THE MARKET VALUE OF FAMILY VALUES

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Abstract:

This paper analyzes how transfers among family members affect the behavior of transfer recipients in the market, and how market prices reflect the presence of such nonmarket transfers. Parental and spousal transfers are motivated both by altruism and by a desire to use the transfers to impart specific values or behaviors to the recipient. When altruistic transfers predominate and the altruism is not completely reciprocated by the recipients, transfers aimed at insuring family members against market risk may have the unintended effect of increasing market risk for the beneficiaries, thus raising market transaction costs. This is due to the disincentive effect of familial transfers on the effort decisions of the recipients, whether in the labor market or insurance market. This, in turn, lowers expected output for market firms, which attempt to re-impose market discipline and realign incentives through layoffs and contracts that provide less security for workers. The problem is mitigated when parents care directly about the actions of their children and use transfers to instill values. But Government social schemes provide substitutes to family transfers that reduce parental influence on children's activities and lead to the bad market outcomes described above. Thus, government programs need to be redesigned to reinforce rather than usurp family values and parental influence over their children.

I. INTRODUCTION

Recently, family issues have received much attention from politicians and social commentators. The debate has centered, for the most part, on the decline of "family values" and the commensurate decline of "work ethic" among partcipants in the labor market. Although economists have no way of measuring values or work ethic directly, they may nonetheless be able to find evidence of changes in values and work ethic to the extent that these changes affect different markets. An extensive literature on the economics of the family has emerged over the past twenty years that documents and analyzes economic interactions between family members, such as bequests and gifts, or *inter vivos* transfers. When it comes to showing the impact of these family interactions on labor and financial markets, however, economists for the most part have remained on the sidelines. In this paper, we bring economics to the heart of the discussion of family values by using the insights gleaned from existing and recent work on the family to forge and highlight the integral link between the family and the market. First, we show how "family values" translate into "work ethic" for the family's labor market participants, how work ethic affects labor market outcomes, and how the market, in turn, affects the family.

We then consider how government social programs change the family-market dynamic. Various commentators have asserted that social insurance programs interfere with parents' authority over their children and are responsible for a decline in values and work ethic among youth. We show that this is not necessarily true. Government programs, depending on how they are structured, can reinforce as well

as weaken parental influence over children. Unfortunately, most social programs are structured in ways that make them compete with, and undermine, parental guidance. In these cases, the market reacts by imposing costs on families, such as higher unemployment rates or higher wage dispersion. Because of the market reaction, government social programs may actually lower welfare. We conclude the paper by suggesting ways to restructure government programs to enhance parental guidance and improve social welfare.

II. EXISTING LITERATURE

Among economists it is well known that familial economic support--whether between parents and children or between spouses--is quite common and represents a significant portion of US wealth accumulation. Moreover, there is now an extensive literature on these transfers that documents their size. Kotlikoff and Summers (1981) estimate bequests to account for four-fifths of U.S. wealth accumulation, Cox (1987) gives an estimate of 63 billion dollars in *inter vivos* transfers and 40 billion dollars in bequests (in 1979 dollars), and more recently Wilhelm (1996), using estate tax data from 1988, puts the size of bequests at 130 billion dollars. While we usually think of transfers in monetary terms, these figures do include the value of transfers of goods and services. What they do not include, however, is the value of any gifts given by parents to children under the age of 18. These transfers, though difficult to disentangle from "regular" family consumption, are regarded by family members as being different from usual consumption expenditures and should be included in *inter*

vivos transfers. If included, the total value of *inter vivos* transfers would be far greater.

Researchers differ as to the motivation behind such transfers. One strand advocates altruism (see for example Becker, 1974), which is the idea that parents care about the happiness of their children and make transfers because they believe the transfers will make their children happy. Another strand argues that benefactors are exchange motivated (see for example Bernheim *et. al.,* 1985), which is the idea that parents are selfish and dangle possible gifts and bequests in front of their children to entice them to give parents the attention they want. Yet a third contends that transfers are accidental (see for example Abel, 1985).

