

A Review of the Relationship between Subjective Well-Being and Consumption

Nattaya Prapaipanich¹

One of the determinants that most happiness economists concentrate on is income. There are not many of prior research studies on the linkages between consumption and subjective well-being (SWB). The objective of this paper is to review and to bridge a gap in the literature on the relationship between consumption and an individual's SWB. It is commonly accepted that consumption increases an individual's well-being. However, does consumption really increase an individual's subjective well-being (SWB)? It focuses on papers that have been published in international journals since 1990 both in the area of economics and psychology. This paper also discusses the reasons why consumption is selected as a proxy, instead of income. Consumption in this paper specifically emphasizes on material goods and experiential goods. There are some interesting findings. Material goods deliver comfort which is temporary and fades with time. It only increases SWB in the short term. An individual adapts to the gain from material goods through time. On the other hand, experiential goods deliver pleasure. Experiential goods provide more SWB than material goods because of three reasons. The first reason is that experiences are less likely to disadvantageous comparisons, or social comparison. The second reason is that experiential goods are less possible to adapt through time. The final reason is that experiential goods are more likely to continually fascinate and provide satisfaction. As a result, it is suggested that an individual should spend money on experiential goods rather than material goods.

JEL Codes: A12 and A13

1. Introduction

Happiness relates to an individual daily life and naturally an ultimate goal of a rational individual is to be happy. The pursuit of happiness has been interested by researchers from many different social scientific disciplines including economists and psychologists. Happiness study is originated by psychologists. Generally, psychologists aim to study how an individual behaves, envisages, and perceives. They also pursue methods to cope with life problems. Psychologists examine some determinants relating to an individual's mind and behavior such as socio-demographic, and personality. Later, economists incorporate the studies to include the effect of economic determinants such as income, consumption, and unemployment. Most economists are interested in determinants. To explain and to analyze the relationship between subjective well-being (SWB) and its determinants, econometric technique is generally applied in the field of Economics of Happiness.

¹ Miss Nattaya Prapaipanich, Faculty of Economics, Chulalongkorn University, Bangkok, Thailand. Mailing address :315 Lakeside Villa1, Bangkaew, Bangpree, Samutprakarn, 10540, Thailand. Email: nattayap@hotmail.co.th, Tel: +66 819030509, Name of the track :Economics

Prapaipanich

In addition to mainstream economics, happiness economics have derived from the alternative perspective. Happiness economists question that do increasing in gross domestic products (GDP), or rising income after certain basic needs are met, actually create greater happiness to a country's population. Similar to mainstream economics, the study of happiness can be separated into individual and aggregate level. At individual level, the study is usually conducted through a survey by collecting primary data. At aggregate level, secondary data is normally applied to analyze the relationship. This only can be done in some countries, where data are sufficient.

Some indicators are continually developed to measure individuals' happiness at aggregate level. For example, Bhutan introduces Gross National Happiness (GNH). The GNH comprises of four pillars of happiness, which are (1) fair socio-economic development (better education and health), (2) conservation and promotion of a vibrant culture, (3) environmental protection, and (4) good governance (GNH 2012). Moreover, New Economics Foundation (NEF) introduces Happy Planet Index (HPI) to be an alternative indicator to measure any national progress. The HPI is calculated by the multiplication of experienced well-being and life expectancy, and divided by ecological footprint. Experienced well-being indicates how well an individual's life. It is assessed by using a questionnaire called the Ladder of Life, which derives from the Gallup World Poll. The HPI's life expectancy derives from the 2011 United Nations Development Program (UNDP) Human Development Report. The ecological footprint is a measure of resource consumption. It is a per capita measure of the amount of land required to sustain a national's consumption patterns (NEF 2012).

One of the determinants that most happiness economists concentrate on is income. For example, Easterlin (1995) studies the relationship between income and happiness mostly at aggregate level. He is the one who pioneers the Easterlin Paradox. Thereafter, there are several studies confirming the Easterlin Paradox that once an individual has sufficient level of income, he/she is not happier when his/her income increases (Clark, Frijters, & Shields 2007; Di Tella, MacCulloch, & Oswald 2003; Helliwell 2003). In addition, there are a number of papers which have been studied the relationship between happiness and income at individual level (Oswald 2008; Peiro 2006; Powdthavee 2009; Rojas 2007).

