

INTERFAMILY TRANSFERS AS ALTERNATIVES TO GOVERNMENT TRANSFERS TO PERSONS*

BY ROBERT J. LAMPMAN

University of Wisconsin-Madison

AND

TIMOTHY M. SMEEDING

University of Utah

How have government transfers altered the distribution of income, the level of work effort, and the rate of personal saving? Most scholars approach this question by comparing the current level of government transfers with the unrealistic counterfactual of a zero-transfer situation. This method overlooks the fact that nongovernment transfers existed before government transfers and the possibility that private transfers might have grown more if government transfers had grown less.

This paper explores the significance of one private alternative to government transfers—namely, direct interfamily giving of cash, food, and housing. Fragmentary evidence suggests that such interfamily transfer was quantitatively more important than governmental transfer for these purposes thirty years ago, but is now only half as great.

If current government transfers are conversions of, or substitutes for, interfamily transfers, then it follows that some of the benefits of government transfer “slide” over to “secondary beneficiaries,” i.e. those who would have made the private transfers. Further, it follows that the effects of government transfers are not much different from those of the private transfers which they replace.

I. INTRODUCTION

Every society has a system for redistributing income. Advanced Western societies have redistributive or transfer systems made up of several parts. They feature, in addition to intrafamily transfers—which we ignore in this paper—interfamily transfers and those that are mediated by private philanthropic organizations, by insurance and pension funds,¹ by employers, and particularly by government (see, e.g. Lampman, 1975, 1981; Rein and Rainwater, 1980). Thirty years ago, interfamily transfers were quantitatively more important than government transfers for income maintenance, food, and housing. Now they are

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¹Pure insurance, purged of its saving aspect, can be viewed as a mechanism for transfer among families. In any period some families pay premiums in excess of benefits received and vice versa, and thus transfers do occur. Similarly, for defined-benefit pension plans wherein benefits received are not directly tied to contributions made, several types of redistribution among workers within the same firm will occur. For instance, all else equal, those with longer post-retirement lives will benefit at the expense of others. In the same way those who leave the firm before pension benefits are vested make an implicit transfer either to those who remain beyond the vesting point, or to the owners of the firm.

only half as great. In this paper we concentrate on the conversion of interfamily transfers (as defined in section III, below) into government transfers and explore the probable effects of that conversion on the distribution of income, on the level of work effort, and on the level of personal savings. We contrast the effects of this conversion with those of the much more commonly studied conversion from zero transfers to positive government transfers, in which the existing system of government transfers is compared to a world without any type of transfer system.

An initial example or two may help clarify this contrast. Consider a situation in which Person A and Person B are in separate family units. Person A is totally disabled. His only income is a private transfer of \$100 per month from Person B. Suppose the government introduces a \$100 per month cash benefit for disabled persons to be paid for out of personal income tax revenues. Person A collects the government benefit, and B stops his monthly payment to A. Person A is the direct or primary beneficiary of the government transfer, but in our example, he is no better off than he was before. There has been a full “slide” of the benefit over to B, who is an indirect or “secondary beneficiary” of the conversion. Moreover, in such a world one might expect that B’s work–leisure and consumption–savings choices would be altered, not A’s, whose behavioral response would be the focal point under the more common zero (or “no other”) transfer counterfactual. While the substitution for interfamily transfer makes B better off, he and others will be subjected to an additional tax to fund the transfer to A, which will alter both their share of income and, perhaps, their behavior as well.

The analysis would be the same if A were unemployed, retired, or had lost the family breadwinner and B had substituted a government transfer (e.g. in the U.S., Unemployment Insurance, Old Age Insurance, or Survivors Benefits) for his own. It would also be similar if A were a college student whose parents would, in the absence of government subsidy, have financed his education, or a person with extraordinary health care expenses which were absorbed by the health care system as bad debts.² The analysis is basically the same if government transfers replace several different types of transfers. For instance, government medical assistance for the poor (Medicaid in the U.S.) has almost surely substituted, to some extent, not only for interfamily transfers but also for private philanthropic transfers and for private insurance.

The implications of this framework of analysis will be explored below. The important point to note is that, because present methods of social accounting do not encompass the entire spectrum of transfer activity (see Moss, 1980), conventional analyses based on the zero transfer counterfactual may entirely misrepresent the effects of this slide of benefits to a secondary beneficiary. For instance, they may lead the observer of household survey data and national income accounts to infer that the total level of transfer has risen substantially, that person A is made better off by the government transfer, and that B’s

²In this example medical care providers act as the implicit intermediary for interfamily transfers. In effect either all demanders of medical care pay a higher price for services received to cover bad debts, or the physician covers the debt via lower income, or some combination of the two. In either case, interfamily transfers occur.

behavior is likely to be influenced only by the advent of the added tax, and not by the substitution of contributions on which benefit-sliding focuses.

II. SECONDARY BENEFICIARIES

The phenomenon of the secondary beneficiary is a familiar one to students of government transfers (e.g. Boulding, 1962; Schwartz, 1970; and Barro, 1974, 1978). It has not, however, always been clearly conceptualized or characterized. It may help to separate this phenomenon from others with which it might be confused. It is different from a pecuniary externality since there is, in our example, no internal beneficiary. It is distinct from the phenomenon of the donor benefit (Hochman and Rodgers, 1969) since in our example the original donor gets no additional satisfaction from knowing that someone has been helped, but he does get financial relief.³

The "slide" of a transfer payment from the primary beneficiary to the secondary beneficiary is also different from the "shift" of transfer benefits. The latter is the obverse of a tax shift. A lump-sum transfer is a negative lump-sum tax; a wage subsidy is a negative tax on wages; a subsidy to a consumer good is a negative tax on such a good. Such negative taxes are shifted via changes in prices for consumer goods or factors of production just as positive taxes are shifted (see, e.g. Haveman and Golladay, 1977). For example, a transfer to certain wage earners may lead to a reduction in the supply of labor and then to a rise in the price of labor. Hence, the benefit is shifted in part to nonrecipient wage earners.⁴ For another example, a consumer subsidy to health care may add to the demand for health care, thereby increasing the price and hence the incomes of health care providers.⁵

These changes in price and income are important to study but they are logically separate from the "slide" identified earlier. The parties to the slide do not necessarily stand in any demand or supply relationship to one another. It is our presumption that the shifting of benefits occurs *after* the sliding. The active party in both the shifting and sliding process is the secondary beneficiary in our example. For instance, a transfer which is conditioned on the earnings of the primary beneficiary may be unrelated to the earnings of the second beneficiary. Hence, the effect on labor supply behavior will be less clear than if only a primary beneficiary were involved. For instance, suppose that Old Age and Survivors Insurance (OASI) has replaced interfamily transfers from adult children to their

³Both external benefit and donor benefit have been cited as reasons why rich people may vote for government transfer programs (Smolensky and Gomery, 1973). Our framework points to another reason: inducing others to reduce the rich person's interfamily transfer burden. External and donor benefits and the slide of benefits may also be used by social accountants as arguments for assigning some of the benefits of government programs to nonrecipient households.