A variation on the exchange motivation for transfers, which comes from other social sciences, links family income transfers to family values quite transparently. This research suggests that gifts and monetary transfers are an essential mechanism through which parental or spousal values and aspirations are conveyed to other family members. Developmental psychologists and sociologists have long recognized the inherent relationship between gift giving and the values of the benefactor. For example, Schwartz (1967, pp.2) argues that "the gift is an imposition of identity," while Sussman (1965, pp. 91) points out that parental giving may influence, among other things, the child's "motivation to achieve." Famed examples of parents realizing this link include Commodore Vanderbilt, Andrew Carnegie, and more recently, Warren Buffet. In the case of Commodore Vanderbilt, his more hard working child was favored in the will and put in control of the trust fund set up for

the less industrious brother (see Clark, 1966). Warren Buffet recently indicated that his concern for the potential negative impact of his sizeable estate on his children's work effort has convinced him to leave most of his fortune to the Buffet Foundation (see *Time*, 1995).

Economists have incorporated into their research agenda the idea that income transfers and value transfers are linked . Interestingly, they have found that the timing of such transfers is critical in determining their effect on the beneficiaries' values and behavior. Assuming that the parent can observe the child's actions, Hirshleifer (1977) points out that if the parent were to decide on the transfer before the child decides on his action, then the parent will face what Becker (1974) termed the "Rotten-kid" problem. That is, the child, after receiving the transfer from the parent, has little incentive to abide by the parent's wishes. The result is bad behavior by the child--to the dismay of his parent. If instead the parent chose to make transfers only after the child has taken his action, the parent may face what Buchanan (1975) termed the "Samaritan's Dilemma.[2]" That is, the child, in anticipation of the parent's transfers, would overconsume so as to engender a higher future transfer from his parent. This problem is exacerbated when the parent is dealing with an adult child, where the parent may not necessarily know the action taken by the child. For example, the parent may not be able to ascertain whether unemployment or low wages are due to the child's low effort or to bad market conditions. In this case, if the parent were to opt for having the last word, then the child stands to gain from the benefit of the doubt, which can only provide a disincentive for the child to raise his work effort. On the

other hand, if the parent were to precommit to a certain transfer rule, then the child's effort is certainly higher in this case, since the child does not expect to receive any help should he expend lower effort and raise the probability of low output.[3] This could partly explain the surge in the past five years in the use of "trust funds" by parents, who may resort to such incentive trusts as a way to precommit to transfer rules that reward children for actions that accord with the parent's values (see *New York Times,* 1995).

The economics literature, for the most part, has concerned itself with the dynamics of the "nonmarket" interaction between the parent and the child or between spouses, and assumed the market activity of the transfer recipients to be exogenous. But a small literature that explores the interaction between family income transfers and market activity of the recipients does exist. Arnott and Stiglitz (1991), in the case of insurance markets with moral hazard, but in the absence of altruism, show that nonmarket transfers--by lowering the effort that individuals take to avoid accidents and raising the probability of accidents--lead to the crowding-out of market insurance. In contrast, Chami and Fischer (1996) show that altruistic transfers may actually complement market insurance, especially in the case where partners care enough about each other's welfare.[4] In the context of labor markets, Holtz-Eakin *et. al.* (1993) show, in an empirical study, that inheritances appear to lower the labor supply and labor market participation of the recipients. Virtually no work has been done, however, on how wages, employment levels and labor contracts reflect the presence of such nonmarket transfers. We present our analysis of this interaction next.

III. FRAMEWORK

Our first task is to build a vehicle for exploring the interaction between altruistic transfers among family members and the market. To make our ideas concrete, we focus on the labor market, though the results can be generalized to other markets.[5] Similarly, although we couch our discussion throughout the rest of the paper in terms of the parent-child relationsip, our analysis can accommodate more general settings that include spouses and partners who are linked, though not only by, altruism. By allowing for family members such as adult children or partners to engage in market activities, members of the family are empowered with certain independence in their decision making. This contrasts with the existing literature, which has typically viewed the parent-child framework from the perspective of the parent, and subsumed the decisions of the child or other family members within that of the parent.[6] By focusing solely on the welfare of the benefactor, these models imply that any conflict resolution in favor of the parent is pareto efficient.[7] And under the assumption that a parent can fully observe the activities of her adult child, the parent can dictate the action that maximizes the parent's utility to the child.

