
marriage	29013	0.636	0.481	0	1
lnexpen	28992	16.79	0.948	13.22	23.69
Age	29013	36.88	15.62	14	97
Gender	29013	0.476	0.499	0	1

The data (Table 1) shows that about more than 90% of respondents feel happy in their life. It means that almost 9 out of 10 Indonesian is happy in their daily life and the lower standard deviation indicates that this variance is constant and good to use as variable in our data modeling.

In our findings, we came across that education is one of the basic objectives of development; they are important ends in themselves. Education is essential for a satisfying and rewarding life; both are fundamental to the broader notion of expanded human capabilities that lie at the heart of the meaning of development. At the same time, education plays a key role in the ability of a developing country to absorb modern technology and to develop the capacity for self-sustaining growth and development. It is interesting since only 39% of respondents attend higher than basic education that means government need to improve for the basic education, since with higher education equipped, people can be easily connected in the globalized world and status of personality is highly rewarded.

Health is central of human being and one major components of human development. The data shows that only 10% of respondent perceived that they are

healthy. Besides self perception, healthy feeling is theoretically determined also by intensity of public health support not only in urban but also in rural area. And lower prices of prescription so people could reach their healthy life more than before. Low level of healthy perception show that the respondents do not feel secured on their health. To increase the level of happiness, Indonesian government makes great effort in health policy to improve the nutrition and environmental condition of the nations, not only to the rich but also to the low income group.

Additionally, 63% of respondents have formal marriage, the rest of them are ever married, did not married or widowed. 47% of respondents are male and 53% of them are female. Minimum age of respondents is 14 years-old and maximum of it 97 years-old. Major group of Indonesian has reported happy in their marriage life, in the psychological perspective, couple feels more secured in the life with another "helper" whenever any barriers encountered in life.

Table 2: Correlation

	happy	**education**	**health**	**Lnasset**	**marriage**	**Lnexpen**	**age**
Happy	1						
Education	0.0373	1					
Health	0.0292	0.0446	1				
lnasset	0.0437	0.210	0.0124	1			
marriage	0.0248	-0.0726	-0.0224	0.0313	1		
lnexpen	0.00370	0.281	-0.00120	0.360	0.0202	1	
Age	-0.0629	-0.310	-0.0898	0.0901	0.180	-0.0742	1
Gender	-0.00230	0.0750	0.0262	-0.00490	0.00360	0.00970	-0.00180

From the correlation result shown in Table 2, it is clearly to be seen that age is the highest correlation with being happy. It is interesting since we analyzed the correlation between age and happiness is negative. The second highest are education with the positive value. Gender is variables with lowest correlation to happiness. Health, asset, marriage and expenditure, have the correlation values to happiness between education's and gender's.

Table 3: Source of Happiness (Model 1–4)

	Model 1		Model 2		Model 3		Model 4	
	Coef.	Odd Ratio	Coef.	Odd Ratio	Coef.	Odd Ratio	Coef.	Odd Ratio
cons	2.863 ***		2.753 ***		2.707 ***		1.136 ***	
	(0.0542)		(0.0633)		(0.0641)		(0.212)	
age	-0.0134 ***	0.987 ***	-0.012 **	0.988 **	-0.0115 ***	0.989 ***	-0.0132 ***	0.987 ***
	(0.0013)	(0.00124)	(0.00133)	(0.00132)	(0.00134)	(0.00132)	(0.00136)	(0.00134)
education			0.152 ***	1.165 ***	0.149 **	1.161 **	0.0577	1.059
			(0.0466)	(0.0542)	(0.0466)	(0.0541)	(0.0483)	(0.0512)
health					0.316 ***	1.372 ***	0.313 ***	1.368 ***
					(0.0778)	(0.107)	(0.0785)	(0.107)
lnasset							0.0986 ***	1.104 ***
							(0.0127)	(0.0140)
marriage								
lnexpen								
gender								
Log Likelihood	-8531		-8526		-8517		-8409	
LR Chi2	110.1		120.9		138.7		195.3	
Pseudo R Square	0.00640		0.00700		0.00810		0.0115	
Prob>Chi2	0		0		0		0	

Significance Levels: *** : 0.001,   ** : 0.01,   * : 0.05

Table 4: Source of Happiness (Model 5-7)

	Model 5		Model 6		Model 7	
	Coef.	Odd Ratio	Coef.	Odd Ratio	Coef.	Odd Ratio
cons	1.066 ***		2.292 ***		2.315 ***	***
	(0.212)		(0.381)		(0.382)	
age	-0.0138 ***	0.986 ***	-0.0141 ***	0.986 ***	-0.0141 ***	0.986 ***
	(0.00135)	(0.00133)	(0.00135)	(0.00133)	(0.00135)	(0.00133)
education	0.0639	1.066	0.099 *	1.104 *	0.103 *	1.108 *
	(0.0485)	(0.0517)	(0.0494)	(0.0545)	(0.0495)	(0.0549)
health	0.315 ***	1.371 ***	0.309 ***	1.362 ***	0.31 ***	1.364 ***
	(0.0785)	(0.108)	(0.0786)	(0.107)	(0.0786)	(0.107)
lnasset	0.0953 ***	1.1 ***	0.109 ***	1.115 ***	0.109 ***	1.115 ***
	(0.0127)	(0.0140)	(0.0132)	(0.0147)	(0.0132)	(0.0147)
marriage	0.23 ***	1.259 ***	0.236 ***	1.266 ***	0.238 ***	1.269 ***
	(0.0433)	(0.0545)	(0.0433)	(0.0549)	(0.0434)	(0.0551)
lnexpen			-0.0869 ***	0.917 ***	-0.087 ***	0.917 ***
			(0.0228)	(0.0209)	(0.0228)	(0.0209)
gender					-0.0415	0.959
					(0.0423)	(0.0406)
Log Likelihood	-8395		-8381		-8380	
LR Chi2	223.3		235.2		236.1	
Pseudo R Square	0.0131		0.0138		0.0139	
Prob>Chi2	0		0		0	

