

9 Wealth, consumption and happiness

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The question of the relationship between wealth and happiness is an ancient one, addressed in the early writings of major religions and in Greek philosophy. Many religious and philosophical thinkers have argued that money does not buy happiness; whereas the general public have seen things quite differently. Recent empirical work has allowed us to bring data to bear on this question, with fascinating results.

Most of this research on happiness (i.e. subjective well-being) assumes that people can assess their own thoughts and feelings with reasonable accuracy. In this sense, it is no different from the overwhelming majority of psychological research, which relies on self-report measures. These self-report measures fall into several categories. Some assess global life satisfaction, for example by asking questions such as: looking at your life as a whole these days, how satisfied with your life would you say you are? Others assess satisfaction with various domains of life, such as financial situation, health, family life, etc. Judgements of life satisfaction are cognitive, that is to say, they are *thoughts* about how well one is doing. Other measures focus on affect, one's emotional life. Recently, researchers have started using the experience sampling methodology (Kahneman and Sugden 2005), in which respondents are contacted through a beeper at various points in the day, and write down what they are doing and how they feel at that moment. Although highly promising, the expense of the experience sampling approach has limited its popularity.

The website for the International Society for Quality of Life Studies contains a search engine for finding appropriate measures, and it is linked to a list of 894 different scales and measures for assessing quality-of-life-related issues. While measures of life satisfaction and emotional well-being are the most commonly used, other measures look at issues including meaning in life, self actualization, mental health and physiological measures of stress. All of these measures illuminate important aspects of well-being, and I am particularly sympathetic with the call for more studies on respondents' sense of leading a meaningful life (Ryff and Keyes 1995). But, for this review, I will focus primarily on studies where the dependent variable is one or more measure of positive affect, negative affect and/or life satisfaction. Blanchflower and Oswald (2004) found that the decision to use either affect or life satisfaction as a dependent variable made no substantial difference in their microeconomic analysis. Since this chapter presents a general overview of the findings in

this area, I will use the term *happiness* very broadly, to refer to any of these measures or their combination. For a more detailed look at how each of these elements of happiness may be differentially affected by economic factors, see Ahuvia and Friedman (1998).

Can happiness measures be trusted? There are good reasons for thinking the answer is yes, at least as general indicators of people's subjective life experience. People's assessment of their own happiness tends to remain fairly stable over time, indicating that it is a global judgement about life rather than primarily a response to momentary conditions (Diener 1984). However, measured happiness does change in the expected direction with major positive and negative life events (Frijters 2004). People who see themselves as happy have positive daily mood ratings, recall more positive and less negative events in their lives, smile more, and are seen as happy by others who know them well (Myers and Diener 1995, Fernandez-Dols and Ruiz-Belda 1990). One common objection to these measures is that happiness is too subjective to be studied empirically; in this regard it is worth noting a growing body of research linking self-reported happiness to specific brain states (Sutton and Davidson 1997). Finally, the conclusions reported here are well replicated, summarizing hundreds of studies that have been conducted using a variety of measures, methods and respondent populations. (For other reviews see Ahuvia and Friedman 1998, Diener and Biswas-Diener 2002, Frey and Stutzer 2002a, 2002b, Layard 2005.)

After valid and reliable measures of happiness were established, there was a lot of initial research that simply observed whether wealthier people were happier than those on lower incomes. This research has been well reviewed previously (Ahuvia and Friedman 1998, and Diener and Biswas-Diener 2002), so the material covered in these previous reviews will only be summarized here. The current review will focus most heavily on work done since 1998, when the present author last summarized work on this topic.

9.1 Personal wealth and individual happiness

9.1.1 The relationship is present, but weak

When looked at in isolation from other variables, the relationship between income and happiness is consistently present, and consistently weak. Figure 9.1 presents a typical illustration of the relationship. Dollars have been converted into 1996 equivalents, and adjusted for household size. The happiness score is based on a simple three-point scale of 'not too happy' = 1, 'pretty happy' = 2, and 'very happy' = 3. As is regrettably common, the data on the very highest income category available in the survey (the top 10 per cent) are difficult to interpret, since they cover people with incomes starting at \$40,000 and go up to include the richest people on earth. Therefore, the graph includes only the first nine income deciles. Although it appears in this particular data set

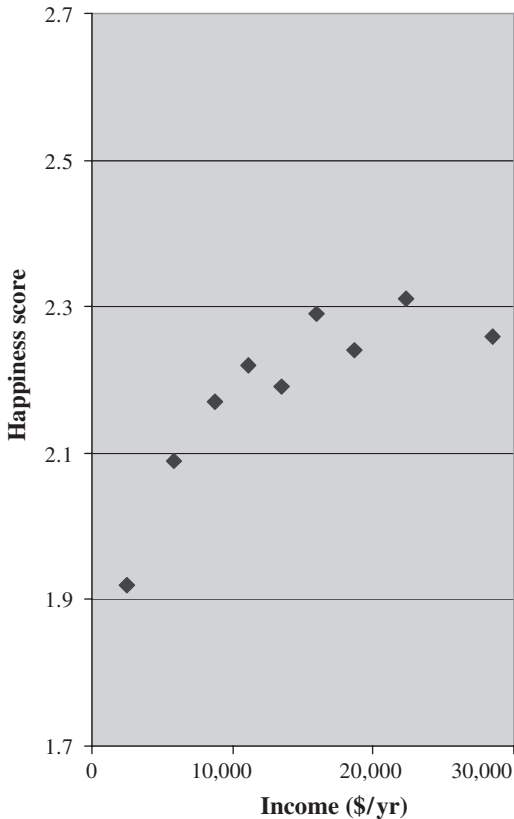


Figure 9.1 Income and happiness in the US, 1972–4. Reprinted from the National Opinion Research Center’s General Social Survey, with permission

that happiness actually declines at around \$30,000 per year, this is most likely a minor random fluctuation, since numerous studies show that the effect of income remains slightly positive even at higher income levels.

Most of this research on happiness (or subjective well-being (SWB)) assumes that people can assess their own thoughts and feelings with reasonable accuracy. Proponents of a connection between wealth and happiness emphasize that a statistically significant connection has been found in almost every study on the topic (for the few exceptions, see Arthaud-day and Near 2005, pp. 518–19). Conversely, authors who wish to argue that money is not closely related to SWB once basic needs have been met, focus on the weakness of this connection among the non-poor population.