With an aim to explore to a new area of happiness economics, the relationship between an individual's happiness and consumption other than income is considered in this paper. Consumption does not gain as much investigation as income. This paper thus interests in consumption pattern. The reason why consumption is selected to study is to provide awareness that purchasing goods may not create greater happiness, especially material goods. However, experiential goods may provide happiness to an individual. This is likely because social interaction, which associates with experiential goods, may create an individual happier.

The next section, Section 2, is a literature review, which mainly includes three sections, (1) terms and definitions, (2) SWB methodology review, and (3) the relationship between consumption and SWB. Section 3 is a discussion. The last section, Section 4, is a conclusion and suggestion. .

2. Literature Review

This section contains some specific terms and definitions, which are used throughout this paper. Then, the literature review on SWB methodology review, and the relationship between consumption and SWB are discussed. The three possible reasons of negative consumption are introduced, including social comparison or relative hypothesis, adaptation or hedonic treadmill, and aspiration or satisfaction treadmill.

2.1 Terms and Definitions

This section aims to discuss the definitions of some specific terms using throughout this paper. Happiness and subjective well-being (SWB) are introduced first, followed by material goods, and experiential goods.

One of the common debates in happiness economics is the definition of the term happiness. The word “happiness” is often used in different meanings. Happiness is sometimes used interchangeably with subjective well-being (SWB).

Subjective well-being (SWB) is defined by Diener (2009) and Kahneman & Deaton (2010) into two components. Diener (2009) suggests that SWB is an affective and a cognitive element. First, an affective element includes momentary moods. An affective element is an immediate situation to realize the feeling experienced by an individual. Second, a cognitive element represents the evaluation of life satisfaction. In the same way, Kahneman & Deaton (2010) suggest that SWB can be separated into emotional well-being and life evaluation. Emotional well-being refers to the emotional quality of an individual’s everyday experience, for example, the frequency and intensity of experiences of joy, stress, sadness, anger, and affection that make one’s life pleasant or unpleasant. Life evaluation refers to the thoughts that an individual has about his/her life. This process occurs when an individual realizes about his/her life.

Material goods are defined as objects that are tangible and are physically retained in one’s possession. They may be carried from one location to another. They occupy physical space and are able to stand for more than two or three days. Many individuals purchase material objects as symbolic possessions, typically serving as markers of social status. Fashionable clothing, jewelry, stereos, and fancy cars are some examples of material goods (Van Boven 2005; Nicolao, Irwin & Goodman 2009).

Experiential goods are defined as objects that are not tangible. An individual purchases these goods to acquire a life experience which is an event or series of events that an individual encounters, for example, movies, amusement parks, and restaurant dinners (Van Boven 2005; Nicolao, Irwin and Goodman 2009).

2.2 SWB Methodology Review

There are literatures confirming that SWB is measurable and comparable with reliability and validity (Diener 1984; Easterlin 2003; Frey & Stutzer 2007; Layard 2005). Layard (2005) suggests that SWB can be measured and compared by asking an individual how he/she feels. This is because an individual is able to be

Prapaipanich

aware his/her feeling. He/she smiles when he/she is happy. Alternatively, he/she is frown or weeps when he/she is sad. Layard (2005) also states that not many individual answers "Don't know" how he/she feels in the surveys. This means that an individual knows his/her feeling and be aware of the validity of the survey question. This section discusses methods of SWB measurement leading empirical research on SWB possible.

Psychologists enlighten economists about a number of different measurement methods for approximating SWB. There are some psychological literatures which study a well-defined correlation between SWB responses and various SWB measures such as Myers (1993), and Pavot & Diener (1993). It can be stated that the SWB study does not aim to compare an individual's SWB at absolute levels but rather the genuinely aim of the study is to seek for the determinants that bring an individual happiness. To assess an individual's SWB, there are mainly two types of data collection, namely subjective and objective data.

The first type is subjective measurement. Happiness study is usually in a form of a survey. Most often researchers typically measure SWB by asking an individual how happy he/she is or how happy he/she is with a particular situation. This is a self-rated method. In general, a survey respondent is asked to rate his/her own personal feeling of happiness or subjective well-being onto a numerical scale. For example, World Values Survey (WVS) asks respondents, "Taken all together, how happy would you say you are: very happy, quite happy, not very happy, and not at all happy?" The answers are scored from one to four points, ranging from 1 not at all happy to 4 very happy (WVS 2012).

