TAX AND SPENDING POLICY

AND ECONOMIC MOBILITY

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KEY FINDINGS:

- While marginal tax rates seem to have little influence on men's decisions to work, refundable tax credits for low-income families have increased women's participation and may improve their relative economic position.
- The tax treatment of wealth accumulation through home ownership, retirement savings, capital income and estate taxes primarily benefits higher-income families and does not enhance intergenerational mobility.
- Since it is difficult to establish causality between health and economic mobility, the mobility effects of the federal government's large investments in health care are unclear.
- Federal spending on education programs targeted towards lower-income individuals such as Head Start and Pell Grants enhance economic mobility by increasing their human capital.
- The federal Social Security program has mixed effects on mobility: cash benefits tend to enhance mobility through their progressivity, but Social Security may also depress savings and absolute mobility.

Government tax and spending policies can affect both relative and absolute economic mobility. Tax rates potentially can affect decisions to work and invest in human capital, economic growth, and families' relative economic positions.

Taxes can also influence individuals' wealth accumulation that potentially affects both absolute and relative economic mobility both across (intergenerational) and within generations (intragenerational). Government spending also affects mobility either by purchasing goods that may drive mobility such as education and health or by effectively lowering the cost of mobility-enhancing goods through tax deductions and credits. Government spending on programs that directly support family consumption also can affect families' relative economic position or intragenerational mobility.



This review focuses on the main role that federal tax and spending policies can play in economic mobility. State policies likely have similar effects. As Carasso, Reynolds and Steuerle (2008) show, numerous federal spending programs can encourage economic mobility. This review touched on only a selection of the main effects of such spending.

The literature leads to several important conclusions about federal tax and spending policies:

- While marginal tax rates seem to have little influence on men's decisions to work, refundable tax credits for low-income families have increased women's participation and may improve their relative economic position.
- The tax treatment of wealth accumulation through home ownership, retirement savings, capital income and estate taxes primarily benefits higher-income families and does not enhance intergenerational mobility.
- Since it is difficult to establish causality between health and economic mobility, the mobility effects of the federal government's large investments in health care are unclear.
- Federal spending on education programs targeted towards lower-income individuals such as Head Start and Pell Grants enhance economic mobility by increasing their human capital.
- The federal Social Security program has mixed effects on mobility: cash benefits tend to enhance mobility through their progressivity, but Social Security may also depress savings and absolute mobility.

Literature Summary

Income taxes can affect mobility through effects on individuals' decision to work and invest in human capital. Since higher taxes lower the marginal cost of taking time off from work, they potentially reduce hours at work and can lower economic mobility that occurs through increased work effort. On the other hand, lower income taxes reduce the demand for leisure and raise hours at work and economic mobility. Most studies agree that taxes have little effect on men's decisions to work (Slemrod and Bakija 2004). In contrast, research on the refundable Earned Income Tax Credit (EITC)¹ concludes that the credit leads to greater employment among women but small and often insignificant effects on hours of work (Eissa and Liebman, 1996; Meyer and Rosenbaum, 2000 and 2001). To the extent that the EITC raises employment and earnings for lower-income families, relative income mobility can increase. Recent studies also document that older adults work more in response to the reduction in taxation of earnings (Song and Manchester 2007). However, since this effect occurs among higher-wage older workers it is not likely to enhance economic mobility. A few studies also find that lower marginal tax rates increase job turnover (Gentry and Hubbard 2004) and potentially could enhance economic mobility through increased wages on the new job.

Progressive taxation reduces the returns to <u>human capital investment</u> (Caucutt et al. 2006) and could thereby reduce absolute mobility since investments in human capital lead to faster economic growth (Romer 1986). Other literature examines the effect of progressive taxation on parents' investments in their children. Some argue that the nondeductibility of investments in children's human capital discourages this investment relative to others (Erosa and Koreshkova 2007), potentially reducing intergenerational mobility.

The role of taxes in economic growth and therefore absolute mobility is unclear. Economists conclude that simple relationships cannot establish how the tax system affects economic prosperity (Slemrod and

¹ The earned income tax credit provides a maximum of \$4,000 to single-parent working families with earned income of \$10,000 with two children. The credit begins to phase out at about \$15,000 higher, and is less for families with one child. The tax code provides a very small credit for childless workers.

Bakija 2007). Many dimensions of the tax system, including rates on individuals, corporations, the treatment of capital gains, and the definition of the tax base all matter.

Studies using tax records to assess *relative* mobility find upward mobility over time (Carroll, Joulfaian and Rider 2006 and Auten and Gee 2007) similar to that found in mobility studies based on pre-tax income. While the literature does not provide studies showing the effects of the tax structure on relative economic mobility per se, the similar findings based on post- and pre-tax income suggest that the tax system does not play a significant role in determining relative mobility. Nor does the literature provide any studies examining the effect on taxes on intergenerational mobility in the United States This gap may be due to the lack of publicly available longitudinal post-tax data.

