Fiscal Externalities of Becoming a Parent

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For presentation at the Annual Meetings of the Population Association of America, April 2010.

March 2010

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This research was supported by grant no. R03-HD048674-01A1 from the National Institute of Child Health and Human Development, and by grant no. R37-AG025247 from the National Institute on Aging. We have received helpful suggestions and comments from many individuals, including seminar participants at Syracuse University and the University of Pennsylvania. Katie Francis also provided valuable assistance. The views expressed in this paper are those of the authors and do not represent the views of their departments or agencies.

Fiscal Externalities of Becoming a Parent

Several researchers have pointed out that the production and rearing of children produces social externalities. Dasgputa (2000) discusses several negative externalities to childbearing that help sustain high fertility levels in poor countries. However, in a developed economy such as the U.S., which exhibits such features as relatively low fertility, substantial expenditures on public goods, and a pay-as-you-go retirement income program, available estimates indicate that there are sizeable positive externalities to childbearing. Lee and Miller (1990), for example, reported that the externality to childbearing in the U.S. was about $105,000 in 1985 dollars. In descending order of importance, the main contributors to this net figure were public goods, intergenerational transfers supporting health, education, and pension programs, and the sharing of government debt. The economic-demographic models used to develop such estimates treat the population as homogeneous with respect to age-specific fertility. Yet a substantial and growing proportion of women in the U.S. remain childless, while many fathers remain completely uninvolved with their children. In view of the likely differences between parents and those who remain childless, with respect to both the support of and the consumption of public expenditures, it is likely that the externality associated with a *first* birth is quite different from that associated with a second or higher-order birth. Thus, the purpose of this study is to determine the net fiscal impact of the transition to parenthood.

Even if all births were the result of decisions reached by well-informed forward-looking individuals, for whom their children are a form of consumption, the costs and benefits of which are fully taken into account, private childbearing decisions could still generate external costs or benefits. Externalities can take many forms, both pecuniary and nonpecuniary, many of which are resistant to measurement. Most attempts to quantify the external costs or benefits of childbearing have focused upon the readily quantifiable flows of taxes paid to, and benefits paid

by, governments at all levels. The most recent such estimates indicate that the social benefits of childbearing are quite large in the U.S. The National Academy of Science's study *The New Americans* (Smith & Edmonston 1997) investigated the fiscal impacts of population change associated with immigration. However, the framework used to obtain those estimates also generates estimates of the fiscal externalities of a native-born newborn child. The calculations, which also take into account the expected fiscal impacts of the newborn child's descendants and condition on the educational attainment of the parent, are striking, ranging from a net present value (NPV) of $92,000 (in 1996 dollars) for the child of a native-born parent with less than a high school education to an NPV of $245,000 for a parent with greater than high-school education. Much of the present value of adding a newborn child is attributable to the child's descendants. This is important because childless individuals by definition have no descendants, and therefore the potential social value of those descendants remains unrealized.

Although overall fertility has remained fairly constant in the U.S. since the mid-1970s, the prevalence of childlessness among women who have reached the upper limit of childbearing age has been rising since 1975, exceeding 20 percent by 2006 (Dye 2008). As Folbre (2008) notes, "[c]hildren symbolically repay their parents by spending money and time on children of their own. The terms of this repayment are modified when the next generation has fewer children…" (p. 17). It is widely acknowledged that the private costs of raising children are high, and some commentators suggest that there is a connection between those high costs and rising childlessness (e.g., Crittenden 2001; England & Folbre 1999a). Yet the findings cited above suggest that these private costs are accompanied by substantial public benefits to childbearing. Societal well-being may be improved through interventions that align private and public costs and benefits. If childbearing produces positive externalities, then policies that subsidize childbearing—policies such as tax reductions, child allowances, or low-cost child care—may be

warranted. Some such policies already exist, of course, although many commentators argue for further reductions in the cost of childbearing (England & Folbre 1999b). There is also some evidence that the childless are becoming a political interest group (Young 1999; Burkett 2000; Hegtvedt et al. 2002; Taylor 2003), leading a backlash against "family friendly" policies in both the public and corporate sector. Thus our estimates have the potential to contribute to public discourse regarding family policy.

There are many reasons to anticipate differences in life-cycle patterns of tax and benefit streams between parents and nonparents, although in some cases the anticipated direction of differences is ambiguous. For example, public assistance payments and school-based nutrition programs are targeted primarily at children, and such programs produce benefits that accrue mainly to parents and their offspring. The childless pay property taxes to support public schools, but have no children to consume that education; they may, however, enjoy private benefits in the form of increased housing values (Hilber & Mayer 2004). On the other hand, families with children may consume more housing, and therefore pay more in property taxes than do the childless. And, while poor families with children consume a large share of public assistance and related benefits, the average of lifetime earned income (and therefore of income and payroll tax payments) may be higher among parents than among the childless.

Research on childlessness often alludes to reduced prospects for old-age support (Rowland 1998) or fears of social isolation, with adverse mental-health problems as additional reasons for concern (Zhang & Hayward 2002). Indeed, informal care provided by family, friends, and neighbors is widely acknowledged to comprise the majority of long-term care and support in the U.S. (Wolff & Kasper 2006). Most disabled elders are not institutionalized, and within that group most receive care either exclusively from informal providers or from a mixture of formal and informal providers. Unmarried individuals without living children are more likely

than those with children to be in nursing homes, in cross-section (McNally & Wolf 1996), while childless elders have significantly higher levels of publicly-funded nursing home costs (through Medicare and Medicaid combined) than do parents (Wolf 1999). Other research has shown that having children serves both to delay entry into, and hasten exit from, nursing homes (Garber & MaCurdy 1990; Freedman 1993; Aykan 2003; Gaugler et al. 2007). With respect to home care—which comprises a minority of the public long term care expenditures—available evidence is less clear.

An expansive definition of "parent"

Demographic treatments of childlessness focus, unsurprisingly, on fertility (Sardon 2003). In a typical aggregate economic-demographic model everyone is identical, and everyone has average fertility, and there is therefore no need to distinguish parents from non-parents. However, in recent decades patterns of marriage and cohabitation, of childbearing within and outside of marriage, and of parent-child coresidence, have become quite heterogeneous. As a consequence "fertility" and "parenting" do not perfectly coincide.

Implicit in the rationale for studying the external costs and benefits of children for society is a recognition that parents incur substantial private costs in the raising of children. These private costs have much to do with time and money investments in children, regardless of the biological relationships between adult and child. Thus, because we want to allocate economic flows according to parental status, we must go beyond the biological dimension of parenting, recognizing its social and economic dimensions as well.

A large body of research documents the complexities of contemporary family structure in the U.S. (Bumpass and Lu 2000; Blau and van der Klaauw 2008). Unmarried cohabiting couples coresiding with children of one, or the other, or both members, as well as lone-parent households, are a prominent feature of this complex picture of the family (Carlson and

Furstenberg 2003; Heuveline et al. 2003). Despite this heterogeneity, mother-child coresidence is a virtually universal experience (Heuveline et al. 2003); thus for women fertility and parenting are nearly synonymous. However, many fathers are economically or socially disengaged from their children. For example, Mott (1990) found that about 18 percent of children experience *no* father coresidence during the first four years of their life. Some of the absent fathers are, to be sure, living with minor children (their own, or those of a new partner) in another household. Yet Garfinkel et al. (1998) found that less than one third of nonresident fathers are living with a new partner and children at a point in time; over the nonresident father's lifetime the percentage who spend at least part of the time in a household with children is probably much higher.

