

ATTITUDE CHOICE, ECONOMIC CHANGE, AND WELFARE*

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Abstract

As supported by commonsense and substantial evidence (discussed in Sections 1 and 2), one's attitude toward wealth may affect utility and people can, at least to some extent and at some costs, choose their attitudes. Using a very simple model of attitude choice (Section 3) and analysing the comparative-static effects of some economic changes (Section 4), this paper shows that individuals with high/low incomes tend to adopt an attitude emphasizing the importance of material consumption more/less. Economic growth unambiguously increases the utility of the rich (unless the generation of growth itself is too costly) by increasing both their income and the prevailing materialistic attitude. It has an ambiguous effect on the poor as it makes them better off through a higher income level but worse off through a higher prevailing materialistic attitude

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1. Introduction

Economists typically analyse individual choices given unchanged preferences. They can explain a lot of apparent preference changes in terms of changes in constraints (e.g. income and prices). Without disputing the usefulness of this traditional method of analysis, this paper attempts to do something different. Still using the traditional methods of utility maximization and comparative-statics analysis, we analyse the choice of an individual's attitude toward consumption or wealth and the resulting implications. The basic idea is that one's utility from consumption/income/wealth (in our atemporal model without savings, the three may be used interchangeably) depends also on one's attitude towards material consumption and that one may increase one's utility by suitable choice (even at a cost) of the appropriate attitude by deviating from one's initial attitude.

Clearly, one who believes that high consumption is sinful will not enjoy a high level of consumption much. One who starts from a low or negative attitude toward material consumption but yet has a high income, may increase utility by shifting their attitude to be more favourable toward consumption. On the other hand, one who puts a lot of weight on material consumption but does not have the income to consume at a level meeting their aspiration, may also suffer from frustration. They may increase their utility by adopting a less materialistic attitude. If one cannot achieve at a high level objectively (e.g. earning a high income), one should adjust one's aspiration or attitude subjectively to avoid a big dissatisfaction. This is well-known in psychology and commonsense. (Some relevant literature is briefly discussed in Section 2 below.) However, there has been no formal analysis of such attitude choice. This paper attempts to fill this gap.

Since people probably acquire an initial attitude toward wealth very early in life, it may be costly in terms of time, effort, and trauma to deviate from it. In addition, there may exist the costs of possible social disapproval if one's attitude differs from the prevailing average attitude of the society or of one's peers.

If economic growth results in an increase in the prevailing materialistic attitude as is likely, it is possible that the poor may be made worse off. They gain from a higher level of income but lose from the higher materialistic attitude. However, the rich are made unambiguously better off, as shown in Section 4.

In a recent paper in this journal, Easterlin (1995) surveys the evidence in the psychology and sociology literatures showing that increasing the incomes of all does not increase happiness. He calls for the attention to factors that are more important to happiness. The first author has also argued elsewhere that it is happiness rather than income, utility or preference that should be our ultimate objective (Ng 1999) and that economists should not be shy in analyzing the more subjective concepts of happiness or welfare which is, contrary to the belief of many economists, cardinally measurable and comparable (Ng 1997). While the present paper still ignores the differences (on which see Ng 1999) between utility (representing preferences) and welfare (defined as happiness) as well as many other factors important for happiness, our analysis of the role of attitude captures an important factor largely ignored by economists.

Easterlin (1974) emphasizes the role of relative-income effects in explaining the failure of economic growth (after a point) in increasing happiness while each individual still views income as very important. We follow up this point in Ng and Wang (1993). To concentrate on the role of attitude as such, we do not directly model the role of relative income in the present paper. We also do not study the full dynamics of growth

in incomes. However, by studying the comparative static effects of income changes as applied to all individuals, the effects capture some important results of growth.

2. Some Relevant Literature

There are several emerging theories that emphasize the importance of reference points and challenge the theory that one's utility depends only on one's real consumption/income/wealth level. First, transaction utility theory suggests that buyers are motivated by more than just the 'acquisition utility' associated with obtaining and using consumer goods. They are also motivated by the 'transaction utility' associated with the difference between the price they actually paid and what they should pay, that is, a reasonable or fair price in their consideration, called the reference price (Thaler 1985). Moreover, the sellers can influence buyers' perception of the transaction utility and therefore their attitudes and behaviour toward acceptable price levels through influencing buyers' reference prices in terms of the current prices to which the buyers are exposed, the recalled prices to which the buyers remember from past exposures, and the context within which the prices are offered (Nwokoye 1975, Nagle & Holden 1995).