Tax preferences that favor wealth accumulation through **home ownership** and savings for retirement tend to benefit the wealthiest households and if anything depress economic mobility. A recent study, for example, suggests that the tax preference, rather than favoring low-income families to purchase homes, encourages higher-income families to borrow more and buy larger homes than they otherwise would (Gale, Gruber and Stephens-Davidowitz 2007). Most low- and moderate-income families do not itemize their deductions to take advantage of this tax expenditure. Also, most federal spending on pension savings accrues to higher-income families (Burman et al. 2004). Some recent research, however, shows positive effects of higher match rates for savings programs targeted towards low-income families (Duflo et al. 2006). While research shows that the estate tax has a small negative effect on wealth accumulation (Kopczuk and Slemrod 2001), most wealth is transferred at death. Grawe's review documents that the vast majority of wealth accumulation occurs through inter-vivos and bequest transfers. Wealth accounts for one third of income persistence.

The federal government spends large sums on potentially mobility-enhancing goods, especially health and education. The evidence of investments in health on mobility is mixed, especially because of the difficulty in sorting out the separate effects of other factors that affect health such as genetics, lifestyle and neighborhood environments. Further, the literature on health indicates that public health insurance programs do not appear to eliminate health disparities. The review on education and mobility highlights how investments in low-income families and children tend to enhance relative inter- and intragenerational mobility.

Research on whether employer-provided health insurance restricts job mobility (and therefore economic mobility) is mixed (Madrian 2006). Some studies, however, find that insurance coverage through a spouse's plan reduces labor supply of the secondary earner (Buchmueller and Valletta 1999).

A large share of the federal government's investment in education does not target a particular income group. Instead it supports state and local K-12 education and provides loans for higher education that can benefit low- and moderate-income families. Smaller federal investments pay for Head Start and Early Head Start, which enhance mobility by targeting and enhancing cognitive achievement among low-income children. The federal government also invests in programs geared toward higher education and job training, such as Pell grants. These investments target lower-income individuals and enhance intragenerational and intergenerational mobility to the extent that the gains from additional education increase individuals' lifetime earnings. Investments in child care that target low-income families may also enhance mobility by increasing work effort among low-income mothers (Schaefer et al. 2006).

² The federal government also supports higher education through tax expenditures that are not reviewed here, such as the Hope and Lifetime Learning tax credits, tuition and fees tax deductions and student loan interest deductions; see Carasso, Reynolds and Steuerle (2008).

Finally, government spending on income support potentially can enhance the relative economic mobility of those families receiving assistance. Social Security benefits promote relative intragenerational mobility since on balance the system is progressive, paying out more in benefits to low-income workers than to higher-income workers (Cohen et al. 2002). Also, Social Security has substantially reduced poverty among older Americans (Engelhardt and Gruber 2004). Social Security may also reduce absolute economic mobility to the extent that it reduces overall savings. Estimates suggest that this effect is relatively small (Conesa and Krueger 1999; Auerbach and Kotlikoff 1987).

While federal spending on income supports can enhance mobility through its effect on relative income, it obviously may also affect families' ability to purchase other mobility-enhancing goods such as food and better nutrition. Food stamps provide a significant income supplement to families that receive these benefits, enhancing their relative economic position. One study also finds that food stamps increase birth weights among low-income children (Almond, Hoynes and Schanzenbach 2007) and, as outlined in the literature review on health, higher birth weights can improve long-term outcomes and mobility.

Conclusions

Research provides surprisingly little evidence on the direct effects of government tax and spending policy on mobility. In part, the lack of evidence reflects the paucity of after-tax income data, especially data that reflect the effect of the tax system on incomes across generations. The expansion of the EITC provides clear evidence of a positive effect on the decision to work among single mothers. Increased work effort should, in turn, lead to greater intragenerational mobility as these parents improve their relative economic positions; it could possibly lead to greater intergenerational mobility since such refundable tax credits were not available to earlier generations. The government also spends enormous sums on health and education, both potentially mobility-enhancing goods. However, research evidence shows that the effect of greater health spending on economic mobility is limited at best. More clearly, education enhances mobility, especially education investments at early ages. Government spending on basic income supports increases relative mobility within a generation, and possibly has other positive effects through better birth outcomes. However, government spending may also reduce families' savings incentives, possibly reducing growth and absolute mobility.

THE EFFECT OF INCOME TAXES ON MOBILITY

The tax structure can affect economic mobility in several ways. Marginal tax rates can reduce labor supply, and total taxes reduce disposable income and lead to increases in paid work (to maintain a desired consumption level). Since work effort can affect relative intra- and intergenerational mobility, taxes can play a role in mobility. Some scholars argue that the tax system affects economic growth, which in turn could affect absolute economic mobility. Of course, taxes affect families' net disposable income and could affect relative mobility. The income tax in the United States is quite progressive, with the 40 percent of tax units with the lowest incomes having no net tax liability. (In fact, they receive net credits from the federal government.) The highest quintile pays 87 percent of all federal income taxes. Considering all federal taxes—payroll, corporate and estate—the highest quintile pays 73 percent of the total bill and the lowest 40 percent of tax units pay 2.5 percent (Rohaly 2007). In general, the lower tax burden on lower-income families increases their chances for economic mobility.

