ECONOMIC POLICIES IN THE LIGHT OF HAPPINESS STUDIES WITH REFERENCE TO SINGAPORE*

YEW-KWANG NG

Monash University, Australia
Visiting Goh Keng Swee Professor,
Department of Economics, National University of Singapore
cecsny@nus.edu.sg
kwang.ng@buseco.monash.edu.au

Recent happiness studies show that income explains only 2% of the variance in happiness. Quality-of-life indicators also correlate less with income but more with advances in knowledge at the world level. Individuals and nations still engage in the rat race for higher incomes due to the competition for relative standing, the ignoring of the environmental disruption effects, our accumulation instinct, the influence of advertising and peer pressure, and the inadequate recognition of the habituation effect. In addition, economists over-estimate the costs of public spending, emphasising the excess burden of taxation, ignoring the negative excess burden in the public spending side and ignoring the grosser inefficiency of private consumption. These considerations suggest that more public spending in the right areas like education, research, and environmental protection may be much more welfare-improving despite some unavoidable inefficiencies. The restriction of private cars in Singapore may be desirable despite being excessive in accordance to the narrower economic analysis. It may also be appropriate to emphasise non-income factors important for welfare, including freedom and democracy.

Keywords: Economic policy; Happiness; Public spending; Welfare.

Virtually all people will agree with me that happiness is of value in itself. Many people will also go along with my more radical view that, ultimately speaking, happiness (not confined to oneself) is the only rational objective (Ng 2000a, ch. 3–4). However, we only need agreement on the first statement to make recent results on happiness relevant for the formulation of public policy in general and of economic policy in particular.

Money is not valuable in itself. It is valuable only when it allows us to buy goods and services for consumption. This in turn is for us to enjoy life, or to be happy. Why do we want happiness? As happiness is enjoyable in itself, we do not need another reason to explain why we want happiness. We

*This paper is revised from the Goh Keng Swee public lecture delivered on 10 October 2002 at the National University of Singapore.
want happiness for its own sake. Happiness is our ultimate objective. Thus, whether higher income and more consumption increase our happiness or not is a fundamental problem. Few economists have paid sufficient attention to this fundamental problem. (Exceptions include Easterlin 1974, 2002.) However, recently there has been more interest, including a symposium in the *Economic Journal* (Frank 1997, Ng 1997, Oswald 1997), a conference on “Economics and the Pursuit of Happiness” at Nuffield College in 2000, and a session on “Economics and Happiness” at the American Economic Association Meetings 2001.

1. The Weak Connection between Income and Happiness

Economists do not pay much attention to happiness studies partly because they doubt their reliability. This view is justifiable to some extent as existing happiness studies rely heavily on self assessment of happiness levels that are difficult to compare interpersonally. However, there are persuasive arguments that, though not ideal, existing measures of happiness are rather reliable. For example, different measures of happiness correlate well with one another (Fordyce 1988), with recalls of positive versus negative life events (Seidlitz, Wyer and Diener 1997), with reports of spouses, friends and family members (Costa and McCrae 1988, Diener 1984, Sandvik, Diener and Seidlitz 1993), with physical measures like heart rate and blood pressure measures (Shedler, Mayman and Manis 1993), and with EEG measures of prefrontal brain activity (Sutton and Davidson 1997). Pavot (1991) finds that respondents reporting that they are very happy tend to smile more. Using the Marlowe-Crowne measure of social desirability, Konow and Earley (2002) find no evidence of bias in their reported happiness data. Moreover, correlations of happiness show remarkable consistency across countries. All these do not rule out remaining problems (see, e.g. Schwarz and Sarack 1999, Bertrand and Mullainathan 2001). However, reported subjective well-being may still be used as a good approximation (Frey and Stutzer 2002a). Moreover, had economists spent more time on the important issues of happiness, they would probably have helped to improve happiness studies. For example, I have developed a method that yields happiness measures that are comparable interpersonally, intertemporally, and internationally (Ng 1996a).