Recognizing these complexities, we base our analysis on a definition that identifies parenting with the bearing of substantial private costs of raising children. Thus we define parents as people who devote *uncompensated time or monetary resources to, or coreside with, biological, adoptive, or stepchildren aged 0 through 17*. Thus, while all taxpayers are providing some degree of support to children through public welfare payments and the financing of education, someone whose *only* support of children is in the form of income or property taxes would not be classified as a parent because those tax dollars are not directed at their own (biological, adoptive, or step) children. Similarly, someone whose only investment in children was in the form of paid provision of childcare or preschool services would not be considered a parent because the efforts are compensated. Under our definition the extreme case of a "deadbeat dad" who has no contact with his children and pays no child support is, despite his biological role in producing children, not considered a parent. And, the stepparent whose spouse's children are coresident while minors, and who therefore are de facto beneficiaries of the stepparent's time and monetary contributions to the household, however modest, is classified as a parent. Under our definition of parenting, distinctions between biological, adoptive, and

stepchildren are irrelevant, regardless of any emotional, affective, or other psychological distinctions across those categories that might exist. Our placing of an upper age limit on the time during which parenting can occur is somewhat arbitrary, and it goes without saying that most parents continue to support their children well into adulthood.

Our definition of parents takes into account directed expenditures of resources in three domains—time, money, and coresidential space—that are widely acknowledged to constitute the available "currencies" for intergenerational resource flows (Soldo and Hill 1993). A problem with our approach is the fact that whereas a nonparent occupies a polar location on a continuum, parents can be found throughout the rest of that continuum. For example, an absent father who makes just a few child support payments, and has no other contact with his child, is only in a minimal sense an economic parent. In principle one might impose an arbitrary criterion by which someone would be awarded "full" parent status (e.g., by maintaining coresidence with and/or making time investments and/or contributing financially to a child in each year from birth through age 17) and then coding each potential parent according to the degree to which they attained that standard; such an approach, however, seems to lie outside the bounds of feasibility given available data.

Complexity of Family Forms

Just as a great deal of childbearing occurs outside of formal marriages, a great deal of childlessness occurs within marriage. Published data from the 2000 Current Population Survey indicate that among women age 40-44, 13.4% of the ever-married women remained childless, while among the never-married, only 59.6% were childless. Given the relative frequencies of these two marital groups in the population, only 38% of childless women born 1955-60 had never married, while 62% were currently or previously married. Not only the distribution but the timing of childbirth has changed in recent decades (Chen & Morgan 1991; Morgan et al. 1999),

with delayed first-parenthood growing particularly among white women. Intentionally delayed fertility may translate into unexpected infertility problems, although many such women resort successfully to infertility treatments. Other first-birth delayers revise their fertility plans, becoming voluntarily childless (Heaton et al. 1999). Infertility has also been shown to predict women's adoption-seeking behavior (Bachrach et al. 1991; Chandra et al. 1999). Given the distinctive pre-first-birth wages and labor market behavior of delayers (Chandler et al. 1994; Joshi et al. 1999), calculations of the net fiscal externalities to becoming a parent would likely depend on the timing of that event; we have not, however, accounted for the timing of the transition into parenthood in our analysis to date.

As women's childbearing behavior has changed, so has men's fathering behavior. Furstenberg (1988) writes of a growing bifurcation of fathers into two groups, "bad dads" and "good dads," the former comprised of nonresident fathers with little or no contact with, and who provide little or no financial support to, their nonresident children. He does note, however, that many men who are from their child's perspective a "bad dad" often take on child rearing responsibilities in some other household, pointing out that "…parental responsibilities are largely dictated by residence" (p. 204). Several studies based on the Fragile Families data have focused on father involvement in their children's lives; Carlson and McLanahan (2002) showed that one year after their child's birth, about 14% of fathers spent no time with the child. Nepomnyaschy (2004) restricted her analysis to nonresident (one year after birth) fathers unmarried at the time of the child's birth, and found that only 62% ever saw the child, while only 50% had had a one-day or longer period of coresidence with the child.

Scope of analysis

Ours is a descriptive analysis of the relative life-cycle patterns of taxes paid and benefits received by parents and nonparents; our calculations of the NPV of becoming a parent do not

employ a behavioral model of fertility or parenting choices in the face of incentives created by these tax and transfer programs. Nevertheless, our descriptive accounting model seems to be a useful precursor to any attempt to model the behavioral consequences of these fiscal flows. Dynamic optimization models of fertility (Hotz et al. 1997), in which choice variables include contraceptive strategy and time allocation, and which condition on the existence of a potentially childbearing couple, might be a logical starting point for such a model. A dynamic choice model could, in principle, map tax and benefit program parameters into behavioral outcomes.

Existing research has found evidence that the dependent's exemption provisions of income taxation have a pronatalist effect (Whittington et al. 1990; Whittington 1992). Moffitt's (1992) review, however, found only mixed evidence of the pronatalist effects of public assistance. Some research has shown a pronatalist effect of the EITC (Baughman and Dickert-Conlin 2003). Public interventions other than direct taxation or benefit transfers might also contribute to parenting decisions and, consequently, have fiscal impacts. For example, Schmidt (2006) found that state-level mandates for private health insurance coverage of infertility treatments significantly increase first-birth rates. These results imply that there may be several "margins" (i.e., budget constraint segments) along which tax and transfer policies potentially influence fertility outcomes. Yet even this ambitious a model would be inadequate for our purposes; to account for parenthood as we define it would require that the decisions to marry or cohabit, and to provide support in the form of time or money to a nonresident child, also be made endogenous. The specification and estimation of such a model lies well outside the scope of our analysis.

A related point is our inability to distinguish childlessness that is due to infertility problems from that which is purposively chosen. The nature of any trends in involuntary childlessness appears to be unknown. While the volume of infertility treatment has risen during

the 1980s and early 1990s, a majority of women who reported using infertility services in 1995 had previously given birth to one or more children (Stephen and Chandra 2000). Furthermore, infertility does not rule out becoming a parent, as we define it, because the transition to parenthood can occur through adoption or marriage (and the consequent acquisition of stepchildren). Data from the 2000 Census indicate that 48.4% of households that contain *any* adopted children contain *only* adopted children, while 46.7% of households that contain *any* stepchildren contain *only* stepchildren (derived from data found in Krieder, 2003, Table 8; a tiny percentage of households contain both adopted and stepchildren but no biological children). While these results are at best suggestive, they imply that a substantial proportion of parents who would otherwise remain childless acquire their children other than through biological reproduction. The extent to which these behaviors resolve situations of biological infertility cannot be determined with available data.

We also ignore the consumption-related environmental impacts of childbearing. While this class of externalities is important, it is very difficult to measure, and is rarely included in empirical analyses. In the long run an additional child will itself bear additional children and contribute a sustained increase in population size, with consequent environmental effects. Nevertheless, the net environmental impact of growing childlessness is less clear-cut. Furthermore, patterns of childlessness—i.e. the *distribution* of fertility—can change while holding constant the overall *level* of fertility and, therefore, holding constant the overall level of environmental externalities.

Analytic Model

Lee and colleagues have developed a comprehensive economic-demographic accounting framework with which to study the fiscal impact of population change (Lee and Miller 1990, 1997; Lee and Edwards 2002a, 2002b; Edwards 2000). The essential elements of the approach

are as follows: (1) a series of age profiles of taxes paid to, and benefits received from, different programs and different levels of government is estimated from individual- and household-level data; (2) a starting population consisting of counts by age in each population group is determined; (3) assumptions about the future path of population change (births, deaths, and immigration), productivity growth, and the path of real interest rates are chosen; (4) algorithms to adjust taxes and programmatic expenditures in each future year, reflecting assumptions about the bounds of allowable public deficits, are adopted; and, finally, (5) a forecast is produced, period by period, with individuals added to and removed from the population according to the demographic assumptions. In the forecast, individuals move, year by year, along their predetermined age profiles of earned income, adjusted to reflect productivity change, and along their age profiles of consumption of publicly-funded program benefits. In the model, population change and productivity growth lead to GDP change which, in turn, changes the demands for various public expenditures. Imbalances between demographically-driven changes in public expenditures and GDP-driven changes in tax revenues induce tax adjustments in accordance with the assumed deficit-limit assumptions. Thus, in any given future year the effective profile of earnings, taxes paid and benefits received across age groups is endogenously determined in the forecast. The model's output includes separate accounts for those in the baseline or starting population, and those in the offspring or descendants' population (for additional details see Smith & Edmonston 1997, especially pp. 323-327).