Taxes and Work

Both income and payroll taxes have two countervailing influences on the decision to work (Slemrod and Bakija 2004). Since most taxes reduce the marginal reward for working, they will reduce labor supply. Taxes also make families poorer so that they need to work harder to achieve a given level of consumption. To the extent that taxes increase (or decrease) work effort they also can affect mobility if one group works more (or less) as a result, thereby increasing (decreasing) their relative mobility.

The responsiveness of labor supply to tax rates has been studied extensively. Nearly all research concludes that male hours worked respond hardly at all to changes in after-tax wages (Slemrod and Bakija 2004). However, others argue that the higher marginal tax rates in Europe account for the much lower labor supply behavior in Europe relative to the United States. Relative to the United States, where the overall tax burden was a constant 40 percent between the early 1970s and the mid-1990s, France's average tax burden rose from 49 to 59 percent and Italy's rose from 41 to 64 percent. Those two countries both saw a significant decline in labor supply relative to the United States during this period (Prescott 2004). Some studies show that the supply of older men to the labor force responds to changes in the Social Security earnings test, which is a tax on earnings, though with some compensation later in life (Song and Manchester 2007; Disney and Smith 2002; Friedberg 2000).

Research also shows that the Earned Income Tax Credit (EITC), a negative marginal tax at low wages, raises the labor supply of women. Mainly, the evidence supports significant increases in labor force participation, with much weaker evidence that hours worked increase as a result of the EITC (Hotz et al., 2006; Eissa and Liebman 1996; Meyer and Rosenbaum, 2000 and 2001). This increase in employment leads to greater earnings and greater relative income mobility in the short run. Since returns to experience are at least as high for low-skill workers as they are for medium-skill workers (Gladden and Taber 2000a, 2000b), greater attachment to the labor force could also increase intergenerational economic mobility in the long run.

Progressive tax rates also can reduce the net benefit of changing jobs, possibly discouraging individuals from moving up the income ladder. The importance of job mobility for income mobility early in young men's careers is detailed in Topel and Ward (1992). Gentry and Hubbard (2004) find that a 5 percent decrease in the marginal tax rate increases the job turnover propensity by 8 percent, and a one standard

³ In fact, the original intent of the EITC was to offset the cost of payroll taxes for low earners and to improve economic mobility.

deviation reduction in the progressivity of the tax system leads to slightly higher increases in the turnover rates.⁴

Gentry and Hubbard (2004) also argue that reducing the progressivity of the tax system will increase relative and absolute intragenerational mobility. Using data from the Panel Study of Income Dynamics and interstate variation in the tax rate, they find that a one-standard deviation reduction in tax progressivity increases the probability of a job change by 8.6 percent.⁵ These job changes come with a wage increase, which results in relative and absolute upward mobility.

Taxes and Human Capital Investment

Blumkin and Sadka (2005) show that investments in **human capital** increase intergenerational mobility and Caucutt et al. (2006) show that progressive income taxation reduces the returns to human capital investment. Further, since investments in human capital lead to faster economic growth than do other types of investments, such as physical capital, the effects of progressive taxation can be compounded (Romer, 1986; Lucas, 2002). Thus, progressive income taxation may lead to lower economic growth than would similar taxation of physical capital. Erosa and Koreshkova (2007) find that progressive income taxes can affect parents' economic mobility through two mechanisms. First, to the extent that parents take time out of work to invest in their children's human capital, their incomes will be lower, reducing their relative economic mobility. Second, the non-deductibility of investments in children's human capital discourages human capital accumulation, especially for higher income households who face higher marginal tax rates, potentially reducing intergenerational mobility.

Taxes and Economic Growth

The role of the tax system on economic growth and therefore absolute economic mobility is complex. Slemrod and Bakija (2004) conclude that "no simple relationship can establish how the tax system affects economic prosperity or growth" (p. 117). They show that economic growth historically does not track well with the level of tax burden in the United States. Many dimensions of the tax system matter: rates on individuals, the corporation income tax rate, the tax rate on capital gains, the definition of the tax base, and so on. Factors unrelated to taxation such as technological advances probably have a much more profound influence on the economy. Identifying precisely what role a slightly increasing overall tax burden and changing features of the tax system have played in economic growth is impossible.

Taxes and Relative Mobility

Since tax rates affect net incomes, they affect intragenerational mobility to the extent that families along the income distribution pay larger (or smaller) shares of their income in taxes. While several studies estimate intragenerational mobility using individual tax records, they do not directly tell us how the tax system per se affects mobility. For example, Auten and Gee (2007) find that 45 percent of those in the bottom income quintile in 1987 moved to higher quintiles between 1987 and 1996. Carroll, