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Chapter Author: Robert H. Frank

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6 Consumption Externalities and the Financing of Social Services

Robert H. Frank

A 60° day in March seems warm to a resident of Minneapolis, but to a resident of Miami, such a day seems chilly. Someone earning $30,000 feels rich when she lands a job that pays $50,000, but someone who earns $70,000 feels poor when her income declines to $50,000. And whereas an American living in a one-room house with no electricity or running water feels ashamed of his circumstances, a villager in Nepal views his similar dwelling with pride.

It is well known to most social and behavioral scientists that satisfaction depends not just on absolute levels of consumption, but also on the context in which they occur. Yet economists have, for the most part, continued to model behavior as if utility depended only on absolute consumption. As I and many others have argued elsewhere, the policy implications of conventional economic models often differ sharply from those in which utility depends also on context.[1] In this essay, I explore the implications of the broader model for how we should finance social services like health care, education, child care, and long-term care. But before turning to the specifics of these issues, I will briefly review some of the evidence that utility depends on relative consumption.

6.1 Concerns about Relative Position

If we adopt the biologist's view that human motivation was shaped by the forces of natural selection, it is no surprise that people might care so strongly

Robert H. Frank is the Goldwin Smith Professor of Economics, Ethics, and Public Policy at Cornell University.

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1. Of the role of context in evaluation generally, see Helson 1964; Scitovsky 1976; and Brickman, Coates, and Janoff-Bulman 1978. Authors who have investigated the policy implications of concerns about relative income include, among others, Veblen 1899; Duesenberry 1949; Hirsch 1976; Boskin and Sheshinski 1978; Layard 1980; Sen 1983; Frank 1985a, 1985b; Ng 1987; Seidman 1987; and Kosicki 1987.

about relative resource holdings. Even in a famine, for example, there is always *some* food available, and the question of who gets it is settled largely by relative wealth holdings. Relative wealth holdings have also been a decisive factor in the allocation of mates, especially in early human societies. Polygyny was practiced in nearly 1,000 of the 1,154 current and past societies for which data are available, and in these societies it was almost invariably the wealthiest males who took multiple wives.[2]

Concern about relative position is also adaptive insofar as it prods people to monitor how they are doing relative to their rivals and to boost their effort levels if they start falling behind. The alternative of operating at maximum effort levels at all times is less efficient because people tend to do better by conserving their energy when environmental conditions are not stressful, for use when the threats to survival are more immediate.

Concern about relative wealth is helpful even in interpersonal bargaining contexts. Consider, for example, an elegant experiment known as the "ultimatum bargaining game" (see Guth, Schmittberger, and Schwarze 1982). The game is played by two players, Proposer and Responder. It begins with Proposer being given a sum of money (say, $100) that he must then propose how to divide between himself and Responder. Responder then has two options: (1) he can accept, in which case each party gets the amount proposed; or (2) he can refuse, in which case each party gets zero and the $100 goes back to the experimenter.

If Proposer believes that Responder cares only about absolute wealth, his own wealth-maximizing strategy is clear: he should propose $99 for himself and $1 for Responder (only integer dollar amounts are allowed). If Proposer's assumption about Responder is correct, Responder will accept this one-sided offer because he will reason that getting $1 is better than getting nothing.

But suppose Proposer believed that Responder cares not only about absolute but also relative wealth levels. Because he finds the relative terms of the one-sided offer so distasteful, Responder might then refuse it, even though he stands to gain from it in absolute terms. The irony is that the effect of Proposer's believing that Responder cares about relative wealth is to boost substantially the amount that Proposer offers Responder. By virtue of his concern about relative wealth, Responder becomes a much more effective bargainer.

People also have good reasons to be concerned about their relative position in the income hierarchy even when they do not care how their own consumption compares to others'. As Amartya Sen has emphasized, for example, community wealth levels are an important determinant of the capabilities—and hence the amount of wealth—an individual needs to be an effectively functioning member of society (Sen 1983, 1987). Because virtually everyone in Los

2. See Wright 1994. Although food shortages and polygyny were common in the environment of evolutionary adaptation, they have of course become rare in modern industrial societies. Yet features of human motivation that were forged in early hunter-gatherer societies are largely still with us.

Angeles has a car, a resident of that city cannot meet even the most minimal social and employment obligations without one. Yet no one expects an Ethiopian villager to be able to transport himself across comparable distances at a moment's notice.

By the same token, there are many goods that are highly desirable in their own right, yet whose supplies are such that only the wealthiest people can have them, no matter how much national income grows. The late Fred Hirsch (1976) called these "positional goods." If everyone has the same preference for a home with a commanding view, and only 10% of the homes in the area have that feature, those homes will go to families in the upper decile of the wealth distribution, no matter how much everyone earns.