Studies by psychologists, sociologists, and a small number of economists show that, at the individual level, income correlates positively with happiness, though only weakly. At least after a certain minimum level, higher incomes do not really make the individual significantly happier. Millionaires are only slightly happier than the average person (Diener, Horowitz and Emmons 1985). Moreover, the direction of causation need not just be from money to happiness. In fact, “if there is any causal relationship in rich countries, it
appears to run from happiness to growth, not vice versa" (Kenny 1999, p. 19). Other things being equal, universities may prefer to appoint jolly rather than sad professors to prestigious chairs. Taken together, the evidence suggests that income matters more for happiness at very low levels of income but it still accounts for less than 2% of the overall variance in individual happiness (Diener et al. 1993). Above about US$5,000 GNP per capita, happiness shows no correlation with income levels. (See Fig. 1.4 on p. 10, Frey and Stutzer 2002a.)

Cross nationally, happiness also correlates positively but weakly with income. For example, using regional and cultural classifications, the Northern European countries with high incomes score top on happiness, followed by the group of English-speaking US, UK, Australia, and Ireland. Central and South American countries including Brazil come next, followed by the Middle East, the Central Europe, Southern and Eastern Europe (Greece, Russia, Turkey, and Yugoslavia), the Indian Sub-continent, and Africa which does not, however, come last. Southern and Western Europe (France, Italy, and Spain) score significantly lower than Africa. And the last group is East Asia. In particular, the country that leads in income, Japan, leads in unhappiness.

One might suspect that the weak relationship between income and happiness cross-nationally is due to cultural differences and think that the relationship should be stronger within the same nation/culture. In fact, the positive correlation between income and happiness disappear for the same country intertemporally. For example, from the 1940s to 1998, the real income per capita of the US trebled. However, the percentage of people who regard themselves as very happy fluctuated around 30%, without showing an upward trend; another measure of average happiness fluctuated around 72%. Since 1958, the real income level in Japan increased by more than 5 times. However, its average happiness measure fluctuated around 59%, also without an upward trend. (See Diener 2002, Diener and Suh 1997; Frank 1997; Myers 1996, p. 445; Oswald 1997; Veenhoven 1993. Blanchflower and Oswald 2000 show that the levels of happiness in the United States have declined slightly over the period from the early 1970’s to the late 1990’s while Hagerty and Veenhoven 1999 show a slight increase. “Roughly unchanged” seems still to be the best bet.) Perhaps, dynamically, we need rising incomes just to sustain happiness at an unchanged level, the so-called “hedonic treadmill”. However, there are also studies showing happiness to be inversely related to the pace of economic growth (Diener et al. 1993; Diener et al. 1995).

Economists may not trust happiness studies despite the first paragraph of this section. However, even if we use the more objective indicators of the quality of life, the picture is not much different. Analyzing a panel data set of 95 quality-of-life indicators (covering education, health, transport, inequality, pollution, democracy, political stability) covering 1960–1990, Easterly (1999)
reaches some remarkable results. While virtually all of these indicators show quality of life across nations to be positively associated with per capita income, when country effects are removed using either fixed effects or an estimator in first differences, the effects of economic growth on the quality of life are uneven and often nonexistent. It is found that “quality of life is about equally likely to improve or worsen with rising income…. In the sample of 69 indicators available for the First Differences indicator, 62 percent of the indicators had time shifts improve the indicator more than growth did” (Easterly 1999, pp. 17–8). Even for the only 20 out of the 81 indicators with a significantly positive relationship with income under fixed effects, time improved 10 out of these 20 indicators more than income did.

The surprising results are not due to the worsening income distribution (there is some evidence that the share of the poor gets better with growth in the long term). Rather, the quality of life of any country depends less on its own economic growth or income level but more on the scientific, technological, and other breakthroughs at the world level. These depend more on public spending than private consumption. Many studies (e.g. Estes 1988, Slottje 1991; see Offer 2000 for a review) show that measures of social progress strongly correlates with income level at low incomes (to around US$3,000 at 1981 prices) but the correlation disappears after that. Others (e.g. Veenhoven 1991, Diener & Suh 1999) show a similar relationship between happiness and income.

