

**The Resource Package of New Yorkers:  
Public and Private Assistance**

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## Introduction

Many welfare state scholars use the concept of “income packaging” to measure household resources obtained from market earnings and government income transfers. Others go further and include governmental services, in-kind benefits and tax benefits in what is called the “social benefit packaging”. In this paper, we add private assistance from family and “kith and kin networks” to the social benefit package in order to get a picture of the total resource package of New York City families. We use data from the New York City Social Indicators Survey (NYSIS) of 1997, 1999 and 2002 to analyze the values and the distribution of both public and private assistance<sup>1</sup> and to explore the interplay between public and private assistance at the family level.

We construct a comprehensive measure of family-level resource packages that includes public social insurance, public cash transfers, targeted tax credits and deductions, and in-kind assistance. Our measure of private assistance includes both cash gifts, for specific and unrestricted purposes, and direct assistance that is provided by family or friends. Using a combination of survey and administrative data, we estimate the probability of receiving each form of assistance and its value.

We use these measures to analyze the contribution of public and private assistance to total resource packages for families at different income levels and to conduct initial analyses of the effect of public assistance on help provided through the private “safety net.” We conclude that private assistance constitutes a small but not negligible component of the total family resource package and that appears to function as a

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<sup>1</sup> We use the term “assistance” to refer to both cash and in-kind goods and services;. To avoid confusion, we use “public welfare assistance” to refer to the narrower set of government programs that provide means-tested cash benefits to low-income families.

supplement to public forms of assistance with very modest evidence of substitution effects.

## **Background**

The concept of income packaging has been used by several authors to describe how individuals and families obtain their resources through different mechanisms: the market (e.g. earnings), government programs (e.g. public assistance, social insurance) and private forms of assistance (e.g. interfamily transfers). A considerable amount of research has examined the market and governmental components of the income package in the US and other industrialized countries (Maître, Whelan, & Nolan, 2002; Meyers & Garcia, 2004; Pedersen, 2004; Rainwater & Smeeding, 1997; Rein & Heinz, 2001; Todd & Sullivan, 2002). Most of these studies, however, do not look at private assistance as a component of the total resource package, or leave it as an “other” category along with other sources of income that are “private” in the sense that they come from the market (e.g. rental property income, capital income or private pensions), but that are not necessarily a private transfer between individuals or families.

There is some evidence that private income<sup>2</sup> represents a relatively small component of the income package for families in European countries, ranging from less than 2 percent of household disposable income in Denmark and The Netherlands, to as much as 6 percent in Greece (Maître et al., 2002). For the United States, however, there is not a recent comparable national figure available. Lampman & Smeeding (1983) estimated that interfamily transfers (including cash, food and housing) represented 5

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<sup>2</sup> In these studies private income includes private transfers plus income from rental property and capital income, which is market income. So if we exclude these market income components, the relative importance of private transfers in European countries is even smaller.

percent of families' total incomes in 1979. Although their importance declined significantly compared to the mid 1930s, they still represented nearly one third (31 percent) of total transfers received by families.

More recent studies have looked at private transfers for some subpopulations. For example, Hao (1996) used data from the National Survey of Families and Households and estimated that 26 percent of all families with children received private transfers (most of them interfamily transfers, only 4 percent of transfers came from friends and neighbors). A study using the National Survey of American Families (NSAF) showed that private cash transfers constitute near 8 percent of total family income for families with children (Acs & Gallagher, 1999). Another study using data from the 1988 Panel Study of Income Dynamics (PSID) showed that near one third (29 percent) of people with some unemployment during the year received private transfers and that these transfers constituted 2.5 percent of total household income (Schoeni, 2002). Most of these studies have been limited to analyses of cash gifts and, to our knowledge, none have recently investigated variation in private transfers across income groups.

Research has also been limited on the question of how public and private assistance function as complements or as substitutes. The few studies in this area suggest mixed conclusion. Lampman and Smeeding (1983) found that between 1935 and 1979, private transfers as a share of total personal income in the U.S. declined from 6.5 to 5 percent while public transfers increased from 2.8 to 11.2 percent. Although this provides some evidence for substitution, with the data available it was not possible to measure this. Cox and Jakubson (1995) used 1979 data from the President's Commission on Pension Policy (PCPP) survey and found that public-income transfers had no significant

crowding-out effects on private transfers (i.e. the amount of public transfers was not significantly associated with a decline in private transfers), rejecting the hypothesis that public income transfers are supplanting a private “safety-net”. On the other hand, Schoeni (2002) used data from a supplement to the Panel Study of Income Dynamics (PSID) and found that among the unemployed private benefits were displaced by unemployment compensation benefits by as much as 24-40 cents per dollar.

These studies have been limited, primarily by available data, in their measures of both the public and the private resources obtained by families. Measures of public assistance have typically excluded in-kind goods and services, which make up a large and growing component of U.S. welfare state assistance for low-income families. Many fail to capture assistance provided through targeted tax benefits, such as the mortgage tax deduction, that benefit middle- and higher-income families. Measures of private assistance, when available, have also been limited to cash gifts and have often been grouped with “other” income from, for example, rental property and capital investments.

In this paper we address some of the limitations in this literature by constructing a more comprehensive measure of the family “resource package.” We construct more comprehensive measures of public assistance by including both targeted tax benefits and in-kind goods and services. We construct measures of private assistance that include both cash gifts and direct assistance with, for example, housing and child care. This allows us to more accurately estimate the contribution of interfamily assistance to families’ total resources, to examine this contribution by income level, and to conduct initial analyses of the relationship between public and private assistance.

## **Data and methods**

We use three waves of data from the New York Social Indicators Survey (NYSIS). The NYSIS is a cross-sectional survey and is conducted every other year by telephone with a representative sample of families from the five boroughs of the City. The survey uses computer assisted telephone interview (CATI) technology and random digit dialing (RDD) to interview approximately 1500 families. For this analysis, we pooled data from 1997, 1999 and 2002 for a total of 4,375 households.

Each cross-sectional NYSIS sample includes a core sample of randomly selected households and an oversample of households with children ages 0-17. The response rates among all households, including those in which a respondent was never reached, were between 28% and 30% for the cross-section samples and 35% and 42% for the caregiver samples. Analysis weights were developed with a nine-step weighting procedure based on inverse-probability weighting and poststratification to correct for various sampling and nonsampling biases arising from the survey design and selection procedure. Weight adjustments were made to the stratified cases based on information from the sampling design about the probabilities of their selection, and comparison with the 1990 and 2000 Census<sup>3</sup>.