Of even more pressing concern is the desire of most parents to prepare their children to have successful lives and careers once they leave home. Positional issues arise here because a "good job," like a fast runner, is an inescapably relative concept. It is a job that offers more responsibility, better working conditions, more opportunities for growth, and higher pay than other jobs. Increasingly, entry-level jobs on the most desirable career paths go the applicants with the best educational credentials (see Frank and Cook 1995, chap. 8). This gives parents a compelling reason to make sure that their children meet or exceed community educational standards, which, in turn, requires high relative income.

Michael McGuire and his collaborators have shown that relative position may even affect fundamental biochemical processes in the nervous system (McGuire, Raleigh, and Brammer 1982; Raleigh et al. 1984). In a study involving nineteen groups of adult vervet monkeys, Raleigh et al. (1984) found that the dominant member in each group had roughly 50% higher concentrations of the neurotransmitter serotonin, which affects mood and behavior in a variety of ways. They also showed that this difference was the effect, rather than the cause, of high status.[3]

Within limits, having elevated serotonin concentrations is associated with enhanced feelings of well-being.[4] Serotonin deficiencies are associated with sleep disorders, irritability, and antisocial behavior. McGuire and his colleagues also found elevated serotonin levels in the leaders of college fraternities and athletic teams.

3. To do this, they removed the initially dominant animal from each group and placed him in an isolation cage. Shortly thereafter, a new individual established dominance within each group, and after roughly seventy-two hours passed, serotonin concentrations in the newly dominant animal rose to the levels seen in the formerly dominant animal. At the same time, the serotonin concentrations in the formerly dominant animal fell to the level associated with subordinate status. When the initially dominant animal was returned to the group, he reasserted dominance, and serotonin concentrations in both the originally dominant and interim dominant animals responded accordingly.

4. The drug Prozac, which increases serotonin uptake in the brain, may thus help defeat the seemingly impregnable constraint that only a fraction of the population can hope to experience the psychological satisfaction associated with high relative standing.

Additional evidence on the importance of relative position comes in the form of happiness surveys conducted over time in a variety of countries. These surveys, which ask people to report whether they are "very happy," "fairly happy," or "not happy," find that happiness levels within a country at a given moment are strongly positively correlated with position in the country's income distribution. The same studies find no long-term trends in average reported happiness levels, even for countries whose incomes have been growing steadily over time. Looking at different countries at a given point of time, the happiness surveys also find little relationship between the average income level in a country and the average happiness level reported by its citizens.[5]

These survey findings are thus consistent with the view that relative position is a much more important determinant of self-rated happiness levels than is absolute position on the income scale. Even though happiness surveys call for purely subjective responses, there is evidence that they measure a real phenomenon. For example, numerous other studies have found strong positive relationships between reported happiness levels and observable physiological and behavioral measures of well-being. People who report that they are not happy, for example, are more likely to experience headaches, rapid heartbeat, digestive disorders, and related ailments (Bradburn and Noll 1969). Self-reported happiness is strongly negatively related to clinical symptoms of depression, irritability, and anxiety (Bachman et al. 1967; Wall, Clegg, and Jackson 1978). Those who rate themselves as very happy are more likely than others to initiate social contacts with friends (Bradburn and Caplovitz 1965). People who call themselves unhappy have higher labor turnover than others (McEvoy and Cascio 1985). Self-reported happiness is also linked to longevity (Palmore 1969) and coronary heart disease (Sales and House 1971).

One final piece of evidence of the strength of concerns about relative position comes from observations of the wage structure within firms. Traditional theory says that individual wage differentials will mirror the corresponding differences in marginal productivity. Yet in virtually every case for which the relevant data are available, the wage distribution within the firm is substantially compressed relative to the corresponding marginal productivity distribution. The patterns of wage compression, moreover, are consistent with the claim that individual wage payments within the firm incorporate substantial compensating differentials based on local rank (see Frank 1985a, chap. 4).

To sum up, evidence from several disciplines strongly suggests that relative economic position is an important determinant of human satisfaction. Let us now consider the implications of positional concerns for the methods of financing social services.

5. Richard Easterlin (1995) reports that a positive relationship between happiness and income has recently begun to show up in cross-national data, perhaps an inevitable consequence of the communications revolution.

6.2 Health Care

Real health care expenditures per capita in the United States have grown more rapidly than real GNP per capita for as long as the relevant data have allowed us to measure (see Newhouse 1992, 4). As a share of GNP, health care costs have risen from only 4% in 1940 to nearly 14% today.

As Baumol and Bowen explained almost thirty years ago (1966), at least some of this increase was simply to have been expected. In the performing arts, education, health care, and other service industries, productivity grows much more slowly than in agriculture and manufacturing. This implies that the prices of services, measured in units of manufactured goods, must steadily rise.

This does not mean, however, that we literally cannot afford to buy the same services we had in the past. In a recent paper, Baumol (1993) stresses that, with rising productivity in manufacturing and with constant productivity in services, we can afford even more services than before.