Second, prospect theory, integrating the psychology of reference points with the economic theory of consumer choice (Kahneman & Tversky, 1979, 1982, 1984; Tversky & Kahneman, 1992), argues that people evaluate utility gains and losses from their purchases not according to a change in some absolute quantity, instead, relative to a reference point of price or consumption or income or wealth level. According to the theory, buyers judge a loss as more painful than they judge the gain of an equal amount as pleasurable. According to Kahneman & Tversky (1981, 1984), Tversky & Kahneman (1981, 1986), Kahneman, Knetsch, & Thaler (1991), Thaler (1980), Meyerowitz & Chaiken (1987), the sellers can use the theory to change the buyers' purchasing

attitudes and behaviour through framing purchase decisions in three ways: (1) they can frame buyers' reference points by affecting perceptions of what buyers perceive as their status quo, called the endowment effect; (2) they can specifically frame decision outcomes in terms of gains or losses; and (3) they can frame multiple gains or losses as bundles that increase their perceived value.

Third, theory of aspiration level argues that people assess options in terms of gains and losses relative to an aspired future wealth position (Lewin, *et al.* 1944, Simon 1955, Ng & Wang 1993). According to Payne, Laughunn & Crum (1980, 1981), one's utility or value function is defined in terms of initial wealth and changes in wealth, rather than terminal wealth. And changes in wealth are evaluated relative to an aspiration level or target return, with gains (or losses) being defined as a change in wealth above (below) the target return. Therefore, one will be experiencing dissatisfaction if the actual wealth is lower than the aspired level. The degree of dissatisfaction depends on the degree of discrepancy between the actual wealth and the aspired wealth. Also, one's aspiration level can be modified by external agents.

Many psychological experiments and surveys show that individuals' attitudes toward wealth, job, occupation, status, and especially aspiration level, change their utility levels (see van Raaij, van Veldhoven, & Waerneryd, 1988; Grunert & Oelander 1989; Wheelan, Pepitone, & Abt 1990; Lewis & Haviland 1993, among others). People evaluate their environments and utility according to the relationship between the minimum acceptable level, aspiration level, and existing level of the environments (Tzeng, Teng, & Hu 1991). And people's values and attitudes toward wealth, job, occupation, status, aspiration level, and reference points can be changed and their behaviour can be modified through skilful human social engineering (Graebner 1986, 1987; Hamida 1988; Kebbon 1997).

The theories above show that: (1) people evaluate their choices in terms of gains and losses, relative to some reference points; (2) people's utilities can be improved if their attitudes toward reference points can be modified, or their reference points can be reframed; and (3) people's attitudes can be changed by external agents.

Our questions are: except for external agents who can and also have incentive to change the buyer's reference points to improve their profits, does a person have a motive or incentive to change their own attitude toward wealth or some reference point? If so, can they choose their attitude? If they can choose an attitude toward wealth at some costs, then, can they increase their utility level through choosing an attitude toward wealth or an aspiration level at any given level of wealth? This paper attempts to investigate these questions, more specifically, the relationship between attitude choice, economic change, and welfare.

According to Antonides (1989), there is a substitution of social psychology attitudes and psychophysical sensations of stimuli for economic utility. This means that one's attitude toward consumption creates utility and implies that there exists a utility trade-off between earning more consumer goods and changing attitudes toward consumption. That is to say, one has an incentive to change one's attitude in order to maximize the total utility subject to the attitude deviation costs. From the theories and a compelling of evidence we reviewed above, we can see that as long as one is willing to make the important commitment for changing attitudes (Desrumaux & Verquerre 1997), there are many agents and means available for people to change their attitudes. For example, there are many psychological methods designed to help people change for the better, so that they can fully develop their potential and capitalize on the opportunities available in their social environment, or change their attitudes to accept what is beyond their power to change. The helping methods can promote change in ways that can lead