The survey is designed to document individual and family well-being and to measure the extent and amount of support from government and private sources. Questions about support are asked at the family level, defined as the respondent, his/her resident spouse or partner, and children related to the respondent and/or spouse/partner as

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<sup>3</sup> A more detailed discussion of the weighting procedure can be found in Meyers & Garcia (2004).

biological children, stepchildren, or legal dependents (e.g. children for whom the respondent was the guardian).<sup>4</sup>

### *Measuring the Total Resource Package*

To estimate the value of public and private assistance, we make use of detailed questions about respondents' receipt of specific forms of cash, in-kind, and tax-based assistance from government, as well as cash and in-kind assistance from family and friends. Measure of public assistance include social insurance (Social Security and Survivor's benefits, Unemployment Insurance and Disability Insurance); means-tested cash transfers (public welfare assistance [Temporary Assistance for Needy Families or TANF] and Supplemental Security Income [SSI]); in-kind food assistance (Food Stamps, the Women, Infants and Children food program [WIC], school lunches, and emergency food relief), health insurance (government health insurance and government tax expenditures for employer-provided health insurance), housing (public housing, Section 8 and Jiggets), child-care subsidies, public primary school education, and targeted tax benefits (Earned Income Tax Credit, mortgage interest tax deduction, child and dependent tax credit, child care flexible spending accounts, child tax credit, medical expense deduction and health expenditure spending accounts). The domains of private assistance include child support and alimony<sup>5</sup>, help in cash to pay for specific necessities

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<sup>4</sup> This definition differs from the Census definition of either household or family. We adopt it because it represents the most reasonable 'economic unit' on which we can collect reliable, detailed information on income sources. The most notable difference from the Census definitions is that under our definition some co-resident and related adults may be counted as separate, one-person families, e.g. an adult child living with his/her mother.

<sup>5</sup> We count child support as private assistance because it is a transfer between two adults with a familial tie, but unlike all the other private transfers discussed here, it is required and regulated by law and government. Classifying child support as public would not change results substantially because it is relatively

(health expenditures, tuition, child care and housing), other cash gifts, and in-kind support in the form of housing, child care and food.

After determining receipt of assistance, we use survey, administrative and other data to estimate the value of each form of public and private benefits received at the family level in the prior year.

Families' market income is calculated as total earnings for the respondent and his/her spouse or resident partner in the prior year. Disposable income is measured by combining market income with the reported or imputed value of public and private assistance, and subtracting estimated payroll taxes, federal and state income taxes, and property taxes.<sup>6</sup>

The values of public and private benefits, market and disposable income are adjusted for family size by dividing the total family-level value by the equivalent scale derived from the Federal Poverty Guidelines<sup>7</sup>. All values are set to \$2001 using the Consumer Price Index.

#### *Measuring receipt and value of the public assistance package*

We determine the receipt of each form of public assistance using detailed NYSIS questions about whether the respondent (and his/her partner and children, as appropriate) received any assistance in the prior 12 months. There were a few instances in which it was necessary to impute whether or not the family received benefits. This was the case

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uncommon. Only 2% of all families report receiving child support and the amount received is less than the average private transfer—just a bit over \$4000.

<sup>6</sup> Tax liabilities are estimated on the basis of market and transfer income, family composition, and homeownership using the TAXSIM estimation model (Feenberg & Couttes, 1993). The calculations were obtained directly from NBER at <http://www.nber.org/taxsim/>.

<sup>7</sup> US Department of Health and Human Services. "HHS Poverty Guidelines: <http://aspe.hhs.gov/poverty/figures-fed-reg.shtml>

for tax benefits and child care subsidies in 1997, when there were limited or no questions about these benefits as well as public housing in 1999, where the survey questionnaire changed causing a significant change in the reciprocity rate. For details on how these imputations were done please refer to Appendix 2.

The value of some forms of assistance are estimated directly from the NYSIS data; in the case of most cash benefits, for example, we rely on respondents' self-reports for both receipt and amount. For other forms of assistance – e.g. in-kind goods and services and tax benefits – for which survey respondents are unlikely to know exact values, we either (1) simulate the value of benefits using program rules and family characteristics or (2) impute values using administrative data on program expenditures. To the extent possible we impute these values specifically for New York City or, if appropriate data for the city was not available, for New York State.

Simulated values are used primarily for programs in which we can use detailed rules to estimate family-level benefits (i.e. Food Stamps and Public Assistance) or to estimate tax benefits. We simulate benefits by applying program or tax rules to relevant NYSIS data, e.g. on income, family composition, housing or other characteristics. Simulations for most tax benefits and for benefits using tax rates were calculated using data from the NYSIS with the TAXSIM estimation model (Feenberg & Couttes, 1993),<sup>8</sup> which takes into account family composition, earned and unearned income, itemized deductions and child care expenses.

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<sup>8</sup> The calculations were obtained directly from NBER at <http://www.nber.org/taxsim/>

Most of the NYSIS estimates of public assistance benefits correspond to 75 to 100 percent of the program caseloads<sup>9</sup> and expenditures reported in administrative data. Correspondence is lower on three means tested programs (WIC, SSI and TANF); this may reflect failure to capture more disadvantaged families in the sample or reluctance to report these benefits. Correspondence is over 100 percent on a few items, including medical expense tax deductions, unemployment insurance, and some early education programs. This might be due to limitations in the administrative data we obtained, which either fail to capture substantial changes in caseloads between time periods or is not available at the city level (case of tax expenditures<sup>10</sup>). For a more detailed description of the imputation methodology and full tables of values please refer to Meyers and Garcia (2004).