Yet spiraling medical costs go beyond lagging productivity in the health care industry. Also implicated have been the expansion of access to medical services through Medicare and Medicaid; increasing reliance on insurance and other third-party payment schemes in the private sector; the growing tendency for physicians to specialize; the rise in malpractice litigation; and especially the rapid introduction of costly diagnostic and therapeutic technologies (Feldstein 1971, 1977; Fuchs 1990; Weisbrod 1991).

Whatever the causes of escalating medical costs, one of their effects has been to place medical insurance increasingly beyond the reach of low- and middle-income Americans, whose real incomes have stagnated for the past two decades. Nearly 40 million Americans, most of them from low- and middle-income groups, are currently uninsured. Although most people favor the provision of universal medical coverage in some form, the budgetary dilemma is that better access means significantly increased usage of medical services and, in turn, even greater escalation in expenditures.

Why is this really a dilemma? Perhaps the value we receive from increased expenditures on medical care is at least as great as we could expect from greater spending on other things. On examination, however, this does not appear to be the case. As Victor Fuchs has repeatedly emphasized, for example, there is no persuasive evidence that mortality and morbidity vary significantly with expenditures on medical care.[6]

To explain why, he begins by noting that most health care systems deliver those medical interventions that are known to save lives and are relatively inexpensive—antibiotics for serious infections, surgical removal of inflamed appendixes, and so on. Variations in expenditures tend to be accounted for by differences in expenditures that do not greatly affect major health outcomes.

6. A brief summary of his argument is contained in Fuchs 1994.

For example, systems vary substantially in the extent to which they administer treatment for essentially self-limiting conditions like colds, headaches, sprains, cuts, bruises, and gastrointestinal upsets.

Further variations come in areas for which there is no consensus on which treatment is best. Thus, for example, Canadian heart-attack victims are generally treated with the enzyme streptokinase, whereas American patients will generally be given the much more expensive TPA, even though there is little evidence that TPA works any better.

Fuchs concedes that there are some instances in which expensive treatments are known to make a significant difference in major health outcomes, but he notes that these cases make up only a minuscule proportion of total expenditures on health care. Further evidence for Fuchs's general claim comes from a recent study by Manning et al. (1987), who found that insurance policies with a large deductible provision produced between 40 and 50% reductions in health care expenditures with no measurable differences in health outcomes.

Fuchs has also stressed, however, that health care systems deliver more than just medically effective interventions. They deliver care to the sick, even when they do not cure them; and they also serve to validate the claims of seriously ill or disabled persons for support from others. We must also inquire whether these important functions might be seriously compromised by efforts to hold expenditures in check.

One of the most common means for curtailing expenditure growth has been the move from private fee-for-service physicians to prepaid group practice plans. In one early study, Richard Tessler and David Mechanic (1975) attempted to compare satisfaction levels for consumers under these alternative arrangements. They found that, although most consumers in the two groups reported being "very satisfied" with their medical services, satisfaction levels were marginally lower in the prepaid group plans.

Because of positional concerns, however, even this small difference probably overstates the cost of a societywide move to less expensive methods of delivering health care. Whether a consumer is dissatisfied when he is told he must wait three weeks for an MRI of his tennis elbow will depend, after all, on how long he expected to have to wait. Canada has fewer high-tech diagnostic devices than the United States, which results in higher utilization rates, lower costs, and longer waiting times for nonemergency patients in Canada. But since the longer waiting times apply equally to all, they do not appear to be a matter of particular concern to Canadian consumers.

In what follows, I will assume that important health outcomes are at most only weakly related to total expenditures on health care and that consumer satisfaction with health care services depends not just on the absolute quality of those services, but also on their relative quality. My point is not that people envy those who receive better care or take pleasure from the fact that they receive better care than others. Rather, it is that subjective evaluations of the adequacy of care are context-dependent. By "context," I have in mind the com-

parison between one person's services and another's, and the comparison between current services and those enjoyed in the past. Under these assumptions, I will now compare the following two alternative health care finance plans with respect to their prospects for holding expenditure growth in check:

Plan 1. Universal membership in a basic, no-frills health insurance plan is financed out of general tax revenues. Consumers are free to join more elaborate plans that include amenities like private hospital rooms, access to new and experimental technologies, or older technologies with low benefit-cost ratios; but they must pay the full cost of the alternative plan completely out of pocket.

Plan 2. A tax-financed voucher is issued to every consumer in the amount required to purchase membership in plan 1. People may then either join plan 1 or supplement their voucher with their own funds to purchase membership in more elaborate plans.

Plan 1 is analogous to the existing method of financing education in most jurisdictions in the United States. Parents can send their students to public schools financed out of tax revenues, or they can send them to private schools by paying the full private tuition out of pocket. Plan 2 resembles recent proposals to fund schooling through a voucher system. These proposals allow parents to send their children to private schools by paying only the difference between the voucher and the current private school tuition.