The second type is objective measurement. The way to measure SWB can be physically conducted by Neuro-science. There is positive correlation between SWB ratings and the physical measures of responses to stress such as heart rate and blood pressure, and the risk of getting coronary heart disease (Blanchflower & Oswald 2008). Happy persons are also unlikely to commit suicide (Frey & Stutzer 2007). The physical measures can be done through, for example, biomarkers. They include brainwaves and blood pressures.

2.3 The Relationship between Consumption and SWB

The usual belief is that if an individual is able to consume more, it may lead to increased SWB. However, does consumption really increase an individual's SWB? Applying Thailand's data, Clarke & Islam (2004) reveal that the economic growth does not bring Thailand to have higher levels of social welfare. Nevertheless, the social welfare in fact reduces. Clarke & Islam (2004), as a result, argue that economic growth is not always desirable. This is also supported by Kasser (2002) that consumption beyond the basics of food, clothing, housing and transportation does not seem to increase an individual's SWB. This means that not all types of consumption make an individual feel more fulfilled. Kasser (2002) suggests that a happy life comes from spend less money but spend more time with family, friends and community.

Scitovsky (1992) refers material goods as defensive consumption. Defensive consumption delivers comfort goods or material goods, such as newer and fancier-looking sofa, nicer cars, and bigger houses to increase comfort. The gain from

Prapaipanich

comfort is temporary and fades with time. It is only a short term happiness which can be adapted through time, and it is simple for an individual to continue to need a comfort once one becomes familiarized to it (Scitovsky 1992). Baudrillard (1993) believes that material goods is used as a “consumption of sign” to add value of oneself. It is used to express an individual’s investment in the material objects for a need for difference (Baudrillard 1993). This paper implies material goods are positional goods and social status goods. An individual purchases these goods because of the seeking for prestige, power and social status. There are costs of materialism. Kasser (2002) emphasizes that materialism may not create happiness to an individual. It may even bring personal harmful. This can be because the desires of having and consuming more of material goods drive an individual to work harder. Once possessing the goods, he/she has to persistently manage, maintain, upgrade, replace, and insure them (Kasser 2002). As a result, materialism generates damage and stress (Kasser 2002). In addition, Kasser (2002) and Diener (1984) believe that placing a high value on material goods can lead an individual to have higher levels of anxiety, depression, and low life satisfaction. Beyond psychology, this paper also considers this aspect in economic point of views. In theoretical study, Duesenberry (1949) introduces Keeping up with Joneses (KUJ) and consumption externality. The KUJ means that the utility of an individual’s level of consumption depends not only on the absolute level of consumption but also on the relative one. He suggests consumption externality is that aggregate consumption increases but an individual’s happiness does not increase. It is because an individual’s consumption affects another individual’s well-being (Duesenberry 1949). An empirical study of DeLeire & Kalil (2010) also support that material goods cannot bring happiness. They employ secondary data from a reliable source, the Health and Retirement Study (HRS) database by examining the relationship between consumption and happiness for elderly Americans over the age of 50.

An experiential good is called by Scitovsky (1992) in three terms. These are pleasure goods, or stimulation goods, or relational goods. These goods include, for example, seeing beautiful scenery, meeting good friends, listening to music, and watching a movie. Scitovsky (1992) thus refers experiential goods as creative consumption. Scitovsky (1992) advises that an individual should spend money on creative consumption rather than defensive consumption because pleasure goods do not tend to adapt through time, and can continually fascinate and provide satisfaction. Happiness from experiential goods is last longer comparing to material goods (Van Boven 2005; Van Boven & Gilovich 2003). DeLeire & Kalil (2010) refer experiential goods as leisure consumption. This leisure consumption includes hobbies, vacations, tickets to movies, sport events, performing arts, exercises/sports including gym membership and exercise equipment. They find that only leisure consumption is positively related with happiness. Specifically, they reveal that the observed higher happiness level from leisure consumption is related to social connections. Spending on other types of consumption such as food, utilities, and health care does not increase happiness.