There is also evidence that the more materialistically inclined are less happy. People who are more willing to help others are happier (Konow and Early 2002). People whose goals are intrinsic, i.e. oriented towards self-acceptance, affiliation, and community feeling, are happier than those whose goals are extrinsic, i.e. oriented towards some external rewards such as financial success, popularity, and attractiveness. (See Kasser and Ryan 1993, 1996, 1998; Richins et al. 1992, Ryan et al. 1999, Wright and Larsen 1993.) “Materialism, a preoccupation with economic well-being, is negatively correlated with SWB [subjective well-being], and especially so in those who believe that more money would make one happier” (Offer 2000, p. 20, reviewing Ahuvia and Friedman 1998, p. 154, 161). Yet, people continue to be or even become more materialistically inclined.

2. Explaining the Paradox

If higher incomes and consumption does not really increase happiness, why do virtually all people still engage in the rat race for making more money and all countries in the rat race for increasing per capita incomes? My explanation is several folds.

First, at the individual level, incomes do correlate positively with happiness, though only weakly; the wealthy are slightly happier than the average
and the poor (though the causation need not be just from wealth to happiness). Thus, even I want to have more money. However, after a relatively moderate level of necessity, additional private consumption serves to increase happiness mainly through competition in relative standing like bigger houses and more luxurious cars than others. However, for the whole society, the average relative standing cannot increase with higher incomes. Thus, individual competition for relative standing in incomes and consumption is a zero-sum game. Worse, it is really a negative-sum game as time and efforts are involved (including the sacrifice of time for the family, for keeping fit, etc.) and the environmental quality suffers from additional production and consumption.

This brings us to the second factor. The costs of environmental disruption may make production and consumption individually rational but socially, and especially globally, irrational. As environmental disruption has global effects, we really need international cooperation to tackle the problem. This failure of international coordination also explains the excessive competition for higher GNP; the socially destructive competition for relative standing at the individual level also applies at the national level, both for the purpose of consumption and for the purpose of national might which is related to GNP. Clearly, the socially destructive effects of competition for military power is worse than that for conspicuous consumption.

Thirdly, even at the individual level, the rat race for making more money may be carried to an excessive level from the viewpoint of happiness. But why would rational individuals want to make money excessively so as to be detrimental to their own happiness? The answer is that individuals are not perfectly rational. I honestly regard myself as within the top 1% in terms of rationality. However, even I am not perfectly rational. This is why I put this in the signature of my email: “Though I have long known the mandate of heaven, I still have illusions”. Confucius said, “I became independent at thirty, had no illusions at forty, knew the mandate of heaven at fifty, . . .”. Thus, by saying that I have long known the mandate of heaven, I am just giving away my age as being well over fifty, not that I am very wise. People are distributed from the very (but not perfectly) rational to the completely mad. Thus, most people are far from being perfectly rational.

One reason for our imperfect rationality in welfare or happiness terms is our biological instinct that is geared to survival and reproduction, not directly to welfare. For one thing, like ants, mice, and squirrels, we have the accumulation instinct that helps us to survive in our long history of evolution when scarcity is the rule. In our current time of abundance, our accumulation instinct is not welfare-maximising, at least at the margin for those sacrificing friendship, family relationship, health and other important things for happiness for making money that is no longer important for happiness.

Another aspect of our imperfect rationality is our tendency to take inadequate account of the effects of current consumption on future welfare. High
current consumption contributes to current well being but reduces future well being due to the customization or adaptation effect. Thus, an ancient Chinese poet had this line, “Having seen the blue sea, one becomes difficult to appreciate other waters”. However, most people have not learnt the lesson adequately. This includes myself. When on my first sabbatical leave, we visited many leading tourist attractions in the world, making future sightseeing rather dull.

Fourthly, the above bias towards materialistic production and consumption is made worse by the omnipresent commercial advertising in our money-oriented society. Businesses can make profits only from more consumption of goods and services, not from people achieving higher contentment or happiness. Worse than just creating a consumption bias, much of advertising actually creates unhappiness. A top executive of a large merchandise chain admits, “It is our job to make women unhappy with what they have” (as quoted in Walsh and Gillespie 1990, p. 5.)