Just how weak is the connection between money and happiness? Typical studies in developed economies indicate that income explains only about 2–4.5 per cent of the difference in happiness between individuals. A more sophisticated multilevel analysis by Schyns (2000) found that individual income

explained only 2.5 per cent of the difference in happiness between people. Other studies have suggested ways of improving measures of income (Hsieh 2004, Saris 2001), but the results find that, at most, 5 per cent of the difference in happiness can be explained by income.

What is more, even the 5 per cent figure may overstate the case that money leads to happiness. Spurious correlations are possible because high-paying jobs also tend to have other rewards such as autonomy and relatively interesting work, which are associated with SWB (Argyle 1996). Unemployment is another likely cause of spurious correlations, since unemployment both brings a loss of income and has strong negative effects on happiness over and above the associated loss of wages (Clark, Georgellis and Sanfey 1999, Oswald 1997). Heavy consumer debt is another possible cause of spurious correlation because it significantly reduces happiness regardless of income level (Ahuvia and Friedman 1998), but it is more common among those with lower incomes (Lea, Webley and Walker 1995). The case of consumer debt is also interesting because at any given income level, increased debt indicates increased consumption. If wealth leads to happiness by increasing consumption, we might expect consumer debt to be positively associated with happiness. In fact, at any given income level, debt is associated with less happiness, and saving (i.e. reduced consumption) is associated with greater happiness (Ahuvia and Friedman 1998, Douthitt, MacDonald and Mullis 1992). Finally, Easterlin (2001b) reports that social class makes a large difference in how happy people are, but rising individual incomes over the life cycle do not increase happiness. One possible interpretation of this is that variables other than the level of one's consumption, like crime and single-parent families, may decrease the happiness of poorer people.

These arguments also arise when one looks at data comparing the average level of happiness in various nations. There is no question that, on average, the citizens of wealthy countries report more happiness than do people in poorer countries. But some researchers question if the observed correlation between GDP per capita and average level of happiness is driven by higher levels of consumption in the developed world. Helliwell (2003) looked at forty-nine countries, including some poor countries, and found that the correlation between national income and average level of happiness goes away after controlling for variables like quality of government, health and social connections. Similarly, Alesina, Di Tella and MacCulloch (2001) found that, after controlling for unemployment rate, income distribution and inflation, there was no correlation between real GDP per capita and happiness in the twelve European countries studied. It should, however, be noted that many of these variables, like health, are related to a country's wealth.

Finally, rather than wealth causing happiness, the causation could lie in the other direction. Aspects of a happy personality, such as optimism, have been shown to lead to higher incomes (Argyle 1996, Diener and Lucas 1999, Myers and Diener 1995). The influence of these personality variables can be

so powerful, as noted in Cummins' (2000a) review study, that when income is included in models, along with psychological variables such as optimism, control and self-esteem, it does not show unique significance.

9.1.2 Money matters more to the poor

If money has little impact on happiness, does this mean we shouldn't worry about poverty? Most researchers reject this harsh conclusion by assuming a diminishing marginal utility for income, yielding a curvilinear relationship between income and happiness, so that a dollar provides more happiness to a poor person than it does to a rich person (Veenhoven 1991). The correlations between income and happiness mentioned above average together the strong effects of increased income on the poor with the much weaker effects of increased income on the non-poor. So, most of the variance explained in these correlations comes from alleviating the unhappiness of the very poor, rather than improving the living standard of the non-poor (Argyle 1999, Burchardt 2005, Firebaugh and Tach 2005, Hsieh 2004, Schyns 2003).

If the relationship between income and happiness is curvilinear, we would expect to see higher income-to-happiness correlations among the poor, who are at the more vertical part of the curve. Consistent with this, a review by Cummins (2000a) found that, among the non-poor, the correlation between income and happiness averaged only .14, but it increased to .26 among the poor. Furthermore, if the benefits of added income accrue mostly at the very low end of the distribution, we would expect the correlation between income and happiness to be higher in poor countries that don't have adequate social safety nets, and indeed, this is the case (Schyns 2003). For example, Biswas-Diener and Diener (2001) found a correlation of .45 between income and life satisfaction in the slums of Calcutta, even after controlling for other variables. And Saris (2001) found a significant improvement in the fit by moving from a linear to a curvilinear model for Russian data, where income explained a remarkably high 9 per cent of the variance in happiness.

Some authors have found evidence of a rather abrupt inflection point at around the income level where basic needs are met, and after that point the influence of income on happiness drops off sharply (Ahuvia and Friedman 1998, Argyle 1999, Cummins 2000a, Fuentes and Rojas 2001, Lever 2004). The approximate location of this inflection point varies across studies. Ahuvia and Friedman (1998) place it at around \$20,000 per year in the US, Frey and Stutzer (2002a) place it at around \$10,000 per year per capita when looking at national GDP data, and Fuentes and Rojas (2001) find that in Mexico it is as low as at \$320 (US dollars, after conversion from Mexican pesos). For people with incomes above that inflection point, most studies find an extremely small but still measurable correlation between income and happiness (Schyns 2003), although, in other studies, the correlation between income and happiness among the non-poor becomes non-significant (Lever 2004).

Despite its intuitive appeal and the almost universal acceptance of the curvilinear relationship between income and happiness, not all evidence supports its veracity. When the average level of happiness for various nations is compared, rich countries are dependably happier than poor countries. Many studies have looked for a curvilinear relationship in this international data, but found a linear relationship instead (Diener, Sandvik, Seidlitz and Diener 1993, Diener, Diener and Diener 1995, Schyns 1998). However, this may be due largely to the fact that the data contain two distinct clusters of nations, the rich and happy versus the poor and less happy; and this type of clustering of data points makes any curvilinear relationship difficult to detect (Schyns 2003, p. 76). Easterlin (2005a) also raises concerns about the assumption of diminishing marginal returns on income. He recognizes that data from a single point in time show a curvilinear relationship between income and happiness, but argues that the expected patterns don't show up when looking at changes in individual or national income over time. Easterlin's arguments on these issues will be addressed in more detail when we look at the hedonic treadmill and economic growth.