The essential difference between the two plans is captured by a comparison of the budget constraints they present to a representative family faced with the choice of how much health care to buy. Figure 6.1 shows a family with a pretax income of Y, and assumes that health care services can be produced at a constant cost of P_m per unit. Under plan 1, each family pays T in health care taxes and is then entitled to $Q_1 = T/P_m$ units of medical services without further payment. If it wants to enroll in a private plan that offers more than Q_1 units of medical services, it must quit the public plan and enroll in the private plan at a cost of P_m per unit. The budget constraint facing a family under plan 1 is thus the locus ABCD in figure 6.1. The kink at B represents the fact that, to improve upon the basic plan, the family must essentially forfeit its entitlement to services under the basic plan and start purchasing medical services from scratch in the private sector. Thus, to purchase just one more unit of medical services beyond the basic plan, it must pay not P_m, but $T + P_m$. This is a sharp disincentive to expand beyond the basic plan, and, for the indifference map shown, the family's optimal choice is to stick with the basic plan (represented by point B in fig. 6.1).

Under the voucher system of plan 2, the family's budget constraint is the locus ABF in figure 6.1. By essentially rebating the family's tax payment T in the form of a voucher, this plan enables the family to expand its coverage beyond the basic plan by spending only P_m for each additional unit of cover-

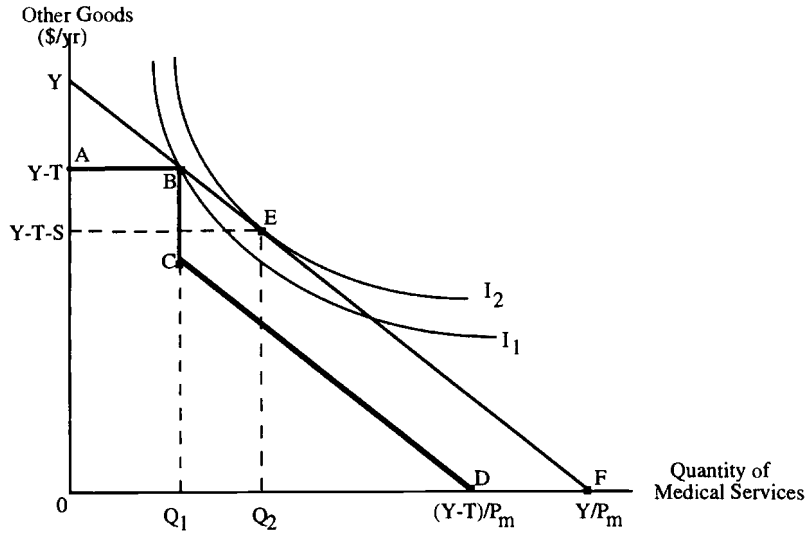

Fig. 6.1 Financial incentives under two health plans

age. Again for the indifference map shown, the family's best option under these terms is to expand its coverage by purchasing bundle *E*, which contains $Q_2 > Q_1$ units of medical services. What is clear, then, is that many families—possibly the vast majority of families—would purchase significantly higher quantities of medical services under plan 2 than under plan 1.

Under conventional economic models, in which satisfaction depends only on absolute consumption, this would be a difference of no concern, since families who elect more elaborate coverage would be paying the full social cost of the added coverage.[7] But things look different if satisfaction also depends on relative consumption. The fact that the voucher plan induces many families to purchase more elaborate coverage now becomes a matter of social concern, since a direct effect of their action is to reduce the satisfaction of consumers who stick with the basic plan.

Once enough consumers enroll in more elaborate health plans, features that were once considered special amenities in those plans will come, over time, to be viewed as essential. People are troubled by inequality in virtually any form, but few forms elicit such strong reactions as the perception of unequal access to "essential" medical services. In a democratic system like ours, the resulting dissatisfaction would translate into irresistible political pressures to upgrade the basic plan.

7. Peltzman (1973) has argued that our current method of financing public education causes many people to spend too little on education. On this view, the spending increase prompted by the move to a voucher system would be a welfare improvement.

Families would then be confronted with the option of upgrading the new, more generous, basic plan by supplementing their vouchers at the margin as before. Many would undoubtedly do so, and political pressure to upgrade the basic plan would begin anew. The voucher plan thus promises to set in motion a dynamic process that would cause even more rapid escalation in health expenditures than we have witnessed in recent decades.

In view of the evidence that spending more on health care does little to change important health outcomes, and little to enhance consumer satisfaction in the long run, the voucher plan seems a very poor bargain indeed. Under the nonvoucher plan, by contrast, there is a much clearer prospect of being able to hold the growth of medical expenditures in check.