Few years later, Nicolao et al. (2009) extend the study of Van Boven & Gilovich (2003) to examine not only the positive outcomes of experiential and material goods purchased but also their negative outcomes. They find that, an individual adapts slower to experiential goods than material goods. For negative purchases, experiential goods lead to longer not happy than material goods. It means, for

Prapaipanich

example, a bad vacation decreases happiness longer than a disappointing automobile purchase. This is because making negative purchases on experiential goods can last not happy over time with the experience. Nicolao et al. (2009) agree with Van Boven & Gilovich (2003) that, for positive purchases, an individual receives longer happiness from positive experiential goods than from positive material purchases. As a result, it can be concluded that experiential goods lead to longer in both positive and negative purchases.

3. Discussion

To measure economic status, economists may consider income or consumption as a proxy. There are some reasons for this paper to select consumption. First, income may be understated. If only use income as a proxy of SWB, an individual who does not work are excluded, for instant, housewives, or who receive income from assets. These include, for example, returns on investments in houses and other durables, and unrealized capital gains on these or on financial assets (Mullis 1992). Second, consumption is more likely to capture a long-term prospect than is income. It is because consumption depends on the total income and wealth that an individual expects to earn over his or her lifetime. For example, a retired individual may have less reportable income than formerly. However, he/she is likely to retain the same consumption level because he/she has no children to educate, has fewer debts, and pays fewer taxes on his/her retirement pensions (Diener & Biswas-Diener 2002). Third, Diener & Biswas-Diener (2002) suggest that it is important to consider how an individual spends his/her income. Assessing SWB through income makes us unable to conclude which spending goods can lead us to be happy. Consumption can lead us to observe how an individual allocates a certain sum of income. As an individual purchases things through his/her income, the effect of SWB is summed in bundle of goods. Therefore, an individual is hardly able to realize which goods convey him/her happiness.

Higher income and consumption may not increase an individual's SWB. These effects can arise from many factors. One of the reasons is because an individual trades away the time of his/her life working to earn money, and also sacrificing family life and health (Layard 2005). In addition, consumption may create negative effects on SWB because of these three main reasons that we might overlook. These are the aspects of social comparison, adaptation, and aspiration.

(1) Social Comparison or "Relative Hypothesis"

There is a possibility that an individual is concerned about his/her positions relative to others in the society, and not only about the absolute level. An individual usually compares himself/ herself with others, driving him/her to create desires or needs to have more and consume more. One of the obviously observed examples is that an individual purchases material goods as symbols of worth, in order to improve his/her status. A good example here is the purchase of luxury brand name watches that others may admire, or contemporary clothes and bags that convey the characteristics of attractiveness. This brings up the potential role of relative theory or the reference groups. According to Gali (1994) , it is referred to the idiom of "Keeping up with the Joneses" (KUJ). The "KUJ" means that an individual consumes by considering inter-personal influences. Because an individual takes

Prapaipanich

others' consumption into account, he/she strives to match others in the levels of spending and social standing (Frank 1999; Gali 1994).

Relative consumption leads to a negative consumption externality. The term "consumption externality" is suggested by Scotchmer (2005); Frank (1999); Gali (1994); and Duesenberry (1949). It means that an individual makes a consumption decision without judging its impact on others. In other words, every time an individual raises his/her relative consumption, he/she lowers the relative consumption of other individuals. This is an external non-benefit or negative consumption externalities imposed on others. Where relative consumption matters, an increase of an individual consumption has no positive impact on SWB if negative consumption externalities exist. In the presence of consumption externalities, aggregate consumption increases, whereas an individual's SWB does not. This is because an individual's consumption affects another individual's SWB.

(2) Adaptation Theory or "Hedonic Treadmill"

Layard (2005) suggests that an individual is always able to adapt his/her preferences. Keeping the same level of satisfaction, an individual usually requires something better to respond to his/her higher needs. Frey & Stutzer (2007) reveal that after some initial period of satisfaction, which derived from the consumption of newly acquired possessions, an individual then accustoms to such things. He/she is, as a result, no longer able to experience pleasure and become bored with those possessions.

Kahneman & Tversky (2000) regard the adaptation theory as a "set-point" theory. The "set-point" theory suggests that inner characteristics, such as personality, are the things which decide an individual's SWB level. This means that the short term events, which come into individuals' lives, including bad health or increase in income, account for a very small percentage change in the SWB level. This suggests that an individual initially does react to the events, but that the corresponding feelings are adapted to the baseline level in the long run as time passes.