In the NAS study of the fiscal impacts of immigration separate profiles were estimated for men and women by three levels of education, and separately for foreign-born, second-generation (native born of foreign-born parents) and third-generation (native-born of native-born parents) individuals. However, the accounting model used in these calculations can deal with other ways of disaggregating the population into constituent groups, and can, as well, produce

estimates of cohort-specific age profiles of fiscal flows for the total population, in which *everyone* is average.

The population-average dynamic profiles used in the estimates presented in Smith and Edmonston (1997) are the starting point for our NPV calculations. In this version of the model, the key output is a series of arrays containing individual elements of the form $Y_{a,y,f}$, each of which represents the per-capita average of funds flowing to or from people of age a, in year t, for fiscal flow f. Thus $a = 0, \ldots, a_{max}$, $t = 1, \ldots, t_{max}$, and $f = 1, \ldots, F$ (the number of distinct fiscal streams recognized in the accounting model). The maximum age is the age beyond which survivorship is negligible. The model can handle arbitrarily many generations of offspring, but in practice the end of the forecast period is reached when the discount rate reduces the present value of a dollar in year t to a negligible amount.

A key to the analysis reported here is the realization that each element $Y_{a,y,f}$ is the weighted sum of group-specific averages, for a set of mutually-exclusive and exhaustive population subgroups, in our case parents and nonparents. External information can be used to decompose the fiscal flows into their group-specific components without altering the internal structure of the accounting model. This, in turn, is desirable because it means that all fiscal streams produced by the model are internally consistent. In particular, the fiscal streams associated with offspring generations are automatically consistent with those associated with the starting population.

Thus, for any cell entry $Y_{a,t,f}$ we can decompose the total flow using the identity

$$Y_{a,t,f} = \pi^{N}_{a,t} Y^{N}_{a,t,f} + \pi^{P}_{a,t} Y^{P}_{a,t,f}, \tag{1}$$

where the proportions and mean fiscal flows on the right-hand side of the equation pertain to nonparents (N) and parents (P) respectively. We treat each nonparent-specific flow as a fixed

multiple of the respective parent-specific flow, $k_{a,t,f}$, so we can rewrite (1) as

$$Y_{a,t,f} = (1-\pi^{P}_{a,t})k_{a,t,f}Y^{P}_{a,t,f} + \pi^{P}_{a,t}Y^{P}_{a,t,f}, \quad (2)$$

eliminating $Y^{N}_{a,t,f}$ from the equation. Given values of $k_{a,t,f}$ and $\pi^{N}_{a,t}$, determined outside the model, we can solve (2) for the unknown value of $Y^{P}_{a,t,f}$, and then calculate $Y^{N}_{a,t,f} = k_{a,t,f}Y^{P}_{a,t,f}$. This allows us to compute the NPVs of the fiscal flows associated with parents and nonparents, and the difference between the two, interpreted as the average fiscal externality associated with being a parent. Our problem therefore becomes one of finding suitable values for the πs and the *k*s.

Fiscal Flows Included in the Model

There are 49 different tax and benefit flows included in our analysis (a complete listing of these flows appears in the Appendix). Each flow accrues either to the Federal balance sheet only, or to the State and local balance sheet only, or to both. All are associated either with taxes paid, or with benefits received, *directly* by individuals or households; "pure public goods" such as national defense, interest on the national debt and spending on research and development, are not included in this table because they benefit society as a whole.

It is clear from equation (2) that the NPVs of fiscal streams associated with parents and with nonparents, and therefore the difference in NPVs between them, will depend on their age patterns—i.e., on when in the life cycle the level of each fiscal stream is small, and when it is large—and on the relative prevalence of nonparents at each age. Individual fiscal flows that peak early in the life cycle (for example, spending on public schools) will contribute relatively more to the NPV calculation than do flows that peak late in the life cycle (for example, Medicare benefits), other things being equal. And, holding constant the total of the age-specific flow and the nonparent-parent ratio of flows at that age, the lower the proportion childless at each age, the greater will be the share of the aggregate fiscal flow allocated to parents.

Nonparent-to-parent ratios of fiscal flows. Some programs—for example, public elementary and secondary schools, school lunch programs, and so on—are by design directed solely at children and, hence, the costs of those programs are associated exclusively with parents. For such programs, $k_{a,t,f} = 0$ by definition. In most cases, however, the ratios must be determined empirically. Using a variety of data sources we have developed estimates of the average levels of fiscal flows to or from parents and nonparents over the period 1967-2005. We use those age-specific means to estimate a set of *k*-ratios which are then assumed to apply to the future years covered by our NPV calculations. For any given fiscal flow (*f*) and age group (*a*) combination *k* is the ratio of the mean flow among nonparents relative to that of parents.

It is not necessary to decompose the fiscal flows associated with offspring generations into their "parent" and "nonparent" components. This is because any fiscal externalities associated with offspring accrue, in their entirety, to those identified as parents in the initial (first-generation) population. Thus, the decomposition of flows based on equation (2) is needed only for those in the population of potential parents, i.e the initial or starting population.

Age-specific proportions of nonparents in cohort. It is also clear from equation (2) that the proportion of nonparents present in a cohort at each age, $\pi^{N}_{a,t}$, will influence the decomposition of fiscal-flow totals into their nonparent- and parent-specific components. Therefore the age-profile of the prevalence of nonparenthood will influence the NPV computations. If nonparents and parents have different death rates at older ages, then the proportion of nonparents will change over time due to differential survivorship of the two groups as a cohort ages. The few studies that have investigated mortality differences by parental status, most of which have examined women's mortality (e.g., Lycett et al. 2000; Grundy and Tomassini 2003; Friedlander 1996) have produced mixed findings. Because of the social support

that can be provided by children, fathers might be expected to enjoy lower mortality than childless men. For women, the situation is more complex because childbearing is protective for some diseases (Cantor et al. 1993; Kravdal and Hansen 1993; Vachon et al. 2002; Melton et al. 2001; Talbott et al. 1989), yet higher-parity mothers appear to have adverse mortality outcomes reflective of an offsetting "wear and tear" hypothesis (Doblhammer 2000).

We analyzed differential mortality between parents and nonparents using data from the Health and Retirement Survey for individuals age 55 and older. Consistent with the needs of our one-sex accounting model, we pooled men and women, and estimated a proportional-hazards model of the effect of being a nonparent, using as the baseline mortality rate an unrestricted single-year step function in age. The results (not shown) indicate that nonparents' death rates are 9.7% higher at each age (through age 99, the oldest age at which our data permitted single-year estimation). This difference is statistically significant ($p = 0.037$) but small: a change in death rates of this magnitude implies a difference in life expectancy at age 55 of only 8 months (using the NCHS 1999-2001 life table), and therefore we disregard it in our analysis.

The "thought experiment"

In our analysis, there are three types of people: (1) children, (2) adult parents, and (3) adult nonparents. We define as children all persons less than 18 years old. We do not distinguish people by gender or race; instead, we depict the situation of a composite "average" person of each type. Furthermore, we maintain the distinction between those already alive at the start of the projection period (i.e., the "initial" population), and those born thereafter (i.e., the "offspring" population). Adult parents, and adult nonparents, are distinguished in the starting population, but not in the offspring population. Finally, in our analysis "parent" and "nonparent" are ***lifetime*** statuses: upon reaching age 18 individuals are classified as parents or nonparents, even if their parenting behavior does not begin until many years later. The lifetime perspective

is needed to account for the possibility that choices about educational attainment, or the timing and intensity of labor market behavior, reflect plans for future childbearing and child rearing.