Of course, these are not the only two plans on the table. Victor Fuchs, for example, favors a third option, in which everyone would be enrolled in a basic plan and then allowed to purchase supplementary coverage out of pocket. The desirability of this option depends critically on the price at which supplementary coverage is made available. For example, if families are permitted to supplement their basic coverage at marginal private cost, this option becomes essentially the same as what I have characterized as the voucher plan. And if the basic plan were truly a no-frills plan, most families would indeed be likely to upgrade on these terms. So just like the voucher plan, the basic-care-with-optional-upgrades plan would engage the social escalation process just described.

At the same time, Fuchs's proposal has undeniable appeal. Having grown accustomed to deluxe medical coverage under our current system, many, if not most, middle-income families might be unwilling to move to a no-frills plan. (If required to move, however, their initial dissatisfaction would diminish over time as the new context became the norm.) But political decisions are grounded largely in the here and now, and without some way of adding supplementary coverage short of starting from scratch, plan 1 might be a political nonstarter. Fortunately, a continuum of plans between plans 1 and 2 are available. What is important is that people not be allowed to upgrade the basic plan by paying only the marginal private cost of the additional features they add.

A compromise plan, for example, might be like the original plan 1 except with more elaborate coverage. This would make it more expensive at first, but would retain the critical feature of plan 1—namely, its ability to contain pressure to escalate the basic plan's coverage over time. Alternatively, a plan might be crafted along the lines Fuchs proposes: people could be permitted to purchase additional features without starting from scratch, but only by paying premiums significantly larger than the marginal private cost of those features.[8]

8. In cases where the marginal costs of additional services are lower than their average costs, the sellers' need to cover total costs might independently necessitate a requirement to charge more than marginal cost for upgrade features. Whether an additional premium is warranted would then depend on the strength of the consumption externalities to which the purchase of these features gives rise.

Thus, for example, if the marginal private cost of adding a rider that provided access to experimental therapies were $1,000/year, that rider could be made available at a charge of, say, $2,000. The central design goal should be to come up with a plan that can attract and maintain the allegiance of a sufficiently large majority that its features become the norm. For once large numbers of consumers elect coverage significantly beyond what is included in the basic plan, that plan ceases to be seen as "adequate" and hence becomes politically unsustainable.

6.3 Education

The question of how best to finance education raises many issues similar to the ones just discussed for health care. Like health care, for example, education is a service industry in which expenditures in real terms have sharply outpaced secular growth in real output. There is also some evidence that important educational outcomes do not improve significantly with increases in expenditure per pupil (see, e.g., Hanushek 1986). And perhaps even more so than in the case of health care, the adequacy of a system of education is perceived in essentially relative terms.

As noted, the current method for financing education in most jurisdictions is like the health plan 1 just discussed. Public schools are financed out of tax revenues, and parents who want to send their children to private schools must pay full market tuition out of pocket. The principal alternative to the current system is a voucher system essentially like the health plan 2 just discussed. Under this alternative, parents are given a school voucher that may be used either to enroll their children in a public school, or, with appropriate out-of-pocket supplements, to enroll them in a private school.

By making it possible to purchase small upgrades in educational quality without having to buy private schooling from scratch, the voucher plan would undoubtedly lead many families to spend more on education than is currently spent in the public schools. And since education, like medical care, is an arena in which positional concerns operate with special force, a static voucher would be difficult to sustain once substantial numbers of families had upgraded. The potential for expenditure escalation is thus precisely the same under the voucher method of financing education as it is under the voucher method for financing health care.

Before rejecting the voucher proposals in education, however, there are some important differences between the two arenas that deserve close scrutiny. Most important, despite all the legitimate criticism about limited access to the American health care system, few deny that the quality of care it delivers is among the best in the world. By contrast, the American system of public schooling ranks near the bottom of industrialized nations on virtually every important measure (see Chubb and Moe 1990). In education, there is thus a strong argument for making at least *some* changes in the status quo.

Moreover, there are persuasive arguments that the competition introduced by a voucher system might help solve many of the problems that currently plague public schools (Chubb and Moe 1990). Parents' inability to choose between schools, for example, means that public school bureaucrats have little incentive to develop innovative educational programs or to take special steps to attract and retain better teachers. Forcing schools to compete for tuition dollars could significantly alter this picture.

The question thus becomes, How can we inject additional competition into the educational arena without unleashing forces that might give rise to runaway escalation in expenditures? One solution might be to limit the applicability of the voucher to schools that held expenditures per pupil below some specified level. In functional terms, this would be similar to existing proposals that vouchers be redeemable only in public schools. A less extreme measure, similar to the intermediate health plan options discussed in the last section, would be to reduce the value of the voucher by some amount for each dollar of tuition the chosen school charged above a given threshold.

Since there is no evidence that expenditures per pupil are too small under the current system, the policy challenge is to design a voucher scheme that will introduce greater competition among schools yet not induce most parents to supplement their vouchers. As with the health care voucher plan, any plan that induces substantial numbers of families to supplement their vouchers is almost certain to launch runaway cycles of expenditure growth.