to greater personal happiness, competence, and satisfaction (see Kanfer & Goldstein 1991; Gear, Liendo & Scott 1989). Most counselling psychologists are professionals who are engaged in many attitude-change activities (Howard 1993). They can help people to change their attitudes to improve their happiness (Surgenor 1985). In many cases, people can change their attitudes to conform to their economic conditions or shift their referent points to better positions through their commitments to time, education, training, information collection, religion, and the like (Walley 1985, Zalesny 1990, Zimbardo & Leippe 1991, among others). For example, Duchardt, Deshler & Schumaker's (1995) experiment on the effectiveness of students' learning strategy shows that ineffective beliefs that result in negative outcomes can be replaced with effective beliefs that can result in positive outcomes via strategic adjustment.

Having been supported by substantial evidence, views, surveys, and psychological experiments as discussed above, our simple model below is to extend the ideas of Lewin, *et al.* (1944) and Simon (1955, 1957) that people assess options in terms of gains and losses relative to an aspired future wealth position and have incentives to adopt their attitudes to success and failure, and the argument in Ng & Wang's (1995) that for any necessity good, there exists an intermediate consumption level at which a change in preference intensity has no effect on utility, below/above which an increase in preference intensity decreases/increases utility. That is to say, how much one enjoys one's income/consumption/wealth depends also on one's attitude toward material consumption.

3. The Model

In our model, one's attitude toward wealth affects utility levels and is a choice variable in the maximization of utility at any given wealth level. There are different individuals of

different earning abilities, much like the Mirrlees (1971) model. However, to concentrate on the choice of attitude, we do not analyse the choice of working hours, and take the income of a given (poor or rich) individual as given. (However, just as the theory of consumption can be extended to include the leisure/income choice easily, our model may also be extended similarly.) One's utility is taken to be one's satisfaction S minus the cost C of deviation D from the prevailing attitude P . Attitude deviation is costly if the chosen attitude differs from the 'uncontrived' or initial attitude. One's satisfaction (from consumption) depends on one's income Y and one's chosen attitude A .

$$U = S[Y, A] - C[D] \quad (1)$$

where $D \equiv |A - P|$. Here D is the absolute amount of deviation, up or down, from the prevailing or initial attitude P , A is related to one's personal aspiration level, and the value of P may be a function of one's own income/wealth as well as the average income/wealth level in the economy, as allowed in Figure 3 below. This divides individuals into two groups, one with the chosen $A > P$ and one with the chosen $A < P$. For the case of a continuous distribution of individuals, the third group with $A = P$ is of measure zero. An individual in this group has an initial attitude P that is optimal for their income level and has no incentive to choose a different value of A . The maximization of (1) with respect to A gives the following first-order condition (a subscript denotes partial differentiation):

$$S_A = C_D \text{ for individuals with } A > P \quad (2a)$$

$$-S_A = C_D \text{ for individuals with } A < P \quad (2b)$$

Why would individuals choose, at a cost to themselves, to deviate from the initial attitude? And why different individuals choose differently? This is answered by the following reasonable assumption.

Assumption A: *A higher value of A (i.e. an attitude more favourable to and emphasizing the importance of material consumption more, usually also involving a higher aspiration level of consumption) increases the satisfaction of individuals with high consumption and lowers the satisfaction of individuals with low consumption.*

Clearly, one with an attitude favourable to material consumption may gain more satisfaction in consuming more. Therefore, the rich should and will, in general, choose a stronger attitude *A* toward wealth than their initial attitude *P*. Conversely, those who cannot afford to consume much may reduce their dissatisfaction by having an attitude that emphasises less on material consumption. Therefore, the poor should and will, in general, choose a weaker attitude *A* than *P*.