For our purposes, it is necessary only to decompose the life-course patterns of taxes and benefits for a ***single*** birth cohort. In particular, for those age 18 at baseline (when t=0), we need to determine fiscal flows for the sequence of flows indexed {a=18, t=0}, {a=19, t=1},{a=20, t=2}, and so on, until the population of people initially 18 years old has completely died out. It is also necessary to distinguish the offspring of those initially 18 years old from all other members of the offspring population.

Having applied the decomposition shown in equation (2) to the population of those initially age 18, for all relevant future years, we then compute the NPV of each of the fiscal flows individually, and then obtain their sum. The difference between the NPV of the fiscal flows of parents and nonparents, i.e. $\text{NPV}_{P} - \text{NPV}_{NP} + \text{NPV}_{OFFSPRING}$, represents the fiscal impacts of replacing an ***average*** nonparent with an ***average*** parent. This comparison does not hold constant any of the other differences between parents and nonparent, such as differences in family background, health and other endowments, educational attainment, labor market outcomes, and any of the other numerous influences on life cycle tax payments or benefit receipt. Thus our estimate cannot be interpreted as the net fiscal impact of the marginal nonparent's transition to parenthood. As noted before, it would take an exceedingly complex structural model of parenting choices to generate an estimate of the fiscal impact of the *marginal* individual's parenting outcomes.

Data

Sample. Our analysis relies mainly on data from the Panel Study of Income Dynamics (PSID), a large, ongoing, panel study of family and economic dynamics that began in 1968 (Hill 1992). Annual interviews with family heads (and occasionally with their spouses) conducted

from 1968 to 1997, followed by biennial interviews in 1999, 2001, 2003 and 2005, are used in this study. We used the PSID data to determine age-specific average amounts of several tax and benefit amounts, separately for parents and nonparents. This, in turn, requires that we be able to categorize PSID sample individuals are parents or nonparents. Our use of a lifetime definition of parent status places restrictions on our use of the data. In particular, PSID respondents were first asked about their childbearing and adoption history in the 1985 interview, and in each subsequent interview. We assume that a transition to parenthood cannot take place after one reaches age 45. This accords with the Census Bureau's practice of reporting parity distributions by age up to a maximum of age 44 (i.e., women age 40-44; see, e.g., Dye 2008). Nevertheless, it must be acknowledged that a woman could have her first child at age 45 or older; it is also quite possible that a man or a woman 45 or older, and with no prior experience as a parent, could adopt a young child or could acquire young stepchildren through marriage, thereby making a first transition into parenthood. While this is indeed a possibility, we do not allow for it in the analysis, implicitly assuming that mid- to late-life transitions into parenthood are rare enough to be disregarded. The implication of this assumption is that PSID respondents must reach age 45, and report on their childbearing history, at or after the 1985 interview.

The requirements that individuals be observed at or after age 45 and observed during or after 1985 define the admissible combinations of age and interview year (and, therefore, year of birth) included in our analysis sample. In the first interview year (1968) we include all family heads or spouses age 18 or older. Someone age 18 in 1968 was born in 1950. The last year of birth included in the sample is 1960; people born that year were 18 in 1978. We restrict our sample of person-years to years in which the individual was both 18 or older and either the family head or the spouse of family head, because more of the key economic information is provided for heads and spouses than for other family members. The resulting PSID analysis

sample includes 9,824 individuals, who provide us with a total of 220,432 person-years of information. Individuals contribute 22 person-years of information to the analysis sample, on average, although they are in the sample from 1 to 35 times.

Measuring Parent Status in the PSID. The PSID includes fertility histories reported separately by men and women in 1985, and updated in subsequent annual interviews. The fertility histories reported by men are, however, known to be extremely inaccurate (Rendall et al. 1999). Adopted children are also recorded. Beginning in 1985 the PSID collected information on child support payments made, permitting men continuously observed to live alone (or in a couple-headed household with no children present) to be categorized as parents. Finally, in each year it is possible to determine whether there are children age 18 or less in the household that are coded as the biological, adoptive, or step child of either the head or the spouse of head.

We code as a "parent" in the PSID anyone who (1) reports having given birth to or of fathering a child at any point, provided that the report is given by someone at least 45 years old; ***or*** (2) ***ever*** reports paying child support, ***or*** (3) ***ever*** coresides with a minor own- or spouse's child. This broadly-construed coding scheme accords reasonably well with our broad definition of parenting, but nevertheless has some shortcomings. First, we overlook anyone—especially, absent fathers—whose only claim on "parent" status is the fact that they invest time, but no money, on behalf of noncoresident children. It seems reasonable to assume that there are relatively few such people. More of a problem is the fact that even with the up-to-35-year life history potentially observed in the PSID, we may miss key parts of people's parenting careers. For example, a man whose sole parenting experience comes from making child support payments, but whose child-support behavior occurred exclusively before 1968, would be incorrectly categorized as a nonparent in our analysis. Moreover, due to patterns of nonresponse in the data, together with the set of sample-inclusion conditions imposed, we often observe just a

few years of the potential life histories of those in the analytic sample. Therefore some PSID respondents are likely to be incorrectly classified as nonparents.

Age Profiles of Fiscal Flows. The PSID permits direct observation of several of the fiscal flows used in the accounting model: *property tax* payments (for homeowners); *SSI* and *OASDI* benefits; *Food Stamps*; *unemployment compensation* benefits; and *military retirement* benefits. Not all of these flows are included in each year's interview; however, for all fiscal-flow variables that are observed at all, we pool all possible years of information in the analysis. For several fiscal flows we develop approximate life-cycle measures: for *rent subsidies* and *public housing*, the PSID includes indicator variables for the receipt of such benefits, but no information on their value. Similarly, for noninsitutional *Medicaid* we know the number of recipients in a household but not the value of services received. For these three flows, we compute *k*s based on the assumption that relative flows are proportional to the receipt of services (or, in the case of Medicaid, the number of recipients). For property taxes paid by renters, we assume that taxes are equally capitalized into rents for parents and nonparents; therefore *k* is the age-specific ratio of rents paid by nonparents and parents. We assume that *unemployment insurance premiums* are proportional to earnings. The PSID provides no information on *institutional Medicaid* costs; for this fiscal flow, we use results for the 65 and older population reported in Wolf (1999), which are based on data from the National Long Term Care Survey (NLTCS).

For several tax items, we rely on simulations produced by the National Bureau of Economic Research's TAXSIM computer program (Feenberg and Coutts 1993). Many, but not all, of the input fields required for TAXSIM are directly reported in the PSID. One major exception is deductable expenses, which we imputed to PSID units using a random-matching approach based on discrete classes of taxable income. TAXSIM was used to obtain estimates of *Federal Income taxes*, *EITC*, *OASDI* and *SMI* (Medicare) taxes, and *state income taxes*. When

preparing input data files for TAXSIM, we assumed that all couples file joint returns.

Federal *excise* taxes, and state/local *sales* taxes, required special treatment. Using results on the effective incidence of the aggregate of these two taxes reported in Pechman (1985), in combination with data from the CBO (2007) on the incidence of Federal excise taxes alone, we developed imputed values for each type of tax, taking into account family income and the nominal level of sales taxation in the respondent's state of residence. Given the limited information available on tax incidence, our estimates of these tax amounts are limited to 1980.