⁴Bishop (1979) presents a general equilibrium model of the tax-transfer system which focuses on the transfer-induced labor market shifting process.

⁵In the example of benefit sliding in the transfer of health care, mentioned in note 2 above, there is no necessary shifting of benefits. However, if medical care providers do not reduce their prices to demanders because "bad debts" decrease, due to government payments for previously "free" health care for the poor, benefit shifting occurs as health providers' revenues and incomes rise disproportionately. Both of these phenomena have most likely occurred in recent years. Thus, while the differentiation between sliding and shifting may be clear in theory, it can be hard to separate in practice.

aged parents, as suggested by Barro (1974, 1978). The OASI "earnings test" places a 50 percent benefit reduction rate on the earnings of the elderly that exceed a certain amount. There is, however, no condition set on the labor supply, savings, consumption, or other transfer behavior of the recipients' children. The children may save an amount equivalent to the former transfer, perhaps to provide an expensive college education for their own children (see Barro, 1978; Wachtel, 1980); or they may decide to take an expensive vacation, or to increase charitable donations, or to reduce their labor supply. (Changes in labor supply and savings are more fully treated in section IV.) In each case, the transfer-induced change in economic behavior is due to the reaction of the secondary, not the primary, beneficiary of the OASI payment.

III. SOCIAL ACCOUNTING FOR BENEFIT SLIDING

A transfer payment is generally defined as a receipt of money for which a less than fully reciprocal specific good or service is exchanged. It may also be defined to include receipts of goods and services (transfers in kind). One may also wish to include an estimate of the value of the donor's time used to provide a particular service.⁶ More specifically, one may count as an in-kind personal transfer those goods and services which have a broad analogue in private markets and which, potentially at least, benefit almost exclusively a single person or family. The principal items in this category are purchases of health care, education services, food and housing, and possibly also the value of time given to others. Families make (contribute) and receive transfers of cash and goods that may be simple and direct—i.e. from one family to another—or they may be complex and involve one or more intermediaries. It should be noted that we exclude capital transfers after death from our list of interfamily transfers.

We define family to include only the nuclear group of related, income-sharing persons. Hence, a family may be an unrelated individual, a married couple, or one or two parents living with dependent children under 18. (Income transfers within any of these groups are intrafamily transfers, which we do not deal with in this paper.) In contrast, the official U.S. Census Bureau definition of family includes all persons sharing the same living facilities who are related by blood, marriage, or adoption (U.S. Bureau of Census, 1980a). The difference is that we consider elderly parents living with adult children as separate families, and the resources they share as interfamily transfers, whereas under the Census

⁶We do not explicitly include the value of time given to others in the analyses which follow because of the conceptual and empirical difficulties involved in measuring time-giving and in allocating it to specific beneficiaries. There is a wide difference between opportunity cost measures (i.e. the giver's wage rate) and replacement cost measures (i.e. the market cost of purchasing the same services). In allocating benefits, the public-good nature of some types of time-giving may be troublesome: consider the time to cook for an elderly relative vs. cooking for a charity dinner or a "soup kitchen." The time expense is the same (or nearly) in both cases, but the aggregate value to all of the recipients may be several times the value of the time input regardless of how it is measured. Thus the accounting framework specified below will exclude the value of "time" transfers. One should note, however, that time-giving is neither trivial nor limited to certain specific sectors. Morgan, Dye, and Hybels (1977) have estimated that time-giving to charities in 1973 totaled \$29 billion (valued at opportunity cost), which exceeded the \$26 billion that they estimate was given to charities in cash or in kind during this same period.

Bureau definition, interfamily transfers do not occur in these circumstances. The term household refers to all people, related or unrelated, who share the same living quarters. For more on intrafamily transfers, see Morgan and Baerwaldt (1971) and Lillydahl and Singell (1980).

The slide of benefits is best envisioned as a process within a “system of personal transfers,” sketched in Table 1. The table excludes intrafamily transfers; the nuclear family is represented as the ultimate recipient of transfers to persons. The table shows contributions flowing out from the nuclear family sector to the other sectors and then flowing back to families in the form of receipt of benefits (col. 1). Interfamily transfers are represented by payments from nuclear families to an imaginary “interfamily transfer fund” (line 1) and by payments from that imaginary fund to nuclear families (line 6). Transfers are also carried out through intermediary organizations which collect money from persons and pay it out to others. Thus, philanthropic organizations collect money from families (line 2) and business firms (line 10) and make transfers to families (line 7). Insurance and pension plans move funds about in the same way (lines 3, 11, and 8).⁷ Business employers⁸ similarly collect contributions from families (line 4) and make contributions to families (line 9) and to other intermediaries (lines 10, 11, 12). Government collects contributions in the form of taxes from families and business firms (lines 5, 12) and makes transfers to families and philanthropic organizations (lines 13 and 14). Note that these contributions, in taxes or otherwise, are by definition limited to those destined for social welfare benefits. For example, the only taxes entered at lines 5 and 12 are those to pay for “social welfare expenditures under public programs.” For another example, the “transfer to families” from insurance or pension funds (line 8) includes only payments which are private social welfare benefits which accrue to families (see note 1). At line 15, we indicate the possibility that, in any one year, social welfare transfers made may not equal social welfare transfers received. This would be the case if, for example, a philanthropic organization decided to delay spending some of its receipts, or if insurance companies are building reserves to assure future payments. On the other hand, the imaginary interfamily transfer fund will always be in balance because contribution and receipt of transfer are synonymous.

Let us now return to our initial example of a slide of transfer benefits. That example was of the complete conversion of a simple interfamily transfer to a transfer by government. In terms of Table 1, the contribution made at line 1 is eliminated, as is the benefit received at line 6. That benefit is replaced by another at line 13, and the original transferee is neither worse off nor better off. The original contribution made at line 1 is replaced by taxes paid at line 5. The original transferor is better off to the degree that the contribution he was making at line 1 is more than his share of the extra taxes now to be paid to finance

⁷In this accounting system one must be careful to distinguish intertemporal transfers from intersectoral transfers. For instance, employer contributions to pension funds benefit both current employees (by increasing the expected value of their future retirement income) and, if the pension system is not fully funded, current retirees. Our system would count only contributions from current employees to current retirees as transfers.

⁸Government agencies as employers are not represented in this table.

TABLE 1
SOCIAL WELFARE TRANSFERS (POSITIVE AND NEGATIVE) BY SECTOR

Transfer Item	Transfer Flows In (+) and Out (-)					
	Nuclear Families	Interfamily Transfer Fund	Philanthropic Organizations	Insurance and Pension Funds	Business Firms	Governments
<i>Nuclear Families</i>						
1. Contributions to interfamily transfer fund	-	+				
2. Contributions to philanthropic organization	-		+			
3. Contributions to insurance and pensions	-			+		
4. Contributions to business firms				+		
5. Personal taxes	-					+
<i>Interfamily Transfer Fund</i>						
6. Transfers to families	+	-				
<i>Philanthropic Organizations</i>						
7. Transfers to families	+		-			
<i>Insurance and Pension Funds</i>						
8. Transfers to families	+			-		
<i>Business Firms</i>						
9. Transfer to families	+				-	
10. Contributions to philanthropic organizations			+		-	
11. Contributions to insurance pensions				+	-	
12. Business taxes					-	+
<i>Governments</i>						
13. Transfers to families	+					-
14. Contributions to philanthropic organizations			+			-
<i>Balancing</i>						
15. Receipt of social welfare transfers less payment of social welfare contributions and taxes		0				

benefits for all disabled persons. It should be noted that taxes will go up both for the secondary beneficiaries and also for those who do not have disabled relatives and hence are not secondary beneficiaries. Secondary beneficiaries are gaining at the expense of other taxpayers—in effect secondary contributors—as a result of the conversion. Over several years, secondary beneficiaries will change, and those who gain in any one year may be losers—i.e. secondary contributors or net taxpayers—in other years. Hence the government transfer system acts as a sharing device and also as an averaging device.⁹

To provide a full picture of the quantitative significance of the conversion phenomenon, we should have data to fill all the cells in Table 1 for a series of years. Unfortunately we are unable to supply much of the needed information. The best we can do at this time is offer some information on changes in the relative importance of interfamily transfers and government transfers in cash or in kind (food and housing). We do not investigate the reasons for the changes,¹⁰ nor do we discuss the normative implications of the changes.¹¹ The principal functions of transfers that have been overlooked are helping people to buy education and health care.¹² In Table 2 we present information that relates to lines 6 and 13 in Table 1. Further application of this method can be made to other conversions within the broad system of transfers—e.g. from philanthropic organization transfers to government transfers.¹³ A detailed description of the data bases and methods which underly these estimates is presented in Appendix A.

⁹Note that this phenomenon is conceptually different from life-cycle treatment of the transfer system, where an individual who contributes to and/or receives transfers from a particular transfer system can compare aggregate contributions and transfers over his or her lifetime. For instance, Burkhauser and Warlick (1979) have disaggregated OASI benefits into two components: an intertemporal component which accounts for benefits which repatriate past contributions to the system, and an intergenerational transfer component which accounts for any remaining differences between contributions and receipts.

¹⁰The objectives and motivations within any part of the system may, of course, change drastically over time. Interfamily transfers may serve primarily to provide housing for elderly persons at one time and to supply aid to adult children in college at another. The degree to which interfamily transfers are “voluntary” may vary over time. The force of custom and law may be strong or weak. Government may or may not mandate, coerce, or induce persons to make transfers to relatives. Or it may also penalize such transfers by, for example, denying a government transfer to a person who receives an interfamily transfer. An explanation of why these changes in a nation’s system of transfers occur is beyond the scope of this paper. See Abrams and Schmitz (1978); Davis and North (1971).

¹¹We do not argue for total replacement of interfamily transfers by government transfers now or at any time in the foreseeable future. Our hypothesis is only that a large degree of substitution has in fact taken place. Interfamily (and philanthropic) transfers offer the advantages of greater freedom and scope, less bureaucracy, and greater temporal and spatial immediacy than do government transfers (see Vickery, 1962).

¹²Peltzman (1973) and West (1975) present evidence that government transfers for public education have replaced private purchases and also interfamily and philanthropic transfers for education. There is also some evidence that the number of unpaid doctors’ bills has fallen since the advent of Medicaid and Medicare during the mid-sixties. It is not clear, however, who bore the cost of unpaid medical bills prior to Medicaid and Medicare.

¹³For instance, Abrams and Schmitz (1978) present evidence that from 1950 to 1970 government welfare expenditures grew much more rapidly than private philanthropic contributions. Counting only itemized deductions on the personal income tax as charitable contributions—clearly an underestimate—they find an elasticity of substitution of government transfers for charity of 0.28. Focusing on only one part of the conversion process, as we do in this paper, may indeed hide much additional benefit sliding among the omitted transfer sectors and/or the omitted types of transfers.

Table 2, line 7, shows that the selected government transfers as a percentage of personal income have increased by two and one half times since 1950—from 4.5 to 11.2 percent—and by a far greater amount since 1929. Interfamily transfers of cash, food, and housing (line 1) show a slight downward trend over this period as far as we have been able to estimate them. Our best guess is that these transfers fell from approximately 6.5 to 5.0 percent of personal income over this period. Most of these data are based on survey reporting which probably biases them downward to some extent.¹⁴ We have no direct evidence for lines 4 or 5, but we suspect that they are small relative to those items which we have roughly identified in lines 1, 2, and 6. The tremendous amount of undoubling of adult units (when couples or single adults leave to form their own households) over this period not only influences line 6 but also, we feel, the missing information in line 4. Certainly as adult units decouple, the possibility of intrahousehold giving declines as well. Moreover, intrahousehold cash transfers are much less than in-kind gifts (Morgan *et al.*, 1962). Thus while the expected trend in line 4 would no doubt strengthen the overall trend, were it available, its size is probably too small to influence the general results of the table. Similarly, if one can ignore gifts of time, in-kind giving among households is probably also quite small. We therefore do not expect that the data omissions in lines 4 and 5 significantly affect the results shown in Table 2. Lines 11 and 12 present a rough indication of the change in composition of food, housing, and cash transfers from interfamily to government transfer over this period.

On these grounds, it appears that intrafamily transfers were greater than government transfers prior to the mid-1950s; in 1935–36 the available evidence indicates that they were roughly twice as large. Data for the missing items in lines 4 and 5 could only strengthen the dominance of private transfers prior to the 1950s. Roughly one third of all government cash transfers between 1935–36 and 1950, and two thirds of all such benefits in 1929, were veterans' payments. Without these, the government role would have been even less prominent before 1950. By 1979 the interfamily–government proportions had almost exactly reversed themselves. Even though total transfers of both types grew from 9.3 to 16.2 percent of personal income over this same period, by 1979 public transfers were 70 percent of the total and private interfamily benefits only 30 percent.