6.4 Child Care

Child care, once the exclusive province of the private sector, moved into the governmental arena with the introduction of the Head Start program. Although this program continues to be targeted at the children of poor households, there is growing interest in expanded public funding for preschool care programs more generally. This interest springs at least in part from the steadily growing labor-force participation rates of women with preschool children. The labor-force participation rate for mothers whose youngest child was three months old, for example, grew from less than 25% in 1975 to more than 50% in 1988 (Klerman and Leibowitz 1994, fig. 1).

To the extent that many parents are either unwilling or unable to purchase satisfactory child care on their own, there is a twofold case for greater government involvement. First, there is the issue of social justice for the children involved. Early childhood experience is known to influence important outcomes throughout life, and it seems grossly unfair for society to allow the futures of large numbers of children to be seriously compromised through no fault of their own. And second, even if justice were not a concern, we have a strong selfish interest in limiting the number of damaged people in society. Such people, after all, are more likely than others to become criminals or to require social assistance in various forms.

Suppose we grant, for the sake of discussion, a collective interest in making child care more available to those least able to afford it. What form should the government's financial assistance take? As we did in the health care and education cases, let us again suppose there are only two choices: (1) provision of basic services financed out of tax revenues; and (2) issuance of a voucher that can be used, with out-of-pocket supplements if desired, to purchase child care in the marketplace.

The first alternative invites the same set of problems that currently plague our public schools. By facilitating greater competition between child care providers, the voucher scheme would help avoid these problems. But to the extent that community standards provide the frame of reference that people use to evaluate the quality of the child care they purchase, the voucher scheme also invites the prospect of sharply escalating expenditures on child care. As in health care and education, if a substantial majority of parents supplemented their vouchers to provide more elaborate facilities for their children, these facilities would gradually become the norm, leading to political pressure to raise the existing voucher.

Whether this prospect is viewed as threatening depends on the social utility of additional expenditures on child care. In both health and education, we can be reasonably confident that we would not get much of value simply by spending more. In the child care arena our experience is much more limited. If the current problem is that most people spend far too little on child care, additional pressure to spend more might be just what we need. Even if so, however, the voucher scheme has no built-in mechanism to prevent further escalation once expenditures reached the efficient level.

As in the other arenas, many of the benefits of the voucher approach could be achieved by a modified plan that constrained parents' ability to supplement the basic voucher. Vouchers could be made redeemable, for example, only in programs that charged no more than the voucher amount. Or, more flexibly but with slightly more risk of expenditure escalation, parents could be permitted to supplement their vouchers at steep penalty rates. Thus, for example, if the basic voucher were for $500/month and parents enrolled their child in a $600/month program, they might be required to supplement their voucher not by $100, but by $200 or even $300. As before, the idea is to choose a sufficiently steep penalty that most people elect not to upgrade.

6.5 Long-Term Care

In the health, education, and child care arenas, people have considerable direct knowledge of community consumption standards. For this reason, voucher plans that allow upgrading at private marginal cost create the risk of runaway expenditure escalation. By contrast, community standards are much less clearly defined in the case of long-term care. Indeed, most people have no

idea whether their friends and neighbors even have long-term care insurance, much less know the standard of care it might provide. Long-term care is thus an "unobservable good," a term I have used elsewhere to describe goods for which direct social comparisons are of relatively little importance (see Frank 1985a).

Although the purchase of long-term care insurance is unobservable, it and other unobservable goods are nonetheless influenced indirectly by positional concerns. Suppose, for the sake of discussion, that goods are either observable or unobservable, and that interpersonal consumption comparisons occur only with respect to observable goods. Positional concerns will then lead people to devote too much of their budgets to observable goods, and too little to unobservable goods. By this I mean that each person would obtain higher utility if all were to shift resources at the margin toward the purchase of unobservable goods.[9]

This theoretical prediction appears consistent with what we know about private purchase decisions regarding long-term care. People routinely insure their cars against theft and damage, even when they could cover such losses out of pocket without great difficulty, yet these same people generally do not insure against the loss of their earning power, a setback that few could handle satisfactorily on their own.

Unlike the health, education, and child care arenas, where voucher plans threaten to push expenditures out of control, the objective here is to induce consumers to devote more of their resources to long-term care. A voucher scheme would serve this goal nicely. The problem with leaving long-term care strictly to the marketplace is that, when consumers decide individually to increase their spending on long-term care insurance, their spending on observable goods falls relative to other consumers. But when we decide collectively to spend more on such insurance, consumption of observables falls in tandem for all consumers, which means that no one suffers a decline in relative consumption of observables.

Of course, even collective decisions to devote more resources to long-term care insurance necessarily entail absolute reductions in other categories of consumption. And to the extent that each individual's own current consumption standards help define his personal frame of reference, such reductions will not be painless. The psychological costs of adjustment, and hence the political costs of implementing the necessary reforms, are likely to be smaller if the shift of resources toward long-term care insurance occurs gradually rather than all at once.