We assume that costs associated with *Public higher education* and *student aid* are proportional to educational attainment. We treat educational attainment as a lifetime attribute, similar to parenthood itself. For *Medicare* costs we have, to date, assumed that there are no differences in age-specific costs between nonparents and parents, despite evidence that the health, disability status, and longevity of the two groups differ, leading one to anticipate that Medicare costs would differ across the groups as well. However, Wolf and Laditka's (2006) analysis of differences in Medicare costs between parents and childless older individuals, based on several years of Medicare claims data linked to NLTCS respondents, finds no consistent pattern of differences over all years considered. Our findings include tests of the sensitivity of the results to the assumption that $k = 1$ for Medicare.

Although Lee's accounting program treats the Federal and the State-Local budgets separately, the PSID data elements upon which our estimates of age profiles of fiscal flows and, consequently, k, are based make no distinction between Federal and State or local sources of benefits. For such flows, we use the same values of k for both Federal and State-local flows. Finally, for several of the fiscal flows included in our calculations, $k = 0$ by definition: this is true for *AFDC/TANF*, *school lunch* programs, and *elementary and secondary education*.

Many of the fiscal flows measured in the PSID accrue to households, yet our accounting

exercise is individually-based. In order to properly account for all flows, we have divided all household-based flows (e.g., income taxes, excise and sales taxes, Food Stamps, subsidized rent, public housing, and so on) by two when the PSID unit contains both a head and a spouse. Finally, for several of the fiscal flows used in the model, we have no information upon which to base an estimate of *k*: *corporate taxes*; *incarceration costs*; *railroad retirement*; *congestible goods*; *worker's compensation*; *bilingual education*; and *state retirement plans*. In each such case, we have little choice but to assume that $k = 1$.

Results

Age patterns of k-ratios. Table 1 shows age-specific values of *k* for the 17 data series for which we have PSID data. Recall that *k* is the age-specific ratio of average levels of a fiscal flow among nonparents to that among parents. Thus a ratio over 1 indicates that nonparents are paying higher taxes (or receiving higher benefits) than parents, in that age group. In many cases we computed *k* using five-year age groups, except for the youngest (18-24) and oldest (65-74 and 75-plus) groups, but for relatively low-frequency programs such as SSI we have used wider age intervals, producing smoother age profiles of nonparent-to-parent ratios.

For many programs, and in particularly for tax payments, the *k* ratios are closely tied to the relative age profiles of per-capita income received by nonparents and parents, respectively. These profiles (not shown) indicate that nonparents have higher per-capita incomes than parents up to about age 45, which is to be expected inasmuch as these are the ages when mothers are more likely to have reduced labor force activity while caring for young children. However, between the mid-50s and early 70s, parents have higher per-capita incomes than do nonparents. For benefit programs with some targeting of children, such as Food Stamps, Medicaid (for those under 65), and especially the EITC, the k ratios are well below one. There are some surprises in Table 1 as well. For example, SSI benefits (for people 45 and older), unemployment benefits,

and (again for those 45 and older) housing subsidies go to nonparents at a substantially higher rate than to parents. Veterans' pensions also favor nonparents, a finding that may reflect the fact that spending one's career in military service may be somewhat incompatible with parenting.

Figures 1 and 2 summarize the age profiles of all taxes paid, and all benefits received, for parents and nonparents. These profiles are obtained by multiplying each program's baseline age profile by the corresponding set of k ratios (including all programs where $k = 0$ by assumption, or $k = 1$ in the absence of evidence to the contrary), then adding across programs. Figure 1 indicates that nonparents pay higher taxes than parents up to age 50, and at ages 70 and older. In Figure 2 we see that parents consume more publicly-funded benefits than nonparents up to age 45, but fewer such benefits from age 65 onward. Between ages 45 and 65 the two groups' per-capita consumption of publicly-funded benefits are indistinguishable.

NPV Calculations. There are two components of our NPV calculations: average own-lifetime estimates, for parents and nonparents in the initial or starting population, and per-parent estimates for those in the offspring population. The calculations used a 1994 baseline population, and age profiles of taxes and benefits measured in 1994 dollars; all results have been inflated to 2009 dollars using the Consumer Price Index. The baseline results assume that the proportion of parents in the population is 0.87 (close to that found among the most recent cohorts observed in both the PSID and HRS), and a discount rate of 3% (as in the baseline results presented in Smith and Edmonston 1997).

In Table 2, all tax and benefit programs for which we had to assume $k = 1$ have been grouped together, because they do not contribute to any potential differential between parents and nonparents. The "other taxes" row of the table includes corporate taxes as well as a host of user and licensing fees, estate and gift taxes, customs levies and other miscellaneous taxes; together these amount to around 22% of all taxes included in the NPV figures. The "other

benefit" row includes energy assistance, incarceration costs, public employee and railroad retirement benefits, workmen's compensation, and congestible goods such as highways; together they represent 35 to 37% of benefits received.

The NPV at age 18 of taxes paid by the average parent over his or her remaining lifetime is about $606,000, whereas the comparable figure for nonparents is nearly $632,000; nonparents, in other words, pay more in lifetime taxes than parents do. However, the NPV of taxes paid (over a 300-year horizon, in these calculations) by the offspring of the parents is nearly $1 million, far more than offsetting the own-lifetime difference between nonparents and parents. The own-lifetime publicly-funded benefits consumed by parents also exceed the analogous figure for nonparents, despite the fact that for many of the individual programs shown, nonparents receive more than nonparents.

However, the relevant figures for purposes of determining the net externalities associated with parenting depend on the difference between taxes paid and benefits received. Nonparents pay about $327,000 more in taxes than they receive in benefits, while parents pay about $278,000 more in taxes than they receive in benefits. The offspring of the parents, in turn, pay over $266,000 more in taxes than they receive in benefits. In each case, the excess of tax payments over benefit consumption results partly from the exclusion of pure public goods from the benefit side of the balance sheet: whereas all tax payments represent a reduction in private consumption possibilities, only the "excludable" part of public expenditures belong in these accounts.

Thus, the net present value of the fiscal externalities of becoming a parent, calculated from the "taxes minus benefits" row of Table 2, equals $277,917 (parents) minus $327,015 (nonparents) plus $266,600 (offspring), or $217,501 in 2009 dollars. This number represents our central finding: the net fiscal externality of becoming a parent is positive, and is substantial. An

asset with a present value of $217,501 (in 2009 dollars) is equivalent to a lifetime annuity that pays $8,096 per year, beginning in one's eighteenth year and continuing to death (computed using the 1999-2001 all-races and both sexes life table for the U.S., produced by NCHS).

Sensitivity Analysis. Table 3 summarizes the contributions to the net fiscal externalities of parenting obtained for discount rates of 0.01, 0.03 (which duplicates Table 2), and 0.05. With discount rates less than 3%, the fiscal externality of becoming a parent rises sharply, nearing $4 million when $r = 0.01$. This very large present value is largely due to the exclusion of pure public goods from the consumption side of the life-cycle balance sheet. For higher discount rates, the fiscal externality of parenting falls; the externality falls to zero when $r = 0.043$. This represents the Internal Rate of Return, i.e., the interest rate for which the NPV of taxes paid minus benefits consumed are equalized between parents and nonparents. As long as the real interest rate is lower than this figure, parents are, on balance, net contributors to societal well-being if measured strictly in public expenditure terms.

We have conducted two other sensitivity analyses, the results of which are shown in Figure 3. First, we used a range of values for k—the nonparent-to-parent ratio—for the Medicare program, which is the second-largest single benefit program according to Table 2. As noted before, available evidence does not support a value for k other than 1, although there are arguments suggesting that it could be either higher or lower than 1. The solid line in Figure 3 shows that over a broad range of possible values—from $k = 0.5$ to $k = 1.5$—the net fiscal externality to parenting ranges from slightly over $190,000 to about $240,000; in all cases, the net externality remains positive. A similar degree of sensitivity to the value of π_P—the proportion of parents in the population—is revealed by the dashed line in Figure 3: the lower the proportion of parents, the greater is the net externality per parent.