Despite these legitimate concerns, the preponderance of the data still suggests a curvilinear relationship between wealth and happiness. In sum, the currently available data suggest that among the truly poor, the relationship between income and happiness is moderately strong. Once one's basic needs have been met, the relationship between income and happiness continues to be measurable but becomes extremely small, and of negligible practical significance.

9.1.3 Why is the relationship so weak?

Money is the ultimate resource which can be converted into almost anything one might desire. Why, then, is the relationship between wealth and happiness so small, especially among the non-poor? The answer seems to lie in a variety of complementary causes.

9.1.3.1 Among the non-poor, satisfaction with income matters more than income per se

First, while one's actual income has little relationship to one's happiness, *satisfaction* with one's finances does have a moderately strong relationship to life satisfaction as a whole, with correlations around .40–.50 (Ahuvia and Friedman 1998). This suggests that when people introspect about the impact of their own financial situation on their life as a whole, they compare their subjective sense of overall well-being to their subjective sense of their financial situation, and indeed the two are highly correlated. This may lead them to believe that their income is a major determinant of their happiness. But it seems that people often miss the fact that their objective financial situation has

only a moderate connection to their subjective feelings about their situation (Diener and Oishi 2000, Fuentes and Rojas 2001).

Part of this is due to materialism, which is a dispositional tendency to, among other things, see one's standard of living as inadequate regardless of how much one actually earns (Burchardt 2005, Kasser 2002, Richins and Rudmin 1994, Ryan and Dziurawiec 2001, Sirgy, Lee, Larsen and Wright 1998). For example, in a recent survey of the very wealthy, 33 per cent of respondents with more than \$10 million in investable assets reported that having enough money is a constant worry in their life (PNC Advisors 2005). Perhaps not surprisingly then, materialism or other forms of high-income aspirations are associated with unhappiness (Kasser 2002, Sirgy 1997, Stutzer 2004, Stutzer and Frey 2004). From this we can see that one's sense of financial satisfaction is largely a result of one's psychological disposition, rather than simply being a reaction to one's actual situation.

The relationship between satisfaction with specific life domains (e.g. standard of living, friends, work, neighbourhood, etc.) and overall life satisfaction is addressed in research on the 'bottom-up' versus the 'top-down' theories of happiness. The common-sense view is called the 'bottom-up' theory of happiness, where overall life satisfaction is a combination of people's satisfaction with various life domains such as family, work, income, etc. In contrast, the 'top-down' perspective holds that overall life satisfaction is largely due to genetics and/or stable personality factors; for example, some people are genetically predisposed towards anxiety and this lowers their happiness (Cummins 2000b, Diener and Lucas 1999, Lykken and Tellegen 1996). Research on the top-down model has shown that this dispositional sense of overall life satisfaction often spills over into specific life domains (e.g. people reason that if their life as a whole is good, their income must also be good), thus causing most of the correlation between domain satisfaction and overall life satisfaction (Mallard, Lance and Michalos 1997, Veenhoven 1996). These top-down effects are particularly strong in material domains such as satisfaction with one's income and home (Lance, Mallard and Michalos 1995). As Diener and Oishi (2000, p. 14) noted, 'people's global feelings about their lives are more important predictors of whether they'll be satisfied with their income than is their objective income!'

In sum, actual income is only loosely linked to income satisfaction, since income satisfaction reflects a large dispositional tendency for some individuals to be more satisfied with their financial situation than others (Ahuvia and Wong 2002). Income satisfaction, in turn, is only one of many life domains that influence overall life satisfaction. And while the connection between income satisfaction and life satisfaction is moderately strong, much of the correlation reflects the effects of overall life satisfaction on income satisfaction, rather than the other way around. Since the causal influences of income on income satisfaction, and income satisfaction on overall life satisfaction, are both fairly weak, it is not surprising that the causal influence of income on overall life

satisfaction is very limited. This being the case, why is the relationship between income and happiness moderately strong among the poor?

9.1.3.2 Among the poor, income satisfaction per se may be largely beside the point

Veenhoven (1991) argues for livability theory, in which income increases happiness for the very poor by meeting basic needs, not by increasing income satisfaction per se. Consistent with livability theory, Groot and Van Den Brink (2000) found that in the Netherlands, when the wealthiest people in their sample received an increase in income, they quickly raised their income expectations to even higher levels and hence felt little happiness as a result (we will look at this 'preference drift' in more detail below), but this effect was not found among low-income respondents. This is interpreted as indicating that among lower income groups, money is used to meet basic needs, so preference drift doesn't occur. Biswas-Diener and Diener (2001) also presented evidence consistent with livability theory. As noted above, the connection between income satisfaction and actual income is generally weak but measurable; but Biswas-Diener and Diener (2001) found that within extremely impoverished populations in Calcutta, the correlation was so weak it did not reach statistical significance. Perhaps this was because even the relatively better off respondents in their sample had lifestyles so far below those they saw in the media (Ger and Belk 1996) that the income differences between the very poor respondents and the very *very* poor respondents had no measurable effect on income satisfaction. Nonetheless, even though income satisfaction had no influence on overall happiness, objective income had a very large and robust effect on overall happiness. In sum, this suggests that among the very poor, income may increase happiness not primarily by increasing income satisfaction, but by providing tangible benefits (nutrition, medicine, etc.) that have more direct effects on subjective well-being.

9.1.3.3 The hedonic treadmill and the durability bias

Disillusioned proponents of the idea that money leads to happiness can take some solace from the fact that it's not just money that disappoints; almost nothing that people expect will bring happiness has its anticipated effect. Part of this is because happiness is determined much more by how one thinks about the world, than by the way the world actually is (Lyubomirsky 2001), so changes to the external world have relatively little impact on subjective well-being. In what is called the 'durability bias', people tend to overestimate how much changes in their circumstances will affect their level of happiness, and, in particular, they greatly overestimate how long the changes in happiness will last (Gilbert, Pinel, Wilson, Blumberg and Wheatley 1998). This is true for negative events, such as having your political party lose an election, not getting tenure, or the dissolution of a romantic relationship (Gilbert *et al.* 1998), where people underestimate how quickly and thoroughly they will recover emotionally. And

it is true for positive events, such as winning a lottery (Brickman, Coates, and Janoff-Bulman 1978) or the more mundane case of getting a higher income (Fuentes and Rojas 2001). The durability bias reflects a psychological process called 'adaptation', where people get used to a new situation and its emotional impact goes away (Kahneman and Sugden 2005). One big exception to this rule of adaptation seems to be the quality of interpersonal relationships, where evidence suggests they have a profound and lasting impact on happiness (Myers and Diener 1997), and people tend to underestimate their importance when making decisions (Dunn, Wilson and Gilbert 2003).