On this evidence, can it be said that there has been a conversion from interfamily transfer? In the discussion above and below we assume that there is a movement over time from an interfamily transfer to a government transfer of the *same scale*. What we observe, however, is a strong growth of government transfers and only a slight diminution of private transfers. Nevertheless, in terms of compositional change, there does seem to be substitution insofar as we have measured it. It can be argued that the two systems of transfer are alternatives,

¹⁴Evidence from the Current Population Survey (CPS) (U.S. Bureau of Census, 1980a) indicates that more than 21 percent of respondents do not answer questions concerning private cash contributions received from outside the household. Because there is no alternative estimate of such giving, we cannot tell how good (or bad) the CPS estimates in line 3 of Table 2 actually are. However, most forms of cash public transfer recorded in the CPS are underestimated by roughly 20 to 25 percent.

TABLE 2
LEVELS OF INTERFAMILY AND GOVERNMENT TRANSFERS FOR INCOME,
MAINTENANCE, FOOD, AND HOUSING (UNITED STATES, SELECTED YEARS)

	1929	1935-36	1950	1959	1960-61	1970	1972-73	1979
<i>Level of Transfer as a Percentage of Personal Income</i>								
1. Total interfamily transfer (items 2, 4, 5, 6)	NA	6.5	5.9	5.4	5.5	5.1	5.0	5.0
2. Interhousehold gifts of cash (includes 3)	NA	3.7	3.9	(4.0) ^a	4.1	(4.0)	4.0	(4.0)
3. Regular cash gifts only	0.4	NA	0.7	(0.8)	0.8	0.6	0.6	0.7
4. Intrahousehold gifts of cash								
5. Interhousehold gifts in kind								
6. Intrahousehold gifts in kind (food and housing)	NA	(2.8)	(2.0)	1.4	(1.4)	(1.1)	(1.0)	(1.0)
7. Total government transfer (items 8, 9)	0.9	2.8	4.5	6.3	6.6	8.3	9.2	11.2
8. Cash transfer for income maintenance	0.9	2.7	4.4	6.1	6.4	8.1	10.7	
9. In-kind transfer of food and housing	— ^b	0.1	0.1	0.2	0.2	0.2	0.3	0.5
10. Total government plus interfamily (items 1, 7)	NA	9.3	10.4	11.5	12.1	13.4	14.2	16.3
<i>Composition of Transfer</i>								
11. Percentage interfamily	NA	70	57	47	45	38	35	31
12. Percentage government	NA	30	43	53	55	62	65	69

Note: NA indicates not available.

Sources: Line 2: U.S. Bureau of Labor Statistics (1941, 1953, 1966, 1977).

Line 3: Regular cash interfamily transfers, defined as follows:

1929: Dickinson (1970): "regular gifts to persons outside the family";

1950: Schwartz (1970, p. 1269): "person to person gifts which are contributions to the support of others";

1960: Dickinson (1970); Morgan *et al.* (1962): "cash support given to persons outside the household";

1970-79: U.S. Bureau of the Census, P-60 series: "regular contributions for support received from persons living in the household" and "alimony and child support payments."

Line 6: Morgan *et al.* (1962).

Lines 8, 9: Merriam and Skolnick (1968); Skolnick and Dales (1972); McMillan and Bixby (1980).

Personal Income: *Economic Report of the President* (1981).

^aParentheses indicate best guess; see Appendix A for basis.

^bLess than 0.1.

and that government transfers could have stayed at 2.8 percent of personal income from 1935 to 1979, and interfamily transfers could have grown from 6.5 to 12.8 percent of personal income from 1936 to 1979. That argument would rest on the idea that such forces as higher income, increased mobility of nuclear families, the breakdown of the extended family (see Table A.1, in the Appendix), and increased urbanization would have led to more private transfer if public institutions had not filled the bill. On that somewhat tenuous ground we proceed with the assumption that government transfers are to some degree conversions of interfamily transfers. Perhaps, in time, development of data and estimates for lines 4 and 5 in Table 2, and expansion of this analysis to embrace other sectors and other types of transfers,¹⁵ will shed more light on the validity of the assumption.

IV. BEHAVIORAL RESPONSE TO TRANSFERS: THE ROLE OF THE SECONDARY BENEFICIARY

Most analysts of transfer payments implicitly ignore the conversion from one system of transfer to another. This is the case, for instance, in the literature on labor supply response to government transfers (e.g., Moffitt, 1980) and savings response to growth of government transfers (e.g. Feldstein, 1974). These authors have used what we will refer to as the zero transfer (ZT) counterfactual, meaning that if there were no government transfer, no other element of the transfer system that we have identified would be substituted for that transfer.

What difference would it make to our perception of the significance of large totals of government transfers if we thought the interfamily (IFT) counterfactual was more relevant than the ZT counterfactual? Let us look at how two different conversions, with the dollar amount of transfer fixed, affect the distribution of benefits and contributions and hence the distribution of income, the level of work effort, and the extent of personal savings.

Income Distribution

If we think of ZT as the appropriate counterfactual, we see the distributional effects of government transfers by comparing the pretransfer income received by ranked quintiles of families with the posttransfer income received by those in each quintile. The income share of the lowest quintile changes from 1 percent to 5 to 6 percent in such cases (see Danziger, Haveman, and Plotnick, 1981, Table 10). This comparison suggests that most positive transfers are quite equalizing in effect. As mentioned above, this effect is observed in spite of an

¹⁵Lampman (1981) expands this analysis to include the private insurance and philanthropy sectors and also includes education and health care transfers. His general results are similar to those shown in Table 2. Once he adds these additional sectors and purposes for transfers, he finds a decided compositional shift from private transfer (philanthropic and insurance sectors as well as the interfamily sector) to public transfer over the 1950-78 period. Owing mainly to the strong traditional role of public expenditures for education, 53 percent of Lampman's total transfers originated in the public sector in 1950, as compared to the 30 percent figure in line 12, Table 2. However, by 1978, public transfers had expanded to 72 percent of the total, with private transfers falling to 28 percent. These percentage figures are quite similar to those in lines 11 and 12 of Table 2.

offsetting action by extended family adult units to move off into separate households (see Appendix, Table A.1) which produces the anomaly that there may be more very-low-income households on a pretransfer income basis after the expansion of government transfers than before. This is a particularly important change in moving from interfamily to government transfers because even if the total level of transfers is fixed, intrahousehold giving has been predominantly in-kind giving, while government giving relies more heavily on cash transfer. Moreover, in-kind housing transfers themselves differ significantly between these two sectors. A government housing transfer may imply an additional household unit if a previously dependent adult unit leaves to form a new unit. On the other hand, a private interfamily (but intrahousehold) housing transfer may imply one less household if a previously independent adult unit moves in with relatives.

