Welfare-reducing growth despite individual and government optimization

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Abstract. In the presence of substantial relative-income effects and environmental disruption effects, economic growth may be welfare-reducing even if each and all individuals are optimizing and eagerly trying to make more money and the government also maximizes the welfare of individuals by the choice of income-tax rate and the ratio devoted to the abatement of environmental disruption. Welfare-reducing growth may be avoided if environmental disruption may be directed taxed at low costs and/or government spending on public goods is not environmentally disruptive.

It is now fairly widely known that, despite the many times (not %) increases in per capita real incomes of many countries, welfare or happiness has not increased significantly, if at all. A number of scholars have discussed the problem, including its relation to the relative-income effect (e.g., Easterlin 1974; Ng and Wang 1993). What this paper shows is that economic growth may be welfare-reducing even if each and all individuals are optimizing and eagerly trying to make more money and the government also maximizes the welfare of individuals by the choice of income-tax rate and the ratio devoted to the abatement of environmental disruption. To avoid this outcome, environmental disruption may have to be directly taxed at low costs (which may not be feasible) and/or government spending may have to be used more in areas of low disruption and high benefits such as education, research, and environmental protection.

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1 Some evidence on happiness

It is true that happiness is difficult to measure and compare objectively. However, conceptually, it is cardinaly measurable (Ng 1997). A practical method has also been developed and used to measure happiness cardinaly and interpersonally comparably (Ng 1996). Though most existing measures of happiness have more problems with their comparability, they are not completely useless. (See Veenhoven 1984, 1993.) If one wants to be pedantic in insisting on perfect accuracy, even GDP is open to query on its accuracy and comparability.

Studies by psychologists and sociologists show that, both within a country and across nations, the happiness level of people increases with the income level, though not very significantly. For example, using regional and cultural classifications, the Northern European countries with high income also score top on happiness, followed by a group of English-speaking countries including the U.S., U.K., Australia, and Ireland. Central and South-American countries including Brazil come next, followed by the Middle East, the Central European, Southern and Eastern European (Greece, Russia, Turkey, and Yugoslavia), the Indian Sub-continent, and Africa which does not, however, come last. Southern and Western European (France, Italy, and Spain) score significantly lower than Africa. And the last group is East Asia, including the country that leads in income, Japan. Singapore has an income (per capita) level 82.4 times that of India. Even in terms of purchasing power parity instead of using exchange rate, Singapore is still 16.4 time higher than India in income. However, the happiness scores of both countries are exactly the same, both significantly higher than that of Japan. (See Cummins 1998.)

While there are notable cases like Japan and France, which are far off the regression line, statistically significant positive relationship between happiness and income exist cross-nationally globally. However, this is due mainly to the inter-group difference between the high-income and high-happiness advanced and free countries and the others. The analysis by Schyns (1998) shows that there is no positive relationship between income and happiness within either of these two groups.

The relationship between happiness and income level intertemporally within the same country (at least for the advanced countries which have such data) is even less encouraging in terms of giving a positive relationship. For example, from the 1940’s to 1994, the real income per capita of the U.S. increased by more than one and a half times. 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%. Over the similar period, the income level in Japan increased by a much larger margin. However, its average happiness measure fluctuated around 59%, also without an upward trend. (See Diener and Suh 1997; Myers 1996, p. 445, Oswald 1997; Frank 1997; Veenhoven 1993.)

On the other hand, there are factors that affect or at least correlate with happiness much more significantly than income, including being married