The durability bias is a more general term for what, in the case of income, has been called the 'hedonic treadmill'. For example, getting a better car provides a short-term boost in mood, but this quickly fades and your happiness goes back to normal. Now, you would need an even better car to elevate mood again, and the cycle could go on indefinitely (Layard 2005). So, like a person on a treadmill, we run and run, yet always stay in the same place. Stutzer and Frey (2004) provide evidence that increasing income aspirations undermine the effect of increases in income on happiness, by showing that the relationship between income and life satisfaction increases dramatically after income aspirations are controlled for.

If the hedonic treadmill exists, we would expect to see strong effects on happiness from recent changes in income, but little or no lasting effects. Some support for this has been found. Using retrospective measures, several studies have found that recent perceived improvements in living standards are related to happiness (e.g. Graham and Pettinato 2002). Using longitudinal panel data measuring income, Clark (1999) found that job satisfaction was tied to changes in wages, independent of absolute wage level. Also using panel data, several studies have found effects from changes in actual income on happiness or income satisfaction, even after controlling for the absolute income level (Chan, Ofstedal and Hermalin 2002, Ravallion and Lokshin 2001, Schyns 2003).

But not all data is supportive of the hedonic treadmill hypothesis (Diener, Sandvik, Seidlitz and Diener 1993). In studies that found the expected effects from changes in income, these effects were not generally strong enough to explain the positive correlation between income and happiness completely. Findings from Burchardt (2005) are even more problematic. In this carefully done longitudinal study, Burchardt finds the expected pattern for people who have experienced a loss in income; i.e. for any given income level, people who have experienced a drop in income are less satisfied with their incomes than are people who have had steady incomes. The negative effects of a drop in income remain even when data is examined over a ten-year period, indicating that adaptation to reduced incomes occurs slowly. Counter-intuitively though, people who have had an increase in income are also *less* satisfied than are people whose income remains constant. Some clues to this mystery can be found by breaking the respondents down into income quintiles, and these clues show that it might not be incompatible with adaptation theory after all. For the three

middle quintiles, there was no difference in income satisfaction between people whose income recently increased to a given level, and people whose income had been holding constant at that level. For the highest income quintile, Burchardt finds the expected pattern where people who have had a recent increase in income are more satisfied with their income than those whose incomes have remained steady (see also Groot and Van Den Brink 2000). But, looking at the lowest income quintile, we get strong findings in the other direction; i.e. people with increasing income are less satisfied with their income than are people with low but stable income. It may be that for the lowest income quintile, increases in income make further increases seem possible, thus whetting respondents' appetite for more, and making them dissatisfied with their actual income.¹

If this explanation for Burchardt's (2005) findings is correct, we see not only adaptation, but *hyper-adaptation*. In some cases, adaptation to an increase in income can 'overshoot' current income and lead to even greater dissatisfaction. This notion of hyper-adaptation is consistent with findings from Graham and Pettinato (2002), who looked at the effects of economic growth in Russia and Peru. They found that, in general, growth can promote happiness through upward mobility and optimism about the future. But they also uncovered a group of people they called 'frustrated achievers' who were disappointed at the slow rate of improvement and, despite objective improvements in their living standards, felt they were not doing well, thus depressing overall happiness scores.

9.1.3.4 Adaptation and material norms

Adaptation tells us that an increase in income is promptly followed by an increase in how much income one desires, so that however much one makes, it never seems to be enough. Saris (2001) provides interesting evidence for this by using a model that statistically removes the influence of past income on the current relationship between income and life satisfaction. Saris finds that, in Russia, this boosts the relationship from .18 to .56,² from which he concludes that 'the best interpretation of the income effect is that it is an effect of the change in income and not so much of income itself' (pp. 132–3). In a stunning example of adaptation to income, PNC Advisors (2005, p. 2, emphasis in original) report that

When asked how much they needed to feel financially secure in the future, respondents consistently cited a need to approximately *double* their current level of assets. Those with \$10 million or more felt they needed a median of \$18.1 million; those with \$5 million or more need \$10.4 million, and those with half a million to \$1 million said they needed \$2.4 million.

¹ This is similar to the historian's adage that revolutions don't occur just because people have been oppressed for a long time. Rather, they occur when downtrodden populations start to see improvements in their lives, thus suggesting that further improvements are possible.

² The same analysis was conducted in Germany with similar, although far less dramatic, results.

This raises the question of where our norms for a desirable standard of living come from. Adaptation can be seen as the result of two different but related processes (Stutzer and Frey 2004). The first process, called habituation or adjustment, refers to decreasing responsiveness to repeated stimuli (Frederick and Loewenstein 1999). This process is not social; for example, getting used to eating spicy foods after a while would occur even if a person lived in complete isolation. The other aspect of adaptation has to do with social influences, like comparisons to other people or media images (Stutzer 2004). Experimental studies have shown that people make relative income judgements and this influences their happiness (Smith, Diener and Wedell 1989).

Michalos' (1985) Multiple Discrepancy Theory (MDT) sees unhappiness as stemming from large 'Have-Want' discrepancies. MDT is consistent with data which shows the Have-Want discrepancy for income to be significantly correlated with overall life satisfaction (Lance, Mallard and Michalos 1995) and pay satisfaction (Rice, Phillips and McFarlin 1990). The 'want' part of the Have-Want discrepancy is sometimes called the 'material norm'. MDT sees this material norm as a function of many variables, including 'what relevant others have, the best one has had in the past, what one expected to have in the past, what one expects to have in the future, what one deserves, and what one needs' (Lance, Mallard and Michalos 1995, p. 69). Festinger's (1954) seminal work on this topic claims that norms, like the material norm, are based on our observation of similar and proximate others. But attempts to test hypotheses derived from this theory have met with mixed results outside of the laboratory. For instance, people with a given income level are not happier when surrounded by people poorer than themselves and are not less happy when they are poorer than their neighbours (Diener, Sandvik, Seidlitz and Diener 1993). People seem to compute these norms in a more sophisticated way than simply looking at their neighbours. Work by Clark and Oswald (1996) and Drakopoulos and Theodossiou (1997) suggests that people may intuitively calculate an estimate of what someone with their education and demographic background normally earns, and use this as the partial basis for their material norm. Other studies have found support that people's perceptions of their parents' earning (McBride 2001) and that of American families in general (Mookherjee 1992, 1998) act as psychological anchors for establishing a person's material norm. Age may also affect the material norm. Campbell, Converse and Rodgers (1976) found evidence that retired people lower their income (and other) expectations, and thus in retirement average happiness increases while objective standard of living decreases.