A lot of evidence shows that the discrepancy between one's actual wealth and their unrealistic aspiration level creates dissatisfaction or even leads to suicide. For example, Stack & Cao (1998) explore the impact of financial satisfaction on female suicide attitudes using a national sample of 321 Chinese women. They find that the greater the financial satisfaction, the less the approval of suicide. The findings are related to recent developments in the Chinese society which foster financial dissatisfaction. A separate analysis of 507 Chinese men suggests that men and women in China follow a similar etiology of suicide attitudes. Obviously, they are not dissatisfied by a reduction in their actual financial situations, which have improved a lot since the economic reform in 1978, but by the failure of their actual situations to match the unrealistic increase in their aspiration levels. A study on black South Africans' quality of

life by Moller (1998) also finds that rising expectations (i.e. attitude change) creates dissatisfaction. Those who value money tend to have a high level of pay dissatisfaction (Tang 1995). Therefore, the poor should change their attitude to a lower level in order to decrease their dissatisfaction. In fact, most people always adjust their attitudes according to their wealth level. For example, in Chinese cultural tradition, those who have succeeded in career are advised to and normally do believe in Confucianism which emphasizes the importance of social status and achievement very much; and those who have not achieved in career are advised to and normally do believe in Taoism or Buddhism which ignores the importance of social status, wealth, and achievement.

If we also assume continuity, then there exists an intermediate income Y where a change in attitude A has no effect on satisfaction S . This intermediate Y may be related to the social referent aspiration level of income. It may depend on A itself and need not be equal to the social average income. This is shown in Figure 1 where an upward-sloping S curve shows that the level of satisfaction S increases with Y , for a given value of A . A higher A will twist this curve, making it lower at low Y and higher at high Y . Mathematically, if we use the Cobb-Douglas case of $S = Y^A$, an increase in A increases/decreases S for $Y >/< 1$. This makes the choice of the unit of measuring Y non-arbitrary (Ng and Wang 1995). Here 1 could just be the social referent aspiration level of income. $Y > 1$ means that one's income level is higher than the social referent aspiration level; $Y < 1$ means that one's income level is lower than the social referent aspiration level. One feels that one is rich or poor, short of income or not, in terms of the social referent aspiration level.

(please insert Figure 1 here)

Individuals with high incomes may thus gain satisfaction and utility by adopting, even at a cost, a high A ; individuals with low incomes may gain satisfaction and utility by adopting, even at a cost, a low A . Condition (2) above gives the optimal choice of A for both the rich (with S_A positive) and the poor (with S_A negative), with the marginal utility of a higher/lower A just offset by its marginal cost. This is shown in Figure 2. A person starts with an initial level (i.e. P) of A indicated by the initial point I which may be a function of both their income, the prevailing social attitude, and perhaps some individual characteristics. The curve C_D indicates that A may be changed up or down from this initial level at some increasing marginal costs. If the individual is rich, the marginal benefit of A (i.e. s_A) is positive at the initial level of A . They thus increase utility by choosing a higher level of A where their S_A curve intersects their C_D curve, as shown in the upper part of Figure 2.

(please insert Figure 2 here)

Alternatively, a poor person has a negative S_A value. Thus, their optimal choice of A involves a value of A below their initial point, as indicated in the lower part of Figure 2. In this figure, the value of Y is kept in the background. A different value of Y has the effect of shifting the relevant curve (especially S_A). This deficiency of Figure 2 is remedied in Figure 3.

(please insert Figure 3 here)

Figure 3 depicts the indifference map of an individual between Y (on the horizontal axis) and A . For any value of Y , there exists an optimal value of A below/above which an increase in A increases/decreases utility. This value of A increases with Y . Thus, the ridge curve (being the locus of points where the indifference curves are vertical) is upward sloping. It need not be linear and may or may not pass through the origin (drawn as so in Figure 3). The initial value of P is drawn as positively dependent on Y , as is likely. However, making P independent of Y does not affect our argument. Here, the value of Y is the income/wealth of the relevant individual. When the average income of the whole economy changes and/or there is a general increase/decrease in emphasis on material consumption, the whole P curve may shift. If the income of a person (the poor) is below the intersection of the P curve with the ridge curve, his indifference curve at the initial point I (with his initial value of A given by the P curve at his income level Y^p) is upward sloping. A decrease in A increases utility provided it is not too costly to do so. They thus move from I to E^p where the transformation curve (which reflects the cost of deviating from the initial value of A) touches a highest indifference curve I_3 . In contrast, a rich person with income Y^r has an initial point J with downward sloping indifference curve. They thus move upward to E^r .