Fiscal Externalities Compared to Private Spending on Children. As another way of

placing our core findings in context, we have imputed private household spending on children to the parents in our PSID database. For this task, we used average per-child expenditures on children found in the U.S. Department of Agriculture's report *Expenditures on Children by Families*, 2008 (Lino & Carlson 2009). The report provides average expenditures from pretax income by income class and child's age (in 3-year groups from 0-2 to 15-17), separately for one- and two-parent families. The report also provides adjustment factors for combining children by age and total number of children. We used these averages to construct a synthetic age profile of household spending on children in the PSID data base. We divided total spending equally between the two parents in couple-headed households, then averaged the imputed per-parent spending by single year of age (of the parent), and finally obtained the NPV at age 18 of all future spending on children. Using $r = 0.03$, the resulting NPV is $191,727 (in 2009 dollars), which is well below the per-parent fiscal externality of parenting. This finding is even more remarkable when we consider that household pretax income includes some transfer income, such as TANF and Food Stamps. If we subtract the publicly-funded part of household expenditures on children from the total, we find that the fiscal externality associated with parenting far exceeds the purely private expenditures parents make on their own children's behalf.

Discussion

There are several possible ways to interpret our estimate of the net fiscal externality to being a parent, $217,501. One might argue that becoming a parent is tantamount to providing society with a nondepreciating capital asset that generates an annual flow of revenues, in perpetuity, such that the present value of the asset (at an interest rate of 3%) is $217,501. A more qualitative interpretation is that parents receive a small net subsidy over their own lifetime, in return for which they produce a flow of offspring that is of substantial—a much more than offsetting—value to society. For discount rates lower than 3% the fiscal externality is

considerably larger, although for discount rates greater than 4.3% it is negative.

There are numerous public policy issues to which our results are relevant. One possible interpretation is that parents pay too much in taxes, or, equivalently, bear too large a share of the total costs of raising children. On the other hand, one might use these results to argue that nonparents should pay a surtax, or otherwise increase their contribution to the public budget. Alternatively, one might contemplate some sort of familial "means" testing for selected benefit programs for which there is good evidence of strongly differential use by nonparents and parents. Any such proposals, of course, would alter the incentives—the "prices"—facing those weighing the options of becoming, or not becoming, a parent. As we have already indicated, we lack the structural model of parenting choices that would permit us to investigate any such second-order effects. Another area of policy relevance, outside the realm of taxes and transfers, relates to coverage of reproductive benefits: King and Harrington Meyer (1997) found that poor women tend to have broad access to contraceptive coverage but little access to infertility treatments, while working- and middle-class women enjoyed broader coverage of infertility treatments but scant coverage of contraception.

A recognition of the social value of informal care—including the care provided by children to their parents—is implicit in proposals to link tax reductions to caregiving. To invoke the social value of informal care as a rationale for differential tax treatment by parental status is to echo past calls to link Social Security benefits to fertility (Demeney 1987; Burggraf 1997). An interesting parallel has arisen in Germany, whose 1994 Dependency Insurance Act launched a universal long-term care insurance program funded through an earmarked payroll tax. In a 2001 decision issued by Germany's highest court, it was ruled unconstitutional to tax parents and the childless at the same rate; interestingly, the judge rejected (for lack of evidence) the argument that parents used fewer care resources, basing his decision instead on the fact that parents,

through their childbearing, produce the future workers needed to keep the system solvent while the childless do not (Schneider 2002). Although they are subject to the usual (as well as a number of less usual) caveats, our findings imply that parents' childrearing activities produce a substantial fiscal dividend in the contemporary U.S. as well.

Our analysis employs a highly abstract depiction of demographic, economic, and public-sector dynamics, and depends on a long list of assumptions; as usual, any interpretation of the findings must be mindful of those maintained assumptions. While we would wish to relax many of those assumptions, to do so would require additional data (some of which do not appear to exist) and a far more complex analytic model. One issue we have not explored is the extent to which the NPVs we present are specific to the single birth cohort—people age 18 in 1994—for which we have obtained our estimates. For example, the budget-balancing assumptions built into the underlying model, together with the combination of age distribution and programmatic structure represented—in particular, the growth of old-age entitlements in a pay-as-you-go system—translate into a combination of tax increases and benefit reductions somewhere in our reference cohort's middle years. These adjustments are likely to produce NPVs that differ from those of cohorts born earlier, or later, than the cohort featured in our analysis.

We have noted, at various points, elements of spillover from private familial behavior into the public arena, some of which—environmental externalities, for example—are omitted from our analysis. But there are any number of private spillovers that might be considered, as well. A more ambitious model might attempt to take into account the effects of fertility fluctuations on cohort wage profiles (Macunovich 2002), which produces an interaction between parenting behavior and the well-being of others, including nonparents. Moreover, some public expenditures that are prompted by the needs of children may produce benefits for nonparents: for example, nonparents can be hired to teach in the schools that are populated by the offspring

of parents. These, and many other issues, remain as opportunities for additional research.

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Table 1: Age-specific *k* -ratios, selected tax and expenditure programs

	Age Group										
	18-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-74	75+
FEDERAL											
Taxes											
Income Tax	1.05	1.16	1.27	1.29	1.12	0.99	0.94	0.86	0.84	0.86	1.67
Excise Tax	1.08	1.08	1.08	1.08	1.08	0.86	0.86	0.86	0.86	1.19	1.19
FICA & SMI	1.00	1.11	1.26	1.32	1.22	1.12	1.05	0.93	0.86	0.80	0.99
Benefits											
OASDI benefits	0.75	0.75	0.75	0.75	0.75	0.95	0.95	0.95	0.95	1.02	1.02
Medicaid (Non-institutional)*	0.18	0.18	0.18	0.18	0.18	0.64	0.64	0.64	0.64	0.99	0.99
SSI*	0.62	0.62	0.62	0.62	0.62	2.28	2.28	2.28	2.28	1.22	1.22
EITC	0.00	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.00	0.00
Food Stamps*	0.16	0.16	0.16	0.16	0.16	0.64	0.64	0.64	0.64	0.64	0.64
Rent Subsidy	0.61	0.61	0.61	0.61	0.61	2.13	2.13	2.13	2.13	2.11	2.11
Public Housing	0.99	0.99	0.99	0.99	0.99	1.44	1.44	1.44	1.44	1.39	1.39
Unemployment benefits*	1.21	1.21	1.21	1.21	1.21	1.17	1.17	1.17	1.17	1.32	1.32
Public College*	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
Military Retirement	0.10	0.10	0.10	0.10	0.10	1.04	1.04	1.04	1.04	1.57	1.57
STATE AND LOCAL											
Taxes											
Income Tax	1.05	1.11	1.18	1.24	1.10	1.08	1.08	0.78	0.55	0.38	1.62
Property Tax (owners)	0.64	0.58	0.85	0.86	0.91	0.91	0.92	0.92	0.91	1.00	0.98
Property Tax (renters)	2.13	2.13	2.13	2.13	2.13	1.76	1.76	1.76	1.76	1.73	1.73
Sales Tax	0.90	0.90	0.90	0.90	0.90	0.75	0.75	0.75	0.75	1.13	1.13
Unemployment premiums	1.12	1.15	1.18	1.19	1.05	0.99	0.91	0.88	0.89	0.70	0.72