#### *Measuring receipt and value of the private assistance package*

With the exception of housing assistance, we determine the receipt of each form of private assistance using detailed NYSIS questions about whether the respondent (and his/her partner and children, as appropriate) received specific forms of assistance from family or friends in the prior 12 months. Survey questions asked whether the respondent received any cash assistance from family or friends to pay for expenditures on health care, tuition, child care and housing. In addition, we use information on whether he/she

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<sup>9</sup> Total recipients are estimated by weighting the NYSIS to the population using family-level weights calculated from the U.S. Census. See Appendix 1 for details. Details on other adjustments to the NYSIS are available in Garcia and Meyers (2003), *Who Gets s What from Government: Estimating the Value of In-Kind Benefits..*

<sup>10</sup> Data on tax collections and unemployment insurance are available at the state level. In order to get an estimate at the city level, the authors used the proportion of tax returns from New York City out of the total returns in New York State, which may underestimate New York City figures.

received any other (unrestricted) cash gifts from family or friends in the last 12 months<sup>11</sup>.

We measure in-kind assistance with child care using detailed questions on help from family or friends to baby-sit in the last year. Receipt of in-kind help with food was measured using a question about whether the respondent (or partner and children) received free food or meals from family or friends because they did not have enough money to buy food.

In the case of housing assistance, we considered a respondent a beneficiary of housing if: he/she reported his/her housing situation as “staying there” (as opposed to renting or owning), or if he/she moved in with someone else in the last 12 months because of financial reasons, or if he/she was renting but sharing the unit with another family (i.e. doubling up) and the per-capita amount of rent paid was lower than the per-capita amount of Fair Market Rent according to the size of the unit<sup>12</sup>.

After determining receipt of assistance, we use survey data to estimate the value of each form of cash assistance received at the family level in the prior year from family and friends. We used two methods to value private assistance. Cash gifts from family, whether general or for specific purposes, were values based on respondent self-report from wave 2 and were imputed using multiple imputation techniques for waves 1 and 3 based on wave 2<sup>13</sup>. In-kind assistance from family and friends was imputed using utilization data from the survey and market values that are used by public agencies that

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<sup>11</sup> In 2002 NYSIS also includes a question on cash gifts in the last 5 years and then asks about the last 12 months.

<sup>12</sup> Per-capita amount of rent paid was the rent divided by number of people in the family (i.e. respondent, spouse/partner and own children). Per-capita FMR was the FMR divided by number of people in the household.

<sup>13</sup> Imputation was done using multiple regression analysis. We used as predictors education, race/ethnicity, age, immigration status, family income, number of children and whether or not the respondent was living with a spouse or partner.

provide similar subsidies<sup>14</sup>. In the case of housing assistance, the value is equal to the difference between the per-capita rent paid by the respondent (total rent paid divided by number of people in the nuclear family) and the per-capita rent paid by the owner/renter of the unit (total rent paid by owner divided by number of people in the household). When data on rent paid by owner/renter was not available, we used Fair Market Rent by apartment size. In the case of child care, the value of the assistance is based on New York State market rates for family childcare (see details in Appendix 2).

This approach is limited insofar as it does not capture the quality of the assistance<sup>15</sup>. However, it has the advantage of allowing us to assign a dollar value to private assistance that is comparable to public assistance.

#### *Estimating the association between private and public assistance*

In addition to describing the value and distribution of public and private assistance, we are interested in the extent to which public assistance complements private help in supplementing market resources or serves as a substitute for resources from private networks or “private safety nets” that are already in place.

Predicted relationships between public and private benefits are complex. Standard economic theory would predict that utility maximizing economic units (families or households) would substitute public benefits, when available, for private forms of assistance. This would occur, for example, when social insurance programs provide

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<sup>14</sup> The survey provides very limited data on the amount of food received by family or friends, making it very difficult to accurately estimate the value of private support with food. Therefore the value of this component is not included in the total package.

<sup>15</sup> We only take into account apartment size and do not adjust for potential differences in the conditions of the housing unit, or other characteristics such as having more or less privacy, or having access to a kitchen. In the case of child care, we also know if the person is receiving help but we do not know the quality of the care.

income to unemployed or aged individuals who would otherwise be supported by family members. A similar substitution may occur when in-kind benefits, such as Food Stamps or child care subsidies, provide goods or services that might otherwise be provided by kin networks.

In other cases, private assistance may complement public benefits through supplementation or substitution. Families may supplement assistance from public sources in, for example, housing, by providing additional cash assistance to family members who also benefit from public housing or mortgage tax exemptions. Similarly, families may supplement income from public programs, such as Social Security for aged family member. Private assistance is most likely to substitute for public benefits when it fills gaps in welfare state provisions. This might be expected when public benefits are rationed (e.g. housing assistance), are difficult to access (e.g. public welfare assistance), or provide goods and services that are of lower quality than those provided through kin networks (e.g. child care).

The complexity of the relationships between public and private assistance, and the indeterminacy of causal direction for different forms of assistance, limits our ability to estimate causal models with cross-sectional data. Although we are not able to model causality, we can examine the magnitude and direction of association between private and public assistance. In particular, we are interested in the question of whether receipt of public forms of assistance is associated with lower levels of private assistance, i.e., with the question of whether public programs supplant private help.

The association between public and private assistance is likely to vary for different forms of assistance (e.g., for cash or food or housing assistance). We would not

expect, for example, public income transfers, housing assistance, and education expenditures to have similar effects on private intrafamily transfers; likewise, different forms of private assistance – such as direct housing assistance and cash gifts – are likely to have different relationships with public assistance. Estimating these associations is further complicated by the targeting of many forms of public assistance in the U.S. welfare state. Eligibility for and levels of cash assistance (including Public Assistance and Supplementation Security Assistance) and in-kind assistance (including Food Stamps, housing and child care) are determined in part by families' market income and private assistance (cash gifts and some forms of in-kind assistance from family members, such as housing and child care). Estimates of the association between private and public assistance may therefore be biased by the endogeneity of public assistance with private forms of assistance.

To address these concerns, we confine our initial analyses to cash and near-cash assistance. Private cash assistance includes cash gifts for specific purposes and unrestricted cash gifts. The full package of public cash and near-cash assistance includes Unemployment Compensation, Social Security retirement and survivor benefits, Disability Insurance, TANF, SSI, Food Stamps, WIC and school lunches; a more restricted measure excludes the near-cash food programs. To address the endogeneity of means-tested public assistance with private resources, we further restrict our analysis to Social Security, a universal and non-means tested program that does not base eligibility or benefit levels on current private income.<sup>16</sup>

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<sup>16</sup> The few empirical studies that have dealt with the endogeneity issue (Cox & Jakubson, 1995; Schoeni, 2002) have used 2 Stage Least Squares methods to resolve this issue and used policy variables as instruments. The problem for us is that we do not observe variation in policy because it is only one city sample, and consequently finding an instrument is very difficult.