Proposition 1: *Individuals with high/low incomes tend to adopt an attitude emphasizing the importance of material consumption more/less.*

That is to say, one who has the intermediate income (where the ridge curve and the P curve intersect) cannot improve their utility level through deviating their attitude A from their initial or prevailing attitude P . Therefore, those whose actual income level is equal to this intermediate income have no incentive to change their attitudes. Those whose actual income level is lower than the intermediate income will have incentives to lower their A from P in order to reduce their dissatisfaction occurring from their

unsatisfied material desire. Those whose actual wealth level is higher than the intermediate income will have incentives to strengthen their A from P in order to collect higher social psychology satisfaction occurring from the surplus of their actual wealth over the intermediate income. Otherwise, they may only have psychophysical sensations of stimuli for economic utility from their actual wealth.

Proposition 1 must not be confused with the fact that people with low income have high marginal utility of income. The proposition means that people on low incomes would regard consumption at high-income levels as not as important as regarded by people on high incomes. Both high and low income-groups may regard consumption as very important at low levels. In fact, since the poor have actual experience of consuming at these low levels, they have more appreciation of the high marginal utility of consumption at these low levels.

The policy implications of the proposition are rich. Firstly, professionals, sectors, and activities used to change people's attitudes toward wealth may be utility-producing activities (e.g. religion, education, training, social engineering, social workers, counselling psychologists, etc.). Therefore, the government should also consider relevant industrial policies on these sectors. Secondly, the government may use public social and/or tax policies to accomplish the optimal P in order to promote social welfare.

4. The effects of economic changes (growth, reform, recession etc.)

We may use the simple model above to analyse the effects of certain economic changes, e.g. economic growth, economic reform, recession, etc. To do so, we put an exogenous variable G (which may stand for growth, government reform effort, etc.) into the model, making it as having a positive effect on Y and P , as well as possibly incurring a cost denoted as F . Instead of (1), we now have

$$U = S[Y(G), A] - C[D] - F[G] \quad (1')$$

For simplicity, we do not consider possible interdependencies (or non-separability) in the S , C and F functions. Totally differentiating (1') with respect to G , we have, for rich individuals where (2a) holds,

$$\begin{aligned} \frac{dU}{dG} &= S_Y \left(\frac{dY}{dG} \right) + S_A \left(\frac{dA}{dG} \right) - C_D \left(\frac{dD}{dG} \right) - F_G \quad (3a) \\ &= S_Y Y_G + S_A \left(\frac{dA}{dG} \right) - C_D \left(\frac{dA}{dG} \right) + C_D P_G - F_G \\ &= S_Y Y_G + C_D P_G - F_G > 0 \text{ for sufficiently small (non-negative) } F_G \end{aligned}$$

where the second equality follows from the substitution of dD/dG from the differentiation of $D = A - P$; the last equality follows from the substitution of (2a) into the second equality. The R.H.S. of the last equality is positive for sufficiently small (but non-negative) F_G , as all other terms are positive.

For individuals where (2b) holds, we have

$$\begin{aligned} \frac{dU}{dG} &= S_Y \left(\frac{dY}{dG} \right) + S_A \left(\frac{dA}{dG} \right) - C_D \left(\frac{dD}{dG} \right) - F_G \quad (3b) \\ &= S_Y Y_G + S_A \left(\frac{dA}{dG} \right) - C_D \left(P_G - \frac{dA}{dG} \right) - F_G \\ &= S_Y Y_G + C_D P_G - F_G \end{aligned}$$

In contrast to the case of (3a), the R.H.S. of (3b) is not unambiguously positive even if F_G is zero, as the rest is the difference of two positive terms. In particular, if P_G and C_D are large, it may be negative. In words, if the increase in income is effected through a big increase in the prevailing materialistic attitude which increases the deviation of the initial attitude of the poor from the utility-maximizing value, and if the cost of deviating from the initial attitude is high, the poor may be made worse off even though their

incomes increase, and even if the generation of the increase in income itself is costless ($F_G = 0$). Roughly speaking, if the aspiration levels of the poor and/or P level grow faster than incomes and if the costs to lower their private aspiration levels are high enough, the poor may feel worse off with economic growth.