* applied to State-local as well as Federal expenditures

Table 2: NPV of lifetime taxes and benefits by program and parent status

	Nonparents	Parents	Offspring
Taxes Paid			
Federal Income Tax	$196,027	$185,484	$308,873
State Income Tax	$41,653	$40,966	$63,912
Excise Tax	$13,742	$13,293	$20,492
FICA	$156,836	$140,637	$238,120
SMI	$4,042	$4,495	$6,512
Property tax (owners)	$23,694	$26,204	$39,459
Property tax (renters)	$13,866	$6,873	$11,911
Sales taxes	$37,728	$42,919	$64,390
UI premiums	$9,381	$8,945	$13,870
Other taxes*	$135,863	$135,863	$212,358
TOTAL TAXES	$632,833	$605,680	$979,897
Benefits Received			
OASDI	$65,623	$66,126	$95,759
Medicare	$48,865	$48,865	$70,468
Medicaid (inst.)*	$17,661	$11,045	$17,250
Medicaid (noninst.)*	$5,195	$16,009	$60,411
SSI*	$5,339	$5,002	$6,407
EITC	$231	$2,608	$2,797
AFDC/TANF*	$0	$12,089	$13,253
School lunch	$0	$244	$3,656
Food Stamps*	$898	$3,838	$12,014
Rent subsidies	$906	$841	$2,097
Public housing	$2,314	$1,997	$4,328
UI benefits*	$8,144	$6,788	$9,542
Public Schools*	$0	$9,951	$143,080
Public higher education*	$20,767	$15,202	$34,320
Student Aid	$4,071	$2,980	$5,073
Military Retirement	$10,711	$9,080	$14,396
Other benefits*	$115,094	$115,094	$218,446
TOTAL BENEFITS	$305,817	$327,763	$713,297
Taxes minus benefits	$327,015	$277,917	$266,600

* Federal and State-local taxes, or benefits, combined

All figures in 2009 dollars.

Table 3: Sensitivity of NPV to discount rate

Discount Rate:	0.01	0.03	0.05
Taxes paid:			
Nonparents	$1,168,369	$632,833	$375,824
Parents	$1,133,317	$605,680	$353,960
Offspring	$13,796,363	$979,897	$220,357
Benefits received:			
Nonparents	$744,508	$305,817	$151,232
Parents	$749,645	$327,763	$174,967
Offspring	$9,850,814	$713,297	$205,614
Taxes-Benefits			
(1) Nonparents	$423,862	$327,015	$224,592
(2) Parents	$383,672	$277,917	$178,993
(3) Offspring	$3,945,549	$266,600	$14,743
Net externality [=(2)−(1)+(3)]	$3,905,359	$217,501	-$30,855

All figures in 2009 dollars.

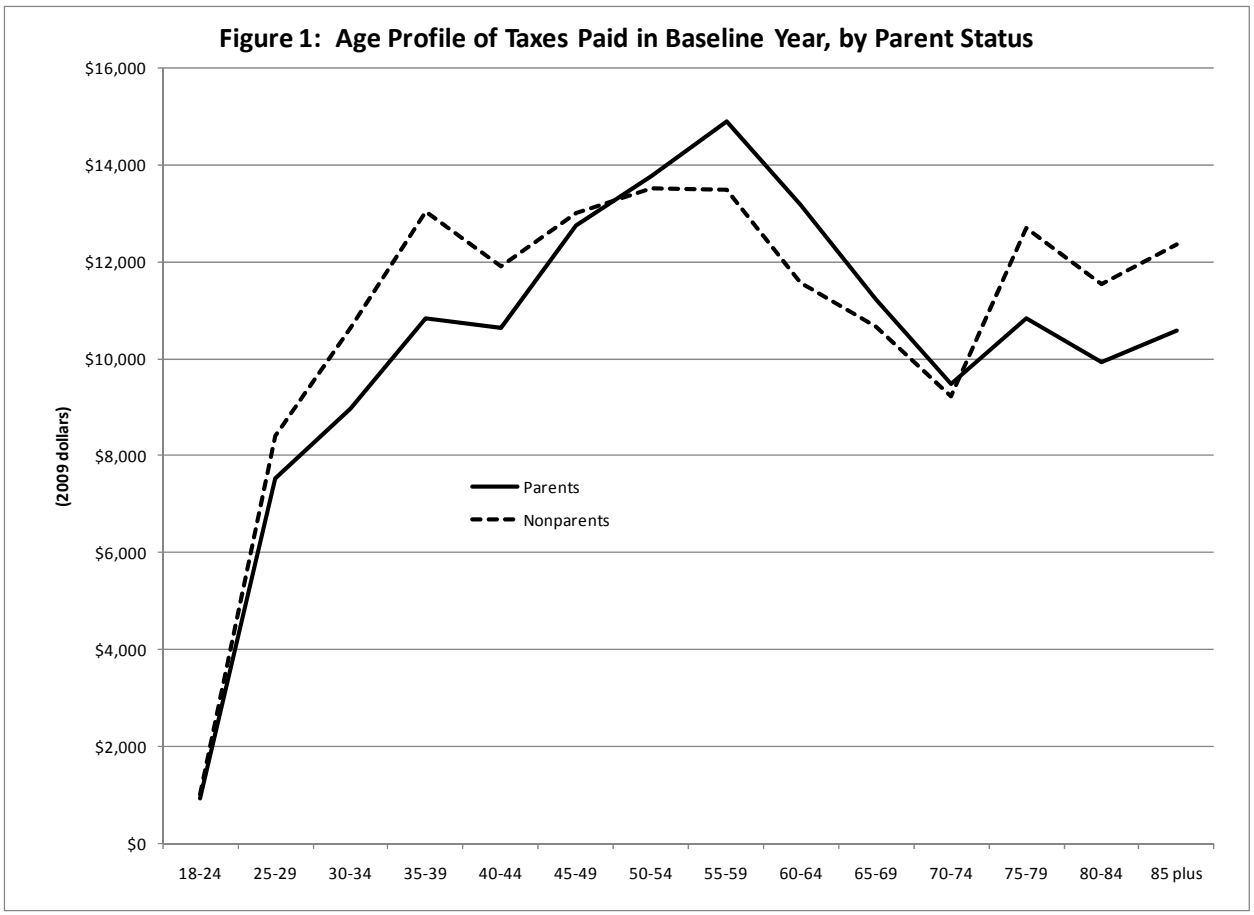
Figure 1: Age Profile of Taxes Paid in Baseline Year, by Parent Status
$16,000
$14,000
$12,000
$10,000
$8,000
$6,000
$4,000
$2,000
$0
(2009 dollars)
Parents
Nonparents
18-24
25-29
30-34
35-39
40-44
45-49
50-54
55-59
60-64
65-69
70-74
75-79
80-84
85 plus