We first use Logit regression to estimate the association of public cash and near-cash assistance with the probability of receiving any private assistance; we then use Tobit regression to estimate the association with the amount of private assistance received. Tobit regression allows us to adjust for the censoring of observations, i.e. the potential bias introduced by cases in which no private assistance is observed.

The general models are represented in equations 1 and 2:

$$\log(P/1-P) = \alpha + \gamma_1 G + \gamma_2 M + \beta X + \varepsilon \quad (1)$$

$$T^* = \alpha + \delta_1 G + \delta_2 M + \beta X + \varepsilon \quad (2a)$$

$$T = T^* \text{ if } T^* > 0 \\ = 0, \text{ otherwise} \quad (2b)$$

Where P represents the probability of receiving private assistance, T is the amount of private assistance received, G is the amount of public assistance received, M is market income (earnings, rental property income, income from interests and dividends), and X represents a vector of sociodemographic variables (respondent's age, education, race/ethnicity, nativity, whether the unit is a female headed family, presence of children and family size). The coefficients we are most interested in are  $\gamma_1$  (which represents the “effect” of the amount of public assistance on the odds of receiving any private assistance from family or friends, conditional on market income and sociodemographic characteristics) and  $\delta_1$  (which represents the “effect” of the public assistance on the amount of private assistance received, controlling for market income and sociodemographic characteristics).

Results are reported as coefficients and as estimated effects per \$1,000 in market income and private assistance, with all other covariates set at the sample mean

## **Results**

### *The distribution of public and private assistance*

Private assistance, as Table 1 indicates, are common and the amounts are large. Two out of five people (45%) receive at least one form of private assistance and the mean value of private assistance for those who receive any assistance is nearly \$6,000. Public assistance is even more common and the amounts are even larger. Four out of five people (83 percent) receive at least one form of public assistance and the mean amount among recipients is over \$13,500. All told, 93 percent of New York City families receive either public or private assistance worth on average close to \$15,000 (conditional on receipt).

The most common type of private assistance is help with housing in the form of cash gifts for housing costs and/or in-kind help through ‘doubled up’ or shared living arrangements. If both cash and in-kind help are counted, 30 percent of families in New York City receive private support for housing. Help in other specific areas – including health costs, child care, and tuition costs – are far less common, reported by 6 percent or fewer of respondents.

Considering all types of help, one third of families receive cash from family and friends and nearly one fifth of households receive in-kind private benefits. Cash gifts are received most commonly for housing (19 percent of families), followed by unrestricted gifts (18 percent). In-kind assistance is also most commonly provided in the form of housing (15 percent), followed by food (6 percent) and child care (5 percent).

On the public support side, the most important form of assistance is health insurance. Two thirds of families receive either public health insurance or benefit from tax exclusions for employer-provided health insurance. Nearly one third of families (30 percent) receive cash assistance, most commonly retirement benefits through Social Security (18 percent). Only 5 percent receive means-tested cash benefits through either TANF or SSI. Thirty percent (30 percent) of families receive specific tax benefits; 14 percent benefit from mortgage interest tax deduction and 12 percent receive the EITC.

Figure 1 indicates the value per equivalent adult<sup>17</sup> of public and private assistance by market income quintile<sup>18</sup> for all respondents (i.e., including recipients and non recipients) (for detailed figures please refer to Table A in Appendix 1). The first column represents the composition of the assistance for all families. On average, families receive four times more from public assistance than from private help. Nevertheless, private assistance is not negligible, averaging over \$2,000 per equivalent adult. Of this, about three-quarters is in the form of cash gifts and the remainder in the form of in-kind help.

The total “package” of public and private assistance is progressive, declining monotonically from nearly \$17,000 for those with the lowest market earnings to about \$6,000 for those with the highest.

The amount of private assistance follows a slightly inverse-“U”-shaped distribution. Those at the bottom quintile receive 42 percent more than those at the top quintile, however they receive 18 percent and 21 percent less on average than the second and third quintiles respectively. Because those with higher market earnings receive less in total benefits, however, private benefits actually make up a larger share of their total

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<sup>17</sup> The values presented in this figure are adjusted for family size by dividing the total family-level value by the equivalent scale derived from the Federal Poverty Guidelines

<sup>18</sup> Income quintiles were calculated based on market income per equivalent adult

package: from 25 to 32 percent of the package for those in the top three quintiles, in contrast to only 13 percent for the lowest earners. Families in the lowest income quintile also receive more of their private assistance in the form of in-kind help (27 percent) than those in the highest quintile (17 percent).

In contrast, the distribution of public assistance is highly progressive: families in the bottom quintile receive on average, nearly \$15,000, or more than three times the amount (\$4500) of those in the top quintile. The share of public assistance received as cash is relatively similar across income groups, but the share provided through in-kind benefits is sharply higher for lower than for higher income families (72 vs. 49 percent), and the share provided through tax benefits correspondingly lower (less than 1 percent vs. 19 percent).