Fifthly, economists contribute to the bias in favour of private consumption by over-estimating the costs of public spending. They emphasise the excess burden of taxation but ignore the negative excess burden on the spending side. In contrast to this general bias against public spending, Kaplow (1996) and Ng (2000b) argue that public goods can be financed without additional distortion by using an adjustment to the income tax that offsets the benefits of the public good. For example, if the benefit of a public good is proportional to the income level of the taxpayers, it may be financed by a (or an increase in) proportional income tax. The proportional income tax itself may involve a disincentive effect. However, the tax plus the public good together involve no disincentive effect. Suppose that, for each $100 earned, $20 have to be taxed. Is not the incentive to earn more income less than the case where one can keep the full $100? This lower incentive may well apply if the tax revenue is thrown into the ocean. However, normally the revenue is used for public spending that the taxpayers value more or at least no less (otherwise the public spending is inefficient even using the benefit/cost ratio of one). Suppose the tax revenue is used for police protection of property whose benefits are roughly proportional to the income level. Then, each individual may in fact has a higher incentive to earn the protected $80 than the unprotected $100.

3. Policy Implications

The discussion above has enormous implications. First, for the non-poor people and countries (including Singapore), since additional private consumption
does not really increase happiness or even the quality of life significantly, at least at the social level, and since the costs of public spending have been over-estimated by economists, it is clear that much more public spending in the right areas may be desirable, despite some unavoidable inefficiencies. Of course, we still need some degree of efficiency. For a government that is very corrupt and/or inefficient, raising more public revenue may be completely wasted. Fortunately for Singaporeans, it may be the understatement of the year to say that their government is well above the average level both in terms of efficiency and freedom from corruption.

Partly due to the economies from its high population density and partly due to its high efficiency, the infrastructure, environment, and public health in Singapore have been of very high standards despite its relatively low public spending as a percentage of GNP. However, given the competitive nature of private consumption and its failure to increase happiness socially, perhaps an increase in public spending in areas like education, health, the environment, and research may be desirable.

Singapore’s policy of rather severe restriction of car ownership, road pricing, and accessible public transport in particular have been successful in achieving a largely congestion-free city, rather rare for highly populated metropolises. Some economists have done some cost-benefit analyses of Singapore’s control of cars and road usage and concluded that the restrictions have been excessive. However, this conclusion is based on the traditional narrower economic analysis taking into account the value of time lost in congestion but ignoring the less traditional factors including the socially destructive competition between consumers and the irrational materialistic bias discussed above. If a deeper analysis is undertaken to examine the effects on the ultimate objective of happiness, perhaps Singapore’s apparently over-restrictive policy on cars and road usage may really be efficient. (On the Singapore’s system of road pricing, see Toh 1992 and Phang and Toh 1997.)

The consumption of cars, especially in heavily populated cities (as applicable to most Asian cities including Singapore), should particularly be discouraged in order to achieve efficiency, due to its three important external costs. First, it contributes to pollution both locally and globally. Secondly, it increases congestion which also further increases pollution. Thirdly, it is an item of particular conspicuous consumption widely used to indicate economic status, especially for the more luxurious models of cars. The last factor is also intertwined with what I called diamond effects — the valuation of a commodity for its exchange value (price times quantity) rather than for the intrinsic consumption effects (Ng 1987).

A pure diamond good is valued only for its exchange value and a mixed diamond good is valued both for its exchange value and its intrinsic consumption effects. The demand curve for a pure diamond good is a rectangular
hyperbola. A tax on a pure diamond good increases its price and leaves the consumers no worse off as they may decrease the physical amounts consumed without changing the values and expenditures. Thus a tax on a pure diamond good not only causes no excess burdens but no burden at all. Optimal tax rates on pure diamond goods are thus arbitrarily high (ignoring smuggling). However, most goods with diamond effects are mixed rather than pure diamond goods. Nevertheless, while taxes on mixed diamond goods usually involve some burdens (though, if not excessive, still of negative excessive burdens), it is possible for a tax on a mixed diamond good to make consumers positively better off (i.e. of negative burdens instead of just negative excess burdens) for cases where the mixed goods are consumed until the marginal utilities of the intrinsic consumption effects are negative. This may appear impossible for rational consumers but may be explained.