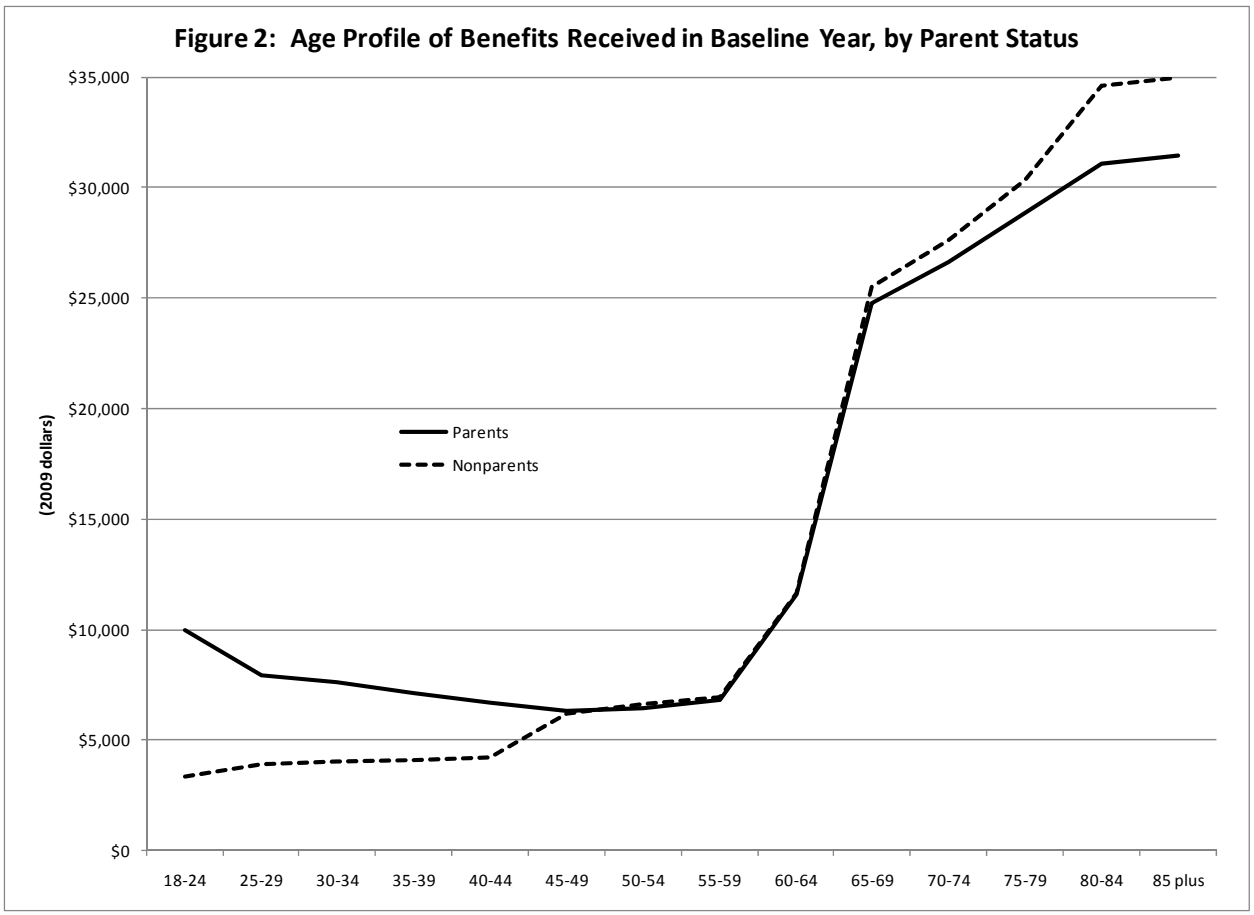
Figure 2: Age Profile of Benefits Received in Baseline Year, by Parent Status
$35,000
$30,000
$25,000
$20,000
$15,000
$10,000
$5,000
$0
(2009 dollars)
Parents
Nonparents
18-24
25-29
30-34
35-39
40-44
45-49
50-54
55-59
60-64
65-69
70-74
75-79
80-84
85 plus

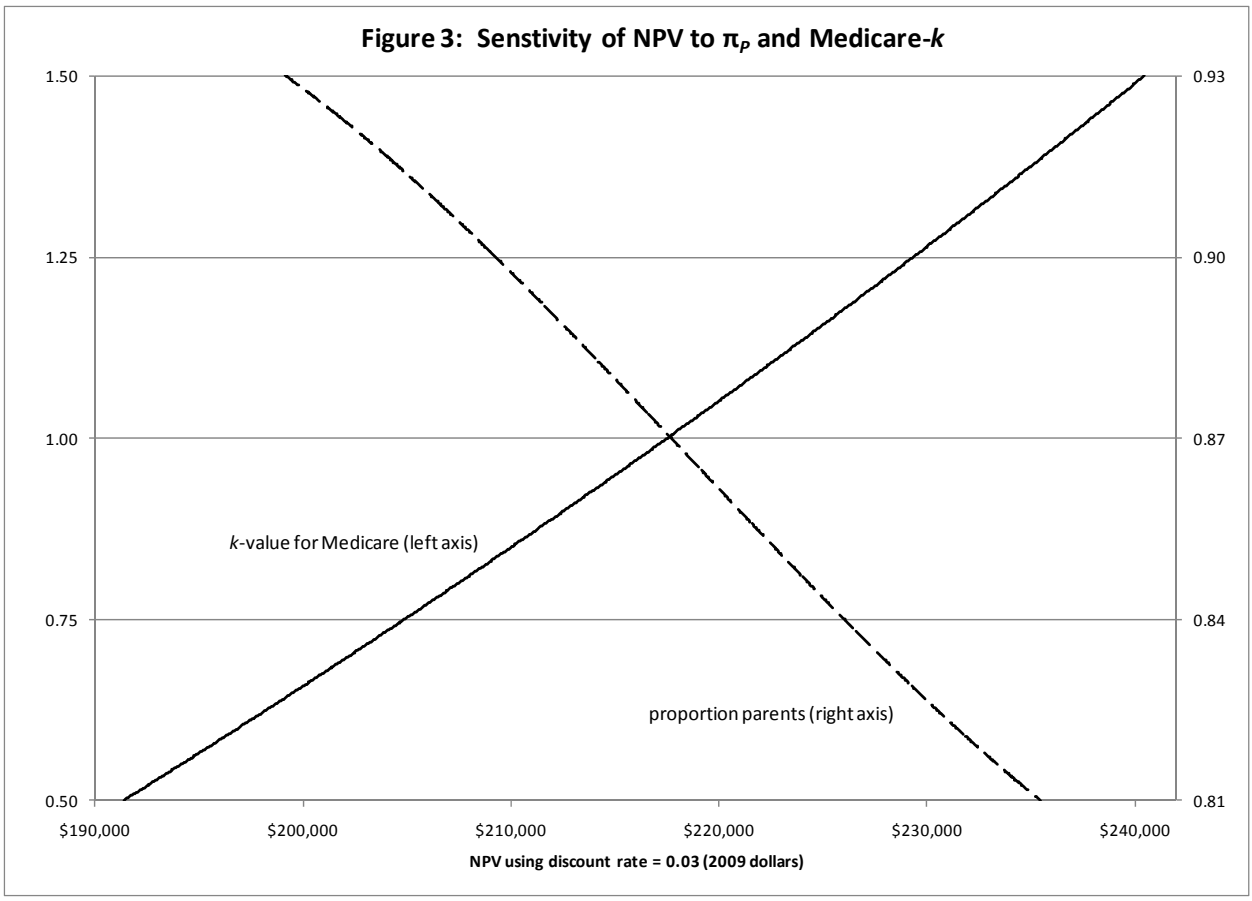
Figure 3: Senstivity of NPV to π_P and Medicare-*k*
1.50
1.25
1.00
0.75
0.50
0.93
0.90
0.87
0.84
0.81
k-value for Medicare (left axis)
proportion parents (right axis)
$190,000
$200,000
$210,000
$220,000
$230,000
$240,000
NPV using discount rate = 0.03 (2009 dollars)

APPENDIX

Table 1: Fiscal Flows Recognized in Accounting Model

		Taxes
F	S	Income tax
F		Corporate tax
F		Excise tax
F		FICA
F		SMI contribution
	S	Property tax, owners
	S	Property tax, renters
	S	Sales tax
	S	Unemployment insurance premiums
F	S	Other
		Benefits
F		OASDI
F		Medicare Part A
F		Medicare Part B
F	S	Medicaid-institutional care
F	S	Medicaid-noninstitutional care
F	S	SSI
F		EITC
F	S	AFDC/TANF
F		School lunch
F	S	Food stamps
F		Energy assistance
F		Rent subsidies
F		Public housing
F	S	Unemployment benefits
F		Refugee aid
F	S	Bilingual education
F	S	Elemenary and secondary schools
F	S	Public higher education
F		Student aid
F	S	Incarceration
F	S	Public Employee retirement
F		Military retirement
F		Railroad retirement
F	S	Congestible goods
	S	Workers Compensation

Note: F = Federal; S = State and local