Van Praag and Frijters (1999), using what they call the Leyden Approach, present evidence that people's idea of what constitutes a 'good income' depends in part on pragmatic issues like family size, but also depends on their current, past and anticipated future income, in that order of importance (van Praag and Frijters 1999). Because standards for a 'good income' depend a lot on one's current income, van Praag and Frijters recognize that the hedonic treadmill

(which they call ‘preference drift’) will occur. Van Praag (1993) estimates that about 60% of the psychological benefits from any increase in income will be nullified by preference drift, but that still leaves 40%. Stutzer and Frey (2004) find that preference drift eats about 33% of the possible increases in happiness from an increase in income, but note that this figure underestimates the total loss in happiness since it excludes some important factors. Looking at Canadian data, Michalos (1989) found that ‘although estimated needs increased 140% in the twelve-year period, these estimates still lagged behind the 199% increase in actual incomes’, thus indicating a preference drift of about 70%. These studies suggest that preference drift is a matter of degree, and there is some lasting increase in happiness from an increase in wages, albeit a significantly smaller increase than one might otherwise expect.

While the idea that 60–70% of any increase in one’s standard of living will be nullified by preference drift may strike some as a radical critique of conventional economic assumptions, it is actually more moderate than the competing claim that the hedonic treadmill eventually eliminates 100% of the psychic gains that might have accompanied increased income. Van Praag and Frijters (1999, p. 422) believe a consumer who gets *no* lasting psychic benefit from a raise in pay is ‘a pathological case that has not been found in reality’. But Easterlin (1974, 1995, 2001a, 2001b) believes that it describes us all. In Easterlin’s view, among the non-poor (and perhaps even among the poor (Easterlin 2005a)), adaptation to the tangible benefits of one’s income eventually becomes complete. Easterlin emphasizes that within any given country, the rich are happier than the poor, but sees this as based entirely on social comparison of relative incomes, rather than any lasting benefits of tangible increases in living standards. Easterlin (2001a, 2005a) finds evidence for this position in data on happiness over the life cycle. As people get older, their incomes tend to increase towards middle age but then decrease as they enter retirement. One might expect their level of happiness to track their income, but instead, happiness is basically flat over the life cycle, even rising slightly in older age (Argyle 1999).

If it is true that adaptation eventually destroys most or all of the psychological benefits produced by an increasing income, what does this say about the desirability of economic growth?

9.2 National income and happy societies

The data comparing average levels of happiness in different countries present a puzzle that has become known as Easterlin’s paradox (1974). The paradox refers to a conflict between the findings of cross-sectional data and those of time-series data. Cross-sectional data clearly show a weak but consistent correlation between income and happiness, yet time-series data do not replicate this effect. The same basic pattern is found on the macro-level, when we analyse

the average levels of happiness in various countries, and compare these over time to changes in GDP per capita. At any point in time, rich countries tend to report significantly higher average levels of happiness than do poor countries (Cummins 1998, Diener and Oishi 2000). But tracking any given country over time, rising GNP per capita does not seem to translate into rising average levels of happiness (although this statement is under dispute, as we will see).

The most parsimonious way to explain this is through a strong form of the relative income hypothesis. In this view, the only benefit of income is status derived from social comparison, i.e. having more than someone else. Within a country, income correlates with happiness because, as people compare themselves to others, the people at the top feel good and the people at the bottom feel bad. Similarly, comparing average levels of happiness between countries, poor countries are on average less happy because their citizens compare themselves to what they see as first-world living standards, and feel unhappy as a result. In today's global economy consumers may judge their lifestyle against a 'world standard package of goods' that is influenced by international media and advertising (Ger and Belk 1996, O'Guinn and Shrum 1997). It is worth noting that Ger and Belk (1996) found that people in poorer countries tended to have the highest expectations for what goods they saw as necessities. This suggests that, rather than comparing themselves to their immediate neighbours, people in less developed countries may be comparing themselves to the lifestyles they see on American television, making their upward social comparison even more painful.

If money brings happiness exclusively through social comparison, individuals can increase their happiness by moving up in the relative income distribution. But since relative position is a zero-sum game, economic growth cannot make a society as a whole become happier – a rising tide lifts no boats.

Another possible explanation of the Easterlin paradox focuses on adaptation rather than social comparison. People simply increase their material norm at the same pace as their income, and hence happiness never improves. If this is true, though, why do we see a correlation between income and happiness at any given point in time? Wouldn't the rich and the poor alike have adapted to their lot in life, and have on average the same levels of happiness? A possible answer to this could be found in the discussion above about possible sources for a spurious correlation between income and happiness. For example, at the individual level marriage has a profound positive effect on happiness (Di Tella and MacCulloch 2005); since the marriage rate is positively correlated with income, this could create a spurious correlation between income and happiness. At a national level, I also discussed above a series of studies showing that if factors like individualism or good government were controlled for, the correlation between GDP per capita and national average levels of happiness goes away.

The social comparison explanation and the adaptation explanation can, of course, be combined so that each explains part of the phenomenon. Whatever

the explanation, if it is true that economic growth does not increase average levels of happiness, this goes beyond a critique of GDP as a measure, and calls into question basic modernist ideas about progress (Eckersley 2000). Not surprisingly, the claim that economic growth does not lead to greater happiness has provoked a major debate that is still far from being resolved. This debate revolves around two key issues. First, is it true that countries are, in general, not getting happier over time? Second, is it possible that increases in GDP per capita do make countries happier, but this improving happiness is offset by other negative social trends?

9.2.1 Are countries getting happier?

Is it really true that countries have not been getting happier? The evidence is overwhelming that improvements in happiness have not kept pace with increases in wealth. But there is less certainty about whether levels of national happiness have remained totally flat, or have been slowly creeping upward, at least in some countries.