If we think of IFT as the appropriate counterfactual, then our perception of the redistribution accomplished by the introduction of a government transfer will be different. Recall that we are assuming that the total amount of money being transferred is fixed and that all interfamily transfer ceases and government transfer takes its place. It seems reasonable to assume that the taxes will be more evenly distributed than were the private contributions. However, it may be helpful to distinguish two cases with respect to benefits. One is the case where the government benefits go to the same persons and in the exact amounts that the interfamily benefits did. This may be called the “full slide” case.¹⁶ The second, “partial slide,” case involves a pattern of government benefits which is more uniform than in the preexisting interfamily system and spreads the total of transfers over a large number of beneficiaries.

In the full-slide case, there is no change in the size distribution of income due to benefits alone. This is so by definition, as explained above. On the other hand, the partial slide case will yield some narrowing of benefits within each income class of beneficiaries.¹⁷ The two cases are identical with respect to the conversion from interfamily contributions made by the minority with disabled relatives to a tax which reaches all persons in each income class. Hence, the conversion narrows contributions within each income class. In sum, regardless of whether we imagine a full slide or a partial slide of benefits, the conversion of an interfamily to a government transfer is unlikely to have much effect on the size distribution of income. If there is any effect there, it will mainly entail a narrowing of the variation in benefits and contributions within an income class. The distributional effects of converting first from zero transfer to government transfer (panel C), as opposed to converting from interfamily transfer to governmental transfer (panel D), are summarized in Table 3.

¹⁶It most closely nests with the “ultrarationality” assumption posed by David and Scadding (1974). In their normative world, government acts as an extension of the individual, completely crowding out all private expenditure (transfer, consumption, and expenditure) with its perfect substitute, government expenditure.

¹⁷To reach this conclusion we have to make assumptions about the frequency of disability by income of relatives and the propensity to give to disabled relatives by income class as well as the distribution of the added taxes by income class. If the substitution of government transfers for interfamily transfer changes the distribution of benefits among the disabled toward greater equality for recipients both within *and between* various income classes, less inequality in posttransfer income may occur under the government transfer system.

TABLE 3
DISTRIBUTIONAL EFFECTS OF CONVERSION OF TRANSFERS

Type of Transfer	Total Amount of Transfer Assumed	Change in Size Distribution of Income	Change in Distribution within Income Class
A. <i>Zero Transfers (ZT)</i>			
Benefits	Zero	Zero	Zero
Contribution	Zero	Zero	Zero
B. <i>Convert from ZT to Interfamily Transfers (IFT)</i>			
Benefits	\$X	Reduce inequality	Reduce variation
Contribution	\$X	Reduce inequality	Increase variation
C. <i>Convert from ZT to Government Transfers (GT)</i>			
Benefits	\$X	Reduce inequality	Reduce variation
Contribution	\$X	Reduce inequality	Increase variation
D. <i>Convert from IFT to GT</i>			
Benefits	\$X	No change	Reduce variation
Contribution ^a	\$X	No change	Reduce variation

^aAssumes the full slide case. If the partial slide case is assumed, the size distribution would be made less unequal relative to IFT.

Work effort

The effects on work effort from the same conversion are sketched in Table 4. The introduction of interfamily transfers will result in less work by beneficiaries relative to the ZT counterfactual, since both income and substitution effects combine to induce less work among transfer recipients (panel B). The assumption is that if the recipient's earnings rise, the relative will reduce his contribution to some degree. However, the effect of the conversion on the work effort of contributors who, in the case of interfamily transfers, are the minority with disabled relatives, is less clear. In moving from ZT to the interfamily system, their income is reduced by the amount of the contribution and that encourages them to work more. However, if their contributions to disabled relatives tend to rise with their own earnings (akin to a proportional tax), this reduces their net wage and is likely to induce them to substitute leisure for work. On the contrary, if their contributions do not tend to rise, then there will not be a substitution effect. Depending upon which assumption is adopted, the work effort of contributors will be the same or will increase. The net change with respect to beneficiaries and contributors combined will be less work relative to the ZT counterfactual, assuming that contributions rise with earnings. If contributions do not rise with earnings, then the combined effect may be no change in work effort. Evidence from the 1972-73 Consumer Expenditure Survey of the U.S. Bureau of Labor Statistics (1977, pp. 58-59, Table 1) indicates that interhousehold cash transfers tend to increase with the income of contributors in a roughly proportional way. Thus, work effort is probably decreased by a

TABLE 4
WORK EFFORT EFFECTS OF CONVERSION OF TRANSFERS

Type of Transfer	Total Amount of Transfer Assumed	Change in Work Effort
A. Zero Transfers (ZT)		
Benefits	Zero	Zero
Contributions	Zero	Zero
B. Conversion from ZT to Interfamily Transfer (IFT)		
Benefits	\$X	
Income effect		Less work
Substitution effect ^a		Less work
Contributions	\$X	
Income effect		More work
Substitution effect ^b		Less work
Benefits and contributions combined		Less work
C. Conversion from ZT to Government Transfer (GT)		
Benefits	\$X	
Income effect		Less work
Substitution effect		Less work
Contributions	\$X	
Income effect		More work
Substitution effect ^b		Less work
Benefits and contributions combined		Less work
D. Conversion from IFT to GT		
Benefits	\$X	
Income effect		No change
Substitution effect		No change
Contributions	\$X	
Income effect		No change
Substitution effect ^c		No change
Benefits and contributions combined	\$X	No change

^aAssuming benefits fall as earnings of beneficiaries increase.

^bAssuming contributions rise with earnings of contributors.

^cAssuming taxes rise with earnings of contributors.

small amount in moving from ZT to interfamily transfer. The usual conversion from zero transfers to government transfers (in panel C) indicates that work effort will decline.