9. Since health insurance is no more observable than long-term care insurance, the analysis suggests a parallel tendency to spend too little on health insurance. This may help explain why some 15% of all Americans, not all of them poor, currently have no health insurance. It may also explain the tendency for most governments to provide some form of social insurance for medical care.

6.6 Concluding Remarks

Every scheme for financing the provision of social services contains incentives that affect individual behavior. To predict how people will respond to given methods of financing health care, education, child care, or long-term care, we need reliable models of behavior. For this purpose, economists have generally employed models in which utility depends only on absolute consumption. Yet there is abundant evidence that utility depends on relative consumption as well.

I have argued that policies for financing social services have strikingly different consequences under the two models. Positional concerns operate with special force in health care, education, and child care, and policy makers who fail to take these concerns into account will fail to anticipate the potential for runaway expenditures inherent in voucher schemes in these areas. By contrast, positional concerns give rise to expenditure deficits in the long-term care arena, and policy makers who ignore these concerns are unlikely to perceive the attraction of collective efforts to steer additional resources into this arena.

If the evidence for the existence of positional concerns is so compelling, why do analysts so seldom take these concerns into account? Some have responded that, although people *do* care about relative position, they *shouldn't* care about it, and policy makers should give these concerns no more weight than, say, the concerns of sadists.[10] This is a curious position in view of the long utilitarian tradition in economics, which holds that a taste for poetry is no better than a taste for pushpins. But even if we reject envy itself as a proper basis for policy decisions, positional concerns often arise with great force even when envy plays no role. In any event, positional concerns are not going to go away. When we fail to take them into account, we often fail to achieve outcomes that everyone would prefer.

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10. This is essentially John Rawls's position (1971).

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Comment

Amartya Sen

Robert Frank's paper is both interesting and insightful, and also of potential practical importance. The paper starts off in familiar territory—indeed a territory that Frank has done much to make familiar. Our sense of well-being depends greatly on our *relative* positions.[1] This important connection Frank explores in assessing different ways of financing health care, education, child care, and long-term care. With this basic relativist consideration, Frank combines a few others: the *observability* of the relative positions occupied; the *usefulness* of channeling more resources into the respective fields; and the role of *competition* in fostering efficiency in each area. I begin with presenting Frank's main arguments in terms of these general considerations applied to the respective specific spheres.

Basic Approaches and General Considerations

There are two basic approaches in public funding of care. Plan 1 gives everyone an entitlement to some basic care, but if someone chooses to have more care than that, then he or she must pay the full cost of the alternative chosen (nothing is carried on from the basic care package). Under plan 2, however, each person is entitled to support to a fixed extent (given, for example, by the value of a "voucher"), and one could use it to purchase either the basic service

Amartya Sen is the Lamont University Professor and professor of economics and philosophy at Harvard University.

1. Frank (1985) is a far-reaching exploration of the relevance and reach of the relativist perspective. See also Hirsch (1976).

or something more expensive (paying the difference). There are many intermediate possibilities, but the main strategic contrast is between these two approaches.

The effect of plan 2 is typically to raise the overall expenditure level, particularly encouraged by the desire of each to do as well and better than others; marginal additions can be made under plan 2 without losing the basic support, as would happen under plan 1. Supplementation by some would also make the others feel—and be—worse off. And it can generate pressure for upgrading the basic entitlement itself, so that the others do not feel left far behind the supplementers. Would this be a good thing? Frank argues that the answer must vary among the distinct fields.

Health, Education, Child Care, and Long-Term Care

When applied to health care, the expansion of medical expenditure resulting from plan 2 would not be all that productive, Frank argues, citing evidence of the ineffectiveness of additional medical expenditure in improving health or longevity (Fuchs's works bear on this claim). This suggests that plan 2 is "a very poor bargain indeed"; plan 1 has a clear advantage in the field of health care. Some compromises are considered, including a hybrid plan proposed by Fuchs (1994), whereby the upgrading of services is made more costly, without going all the way to plan 1. But intermediate plans also have intermediate problems.

In education, the same consideration applies, but Frank sees less waste in upgrading basic educational provisions in the United States (compared with that in health, where the general quality of care is already very high). This makes the argument against plan 2 in education a little less powerful. A compromise is sought, but with less of a full-blooded rejection of plan 2.

When it comes to child care, the inflationary features of plan 2 remain, but the scope for more fruitful expenditure in this field appears to be very clear. And so is the effectiveness of more competition in raising efficiency, and this would be encouraged by plan 2. The balance of advantages now shifts somewhat away from plan 1, moving in the direction of plan 2.

Finally, when it comes to long-term care, there is not only a strong need for more money being spent on it, which makes plan 2 useful, but also the well-being effects of plan 2 are less austere. The relative increase of long-term care on the part of some families need not generate the sense of being "left behind" on the part of those not able to supplement the basic provision. This is because, argues Frank, this kind of care is largely "unobservable," and the standards of care are not quite common knowledge.