Easterlin (2005b) reviews a large body of evidence suggesting that, in general, longitudinal data show the level of happiness in most countries to be essentially flat over time. He concludes that 'countries with quite similar rates of economic growth have quite disparate trends in happiness, and that significant positive cases tend to be the exception, not the rule in countries with similar economic growth' (p. 440). In a commonly cited example, Easterlin (1995) presents data that show that the average level of happiness in Japan remained unchanged between 1958 and 1986, despite the fact that Japan's economic rise over that period was enormous. Japan is a problematic example to use, because on the one hand it did have enormous growth, but on the other hand it is a glaring exception to the normal correlations between GDP per capita and happiness. However, other studies also support Easterlin's general view. Stutzer and Frey (2004) find that after a rise in income, the related processes of habituation and social comparison fully nullify any lasting effect on happiness. Blanchflower and Oswald (2004) report that happiness in the US has actually been declining, and happiness in Britain has been flat, even as their economies have grown. Myers (1992) reports that between 1957 and 1990 the percentage of Americans who considered themselves 'very happy' remained unchanged despite a doubling of per capita income in constant dollars (see also Campbell 1981, Diener 1984).

On the other side of this debate, Veenhoven and Hagerty (2006) uncovered additional sources of time-series data that allowed them to look at trends over longer periods of time and in more countries. They found a very slight upward trend in happiness in both the US and Europe. This is consistent with Oswald's (1997) and Andrews' (1991) findings for the US, and Diener and Oishi's (2000) findings for Germany, Denmark and Italy. Veenhoven and Hagerty also found

upward trends for happiness in the less developed countries where data was available, and the amount of improvement in happiness was much greater in these countries than it was in the US or Europe. This pattern is consistent with the idea that economic growth in poor countries can help people meet their basic needs, which impacts happiness directly, whereas the impact of economic growth on happiness in already developed nations is much less pronounced. Frijters (2004) found that after unification, 'East Germans experienced a continued improvement in life satisfaction to which increased household incomes contributed around 12 percent' (p. 649). In sum, because of limitations in the quality, duration and consistency of available data, no conclusive judgement can currently be reached as to whether happiness has been virtually flat or has been improving slightly.

9.2.2 Are other factors suppressing the relationship between national GDP changes and happiness?

Research on preference drift has found that rising expectations destroy most, but not all, of the psychic benefits from an increase in income. This would suggest that economic growth should lead to slight improvements in average levels of happiness. Under this scenario, the benefits of economic growth would be weak and easily overcome if other trends, such as increased pollution or longer work hours, were pushing happiness downward. Hagerty (2000) finds some support for this notion. His analysis shows that as communities get richer, higher absolute income levels create higher levels of happiness. But economic growth is often accompanied by increased inequality. Increased inequality raises the happiness of those at the top, but lowers it for those at the bottom. Since there are a lot more people at the bottom than the top, the net effect of increasing inequality is to decrease overall happiness (see also Alesina, Di Tella and MacCulloch 2001). Hagerty suggests that this is why economic growth in the US is not leading to much increased happiness, while economic growth in some more egalitarian European countries has led to increased levels of happiness. However, Schyns (2003) looked at forty countries in the World Values Survey using a multi-level model that simultaneously estimated individual and national level effects, and did not find similar negative effects for inequality.

Di Tella and MacCulloch (2005) also investigated this issue. Using large-scale time-series surveys in Europe and the US, they looked at the effects of economic growth on happiness, while statistically factoring out changes in life expectancy, environmental pollution, unemployment, inflation, unemployment benefits available, crime rate, divorce rate, working hours, economic openness to imports, government consumption, inequality, divorce rate, family size, and other factors. While some of these factors had moved in a negative direction, decreasing overall happiness, others had moved in a positive direction. On

balance, the overall effect of these other variables was to *increase* happiness. So, rather than offering a solution to Easterlin's paradox by demonstrating negative social trends that offset the happiness caused by economic growth, they just make the paradox all the more vexing. If there is some social trend going on worldwide that is counteracting the positive effects of economic growth, it has yet to be discovered.

9.2.3 Does economic growth improve SWB in the very long term by changing culture?

Ahuvia (2002) argues that economic development is linked to happiness, but only in the *very* long run. Economic growth is important for meeting basic human needs. But beyond that, it also creates the preconditions for cultural and political change, and it is these social changes that ultimately have the greatest influence on happiness. Historically, this has been a multigenerational process occurring over hundreds of years. So, the rate of change in US happiness reported by Veenhoven and Hagerty (2006), where it would take 167 years to move the average happiness level up one point on a ten-point scale, is in line with this type of slow historical transformation. In particular, Ahuvia argues that 'cultures of happiness' allow people to make major life decisions like whom they will marry, or what their career will be, based on what they will find most personally fulfilling, allowing people to achieve higher levels of happiness.

It is clear that culture and related national or regional level variables have a strong influence on happiness. Helliwell (2003) found that the strong correlation between GDP per capita and average national levels of happiness is almost completely eliminated by controlling for region-specific determinants of happiness, such as culture. Schyns (2003) used a multi-level approach to look simultaneously at individual income and the effects of living in a rich country. She found that living in a rich country has an independent effect which is much stronger than individual level variables such as personal income. So we know that culture has a profound influence on happiness, and it is also known that the cultures that are most associated with happy societies allow people the freedom to make important life choices and express their thoughts and values (Diener, Diener and Diener 1995). Looking at a particular contemporary instance of this cultural change process, Kedem-Friedrich and Al-Atawneh (2004) found that Bedouin women in Israel were happier when they led more modern lives, provided that they saw their husbands as being fairly supportive of their more modern lifestyle. However, if the woman's modern lifestyle caused marital conflict, a more modern lifestyle was associated with lower happiness.

Richer countries tend to be more individualistic, and individualism is very strongly correlated with happiness at a national level (Cummins 1998, Myers and Diener 1995). As Schyns (2003) cautions, individualism, democracy and

economic prosperity are bound together in a cycle of modernization that is very difficult to disentangle (with correlations as high as .85). However, when attempts have been made to pull these factors apart, the results provide only mixed support for Ahuvia's cultures of happiness thesis. Consistent with Ahuvia's thesis, Diener, Diener and Diener (1995) found that when individualism is controlled for, the correlation between GNP per capita and happiness goes away, but when GNP per capita is controlled for, the correlation between individualism and SWB is reduced but remains significant. However, Schyns (2003) conducted a similar analysis on a different data set, and found just the opposite results.