Graphically, as illustrated in Figure 3, economic growth may increase the income of the poor from Y^p to $Y^{p'}$ and that of the rich from Y^r to $Y^{r'}$. However, if the prevailing attitude shifts from the P curve to P' , the poor may be worse off, moving from the indifference curve I_3 to I_1 , though the rich is unambiguously better off, moving from indifference curve I_5 to I_7 .

Proposition 2: *Economic growth unambiguously increases the utility of the rich (unless the generation of growth itself is too costly) but has ambiguous effects on the utility of the poor. Economic growth makes the rich better off both by increasing their income and by increasing the prevailing materialistic attitude. It makes the poor better off through a higher income/consumption level but worse off through a higher prevailing materialistic attitude.*

It may be noted that this is true even if the distribution of income has not become more unequal and even if the issues of environmental disruption and relative-income effects are ignored, as are so ignored in our simple model.

Proposition 2 may be used to evaluate the welfare effects of certain changes like economic reforms. For example, whether China's economic reform has really increased or decreased social welfare depends not only on its economic growth rate but also on changes in the prevailing materialistic attitude. If the P increases too fast in terms of the growth rate of their wealth, the economic reform may make them worse off. Hence, in order to avoid decreases in welfare with economic growth, changes in people's attitudes toward wealth must be consistent with income changes. Under this situation, attitudes

modification by social and/or tax policies may help avoid welfare-reducing growth. (This does not mean that there may not exist substantial costs and abuses associated with such policies, possibly making such policies themselves counter-productive.)

The proposition can be easily applied to explore the welfare effects of an economic recession (e.g. the current Asia financial crisis). An economic recession makes people worse off but the negative effects could be decreased if the private attitudes of those who suffer income losses could decline and/or the social prevailing attitude toward wealth could be weakened at reasonable costs during the recession. The economic recession lowers their utility, but their weaker desire or attitudes toward wealth mitigates against this decline. Of course, it may be more difficult for people to weaken their attitudes toward wealth with decreasing wealth levels than to strengthen their attitudes with increasing wealth. Therefore, it may be more difficult for people to protect their utilities via attitude changes during a recession than during a growth. However, no matter under which situation, it is always important and also possible for people to improve their satisfaction via adopting their attitudes according to their actual wealth levels.

We may also consider the social optimal choice of G to maximize a social welfare function. In principle, we may do that for any number of individuals; however, for simplicity, we just consider the simple case of two (groups of) individuals, the poor p and the rich r . (The fact that there may be more poor than rich persons may be allowed in this simple model by having a larger $\partial W/\partial U^p$ than $\partial W/\partial U^r$ below.) Differentiating $W(U^p, U^r)$ with respect to G , we have

$$\frac{dW}{dG} = \left(\frac{\partial W}{\partial U^p} \right) \left(\frac{dU^p}{dG} \right) + \left(\frac{\partial W}{\partial U^r} \right) \left(\frac{dU^r}{dG} \right) \quad (4)$$

$$= \left(\frac{\partial W}{\partial U^p} \right) \left(S_Y^p Y_G^p - C_D^p P_G^p - F_G^p \right) + \left(\frac{\partial W}{\partial U^r} \right) \left(S_Y^r Y_G^r + C_D^r P_G^r - F_G^r \right)$$

where the second equality follow from the substitution of $\frac{dU^p}{dG}$ and $\frac{dU^r}{dG}$ from (3b) and (3a) above, with the appropriate superscripts p and r . The point to note about (4) is that, while the positive term $C_D^r P_G^r$ carries a positive sign for the rich, the positive term $C_D^p P_G^p$ carries a negative sign for the poor, indicating that the poor are made worse off by an increase in the value of the prevailing attitude P . Thus, unless government effort to promote growth results in a greater increase in the income of the poor ($Y_G^p > Y_G^r$) and/or the cost of financing the growth effort falls mainly on the rich ($F_G^r > F_G^p$), the promotion of growth may make the rich better off and the poor worse off, and possibly decrease social welfare. Given the optimal choice of these distributional aspects (which involve other considerations like incentives not considered in our model), G is optimized by setting the right hand side of (4) to zero. Thus, we can see that the optimal rate of economic growth rate may also depend on the prevailing attitude P and the intermediate level of income.