Variations and the Facts of the Case

So it turns out, in this series of arguments, that Frank arrives at quite *different* conclusions about the right way of financing distinct types of cares (health, education, child care, and long-term). But the different recommendations are

all based on the same basic principles. Dissimilar conclusions result from variations in the conditions that obtain. And this indeed is a great merit of Frank's analysis, which is at once quite general (in terms of principles) and very specific (in terms of applications). Since the question is sometimes asked—explicitly or by implication—why the same rules should not apply in different spheres of social insurance and public support, Frank's line of analysis has much attraction: the rules have to be different to be faithful to the same basic principles.

While I see the force of Frank's arguments, I shall not refrain from airing some mild grumbles. First, as far as health care is concerned, it is possible that Frank is somewhat overpessimistic about the effects of more resources going to health care. While the main defects of contemporary health care arrangements in the United States clearly lie elsewhere (particularly in the absence of universal coverage and affordable health care for all), the statistics of longevity and health benefits can, to some extent, hide the positive impact of more health expenditure, particularly in reducing pain and suffering and in improving the quality of life. Also, even health care practices—not just education and schooling—can improve with more competition and more learning from each other, and there is considerable evidence that even in the United States the level of care in different hospitals (for example, in radical surgery) varies a great deal. Frank's overall conclusion may well be right, but there is some need to answer the counterarguments that can certainly be presented.

Well-Being and Psychology

Second, when Frank analyzes the effects of relative position on one's well-being, he relies largely on the psychological sense of well-being (such as happiness, satisfaction, etc.) as the true indicator. In this sense, Frank's approach has features of classical utilitarianism. While he cites John Rawls (1971) as dissenting from this view, Rawls's counterarguments are not, in fact, terribly well presented here. Frank identifies Rawls's position with the view that "policy makers should give these [relative position–based] concerns no more weight than, say, the concerns of sadists." Rawls's arguments (and those of many other modern political philosophers) are less arbitrary than that. Rawls's reasoning turns on rejecting the exclusive status of subjective perceptions in judging well-being.

There are issues of real importance here. For example, consider a general diminution of living conditions that reduces the quality of life and effective freedoms of all, but which leaves everyone's sense of well-being (based strongly on relativist perceptions) rather unchanged, since *all* have come down together. In terms of the purely subjectivist view of well-being (to which Frank seems largely to adhere), not much would seem to have been lost in this case. But this can be seriously questioned, since everyone is *absolutely* more deprived (for example, more hungry, more insecure, and so on), even though not so in *relative* terms. There is an issue here that needs addressing.

Types of Relativities

Finally, there is perhaps need for distinguishing among the different ways in which "relative" concerns figure in influencing our perceptions, effective freedoms, and welfare. There is, first of all, *relativity in commanding commodities:* the competition for the same facilities in which more absolute purchasing power of some would mean less relative entitlement of others. For example, in the fight for entitlement over food in situations leading to a famine, the increase in the money income of one group has often reduced the absolute command over food that others may have.

The second kind is the *relativity in generating capabilities* from a specific bundle of commodities, or from a specific level of real income. As Adam Smith has pointed out, in a country where everyone has linen clothes and leather shoes to wear, someone without them would feel poor in a way a person might not in another society in which others too don't have these things. The ability to "appear in public without shame" depends not only on one's own commodity bundle (or real income) but also on what others have.

The third kind is the *relativity in evaluating capabilities.* What we regard as minimally acceptable freedoms would tend to depend on what others standardly have. When the standard achievements go up, acceptability may also be revised upward.

Each of these three perspectives brings in relative concerns (and they actually do figure in Frank's arguments), but not for the same reason, nor in the same way. Their distinct bearings may be fruitfully separated out in extending Frank's analysis further. For example, if as a result of plan 2 there is a substantial increase in the money spent by some on health, then, given the existing *total* facilities, this may reduce the absolute facilities obtained by the others who may be competed out (relativity in commanding commodities). This can be a significant consideration, particularly in the short run.

Now consider a case in which this does not happen, perhaps because of the expansion of total supply of these facilities. But still the sense of being medically "secure" (or of having "state of the art" care) can be unfavorably affected by the escalation of care for some, even when the concrete medical facilities remain the same for others (relativity in generating capabilities). The capability of feeling medically secure does not depend only on the exact medical facilities the person enjoys, but also on relative positions.

But even when such a deprivation of capabilities does not occur, it is possible that a general expansion of medical care may lead to a change of standards in deciding on the minimally acceptable sense of medical security (relativity in evaluating capabilities). Each of these types of relations has relevance to the subject matter of Frank's paper. But they have to be distinguished, since they operate differently, and because our welfare-economic evaluation of these different types of effects may well be quite divergent.

Frank's already rich line of analysis can perhaps be somewhat further en-

riched in these ways. However, we must not grumble that Frank has not done more, since he has done so much.

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