Significance Levels: *** : 0.001,   ** : 0.01,   * : 0.05

The logistic regression on Table 3 and Table 4 consistently show that age is one of major source of happiness. The odd ratio shows that the respondents with older age less likely being happy rather than young respondent (Odd Ratio: 0.9 with 99.9% confidence interval). It might were influenced by psychological situation of human being.

The respondents with who attended more than basic education/ senior high school or higher are more likely being happy rather than respondent who only achieve basic education/ junior high school or lower (Odd Ratio: 1.6 with 95% confidence interval). Government could have more attention education to increase of the people's happiness, because although only 39% of respondents attended higher than basic education, the variable have significant to respondents' happiness.

The respondents with who feel healthy are more likely being happy rather than respondents who are not feeling healthy (Odd Ratio: 1.3 with 99.9% confidence interval). Although from the data might people be happy even they are not feeling healthy, government need to pay more attention in provide basic service for health since only 10% of respondents feeling healthy and it seems that improving health situation will effectively increase happiness.

Asset ownership is one of source of happiness (Regression coefficient: 0.09-0.1 with 99.9% confidence interval). Person with higher values of asset are more likely to be happy rather than people with lower value of asset. It might happen because people with sufficient asset might feel more secure than people who has insufficient one. Asset can be used as investment as well as prevention.

Consistent with Oswald's (1997), The respondents with who have formal marriage are more likely being happy rather than respondents who are not married. It indicating that a couple with formal marriage are happier than single, may be its reason because they are couple that their life could share in a pair – ups and downs in life, rather than if he is a single, his life will be done and finished by himself solely. Additionally, formal marriages provide legal and social protection more than informal marriage.

Expenditure is also one of source of happiness (Regression coefficient: -0.08 with 99.9% confidence interval). We use this variable to addressing how much money did member spent by households. Interestingly, the regression coefficient is negative, it means person with higher expenditure are less likely to happy. It might caused by sources of expenditure itself. If the people have to borrow money to fulfill their need or they have to spend a lot of money because of inflation, they might be unhappy.

Interestingly, gender differences did not affect to respondents' happiness. It is different to the result from studies that was conducted by Oswald (1997) at Europe and US. In this study, we can conclude that gender differences, female or male, doesn't affect on happiness. There is no significant relationship between gender and happiness. This might reflect a good social balance in society. It might reflect cultural values

validating expression of satisfaction or dissatisfaction about one's life situation. As with several other variables there is much further investigation which could be carried out to explore this issue further.

5. Conclusion

Based on the analysis, there are some variables that are indicated as sources of happiness for Indonesian. The variables are age, education, health, asset, marriage, expenditure. And there is also variable which haven't impact on Indonesian happiness, which is gender differences.

We found that our results receive typical response from the Indonesian on "wealth and happiness" research. From the empirical results, the living behavior and pattern of happiness in Indonesia is consistently well. This indicates that those variables are basic need for Indonesian, which is important in output per capita that contribute to economic growth.

This nation could have more attention education and health to increase of the people's happiness, because although only 10% of respondents feel healthy and 39% of respondents attended higher than basic education, both of variables are have significant to respondents' happiness.

Political arrangements also matter. Much of the literature finds that both trust and freedom have positive effects on happiness (Helliwell, 2003; Layard, 2005). As a policy implication, government should fulfill the need of the nation to increase happiness level and this directly affects the growth of output, which is important to the country development. Unlike Nordics countries recently, serious riot of the nation has caused a great lost to the country. Despite the potential contributions that happiness research can make to policy, a sound note of caution is necessary in directly applying the findings, both because of the potential biases in survey data and because of the difficulties associated with analyzing this kind of data in the absence of controls for unobservable personality traits. In addition, happiness surveys at times yield anomalous results which provide novel insights into human psychology – such as adaptation and coping during economic crises – but do not translate into viable policy recommendations.

Happiness economics also opens a field of research questions which still need to be addressed. These include the implications of well-being findings for national indicators and economic growth patterns; the effects of happiness on behaviour such as work effort, consumption, and investment; and the effects on political behaviour. In the case of the latter, surveys of unhappiness or frustration may be useful for gauging the potential for social unrest in various contexts. In order to answer many of these questions, researchers need more and better quality well-being data, particularly panel data, which allows for the correction of unobserved personality traits and

correlated measurement errors, as well as for better determining the direction of causality (for example, from contextual variables like income or health to happiness versus the other way around). These are major challenges in most happiness studies. Hopefully, the combination of better data and increased sophistication in econometric techniques will allow economists to better address these questions in the future.

Finally, for the further research, we need to consider conducting specific study on the effect of education to happiness and identifying a specific impact of education level, type of education and government's intervention in education sector to people's happiness. Additionally, it will be also interesting identify the effect of specific health problem as well as public health service to people's happiness.

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