By introducing an outside market, such as a labor market, into our framework, we become obliged to consider children as independent economic agents who make decisions independently of their parents. In other words, parents cannot completely control the behavior of their children. Furthermore, we relax the assumption usually

made in the literature that a parent is able to observe the activities and opportunities of her children. Parents gradually lose the ability to observe the activities of their children as the children approach adolescence and spend more time outside the home. The inability of the parent to discern the child's activities is complicated by the uncertainty inherent in the market, where market luck helps determine the child's wages and employment opportunities. In this case, parents may want to rely on the child's output as a sign of the effort level expended. But since market luck is present, the child has the advantage of private information regarding his true effort, which he may choose not to reveal to his parent so as to enjoy the benefit of the doubt.

We incorporate the above ideas into a model of a game whose rules and timing are as follows. The basic game has four players: a parent, a child, the firm, and nature. The parent is altruistic in the sense that in addition to caring about her own consumption, she also receives utility from the child's utility--the happier the child, the happier the parent. The child recieves utility from consumption and disutility from expending effort in the workplace. To make the asymmetry in altruism clear, we assume that the child does not care about the parent's happiness at all, though all that is necessary to support our conclusions is a situation in which the parent cares about the child's utility more than the child cares about the parent's utility. The firm is a profit-maximizing business producing for a competitive market, and nature is the source of market luck.

The game proceeds in this order. First, the parent makes a transfer of resources

to the child. Next, the child secures a labor contract from the firm and then decides on the level of effort he will expend on the job. Finally, this effort is combined with market luck to determine the outcome in the market. The actions we are interested in analyzing include the choice of labor effort on the part of the child and the choice of transfers on the part of the parent. We are also interested in showing how the labor market reacts to these choices, and what consequences this reaction has for parent and child. Ultimately, we intend to piece together the relationship between the level of transfers made by the parent, the level of effort chosen by the child, and market outcomes.

IV. COMPETITIVE EQUILIBRIUM

An essential step toward understanding the effects of parental transfers on the labor market is to realize that the motivation behind such transfers will be reflected in the type of transfers made. When the parent behaves altruistically-- that is, cares directly about the welfare of her child--her transfers, at the margin, will be compensatory in nature. In other words, such transfers are subsidies that attempt to shield the child from, or compensate the child for, possible bad luck in the market.[8] As long as the child does not share the parent's level of altruism, such transfers can only lower the effort of the child in the labor market. While the parent intends the transfer to make up for possible bad luck, the child will use the transfer to substitute for effort, which he does not like to expend. For example, absenteeism and incidences of shirking on the job may rise in the labor market, and reckless behavior that

increases the possibility of injury also rises in the insurance market. Holtz-Eakin *et. al.* (1993) provide empirical evidence that recipients of inheritances do lower their labor supply and labor force participation. This problem is exacerbated when parents cannot directly observe the child's actions, since the parent cannot accurately infer the extent to which the child's wage outcome is due to luck rather than effort. The child will take advantage of this information asymmetry by further lowering his effort level, receiving the benefit of the parent's doubt in a literal, monetary sense.

The above scenario analyzes the case in which the parent only cares about the welfare of the child without trying to directly impose her will and expectations on her child. But as alluded to earlier, work by Sussman (1965) and Schwartz (1967), among others, argues that parents not only take an active interest in their children's actions, but may also try to influence their children's decisions. Sussman (1965, pp. 91) points out that parental authority extends to "occupational choice, mobility of children and ... mate selection." Here, the parent is not only altruistic, but also cares directly about the actions taken by the child. Becker (1991, pp.9) calls this the "merit good" case, where the term *merit good* refers to the action or behavior the parent cares about. When a merit good is present in the parent's utility function, parental transfers differ in type and in quantity from the case in which the parent is only altruistic. While transfers would continue to provide some compensation for bad luck, transfers now also take the form of incentives that are intended to induce higher effort from the child. For example, the parent can link transfers to the child's effort, or some measure of effort such as income or occupation in the case where effort is unobservable. This

leads to parental transfer schemes under which , if the child's income is low, then transfers are lower than in the case in which the child's output is high. Indeed, Commodore Vanderbilt, in his will, instructed that his younger and less industrious son be provided with a trust fund that only rewarded his son for “exemplary” behavior.