For consumption, an individual may raise his/her SWB at first when he/she purchases a new good. In the long run, however, his/her feeling is adjusted, resetting the level of satisfaction to his/her original set point. It is important to point out that adaptation may not operate equally for all goods (Wang, Novemsky & Dhar 2009). This means that not all consumer goods have the same adaptation level. The SWB from some goods lasts longer, for example, experiential goods compared to material goods (Van Boven 2005). These findings are supported by Van Boven (2005); Van Boven and Gilovich (2003), as well as Easterlin (2003). They agree that the satisfaction for experiential goods, such as music, literature, and art, are less likely to be adapted quickly, compared to other material goods, such as automobile. They concur that an individual will increase his/her SWB if the individual spends his/her money on experiences goods compared to material goods.

Prapaipanich

(3) *Aspiration Theory or "Satisfaction Treadmill"*

According to Kahneman, Wakker, & Sarin (1997), the aspiration theory is a theory based on the gap between aspiration and achievement. Aspiration level is the level that an individual would like to reach, but achievement level is the level an individual has already achieved. When there is a gap between the two, it would create the boundaries between satisfactory and unsatisfactory results. Frey & Stutzer (2002) study the effect of aspiration with an individual's SWB. In doing so, they find that an individual is most likely to compare his/her current situation with his/her past or future expectations, and this creates the changing in aspiration level. An increase in aspirations level creates negative externalities in consumption. It will pollute or pose negative effects to an individual's SWB.

4. Conclusion

Mainstream economics view an individual as highly individualistic, assuming that he/she consumes goods in the most efficient way to maximize his/her well-being. It is commonly accepted that consumption increases an individual's well-being. However, this paper believes, rather differently, that consumption does not necessarily increase SWB.

Consumption may create a negative effect on SWB. Such an argument can be raised by three reasons. One of the main aspects may be due to social comparison. An individual usually compares himself/herself with others, leading to increased desires or needs to have and to consume more. Second, adaptation occurs after a purchase since an individual is able to reset his/her satisfaction after acquiring a new possession. After a certain period of satisfaction caused by the consumption of new things, an individual grows accustomed to them and is no longer happy. He/she then derives low or no pleasure from such consumption. The third reason is aspiration, because to keep the same level of satisfaction, an individual usually requires something better to respond to his/her higher need.

According to the author's reviews, it is suggested that an individual should spend money on experiential goods, rather than material goods, as experiential goods are less likely to be prone to the said social comparison, adaptation, and aspiration process. As a result, experiential goods can more continually fascinate and provide satisfaction. However, the limitation of this paper is acknowledged. It is that there are not many of prior research studies on this topic to assure the suggestion.

References

- Baudrillard, J 1993, *Symbolic exchange and death*, Sage, London.
- Blanchflower, DG & Oswald, AJ 2008, 'Hypertension and happiness across nations', *Journal of Health Economics*, vol.27, no. 2, pp. 218-233.
- Clark, AE, Frijters, P & Shields, M 2007, 'Relative income, happiness and utility: an explanation for the Easterlin paradox and other puzzles', *Institute for the Study of Labor (IZA)*, vol.2840, pp.1-68.
- Clarke, M & Islam, SM 2004, *Economic growth and social welfare: operationalising normative social choice theory*, Elsevier B.V., Amsterdam.