5. Concluding Remarks

People's attitudes toward wealth (or in a somewhat related concept, their aspiration levels of wealth) may affect their utility levels. People choose not only a bundle of goods to maximize their utility at a given budget level but also a certain attitude toward wealth to maximize their utility at any given level of wealth. The rich may increase their utility by adopting a more materialistic attitude towards wealth than their initial prevailing attitude, even at some costs; the poor may increase their utility by adopting a less materialistic attitude.

Public social policies (which may be implemented through social engineering activities, public media, social workers, opinion leaders, teachers, counselling psychologists, and other professional organizational development interventions), social discussions and debates that change social norms, external agents and legal systems, social programs, and even tax policy, may be used to lower the costs of attitudes change, achieve a more suitable attitude towards wealth, guide people to an optimal private aspiration level or an optimal consumption path (this may be investigated by a dynamic model), achieve an optimal economic growth rate, and the like, so that a higher social welfare level can be accomplished. However, possible costs and side effects of such measures have also to be taken into account.

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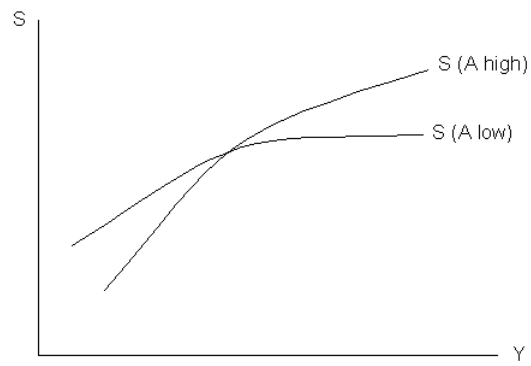


Figure 1

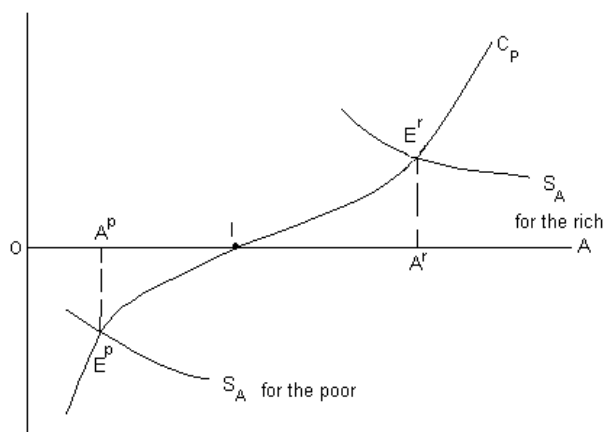


Figure 2

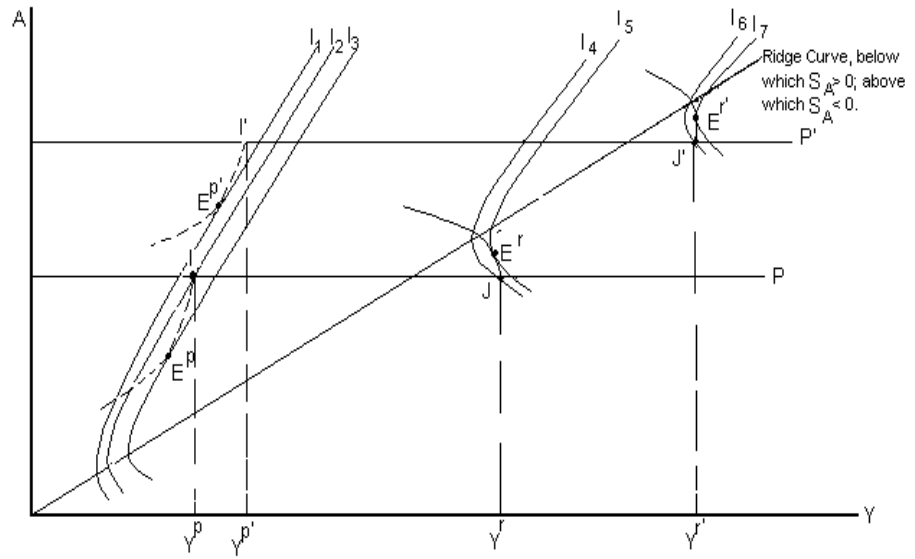


Figure 3: Indifference Map Between Income and Attitude