Converting from interfamily transfers to governmental transfers of the same total quantity (panel D) appears unlikely to cause any change in overall work effort. Beneficiaries may receive more uniform benefits (in the partial slide case) but will have income and substitution effects which are similar to those under interfamily transfers.¹⁸ (We are assuming that in both cases benefits fall with

¹⁸Because changes in aggregate work effort for both the beneficiaries and contributors is at question here, the partial slide case is much less important than it is with respect to distributional effects. In other words, variations in the distribution of transfers in changing from one transfer regime to another will not lead to changes in work effort unless those individuals who receive different amounts of transfer have differing labor supply responses. Because we assume that this differential effect will be small, the crucial factor in the determination of work effort is the aggregate level of transfer, not the interfamily distribution of those transfers. In both the full and partial slide cases, work is unchanged.

the earnings or other income of beneficiaries.) Contributors will now include all taxpayers rather than only the minority of persons with disabled relatives, but once again the income effect is offset by the substitution effect. The change in work effort between the IFT counterfactual and the current level of government transfers (panel D) is zero for beneficiaries and contributors combined. It is clear that comparing the ZT counterfactual with a government transfer predicts a greater decrease in work effort (see C) than in moving from interfamily transfer to a government system of transfers (see D). Due to lack of data on the extent of the interfamily transfer system in earlier years, it is not possible to test the IFT counterfactual. Others (Danziger, Haveman, and Plotnick, 1980) who have employed the ZT counterfactual or a related variant (Lampman, 1978)¹⁹ have found a total work reduction of 4 to 7 percent for benefit recipients and/or recipients and taxpayers combined.²⁰ If our theorizing is correct, this is clearly an upper bound estimate of the effect of government transfers on total work effort, since some of such transfers are substitutes for interfamily transfers.

Savings

The effect on savings of conversion from one transfer scheme to another will depend to an important degree on whether or not the conversion alters expectations that all persons who become disabled in the future may count upon a transfer.²¹ The ZT regime creates a maximum incentive for each person to save prior to the event of his own probabilistic loss of earnings.²² It also carries with it the ability to dissave after the event. If the interfamily transfer system sets up expectations of future benefits in stated contingencies, then it may be that all individuals will do less saving, i.e. they will substitute a claim on interfamily transfer or interfamily wealth for personally accumulated wealth (see, e.g. Barro, 1974). This effect may, however, be offset by the tendency to dissave less after the event and by the expectation that one may be called upon to be a future contributor to a disabled relative and hence save more. The twin effects may cancel each other. Positive savings will occur in both cases, though they will probably be larger in the ZT case than in the IFT case.

Substituting a government transfer for an interfamily transfer would probably make expectations of a future benefit more firm. Indeed, one advantage of a government system of transfers is reduced uncertainty. At the same time,

¹⁹In Lampman's work, the comparison is between the current level of work effort and the level which would have been experienced if government transfers and the taxes to pay for them had remained at the 1950 ratio to GNP.

²⁰The reader is warned that there is little recent information on the labor supply effects of the personal income tax (or other contributions) for higher-income contributors.

²¹If it does not set up such expectations, then the analysis may be confined to the closed period during which the transfer occurs. Person B's ability to save is diminished by the same amount that Person A's ability to save is increased. If A's marginal propensity to save is less than B's, then the effect on total savings will be negative. This prediction will hold equally for both the ZT and IFT counterfactuals.

²²The ZT counterfactual does not permit individuals or employers to purchase private insurance policies against disability or unemployment or to enter into pension plans. If so, the ZT counterfactual is false and a different type of counterfactual emerges, and the conversion to be studied is one from a private insurance or pension system to the current social insurance system.

contributions are regularized as taxes, which in case of a pay-as-you-go or unfunded system, do not enter into national savings. In this case, each person is likely to do less saving—i.e. to substitute future benefits (Social Security wealth) and to do less dissaving. While the theory of life-cycle saving is tangled by offsetting effects, we suggest that government transfers may induce less saving than will interfamily transfers, which in turn will induce less saving than will a ZT counterfactual.²³

In the case of retirement there may be an offset to this in that a decision to retire early means that a larger accumulation of savings is required to finance the longer life in retirement (see Feldstein, 1974). Further, under the pay-as-you-go Social Security system, income is being transferred from younger, healthier people to the aged and disabled. That transfer may induce elderly or disabled benefit recipients to save in order to leave a bequest for their children (see Barro, 1978). Alternatively, the pay-as-you-go feature may induce each cohort to save less during working years but also to dissave less in retirement. However, these influences may not be strong enough to offset the likely decrease in savings. Danziger, Haveman, and Plotnick (1980) set the upper-bound effect of going from ZT to the current level of government transfer as a reduction of savings of 10 percent. We suggest that the effect of going from IFT to government transfer must have been less than 10 percent.

V. CONCLUSIONS AND FUTURE DIRECTIONS

We conclude that in moving from an interfamily transfer to a government transfer of the same scale, the predicted effects are as follows:

- (a) Little change in the size distribution of income.
- (b) No change in work effort.
- (c) Some reduction in savings as expectations of true benefits influence current savings.

The evidence presented in Table 2 indicates that from 1935–36 to 1979 there has been a modest decline in interfamily transfer as a percentage of personal income despite the large growth in average income and in the number of relatively low-income households. We assume that the growth in government cash and in-kind transfers explains much of this decline in interfamily transfer.

The major argument of this paper is that it is inappropriate to use zero transfer as the exclusive counterfactual in the study of transfers. To do so leads people to believe that total transfers have increased more than they actually have and that the effects of government transfer, desired and undesired, are greater than they actually are. This misconception may be particularly important in the case of changes in work effort due to the growth of government transfers.

As must by now be clear, much additional work is needed to establish these conclusions more firmly. One large step would be to develop a system of social accounts which encompasses the entire transfer system—government and non-government. We hope that this paper has raised questions which will stimulate

²³Note again that there is no difference in result in the full-slide or partial-slide cases unless within-group savings rates are substantially different.

the development of such a system of accounts and encourage further research into the issues we raise.

APPENDIX

The estimates of interfamily transfer presented in Table 2 deserve detailed explanation. In particular, we need to explain the basis on which the calculated guesses (in parentheses) are based and the several sources of data on which other point estimates are based. We will proceed line-by-line.

Line 1 (total interfamily transfer) depends on the estimates in lines 2, 3, and 6. Cash gifts to others outside the household (line 2) may be on an irregular basis and completely unrelated to any income-maintenance motive: e.g. Christmas, graduation, and birthday gifts. Data on average gifts of cash to persons not in the household, which include both regular contributions for support and gifts *per se*, have been collected by the U.S. Bureau of Labor Statistics (1941, 1953, 1966, 1977) in selected cities (for 1935–36, and for 1950) and nationwide (for 1960–61, and for 1972–73). These data show the patterns of giving in line 2. Morgan *et al.* (1962, pp. 264–266) further found that, in 1959, 6 (12) percent of all nuclear family units gave \$500 (\$250) or more to other individuals, a substantial sum. (The authors do not distinguish interhousehold transfers from intrahousehold but interfamily transfers, a problem dealt with below.) Thus a fairly low aggregate level of these transfers may hide a substantial amount of cash transfer by a sizable proportion of the population.