The merit good, in our analysis of the labor market, is the effort put forth by the child. Parents care directly about this merit good because they know--usually better than the child--that effort is associated with success in life and greater happiness in the long run. Work effort is so important to success and happiness that society has developed a moral value associated with it: work ethic. This family value is the main focus of this essay. Parents want their children to develop a strong work ethic. Children, who do not like to expend effort because they do not receive immediate rewards for doing so, will not develop a work ethic without some kind of external provocation. Parents therfore provide incentives to build up the work ethic of their children, and they do this in great part through the use of carefully designed transfers. Thus, parental expectations and values, reflected in the type of transfers made, play a pivotal role in providing incentives for the effort decisions of their children.

The question now is, why should parental transfers affect market profitability? First, such forms of transfers, which include bequests, inter-vivos transfers, spousal support, and income pooling, are quite large and commonplace. Second, whereas individual parents and partners correctly perceive themselves as price takers in the market, it is the *collective* impact of the behavior of the recipients of such transfers,

through their action in the market place, that impacts market prices. Thus, although competitive firms may not observe the amount of nonmarket transfers made to the beneficiaries, they will feel the impact of such transfers through the effort level expended by beneficiaries, which in turn will affect the profit margins of the firms. For example, if purely altruistic transfers prevail, then effort expended by workers will be lower, which lowers productivity, raises costs associated with absenteeism, and lowers expected profits for the firms. In the case of labor markets, firms will react to such behavior by exposing the workers to higher risk in order to realign incentives and engender higher effort. This is done by increasing wage dispersion and decreasing job security. The market increases wage dispersion by lowering the market wage for less skilled work and paying a higher premium for skilled labor, by lowering base salaries and relying more on bonuses, and by eliminating fringe benefits. The market decreases job security by increasing layoffs and by replacing full-time employees with contract workers or temps. All of these actions serve to shift risk from risk neutral firms to risk averse individuals, which reduces the efficiency of the market.

The above discussion highlights the role that families play in affecting equilibrium market outcomes, and how they are affected in turn by the market's reaction. Parental values and expectations are reflected in the type and level of transfers made. These differing types of transfers will have disparate effects on the effort decision of the recipients. Thus, the family imposes negative or positive externalities on the market depending on parents' expectations regarding their

children's behavior. These externalities cannot be priced out completely by the market, since the source of risk is not entirely exogenous but partly determined by the market participant's effort decision. The market responds to the externality imposed on it by altering equilibrium prices and quantities of labor, which changes family welfare. It is in this sense that the family values play a central role in forming market outcomes. Ideally, families would have a constructive role in reinforcing market discipline, which will increase efficiency and raise welfare for all market participants.

V. GOVERNMENT POLICY

Public transfers typically attempt to provide a "safety net" that raises or preserves the recipient's welfare in the face of hardship or misfortune. In this respect, government transfers function very much like transfers from altruistic parents to their children: they are compensatory in nature. Given what we have learned about altruistic family transfers, we can say that compensatory government transfers may have the unintended effect of lowering the recipient's welfare. Children, knowing that the government will make transfers to them if their incomes fall short, will choose reduced levels of effort, effectively substituting the transfers for the extra income they would have expected to earn by expending higher effort in the labor market. Reduced worker effort will lower expected profits for firms in the market, who will react by lowering employment and increasing wage dispersion. The invisible hand shifts more risk to transfer recipients in an effort to reestablish their incentive to expend high effort. The net effect is that transaction costs for market

participants are higher, with risk averse agents--families, and eventually the government--having to absorb more risk. As a result, overall efficiency and welfare is lower. Since the child did not take into account the effect of his actions on the market, the fall in real income he experiences is likely to be greater than the increase in welfare made possible by the government transfer. Therefore aggregate welfare can fall.