9.3 If money doesn't buy happiness, why do we act like it does?

Economists have long assumed that situations where people behave in ways that run counter to their own happiness are rare exceptions, not deserving of serious consideration. We are seeing here, though, that people make choices that don't maximize their happiness with great regularity and consequence. There are two main reasons why people might behave in ways at odds with their own happiness: biased processing and multiple goals. The biased processing approach maintains that consumers are trying to maximize happiness, but are bad at it due to various biases and heuristics (Layard 2005). And indeed, people seem to be astonishingly bad at predicting how happy some turn of events will make them, and also seem unable to learn from their mistakes. For example, van Praag and Frijters (1999) and Easterlin (2001b) argue along the same lines in explaining why people think more money will make them happy, when in fact it does not. Essentially, people have a psychological bias that prevents them anticipating the way their aspirations will adjust to their improved circumstances. So, when they contemplate getting a rise in pay, they imagine how happy they would be with that income, if their material norm remained unchanged. Yet, time and time again, their material norm does change after receiving a rise, and they seem to have great difficulty in taking this into account when making decisions.

Frey and Stutzer (2004) further refine this view. They argue that several biases combine to cause people to overvalue extrinsic benefits (e.g. wealth and prestige) and undervalue intrinsic benefits (e.g. family time) when making decisions. (For a fuller discussion of the extrinsic/intrinsic dichotomy see Kasser (2002).) To illustrate this point, they use the example of making a choice to take a job that offers a higher salary, but requires a longer commute. The commute cuts into time needed to pursue intrinsically rewarding activities like building social relationships, but provides income which can easily be translated into extrinsic rewards like status. They suggest that decision-making biases cause people to overvalue the income and undervalue the costs

of the commute, thus leading them to accept the job when they should not. As empirical support for this hypothesis, they find that after controlling for a host of demographic variables, longer commuting times are closely associated with lower life satisfaction among respondents to the German Socio-Economic Panel Study (GSEPS). This runs counter to rational decision-making models, which suggest that commuting times and life satisfaction should be uncorrelated, since people would only choose to take a job with a long commute if it offered other advantages that compensated for this lost time. As further evidence for the psychological mechanism that they propose to explain this phenomenon, Frey and Stutzer hypothesize that people with a more extrinsic values orientation are particularly prone to making the mistake of overvaluing income relative to the loss of free time. To demonstrate this, they divide GSEPS respondents into those who primarily value intrinsic rewards (family, friends and religion) versus those who primarily value extrinsic rewards (income, influence on political decisions and career success). They then show that the negative correlation between commuting time and life satisfaction only exists in the extrinsically oriented group.

Advocates of the multiple goals perspective generally acknowledge that these cognitive biases exist, but question whether these biases represent the complete explanation for behaviors that work against happiness. The multiple goals perspective holds that while happiness is extremely important to people, it is just one of several goals underlying human action (Ahuvia 2002, 2006). Examples of these other goals include gaining honour or prestige, complying with social expectations, being sexually attractive, etc. In contrast to arguments that people only want these things because they hope to become happier, the multiple goals perspective holds that people sometimes value these things as ends in themselves, on a par with happiness. As Ahuvia (2002, p. 31) writes, for some people it is just as possible that they 'seek social recognition with the ultimate goal of personal happiness' as it is that they 'seek happiness with the ultimate goal of getting others to think well of them for having such a pleasant affect'. Frijters (2000) looked empirically at this question, and consistent with the multiple goals perspective, found only weak and limited evidence that people try to maximize general satisfaction.

In the multiple goals perspective, then, part of the reason people don't always achieve happiness is that they are implicitly trying to achieve goals that may conflict with happiness. If this is the case, people have multiple motivational systems that at times conflict with each other, rather than just one unified motivational system that maximizes a single goal such as utility. These motivational systems may have evolved at different times in our history and may operate through different neurological mechanisms. Which of these motivational systems eventually wins out and controls our behavior may be the result of factors like what mood we are in, if we feel threatened, whether social expectations are momentarily salient to us, or how much alcohol we have consumed; rather than a utility maximizing master algorithm.

9.4 Happiness and utility

Views in economics on the measurability of utility can be divided into four historical stages (Bruni 2004). The early classical economists spoke directly about happiness, which they saw in the Aristotelian sense of eudaemonia (i.e. human flourishing), which is dependent on virtuous actions. In the second stage, economic language shifted from 'happiness' to 'utility', which is a less morally charged concept, defined as the subjective balance of pleasures and pains (Bentham 1789/1948). This experienced utility was believed to be measurable (Frey and Stutzer 2002b, Layard 2005); for example, Edgeworth proposed the idea of a 'hedonometer', a machine to measure happiness (Dixon 1997). In the third stage, Robbins (1935) led a revolution in the field by arguing that subjective utility could not be measured and was therefore not a scientific concept. Samuelson (1938) proposed what is in essence 'decision utility' (Frey and Stutzer 2002b, Kahneman and Sugden 2005); i.e. rather than being a psychological experience that occurs during or after consumption, utility is that which people try to maximize when choosing between alternatives. Therefore, people's choices reveal their preferences, which in turn reveal their utility function; hence, revealed preferences define utility. After the Second World War, this school of thought became known as the New Welfare Economics.

Robbins (1935) mirrored the ideas of psychological behaviourism (Watson 1913), which was in full swing in the 1930s. Behaviourism held that, to be truly scientific, psychological theories should be based only on directly observable behaviour without reference to mental constructs like ideas, feelings, motives, etc. Behaviourism eventually lost favour in psychology for two main reasons. First, evidence mounted that human behaviour could not be adequately explained without reference to mental constructs. And second, philosophy of science also came to accept that theories are often about constructs that are not directly observable, whether they be gravity or grief. We infer the action of these non-observable constructs through observing what we can; in the case of gravity, we observe the behaviour of physical objects; in the case of grief, we observe human behaviour either in situ or in the form of responses to a questionnaire. So the exclusion of non-observable constructs is an unscientific requirement.