Data on regular money contributions for support of persons living outside the household are available from several sources. In line 3 we attempt to gather and make consistent the various estimates of regular cash interhousehold transfers for the 1929–79 period. Private interhousehold regular cash transfers are of two basic types: alimony and child support payments, and other regular contributions for support received from persons not living in the household. Prior to 1968 it is not possible to separate alimony and child support from regular support of other relatives and nonrelatives living outside the family.²⁴ Total private interhousehold regular cash transfers as a percent of total personal income have grown since 1929, from 0.4 percent in 1929 to about 0.7 percent in recent decades (line 3). Although not separately shown in Table 2, since 1968 alimony and child support have increased from about 0.3 to 0.5 percent, while other regular contributions to relatives and nonrelatives have fallen from 0.4 to 0.2 percent of personal income. Thus the flat trend in line 3 masks a significant

²⁴The data are somewhat inconsistent: prior to 1960, data are based on aggregate contributions made by households, while in 1968 and beyond data are based on contributions received by households. Every effort was made to verify their consistency where alternative estimates were available. For instance, 1972 amounts reported in Table 2 are from the Current Population Survey (CPS). This figure, \$4.7 billion, is quite close to the \$4.9 billion figure reported in the 1972–73 Consumer Expenditure Survey of the U.S. Bureau of Labor Statistics (1977, p. 537, Table 8). Similarly, 1975 CPS totals are within 0.1 billion of the Survey of Income and Education total reported in that year. Data from BLS Surveys in 1935–36 and 1945 indicate that at median income levels in survey cities, cash contributions for support of relatives and others not in the household ranged from 0.5 to 0.9 percent of median income. Median income must be used in this case because in 1935–36 and 1945 only households in various cities were interviewed; there was no nationwide sample. These figures are not inconsistent with those presented in Table 2 for 1929.

change in the composition of regular interfamily cash transfers, and in the basis for such giving.²⁵

In order to grasp the “importance” of these figures, and those which follow, one must be aware of what they do and do not show. The digression which follows is designed to convey the content of the data and the significant sources of transfer omitted.

Line 3 contains only data on regular cash interhousehold transfers. The figures do *not* include data on cash or in-kind income transfers between nuclear and related family members (e.g. elderly parents) living in the same household (lines 4 and 6). In fact, the terms *regular*, *interhousehold* and *cash* are all important to differentiate.

The importance of the term *regular* becomes clear if one compares lines 2 and 3 in Table 2. While neither shows much of a trend, total interhousehold cash giving is roughly five times as large as regular interhousehold cash transfers alone.

The term *interhousehold* is crucial because of the dramatic and massive changes in living arrangements between 1940 and 1980. The growth in government cash transfers, particularly Social Security for the aged, has contributed to the decline of the extended family. This trend has led to smaller household size and to increases in measured income inequality—since those who live alone usually have incomes below those of the family which they left. While we cannot always determine the trend in private interfamily but intrahousehold giving, patterns of household dependency—i.e. the trend toward living together (or living apart) is probably a good proxy for changes in the trend in intrahousehold giving. For instance, this trend has been particularly marked for elderly widows. Michael, Fuchs, and Scott (1978) report that due primarily to increased incomes (through Social Security benefits), the proportion of elderly widows living alone increased from 25 percent in 1950 to almost 70 percent in 1976. But elderly widows are only the tip of the proverbial iceberg. U.S. Bureau of Census (1980b: Table 3) indicates other changes since 1976 in household living arrangements.

Table A.1 clearly illustrates these trends for the 1940–80 period. The number of related and unrelated dependent adult units—i.e. those that share the home of another to whom they are related or unrelated—has decreased from 25.9 percent in 1940 to 10.9 percent in 1980 (Table A.1, line 11). This decrease of 58 percent has been fairly uniform across different types of related and unrelated dependent adult units. (Note that from 1970 to 1980 the trend toward fewer unrelated adult units reversed itself owing to two other trends: toward later marriage, and toward younger adults living together unmarried.)

The decline in dependent family units (Table A.1, lines 3 and 5) has continued at a slower rate during the 1970s despite a large increase in dependent female-headed subfamilies and secondary families over this period. Married

²⁵This differentiation is important because of the rapid growth of deserted, divorced, and separated single parent families in recent years. In examining the trend of private interhousehold giving, one would like to abstract from demographic changes such as these which affect the trend in interhousehold transfers. However, because of the infrequency of child support and alimony payments prior to the 1960s, most private cash transfers are likely to be regular contributions to support others prior to 1968, when data which separate these types of giving are first available.

TABLE A.1
TRENDS IN U.S. DEPENDENT ADULT UNITS (IN MILLIONS), 1940-1980

Demographic Group	1940	1950	1960	1970	1980	Percent Change, 1940-1980
1. Primary families	30.104	36.901	43.957	50.436	57.615	91.4%
2. Primary individuals	3.458	4.716	7.894	11.945	20.695	498.5
<i>Related Adult Units</i>						
3. Subfamilies	2.062	2.402	1.514	1.150	1.114	-46.0
4. Other relatives ^a	3.203	3.537	3.971	3.437	3.119 ^b	-2.6
<i>Unrelated Adult Units</i>						
5. Secondary families	0.675	0.465	0.207	0.130	0.344	-49.0
6. Secondary individuals	5.819	4.420	3.198	3.043	5.113	-12.1
7. Total adult units (1+2+3+4+5+6)	45.321	52.441	60.381	70.41	89.114	96.6
8. Total dependent units (3+4+5+6)	11.759	10.824	8.790	7.760	9.690	-17.6
9. Related (3+4)	5.265	5.939	5.485	4.857	4.233	-19.6
10. Unrelated (5+6)	6.494	4.885	3.305	3.173	5.457	-16.0
<i>Percentage of All Adult Units Who Are</i>						
11. Dependent units (12+15)	25.9%	20.6%	14.6%	11.1%	10.9%	-57.9%
12. Related dependent units	11.6	11.3	9.1	6.5	4.88	-58.6
13. (Subfamilies)	(4.5)	(4.6)	(2.5)	(1.6)	(1.3)	-71.1
14. (Other families)	(7.1)	(6.7)	(6.6)	(4.9)	(3.5)	-50.7
15. Unrelated dependent units	14.3	9.3	5.5	4.5	6.1	-57.3
16. (Secondary families)	(1.5)	(0.8)	(0.3)	(0.2)	(0.4)	-73.3
17. (Secondary individuals)	(12.8)	(8.5)	(5.2)	(4.3)	(5.7)	-55.5
18. Married couples not living in own household	6.8	5.6	2.4	1.4	1.2	-82.3
<i>Number (Millions)</i>						
19. Unrelated individuals living alone	2.684	3.954	6.896	10.851	17.861	565.4
20. Parents living in households of their children	2.235	2.755	2.574	2.273	1.740	-22.1

Sources: U.S. Bureau of Census (1979, 1980b) and official Census figures for 1940, 1950, 1960, 1970.