The above scenario leaves parents out of the picture. When we include them, we can show that government transfer programs can harm family values and parents' welfare as well as children's welfare. We consider the case in which parents are altruistic but also care about a merit good. Compensatory public transfers act as substitutes for family transfers by providing their recipients with an additional avenue through which they can obtain resources for consumption. Because they substitute for parental transfers, which reflect parental expectations and wishes, public transfers provide an alternative to children who may not share their parent's aspirations.[9] In other words, government transfers provide children with a way to disobey their parents without suffering any consequences. Thus government transfers interfere with the parent's ability to pass her values on to her children and they reduce her control over the behavior of the child.[10] This lower consumption of the merit good lowers parental welfare. For example, Friedman (1980) pointed out that the introduction of social security could be the reason behind the decline in the level of attentiveness given by children to their parents. As the above analysis would suggest, a possible explanation is that public transfers compete to a certain extent with parental

transfers in affecting the behavior of the child. Children substitute social security wealth for parental bequests in their consumption calculations and maintain their welfare without having to expend as much effort visiting their parents.

The evidence from academic studies on poverty, while it does not focus on the connection between government programs and parental influence, also suggests that government programs have significant effects on the behavior of youth. For example, Haveman and Wolfe (1994), in their summary of recent research, report that welfare recipiency on the part of parents greatly increases the chances of a child becoming a welfare recipient, and that the generosity of state welfare benefits influences duration of welfare recipiency. Some social commentators have used this evidence to support their views that government transfer programs have created a culture of dependency and idleness among transfer recipients. While this may be true, it has not yet been proven by rigorous research. Nonetheless, this evidence does tend to confirm that government programs create career and lifestyle paths that compete with the traditional paths preferred by parents and firms.

So long as public transfers are solely intended to compensate recipients for bad outcomes, they will interfere in the dynamics of family interaction and harm the welfare of all family members. It is reasonable to argue, therefore, that such compensatory social programs should be cut back or even eliminated. This does not necessarily mean, however, that all transfer progams should end. The economic essence of family values is an externality, and as with all externalities, individuals

will produce too much of the negative kind and too little of the positive kind. In other words, parents care too little about merit goods because they don't internalize all of the social benefit that their concern produces. Public transfers could be designed to complement family transfers, support parental influence over children, and impose positive externalities on the market. In terms of our model, public transfers could be structured to enhance market incentives that induce children to expend higher effort in the labor market. Such policies would have the desired effects of raising expected profits in the market and inducing market firms to lower layoffs and provide wage contracts that feature higher insurance.

What would such government programs look like? On a general level, government transfer programs would be reward-based rather than compensatory: good outcomes or performance would be reinforced by government transfers. In addition, the transfers would target parents rather than children whenever possible. These two aspects combined would effectively make the parent place more weight on the merit good, and therefore structure family incentives accordingly. This approach would not only prevent government transfers from competing with parental transfers, but also enhance parental influence by increasing the potential size of these transfers. For example, governments could give monetary rewards to parents whose children have exemplary school attendance or score well on standardized tests.

This does not necessarily mean, of course, that governments should abandon compensatory transfers. There is nothing wrong with a government acting

altruistically, so long as the government recognizes the consequences of its actions. Indeed, the notion of a democracy that does not care about the welfare of its citizens seems absurd. In addition, compensatory transfers can be justified as a safety net for those unfortunate individuals whose parents are incompetent, uncaring, or unable to instill the values necessary for success. In this case, government should emulate the parent who is altruistic but who also cares about merit goods. Within this framework, governments could design transfer programs that reflect both goals. For example, programs such as AFDC could be redesigned to deliver a very low baseline level of support combined with increasing rewards for achieving goals that will help recipients move off of the transfer program, such as completing eduational degrees or finding part-time employment. Recent attempts by many states to impose time limits and work requirements on transfer programs are well-intentioned attempts to move in this direction. Unfortunately, these policies will have limited success because they do not take into account the power of family values or the requirements of the labor market. The policies advocated above, which are based on an understanding of the family-market relationship, should not only help more people graduate from transfer programs, but also reduce the number of families who go on them in the first place.

VI. DISCUSSION AND CONCLUSIONS

The family plays a pivotal role in affecting the market through its provision of income transfers. These transfers, by affecting the choices made by market participants, can either complement the market or impose costs on it. The market,

therefore, places a significant value on family values--though not for their own sake. Family values, such as work ethic, have a tremendous impact on the bottom line, through their effects on the skill accumulation and productivity of employees. When work ethic is effectively passed from parents to children, firms will be more productive and will pass their gains to workers in the form of higher wages, lower unemployment, and lower uncertainty about wages and employment in general. But when work ethic declines or is not passed from parent to child effectively, the market reacts to lower efficiency and higher costs by passing these costs on to the family in the form of greater uncertainty about wages and job security. This is essentially the same story of market discipline that plays out with respect to any business practice: actions that raise efficiency and deliver value are rewarded, while actions that lower efficiency and reduce value are punished.