A mixed diamond good has both the diamond effect and the intrinsic consumption effect. If the demand for the diamond effect is high enough and the marginal utility of the intrinsic consumption effect quickly decreases to be negative, it is possible for it to be consumed until the intrinsic consumption effect is negative, if there is no free disposal of the intrinsic consumption effect. An example may help. Mr. A invites Miss B out for dinner. He wants to impress her with the amount he is willing and/or able to spend. He orders expensive wine and drinks excessively. If it is regarded as a bad habit to leave too much wine unconsumed, he may drink until the intrinsic utility of wine is negative at the margin to achieve the desired level of spending. A tax that increases the price of wine may thus make him better off by being able to achieve the same degree of diamond effect without enduring the negative utility of excessive drinking.

The above example also illustrates the possibility that the compensated demand curve for a mixed diamond good may be upward sloping (even in the absence of an increase in the degree of diamondness as the price increases). Suppose A wants to impress on B enough for her to agree to spend the rest of the evening with him. The higher the prices of the dishes, the higher the probability that the objective will be achieved. To stay late at night requires eating more. Thus, the higher the prices, the more may be ordered. The demand curve may be upward-sloping. (See Ng 1993 for a rigorous demonstration.)

Another implication of the discussion above is that the competition for relative standing, especially in consumption, may make people work excessively to earn more incomes. This excess from the social point of view is made worse by the environmental disruption effects of most production and consumption activities. In addition, our accumulation instinct and the influence of advertising and peer pressure further twisted our preferences in favour of materialistic consumption, making our consumption not only socially undesirable (at the margin) but also detrimental to our happiness even at the
individual level. Thus, legal limitations on working week, income and general consumption taxes, far from having the distortive effects of making people consume excessive amounts of leisure, are actually likely to offer only a partial offset to the materialistic excess. (However, see Ng and Ng, forthcoming, for an examination of James Buchanan’s case for the work ethics based on the favourable effects through the economies of specialization.) Such excesses are likely to be more severe for the economically successful countries/regions like the East-Asian tigers including Singapore. For example, according to a report broadcasted on 15 January 2002, 70% of men aged between 45 and 60 in Singapore have problems of sexual potency due to high pressure at work; a figure which is ten percentage points higher than the average in the world. The very qualities (such as high degrees of competitiveness, the willingness and ability to endure hard and long working hours) that make these people economically successful may also make them less happy, resulting in what I call the East-Asian happiness gap. (See Ng 2002 for the evidence of this gap and the explanations and policy implications offered.) To avoid such a gap, the East-Asians may have to learn to put more emphasis on factors more important for happiness such as health, relationships, and faith, rather than on financial gains.

In fact, other researchers also have similar concerns for the materialistic excess. For example, ‘The “Singapore dream” of owning landed properties and motor cars to support a high technology lifestyle is not in itself wrong. More worrisome is the rate at which people wish to achieve. The worst is the speculative mentality that because land is a finite commodity, the present generation tries to secure more properties and assets for their children and even grandchildren. This kind of negative, over competitiveness borders between greediness and self-serving survival may erode the value system which positive competitiveness requires.’ (Low 1998, p. 184).

I have sympathy for this concern. In fact, excessive protection of children and showering them with material plenty are likely to be detrimental to their welfare. Growing up in an over-protected environment like little emperors, these children will grow up to be less independent and have more difficulties in interpersonal relationships. Moreover, being accustomed to too easy a way of life and high standards of living will make them difficult to achieve progress for themselves, robbing them of an important source of happiness. Instead of being envious of the luxurious lifestyles of the children of the rich, we should really feel sorry for them!

The overwhelmingly important principle of liberalism requires us to respect people’s preferences as far as possible. Economists also typically ignore the divergences between preference and welfare. This may be a sensible
simplification for most purposes. However preference and welfare can diverge. Recognition of such divergences may give insights useful for public policy formulation, as discussed in Ng (forthcoming). It is true that we have to be cautious not to let the violation of preferences justified on the ground of welfare be used to justify really detrimental policies instead, as happened in the cases of Nazism and Communism. Nevertheless, with sufficient safeguards, certain welfare-improving violation of preferences may be possible.