We are, I would argue, at the beginning of a fourth stage in economic thinking on these issues – what Frey and Stutzer (2002a) call 'another revolution in viewing utility' (p. 43). In contrast to the analytic focus of the New Welfare Economics, I would call this fourth stage a period of *Economic Psychological Realism*, in which economists try to bring their models of decision making and utility more in line with empirical research in the social sciences. One day, the award of the 2002 Nobel Prize in Economics to Daniel Kahneman may come to be seen as the historical turning point towards economic psychological realism.

Not surprisingly, this move towards economic psychological realism has encountered resistance. The data on income and subjective well-being are remarkably inconsistent with widely held views about the benefits of material wealth. And it is this radical disjunction between the data and established theory that has, in an ironic way, limited the data's discussion in economics. Free market advocate Arnold Kling (2003) was refreshingly candid in arguing that since the data seems to contradict established theory, *there must be something wrong with the data*. Coming from the other side of the controversy, van Praag puts the opposite spin on the same phenomenon, writing that 'it is rather remarkable that mainstream economics for half a century . . . has followed a way which is so different from what is going on in the development of most sciences. Mostly science is *following* reality, instead of *ignoring* it' (1994, p. 88, emphasis in original). Nonetheless, attitudes do seem to be slowly changing in economics. Although many economists still view happiness as 'too subjective' to be studied scientifically, a growing body of research is now linking self-reported happiness to specific brain states (Sutton and Davidson 1997), which is encouraging some otherwise sceptical observers to take research on happiness more seriously.

Of course this change in economics is not inevitable – there is another option. Economists can simply define the problem out of existence. Recognizing that decision utility (the implicit weights given to various alternatives before a decision is made) and experience utility (the experienced psychological consequences of those decisions) are frequently not in sync, economists could opt to define decision utility as the only utility of disciplinary concern. For many descriptive or predictive tasks, this would be appropriate and sufficient. But if decision utility is the only utility studied in economics, then economics makes an implicit claim that a decision is a good decision simply because someone freely made it, regardless of the consequences. This would be a brave philosophic stand, but also one that would place economics outside of the mainstream of normative discourse, where things like happiness matter.

9.5 Future directions

The previous discussion has revealed several large questions that remain top priorities for research. Questions about economic growth are high on the list. We know that economic growth does not provide large long-term returns in happiness, but the question is still open as to whether it can at least provide smaller lasting returns that might build up to practical significance over the long run. This relates directly to the issue of poverty. We have good evidence that improving the living standards of the very poor produces strong and direct gains in happiness, but it's too early to declare the case closed. Further evidence on this issue is badly needed due to its clear policy implications. We should also consider the potential positive effects of economic growth on

culture. Specifically, at least moderate levels of economic growth might pay off psychologically by increasing optimism. Along these same lines, a zero overall growth level means that for someone to increase their income, someone else must lose income. Given that people will still want to get ahead economically, what would the effect of a zero-growth economy be on social trust and harmony? While these questions mean that advocating zero economic growth per capita is at best premature, the data is quite compelling that a culture less obsessed with economic growth would be both psychologically and ecologically healthier (Brown and Kasser 2005).

Much of the previous discussion revolves around people's material aspirations and their link to both income and happiness. In this way, the literature on income is closely linked with materialism. But current work has often relied on very approximate proxy measures for these aspirations. The inclusion of good measures for material aspirations in large-scale longitudinal studies would help fill in one of the most problematic lacunae in this area. How material aspirations are set has implications for, among other things, tax policy. If one person's gain in consumption raises the material aspirations of those around him or her, then status consumption has negative externalities (Frank 1999). Like any good with negative externalities, it will be overconsumed. Thus, Frank (1999) advocates a consumption tax to shift resource allocation away from status consumption and towards leisure, health, education and other less status-focused pursuits. It's a simple argument, but it has yet to make real headway as a policy.

In future research, it would behoove us to develop effective personal and social strategies for living a happy life in a consumer society (Seligman 2002). For example, Scitovsky (1992) suggests a strategy for enjoyable spending, where people focus their budget on things for which adaptation is slow. And Tatzel (2003) recommends developing low financial aspirations and moderate spending patterns. But work in this area is still in its infancy.

Finally, quality of life is often looked at using a combination of objective and subjective indicators. However, some proponents of subjective measures argue that, ultimately, happiness is the only thing that matters. For example, Ng (1997, p. 1849) writes that 'We want money (or anything else) only as a means to increase our happiness', and Stutzer and Frey (2004, p. 1) write that 'Economic activity is certainly not an end in itself, but only has value in so far as it contributes to human happiness.' This position is an intellectual descendant of Aristotle's (trans. 1962) view that *eudaemonia* (roughly translated as happiness) is the proper ultimate goal for all human action (Ahuvia 2006). Aristotle reasoned that every other goal, such as wealth or power, was only desired because it was hoped that it would lead to happiness; whereas happiness was desired as an end in itself and not a means to another end. Therefore, other goals were only valuable in so far as they produced happiness.

But is this the position we really want to take? As Veenhoven and Hagerty (2006) point out, at the very least we should be looking at longevity as well

as happiness. And Cummins (2000b) argues that both objective and subjective measures of quality of life are important to get a full picture of a good life. Diener and Diener (1995) start with the assumption that happiness is just one value among many, and therefore look at numerous measures, such as scientific achievement, that reflect achievement in different societies on a wide range of human values. In this chapter I have been quite critical of economists' reluctance to look at happiness, but that's not the same as saying all we should look at is happiness.

9.6 Conclusion

A somewhat stark conclusion to this chapter must be that people's economic decisions don't match up well with their self-reports about their happiness, leaving researchers and theorists with a real dilemma. Either one argues that people are smart and rational enough to make decisions that maximize their utility, but incompetent at assessing their own utility; or, one is left with the symmetrical problem that people are competent enough to assess their own well-being, but not competent enough to use that information effectively in decision making. While neither alternative is very appealing, it seems that the second is the more likely of the two. After all, assessing one's own *subjective* well-being seems a fairly straightforward task, at least when compared to making decisions about the probable outcome of future events. So, if either of these processes is prone to go askew, it is more likely to be decision making. The model of rational economic man is elegantly simple, but it is no longer capable of explaining the extant data. As Einstein once said, theories should be made as simple as possible, but not simpler.

9.7 References

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