If work ethic and other family values are indeed in decline, as some observers would suggest, then economists should be able to detect the effects of this decline in data on wage dispersion, employment dynamics, and labor contracts. On the other hand, a word of caution is in order before we search for any links between market outcomes and the state of family values in our society. Public warnings about moral decay are as old as the concept of morality itself. Indeed, the practice of older generations of a society criticizing the morals of younger generations is one of our most observed if not most honored traditions. Perhaps these condemnations and warnings are simply another mechanism by which parents ensure that their values are transfered to their children. If this is truly all that the current debate over family

values represents, then it is unlikely that economists would find any measurable effects when they conduct their experiments.

As this paper shows, however, the transmission of family values from parents to children has probably been harmed by the emergence of government social insurance programs. These programs, which have only existed for the past two generations, represent a new development in the cycle of family values. Our model suggests that these programs, in their current form, interfere with parental influence and prevent values from being passed effectively from one generation to the next. Their effect, moreover, has probably become more pronounced within the last twenty-five years as the variety and generosity of government transfers have increased. The introduction of government programs, therefore, can be interpreted as a shock to the system that upset the balance between the family and the market. This raises the likelihood that economists can find evidence of the effects of government programs on work ethic through the programs' effects on wage and employment data. Carrying out the empirical investigations suggested by this paper, therefore, appears to be a worthwhile endeavor.

But even if the current evidence showing an adverse effect of government programs on market outcomes is diffuse, we should still rethink the goals and mechanisms that shape government transfer programs. Policymakers must pay attention to the incentives they create, because the effects of incentives are cumulative. If social policy is driven primarily by altruism, as it appears to be, then sooner or later

both economists and the public will be able to detect adverse effects from well intentioned transfer schemes and policymakers will have to fix the programs. Policymakers need to create a balance between altruism and direct concern for specific behaviors that is tangible in the design of social programs. In doing so, they would not only be modeling themselves after wise parents, who constantly search for this balance as they raise their children, but they would also be imitating the Founding Fathers, who expressed both altruism ("promote the general welfare") and concern with specific actions ("provide for the common defense") in the Preamble to the Constitution, as a means of transmitting their values ("the blessings of liberty") to future generations.

REFERENCES

Abel, Andrew B., (1985), “Precautionary Saving and Accidental Bequests,” *The American Economic Review* 77, pp. 1037-1047.

Arnott, Richard, and Stiglitz, Joseph, (1991),”Moral Hazard and Nonmarket Institutions: Dysfunctional Crowding out or Peer Monitoring," *The American Economic Review*, 81,
pp.179-189.

Becker, Gary S., (1974),”A Theory of Social Interaction," *Journal of Political Economy*, 82,
pp.1063-93.

Becker, Gary S., (1991),”A Treatise on the Family," Enlarged Edition, Cambridge: Harvard University Press.

Bernheim, B. Douglas; Shleifer, Andrei, and Summers, Lawrence. H., (1985), “The Strategic Bequest Motive," *Journal of Political Economy*, 93, no.6, pp.1045-76.

Buchanan, James M., (1975), “The Samaritan's Dilemma," in Edmund S. Phelps, ed., Altruism, Morality and Economic Theory, New York: Russell Sage Foundation.

Chami, Ralph, (1996), “King Lear's Dilemma: Precommitment Versus The Last Word," *Economics Letters* 52, pp.171-176.

Chami, Ralph and Fischer, Jeffrey H., (1996), “Altruism, Matching, and Nonmarket Insurance," *Economic Inquiry* 34, pp. 630-647.

---------, (1996), “Do Bequests Increase Labor Market Risk?,” mimeo, University of Notre Dame.

Chami, Ralph and Fullenkamp, Connel, (1996), “The Government and The Family: Partners or Competitors?,” mimeo, University of Notre Dame.

Clark, Frank, (1966),”The Commodore Left Two Sons," American Heritage, 17, pp. 81-103.