One real-world example where the violation of the preferences of people actually improved their welfare happened decades ago in Singapore under Lee Kuan Yew’s government. Lee decided to compulsorily acquire a piece of cemetery land for a certain public development project without sufficient compensation. Existing tombs there had to be evacuated for reburial elsewhere. Such an evacuation was (and probably still is) regarded as an extreme disturbance of the peace of the dead and most survived children would not take millions of US dollars to accept such evacuations. Even if the government had only to pay a small fraction of the willingness to accept, the public development would certainly turned out to involve negative net benefits. However, I certainly agree with Mr. Lee that the government should look after the welfare of existing (and future) people rather than that of the dead. This welfare-improving decision in favour of development would not only certainly fail to pass the traditional cost-benefit test based on preferences, it would also likely fail to pass the public choice test of democratic voting (also based on preferences).

It is interesting to examine why preference does fail in this case. First, it is partly due to the external costs created by the tradition of excessive respect for the “peace of the dead”. An individual failing to show due respect would run the risk of social disrespect. Some due respect for the dead may serve some useful function but has become excessive due to a complex process of interaction, including the individually rational but socially harmful strategy of pretending to be very respectful. If this failure can be explained in the traditional analysis in terms of external costs, the next one cannot. Secondly, even abstracting away the danger of social disrespect, individuals may have genuine preference for showing extremely high respect for the peace of the dead due to cultural influence. They may genuinely feel important to avoid the evacuation of the remains of their ancestors. However, if the decision for compulsory acquisition was made by the government, they would accept it as unavoidable and beyond their control and hence would suffer little loss in welfare. It is thus more than a publicness problem. If the decision was put to a vote, most of them may feel compelled by the respect for the dead to vote against evacuation and development. However, if the decision was made for them by the government, most of them would not feel too distressed. Thus, Lee’s decision almost certainly increased social welfare despite being
against the preferences of the people. However, this example has some degree of exceptionality and does not justify autocratic decisions against the will of people in general, not to mention the possible indirect costs of such illiberal policies. Nevertheless, this example also illustrates the limitations of analysis concerned only with preferences. I have made a modest attempt (Ng, forthcoming) to try to push the analysis to the deeper (in fact, ultimate) level of welfare and hope that other economists will make similar contributions. With sufficient care, safeguards, and ingenuity, I hope that we may be able to learn useful insights from the deeper analysis to the ultimate level of welfare, without being misguided into taking illiberal policies justified on the ground of welfare but that are really very detrimental to welfare in the long run.

At the moment, it is more important for Singaporeans to avoid the excessive rat race to make more money and to compete in conspicuous consumption. Factors more important for long-term welfare should be emphasised instead. Apart from such well-known factors like health, relationships, and faith, recent happiness studies also demonstrate the importance of freedom and democracy. Veenhoven (2000) shows the positive correlation between freedom and happiness. Frey and Stutzer (2000) show the positive correlation between democracy and happiness. The graphs that plot well-being against some reasonable measures of freedom and democracy both show very strong positive correlations, much more than the graph that plot well-being against income levels. Freedom and democratic processes do not only contribute to welfare by making the right choices but people also enjoy these processes. As Singapore has already been very successful in achieving a high level of affluence economically, it seems that the next move should be emphasising other factors important for welfare. It is thus reassuring that the Prime Minister of Singapore, Mr. Goh Chok Tong, in his National Day address in August 2001 foreshadowed some changes in this direction and that some preliminary arrangements have been taken in 2002. I wish Singaporeans to be not only prosperous but also happy!

References


Ng, Yew-Kwang and Ng, Siang (forthcoming). Do the economies of specialization justify the work ethics? An examination of Buchanan’s hypothesis. *Journal of Economic Behavior and Organization.*


Walsh, David and Gillespie, Austin (1990). *Designer Kids: Consumerism and Competition: When is it all too much*? Deaconess Press, Minneapolis, MN.