^aOther relatives are adults age 21 or over not in subfamilies but related to the household head. The estimates are derived from 1940-1970 Census count of related persons living in the household of another age 21 or over, minus members of subfamilies and grandchildren.

^bAuthors' estimate based on 1980 CPS and preliminary 1980 Census figures.

^cIncluded in 12.

couples (line 18) are now almost all living in their own households. The decline in the number of (primarily elderly) parents who live with younger relatives is shown in line 20 (these may also be part of either lines 12, 13 or 14). These data indicate that the number of parents (of any age) living in the household of a child has declined from roughly 2.8 million persons in 1950 to about 1.7 million in 1980, despite the rapid increase in the elderly population, particularly those over age 80, during this period. This trend also reveals itself in the tremendous, nearly sevenfold, increase in the number of unrelated individuals who are living alone, and corroborates the evidence given by Michael, Fuchs, and Scott (1978). A final piece of evidence which speaks to the desirability of this trend is the finding of Morgan *et al.* (1962) that 73 percent of extended

family units in 1959 preferred to live alone but were economically better off living with younger relatives. Between 1960 and 1980 government transfer payments to the elderly (in the form of OASDI, Medicare, Medicaid, and/or SSI) and to others (AFDC, food stamps, public housing, etc.) increased tremendously. Given the desire to live alone, and given the public means to reach this goal, the massive trends revealed in this table should come as no surprise.

Despite the rapid growth in the number of households in Table A.1 which these simultaneous developments have encouraged, Table 2 indicates that there has been little or no increase in either regular or total private interhousehold gifts of cash relative to aggregate income since 1950. Moreover, the overall percentage of households reporting receipt of regular private support payments increased only from 3 percent in 1959 (Morgan *et al.*, 1962) to 4 percent in 1960–61 and 1972–73 (U.S. Bureau of Labor Statistics, 1966, 1977). In 1972–73 only 2 percent of all households headed by a person age 65 or over reported receipt of regular cash support payments from others outside the household. Clearly, interhousehold and interfamilial cash private transfers play only a minor role in today's transfer system. But even in earlier years, before the rapid increase in public transfers, it appears that interhousehold cash transfers were not much larger in scope. One reason for the relatively low level of cash interhousehold transfers prior to the 1960s was that many transfer recipients lived in the same household—or extended family—as did the transfer contributor. Table A.1 indicates that over one-fifth of all adult units lived in the household of another as late as 1950. These transfers therefore do not show up in line 2 of Table 2. Another reason, to which we turn, is the form of the transfer.

Morgan *et al.* (1962, p. 260) found that in 1959 the large majority of interfamilial transfers to relatives were in-kind. In that year the value of in-kind benefits given to adult units living with nuclear families in the form of food and housing alone amounted to \$4.5 billion, or 1.4 percent of personal income (Table 2, line 6). They found that among their estimated 11 million extended family adult units,²⁶ 76 percent had their own incomes, and thus were contributing to their own economic well-being and possibly also to the well-being of the members of the nuclear family with which they lived. This \$4.5 billion ignores intrahousehold transfers among the roughly 3.3 million unrelated dependent adult units in that year. However, even ignoring these differences, and assuming that the proportion of personal income transferred to all dependent units varies directly with changes in the percentage of adult units who are dependent, we have estimated the trend in intrahousehold food and housing transfers as shown in

²⁶Table A.1 (line 9) indicates only 5.5 million such units in 1960 according to the U.S. Census. This discrepancy may be explained by the fact that Morgan *et al.* relied on a household sample of only 2,800 units and a population weighting scheme that was probably based on the 1950 Census. The combined error in weighting and sampling could yield such a discrepancy. On the other hand, because no separate data for "other relatives," i.e. nonfamily dependent adult units, are available, the estimates in line 4 of Table A.1 are quite conservatively based on 1960 estimates of the number of adults (not adult units) who live with relatives, adjusted to remove subfamilies, the children in subfamilies, and "adults" under age 21. Because some of these might be considered separate adult units, this estimate of 5.5 million is quite conservative. However, the actual number of such units was probably much closer to 5.5 million, perhaps 6.5 to 7.0 million, rather than the 11 million reported by Morgan *et al.* (1962).

line 6 of Table 2.²⁷ The 1935–36 estimate in line 6 of Table 2 is based on the extent of dependent adult units in 1940.

We were not able to estimate intrahousehold (but interfamily) gifts of cash (line 4 of Table 2),²⁸ nor were we able to estimate interhousehold gifts in-kind. Both of these are probably smaller, however, than those types of transfers for which we do have estimates. The estimation of similar public sector transfers (lines 7–9 of Table 2) was quite straightforward and needs no explanation. Sources for all data are given in this Appendix and in the source note of Table 2. Note that because government transfer amounts are taken from administrative budget outlays, they are more accurate than interfamily transfers, which are universally derived from survey questions and hence are subject to underreporting. However, unless underreporting of various types of private interfamily transfers has changed dramatically over the relevant time period, only the absolute level of private interfamily transfer, and not its trend, will be affected by this bias.

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²⁷For example, in 1960 1.4 percent of personal income consisted of intrahousehold transfers in kind, and 14.6 percent of adult units were dependent. In 1980 the percentage of adult units who were dependent had fallen to 10.9 percent, a 25 percent decrease. Reducing the 1.4 percent of personal income estimate by 25 per cent yields an estimate of 1 percent of personal income for these transfers in 1980.

²⁸Moon (1977, p. 74) used a formula for income-sharing to estimate that in 1967 the value of cash intrahousehold transfers made by the aged in extended families to the nuclear family was slightly greater than the amount of cash intrahousehold transfers received by these aged persons. Thus, there may be a large amount of cash transfer each way among nuclear families living in the same household, but with little net effect within the household unit. Such reciprocal contributions can hardly be transfers in any meaningful sense.

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