Prapaipanich

- DeLeire, T & Kalil A 2010, 'Does consumption buy happiness? Evidence from the United States', *International Review of Economics*, vol.57, pp.163-176.
- Di Tella, R, MacCulloch, RJ & Oswald, AJ 2003, 'The macroeconomics of happiness', *The Review of Economics and Statistics*, vol. 85, no. 4, pp. 809-827.
- Diener, E 2009, *Assessing well-being the collected works of Ed Diener*, Springer, New York.
- Diener, E 1984, 'Subjective well-being', *Psychological Bulletin*, vol. 95, no. 3, pp. 542-575.
- Diener, E & Biswas-Diener, R 2002, 'Will Money Increase Subjective Well-Being?', *Social Indicators Research*, vol. 57, pp. 119-169.
- Duesenberry, J 1949, *Income, saving and the theory of consumer behavior*, Harvard University Press, Cambridge.
- Easterlin, RA 2003, 'Explaining happiness', *Proceedings of the National Academy of Science (PNAS)*, vol. 100, no. 19, pp. 11176-11183.
- Easterlin, RA 1995, 'Will raising the income of all increase the happiness of all?', *Journal of Economic Behavior and Organization*, vol. 27, pp. 35-47.
- Frank, RH 1999, *Luxury fever: why money fails to satisfy in an era of excess*, The Free Press, New York.
- Frey, BS & Stutzer, A 2007, *Economics and psychology: a promising new cross-disciplinary field*, MIT Press, Cambridge.
- Frey, BS & Stutzer, A 2002, *Happiness and economics: how the economy and institutions affect human well-being*, Princeton University Press, New Jersey.
- Gali, J 1994, 'Keeping up with the Joneses : consumption externalities, portfolio choice and asset prices', *Journal of Money, Credit, and Banking*, vol. 26, no. 1, pp. 1-8.
- Helliwel, JF 2003, 'How's life? combining individual and national variables to explain subjective well-being', *Economic Modelling*, vol. 20, pp. 331-360.
- Kahneman, D & Deaton, A 2010, 'High income improves evaluation of life but not emotional well-being', *Psychological and cognitive sciences*, vol. 107, no. 38, pp. 16489-16493.
- Kahneman, D & Tversky, A 2000, *Choices, values, and frame*, Cambridge University Press and Russell Sage Foundations, New York.
- Kahneman, D, Wakker, PP & Sarin, R 1997, 'Back to Bentham: explorations of experienced utility', *Quarterly Journal of Economics*, vol. 112, pp. 375-405.
- Kasser, T 2002, *The high price of materialism*, The MIT Press, Cambridge.
- Layard, R 2005, *Happiness: lessons from a new science*, The Penguin Press, New York.
- Mullis, RJ 1992, 'Measures of economic well-being as predictors of psychological well-being', *Social Indicators Research*, vol. 26, pp.119-135.
- Myers, DG 1993, *The Pursuit of Happiness*, HarperCollins, Michigan.
- Nicolao, L, Irwin, JR & Goodman, JK 2009, 'Happiness for sale: do experiential purchases make consumers happier than material purchases?', *Journal of Consumer Research*, vol. 36, pp. 188-198.
- Oswald, AJ 2008, 'On the curvature of the reporting function from objective reality to subjective feelings', *Economics Letters*, vol. 100, no. 3, pp. 369-372.
- Pavot, W & Diener E 1993, 'Review of the satisfaction with life scale', *Psychological Assessment*, vol. 5, no. 2, pp. 164-172.
- Peiro, A 2006, 'Happiness, satisfaction and socio-economic conditions: some international evidence', *The Journal of Socio-Economics*, vol. 35, pp. 348-365.

Prapaipanich

- Powdthavee, N 2009, 'How important is rank to individual perception of economic standing? A within-community analysis', *Journal of Economic Inequality*, vol. 7, no. 3, pp. 225-248.
- Rojas, M 2007, 'Life satisfaction and satisfaction in domains of life: is it a simple relationship?', *Journal of happiness studies*, vol. 7, no. 4, pp. 467-497.
- Scitovsky, T 1992, *The joyless economy: the psychology of human satisfaction*, Oxford University Press, New York.
- Scotchmer, S 2005, 'Consumption externalities, rental markets and purchase clubs', *Economic Theory*, vol. 25, no. 1, pp. 235-253.
- The Gross National Happiness Centre (GNH) 2012, *The background of gross national happiness*, The Gross National Happiness Centre, viewed 16 April 2012, <<http://www.gnhbhutan.org>>.
- The New Economics Foundation (NEF) 2012, *Happy Planet Index: 2012 Report*, The New Economics Foundation, viewed 30 November 2012, <<http://www.neweconomics.org/publications/entry/happy-planet-index-2012-report>>.
- Van Boven, L 2005, 'Experientialism, materialism, and the pursuit of happiness', *Review of General Psychology*, vol. 9, no. 2, pp. 132-142.
- Van Boven, L & Gilovich, T 2003, 'To do or to have? That is the question', *Journal of Personality and Social Psychology*, vol. 85, no. 6, pp. 1193-1202.
- Wang, J, Novemsky, N & Dhar, R 2009, 'Anticipating adaptation to products', *Journal of Consumer Research*, vol. 36, pp. 1-11.
- World Values Survey Organization (WVS) 2012, *World Values Survey – Surveys*, World Value Survey Organization, viewed 5 December 2012, <http://www.worldvaluessurvey.org/index_surveys>.