Cox, Donald, (1987), “Motives for Private Income Transfers," *Journal of Political Economy*, 95, pp. 508-546.

Friedman, Milton, (1980), in “The American Economy in Transition," Martin Feldstein, ed.,
Chicago: University of Chicago Press (for N.B.E.R.).

Haveman, Robert, and Wolfe, Barbara, (1994), *Succeeding Generations: On the Effects*

of Investments in Children, New York: Russel Sage Foundation.

----------, (1995), "The Determinants of Children's Attainments: A Review of Methods and Findings," *Journal of Economic Literature* 33, pp. 1829-1878.

Hayes, Cheryl D., ed., (1987), *Risking the Future: Adolescent Sexuality, Pregnancy, and Childbearing*, Vol. 1, Washington, D.C.: National Academy of Sciences Press.

Hirshleifer, Jack, (1977), "Shakespeare Versus Becker on Altruism: The Importance of

Having the Last Word," *Journal of Economic Literature*, 15, pp. 500-502.

Hirshleifer, Jack, (1985), "The Expanding Domain of Economics," *The American Economic Review* 75, Supplementary issue, pp. 53-68.

Holtz-Eakin, Douglas, Joulfaian, David, and Rosen, Harvey S., (1993), "The Carnegie Conjecture: Some Empirical Evidence," *Quarterly Journal of Economics*, 108, pp.413-435.

Kotlikoff, Lawrence J., and Summers, Lawrence H., (1981), "The Role of Intergenerational Transfers in Aggregate Capital Accumulation," *The Journal of Political Economy* 89, pp. 706-732.

Menchik, Paul, (1988), “Unequal Estate Division: Is It Altruism, Reverse Bequests, or Simply Noise,” in *Modeling the Accumulation and Distribution of Wealth*, D. Kessler and A. Masson, eds., Oxford, U.K.: Clarendon Press.

New York Times, (1995), “Six Feet Under and Overbearing," March 12: Section 4, pp. 5.

Schwartz, Barry, (1967), “The Social Psychology of the Gift," *The American Journal of Sociology*, vol 73, pp. 1-11.

Sussman, Marvin B., (1965),”Relationships of Adult Children with Their Parents in the United States," in *Social Structure and the Family: Generational Relations*, Ethel Shanas and Gordon F. Steib, eds. New Jersey: Prentice Hall.

Stark, Oded, (1989), “Altruism and the Quality of Life," *AEA Papers and Proceedings*, 79, pp. 86-90.

Time, (1995), “Now He's Even Richer; When Disney Landed ABC, Warren Buffett Scored the Biggest Hit," August: 54-55.

Udry, Christopher, (1996), “Gender, Agricultural Production, and the Theory of the Household,” *Journal of Political Economy*, 104, pp. 1010-1046.

Wilhelm, Mark O., 1996. "Bequest Behavior and the Effect of Heirs' Earnings: Testing the Altruistic Model of Bequests," *American Economic* Review, 86, pp. 874-892.

FOOTNOTES

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[2] For a discussion of the benefits of the last word in the case of perfect foresight see Hirshleifer (1977, 1985) and Becker (1991) when uncertainty is present.

[3] See Chami (1996) for a discussion of the benefits of precommitment.

[4] See Stark (1989) for a similar argument in the context of the family and in the absence of an outside market.

[5] In particular, all of the ideas discussed in this essay apply in a straightforward way to insurance markets, or any other market in which some agents act in ways to insure others against some risk.

[6] This criticism is voiced in Lazear and Michael (1988), and more recently in Haveman and Wolfe (1995).

[7] Udry (1996), in an empirical study, shows that Pareto efficiency may not obtain when other members of the same family are modeled independently.

[8] See Cox (1987) and Menchik (1988) for a discussion of this result.

[9] A similar result, albeit in a different context, is found in Chami and Fullenkamp (1996), who study the role of private and public transfers in affecting teenager choices, including fertility, wage earnings and labor supply.

[10] A report of the National Academy of Sciences Panel on Adolescent Pregnancy and Childbearing entitled *Risking the Future* (Hayes, 1987) cites a decline in parental authority and responsibility as one of the main causes of the high rate of teenage pregnancy in the U.S.