**Fig. 1 Transfers per equivalent adult by income quintile (2001 Dollars)**

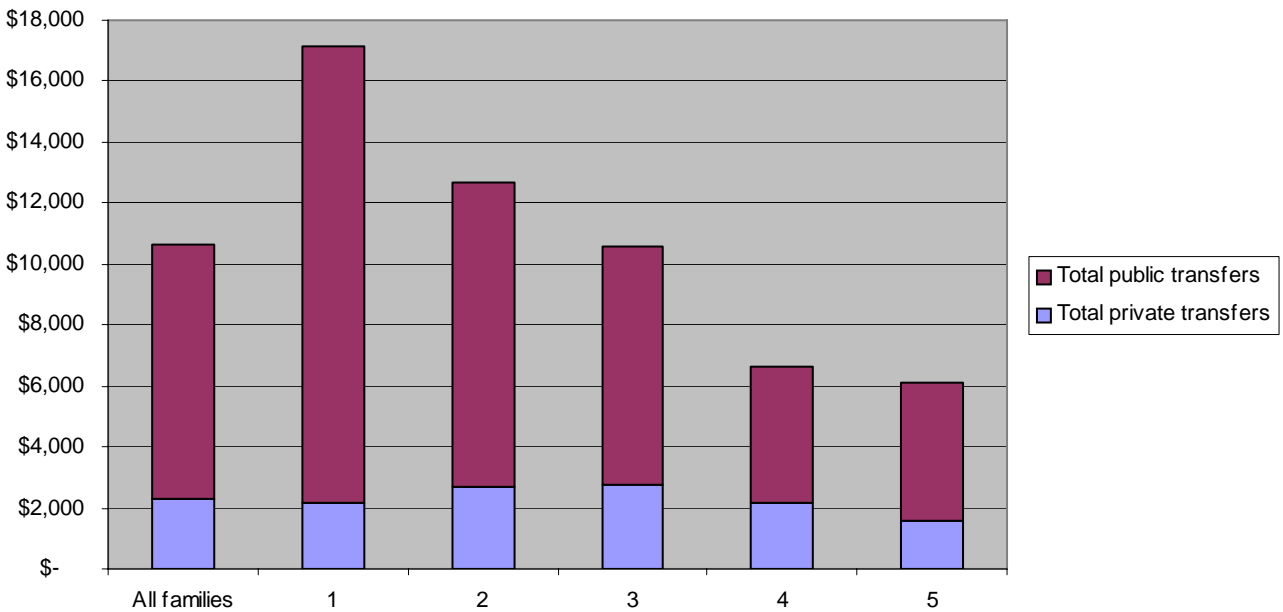
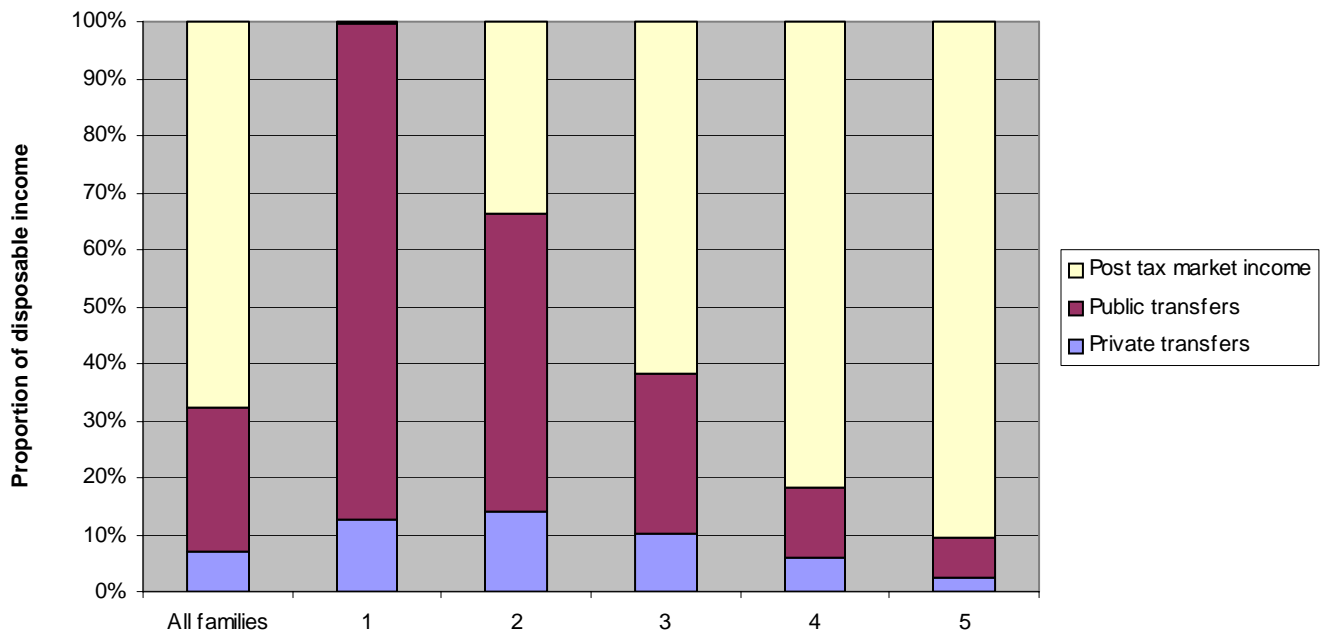


Figure 2 indicates the components of family’s income package (public assistance, private assistance and market income, net of taxes) as a proportion of total disposable (post-tax and transfer) income (for detailed figures, please refer to Table A in Appendix 1). Although private assistance is smaller than public, it constitutes a non-trivial portion of families’ income, particularly for the first three income quintiles. On average for all families, private assistance represents 7 percent of disposable income, however it constitutes 13 and 14 percent of total disposable income for those in the bottom two quintiles (with very little market income) and 10 percent of total disposable income for families in the third quintile.

**Fig 2. Components of the income package by income quintile**



*How does public and private assistance interact?*

Table 2 reports multivariate results for the probability of receiving private cash assistance as a function of market income, individual and family characteristics, and various measures of public cash and near-cash assistance. In model 1, public assistance is restricted to cash programs (Social Security, Disability Insurance, Unemployment Insurance, TANF and SSI); in model 2, in-kind food assistance is added to cash assistance (Food Stamps, WIC and School Lunches).

Market income is negatively associated with the probability of private support. Female headed families are more likely to receive private assistance than families in other living arrangements. In contrast, families with elderly are significantly less likely to receive private assistance than families with young adults.

After controlling for market income and sociodemographic characteristics, each \$1,000 in public cash assistance received is associated with a small reduction of 0.29 percent in the probability of receiving any private assistance. When the measure of public assistance is expanded to include in-kind food stamps, the estimated coefficient is slightly smaller and only marginally significant ( $p < .10$ ).

In table 3 we present the multivariate results for the total amount of private assistance, using the same measures of public cash assistance and public cash plus in-kind food assistance. The magnitude of the association between public assistance and private help, although significant, is relatively small (private assistance is reduced by 3 cents for each dollar of public cash assistance). The addition of in-kind food assistance to public assistance results in a slightly smaller and only marginally significant coefficient.

As discussed above, these estimates may be biased by the endogeneity of public assistance with private interfamily assistance. In table 4, we report selected coefficients for Tobit regressions in which public cash assistance is restricted to Social Security, which is non means-tested. The point estimate of the effect of the amount of Social Security on the amount of private assistance received is slightly smaller than for all public cash assistance and does not reach statistical significance. This might suggest that (at least for Social Security), there is not a substantial substitution effect and private assistance has the potential to supplement rather than substitute for public benefits.

## **Conclusions**

This paper explores a new, more comprehensive measure of assistance received by New York City families. It suggests the importance of including both multiple dimensions of cash and non-cash assistance, as well as public and private forms of assistance, when measuring the total resource package of families.

Using these more comprehensive measures, we find that nearly half of all families report some form of private assistance and over 80 percent receive some form of public assistance. Similar to previous research, we found that private assistance is a small component of families' total resource package. Although small, our more comprehensive measure of private assistance indicates that the contribution of private assistance is not negligible, representing no less than 10 percent of total disposable income for the bottom 60 percent of the market income distribution. This is considerably higher than the (more restricted) measures of private assistance in European countries as well as prior studies in the U.S. About one-quarter of this private assistance is provided in the form of non-

cash, direct assistance with housing and child care – forms of assistance that are rarely measured in household surveys.

The contribution of private assistance varies with both market income and with other socio-demographic characteristics. Private assistance generally declines with market income, although the relationship is nonlinear, with the highest levels of private assistance reported by individuals with market earnings in the second-lowest and middle income quintiles. The form of assistance also varies, with lower income families more likely to receive concrete help – with housing or child care -- than those with greater market earnings.

Our more comprehensive measure of public assistance suggests that the large majority of families receive some form of public benefits, which make up about one-quarter of total, disposal income. This assistance makes up a much greater share of total resources for low income families. About two-thirds of public assistance is provided through in-kind programs, primarily health insurance and public education. Low-income families receive a greater share of their income through in-kind programs than more affluent families, who receive a greater share through tax benefits.

Multivariate analyses suggest that the amount of public cash and near-cash assistance received by individuals may have a very modest substitution effect on the amount of assistance provided through private networks. When all forms of public cash assistance are considered, the association is small and negative with both the estimated likelihood and the estimated amount of private assistance. When the analysis is restricted to Social Security, which is non-means tested and therefore exogenous to private assistance, the estimated coefficients are smaller and not statistically significant. This

suggests that public cash assistance does not play a large role in supplanting “private safety nets” but rather complements the resources available to families.

This analysis is limited in a number of important respects. The relationship between public and private assistance is likely to vary across various forms of assistance. It is possible that patterns of substitution and supplementation vary by type of assistance (Schoeni, 2002). Although we attempt to control for endogeneity in our estimation of substitution, we are limited in our ability to address this issue by the lack of policy variation in our one-city sample. We make use of one form of exogenous public assistance, Social Security, to address this concern. Since these benefits are largely limited to the aged, however, our estimates may be confounded by patterns of intergenerational transfers within families.

Although limited, these analyses suggest directions for future research. Our more comprehensive measure of family resource package suggests the importance of considering both non-cash and private forms of assistance. We hope to use these measures to examine variation across other socio-demographic dimensions and to explore variations in the mechanisms through which public and private assistance interact.

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**Table 1. Private and Public transfers (weighted figures)**

	% (N=4,375)	Mean among recipients (2001 \$)
Any private transfer	45	5,860
Any public transfer	83	13,610
Any transfer (public or private)	93	15,067
<b>PRIVATE SUPPORT</b>		
Child support or alimony	2	4,191
<u>Cash transfers</u>		
Cash receipt for specific uses		
Health expenditures	3.5	1,312
Tuition for children	0.5	1,993
Child care	0.5	2,443
Housing	19.4	6,002
Any help for specific uses	22.1	5,568
Cash gift	17.9	3,330
Any cash (gift or for specific uses)	33.3	5,483
<u>In-kind transfers</u>		
Housing (comparing FMR and rent paid)	15	3,583
Child care	6	3,429
Food	6	n/a
Any in-kind transfers	20	n/a
<b>PUBLIC SUPPORT</b>		
<u>Cash transfers</u>		
Unemployment Compensation	7	4,482
Social Security	18	10,582
SSI	5	6,061
Public Assistance	5	4,737
Any cash transfer	30	8,941
<u>In-kind transfers</u>		
<b>Food</b>		
Food stamps	9	2,528
WIC	3	912
School lunches	7	701
Emergency food relief	3	603
Any food	16	2,048
<b>Health</b>		
Government health insurance	30	10,736
Employer health insurance (tax piece)	46	906
Any health insurance	67	5,341
<b>Housing</b>		
Public housing	9	8,944
Section 8	4	5,846
Jiggets	0.3	3,285
Any housing subsidies	12.3	8,867
<b>Child care and Education</b>		
Child care subsidies	7	7,928
Public education	14	17,364
<b>Any public in-kind</b>	75	10,677
<u>Tax benefits</u>		
EITC	12	1,825
Mortgage interest tax deduction	14	2,288
Child and Dependent Tax Credit	4	743
Child Care Flexible Spending Accounts	0.4	723
Child Tax Credit	4	625
Medical Expenses Deduction	5	1,441
Health Expenditures Spending Accounts	7	426
Any tax benefits	30	1,928

**Table 2. Logit regression on total private assistance (N=3,970)**

	Model 1		Model 2	
	Coef.	Estimated Effect	Coef.	Estimated Effect <sup>a</sup>
Market income	-1.07*10 <sup>-5</sup> *** (1.63*10 <sup>-6</sup> )	-1.29*10 <sup>-6</sup> *** (.000)	-1.08*10 <sup>-5</sup> *** (1.64*10 <sup>-6</sup> )	-1.30*10 <sup>-6</sup> *** (.000)
<i>Public Transfers</i>				
All cash	-2.39*10 <sup>-5</sup> (1.19*10 <sup>-5</sup> )	-2.87*10 <sup>-6</sup> *	N/A	N/A
All cash plus food	N/A	N/A	1.96*10 <sup>-5</sup> + (1.04*10 <sup>-5</sup> )	-2.36*10 <sup>-6</sup> + (.000)
Black	-.045 (.127)	-.005 (.015)	-.046 (.127)	-.005 (.015)
Hispanic	0.112 (.127)	.014 (.016)	1.14 (.127)	.014 (.016)
Other race	-.190 (.194)	-.022 (.021)	-.191 (.194)	-.022 (.021)
Less than high school	-.051 (.160)	-.006 (.019)	-.045 (.160)	-.005 (.019)
High school/GED	-.303 * (.134)	-.035 ** (.015)	-.301 * (.134)	-.034 * (.015)
Some college	-.164 (.128)	-.019 (.015)	-.165 (.128)	-.019 (.015)
Female-headed HH	.327 * (.138)	.042 * (.019)	.344 * (.140)	.045 * (.019)
Age 30-64	-.616 *** (.099)	-.081 *** (.014)	-.624 *** (.099)	-.082 *** (.014)
Age 65 over	-1.62 *** (.268)	-.118 *** (.011)	-1.66 *** (.265)	-.120 *** (.010)
Family with kids	-.062 (.172)	-.008 (.021)	-.076 (.172)	-.009 (.021)
Number of people in family	-.154 ** (.055)	-.019 ** (.007)	-.143 ** (.056)	-.017 ** (.007)
Immigrant	.108 (.097)	.013 (.012)	.109 (.097)	.013 (.012)

Standard errors are reported in parentheses  
 \*\*\* p<0.001; \*\* p<0.01; \* p<0.05; + p<0.10

<sup>a</sup> All variables set at their mean  
 N/A: not applicable

**Table 3. Tobit regression on private assistance (N=3,970)**

	<b>Model 1</b>		<b>Model 2</b>	
Market income	-.042	***	-.042	***
	(.007)		(.007)	
<i>Public Transfers</i>				
All cash	-.100	*	N/A	
	(.050)			
All cash plus food	N/A		-.079	+
			(.044)	
Black	-5.87		7.03	
	(552)		(552)	
Hispanic	957.348	+	964	+
	(553)		(553)	
Other race	-353.797		-355	
	(833)		(833)	
Less than high school	-408.952		-385	
	(702)		(703)	
High school/GED	-1782.291	**	-1772	**
	(583)		(583)	
Some college	-1460.241	**	-1459	**
	(554)		(554)	
Female-headed HH	1331.798	*	1385	*
	(610)		(615)	
Age 30-64	-3112.753	***	-3145	***
	(451)		(450)	
Age 65 over	-7483.975	***	-7657	***
	(1112)		(1098)	
Family with kids	-622.271		-673	
	(735)		(737)	
Number of people in family	-680.182	**	-638.136	**
	(227)		(230)	
Immigrant	372.975		380.618	
	(426)		(426)	

Standard errors are reported in parentheses  
 \*\*\* p<0.001; \*\* p<0.01; \* p<0.05; + p<0.10  
 N/A: not applicable

**Table 4. Logit and Tobit regressions on total private transfers as function of social security benefits<sup>1</sup> (N=3,970)**

	<i>Logit</i>		<i>Tobit</i>	
Market income	-1.04*10 <sup>-5</sup> (1.60*10 <sup>-6</sup> )	***	-.040 (.007)	***
Social security benefits	-2.25*10 <sup>-5</sup> (1.58*10 <sup>-5</sup> )		-.090 (.064)	

Standard errors are reported in parentheses  
 \*\*\* p<0.001; \*\* p<0.01; \* p<0.05; + p<0.1

<sup>1</sup>Includes controls for market income, race, education, age, family with kids, number of people in the family and immigration status.

## Appendix 1:

**Table A. Equivalent values of private and public assistance by market income quintile (amounts are in dollars adjusted by family)\***

	Income Quintile					
	All families	1	2	3	4	5
Market Income <sup>a</sup>	27,483	61	6,530	18,966	35,201	76,493
Private assistance	2,268	2,197	2,676	2,782	2,140	1,547
Public assistance	8,369	14,938	10,029	7,778	4,503	4,555
Total assistance	10,637	17,135	12,705	10,560	6,643	6,102
Taxes paid	5,258	8	121	1,846	5,568	18,660
Total disposable income <sup>b</sup>	32,862	17,189	19,114	27,680	36,276	63,935
<b>PRIVATE ASSISTANCE</b>						
Child support or alimony	56	59	82	57	51	32
<b>Cash</b>						
Cash receipts for specific uses						
Health expenditures	41	49	58	32	58	10
Tuition for children	6	6	7	4	6	4
Child care	7	4	7	10	9	3
Housing	1,091	1,315	978	1,355	1,200	615
Any help for specific uses	1,145	1,374	1,051	1,402	1,273	633
Cash gift	519	186	870	507	414	611
Any cash (gift or for specific uses)	1,664	1,460	1,920	1,909	1,687	1,244
<b>In-kind</b>						
Housing (comparing FMR and rent paid)	445	527	558	663	300	183
Child care	106	63	118	157	103	87
Any in-kind	551	590	676	820	403	270
<b>PUBLIC ASSISTANCE</b>						
<b>Cash transfers</b>						
Unemployment Compensation	254	115	279	555	190	137
Social Security	1,695	2,511	2,238	1,651	923	1,144
SSI	249	989	187	56	6	5
Public Assistance	166	576	170	35	20	29
Any cash transfer	2,364	4,191	2,874	2,297	1,139	1,315
<b>In-kind transfers</b>						
<b>Food</b>						
Food stamps	165	615	167	28	7	7
WIC	14	21	27	15	5	1
School lunches	25	39	50	30	6	2
Emergency food relief	11	25	14	11	4	2
Any food	215	700	258	84	22	12

**Appendix 1 – Table A (continued)**

	All families	Income Quintile				
		1	2	3	4	5
<b>Health</b>						
Government health insurance	2,607	5,928	3,541	1,828	955	743
Employer health insurance (tax piece)	282	-	62	227	394	721
Any health insurance	2,889	5,928	3,603	2,055	1,349	1,464
<b>Housing</b>						
Public housing	721	1,799	748	664	341	53
Section 8	181	588	178	58	75	4
Jiggets	7	11	18	1	-	3
Any housing subsidies	909	2,398	944	723	416	60
<b>Child care and Education</b>						
Child care subsidies	296	380	425	399	182	150
Public education	1,267	1,59	1,697	1,799	957	527
<b>Tax benefits</b>						
EITC	159	0	221	241	173	139
Mortgage interest tax deduction	189	-	17	94	144	687
Child and Dependent Tax Credit	15	1	19	25	15	13
Child Care Flexible Spending Accounts	1	-	0	2	1	2
Child Tax Credit	13	-	3	38	19	4
Medical Expenses Deduction	13	0	8	11	15	31
Health Expenditures Spending Accounts	0	0.0	0.0	0.1	0.1	0.1
Any tax benefits	390	1	268	411	367	876

\* Adjusted by family size was using equivalence scales derived from the federal poverty guidelines.

<sup>a</sup> Includes earnings, interest and dividends, income from private pensions and income from rental property.

<sup>b</sup> Market income plus total assistance minus taxes.

## Appendix 2: Imputation of receipt and value of public and private assistance

### A. Imputation of public benefits

#### 1. Imputation of values in wave 1

Imputation of values of public benefits is explained in detail in Meyers and Garcia (2004) and Garcia and Meyers (2003). However, in those documents wave 1 was not included. Here we describe the imputation for values in wave 1.

##### Cash

As with waves 2 and 3, receipt and value of cash benefits were reported by the respondent. This includes unemployment compensation, social security, SSI, and public assistance.

##### Food

- *Food stamps*: receipt and value was reported by the respondent.

- *WIC*: to calculate the value per recipient we used 1999 cost figures and adjusted by the ratio total WIC cost 1996/1999<sup>19</sup> to adjust for wave 1.

- *School lunches*: we used 1998 cost figures, adjusted for CPI.

##### Health

Because of data limitations in wave 1<sup>20</sup>, the total value of both public and employer-provided health insurance was imputed based on wave 2 and wave 3 values. Imputation was done using multiple regression and using as predictors income, race, education, immigration status, age, marital status and number of children.

##### Housing

Values of public housing, section 8 and Jiggets were imputed using 1998 cost figures and adjusted by CPI.

##### Child Care & Education

Because of data limitations in wave 1<sup>21</sup>, the total value of child care subsidies was imputed based on wave 2 and wave 3 values. Values for public education were imputed based on 1998 costs figures and adjusted by CPI.

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<sup>19</sup> Source: WIC Program Participation and Costs, at <http://www.fns.usda.gov/pd/wisummary.htm>

<sup>20</sup> We only have one question that asks whether or not anyone in the household has governmental health insurance. We do not know which insurance is it (Medicaid, Medicare or CHIP) or how many people in the household are covered in order to impute the values of the benefits. For employer provided health insurance we do know if the respondent has coverage but we do not know who is covered (respondent, spouse, and/or kids).

<sup>21</sup> In wave 1 we get much less detail in terms of sources and amounts of benefits (number of kids who receive it, number of hours, etc)

## Tax Benefits

*EITC and the Child and Dependent Tax Credit:* were obtained through the TAXSIM estimation model,<sup>22</sup> which takes into account family composition, earned and unearned income, itemized deductions and child care expenses.

*Mortgage interest and health expenditures tax deductions:* we did not ask questions about deductions from taxes but we know if they have a mortgage as well as information on health care expenditures. We assume that all those who have a mortgage deduct the interest from their taxes, and that all those who have health expenditures above 7.5% of their Adjusted Gross Income deduct their health expenditures from their income tax. However, this might be an overestimation.

## **2. Imputation of receipt for waves 1 and 2**

There are two areas where the instrument changed in a significant way and therefore the reciprocity rates were affected: public housing in wave 2 and child care in wave 1. In these 2 cases, we used multiple imputation to predict the probability of receipt based on the other 2 waves and assigned a 1 to those with the highest predicted probabilities until reaching 9% for public housing and 7% in child care.

## **B. Imputation of values of private benefits**

### **1. Measure of the value of housing assistance**

To measure the value of assistance we do the following:

- For those who reported that are staying there, we use information on how much the other person (family, friend, etc) paid for mortgage or rent to impute the value of housing help. Therefore for “stayers”, the value of the transfer is equal to the per-capita amount paid by the family-member/friend multiplied by the number of people in the respondent’s family (i.e. respondent, spouse/partner plus own children).
- In those cases where the respondent refused to give an amount, we imputed values based on Fair Market Rents by apartment size (we imputed the total value divided by the number of people in the household and multiplied by the number of people in the family – i.e. respondent, spouse/partner and children). It is important to note that for wave 3 the question about how much the other person pays in rent/mortgage was cut and therefore we imputed all values based on Fair Market Rent.

### **2. Child care help from family and friends**

The imputed values for child care help are based on New York State market rates for childcare as of October 1999. The market rate is the maximum level of payment that

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<sup>22</sup> Feenberg, Daniel Richard, and Elizabeth Coutts, *An Introduction to the TAXSIM Model*, Journal of Policy Analysis and Management vol 12 no 1, Winter 1993, pg. 189-194. The calculations were obtained directly from NBER at <http://www.nber.org/taxsim/>

NYS will reimburse a provider for care of a child eligible for subsidy. The rate is determined by surveys conducted by the NYS Office of Children and Families Services (OCFS), and it is set at the 75th percentile of reported fees charged by programs in each locality. These rates vary by type of care and duration (see Table B).

**Table B. New York State Child Care Market Rates (Rates per week as of October 1999)<sup>23</sup>**

Age/duration	Type of Care			
	Center	Group Family	Family	Informal/ in home
0-2 yrs /full time	\$254	\$143	\$ 127	\$ 95
3-5 yrs / full time	170	126	103	77
3-5 yrs / part time	111	82	67	50
6-12 yrs/ full time	170	117	102	77
6-12 yrs / part-day	115	75	65	50

In wave 2 we know how many kids are being cared by family and friends as well as how many weeks of care were received and the average number of hours per week. However, when there is more than one child we don't know which kids are being taking care of (so we don't know the exact age). Therefore we use the full-time / part-time rates for 3-5 years old (which is the mid point). This is \$103/week for full time and \$67/week for part-time care.

In wave 3 we do not know how many months of care were received, nor the average hours per week, so we are not able to impute the value of child care using the same methodology. Instead, we use average months from wave 2 to impute wave 3 and in order to take care of number of hours, we impute average rates (full-time/part-time).

<sup>23</sup> Source: Child Care, Inc. Primer 2000 - Cost of Public and Private Child Care in New York City (pg. 24)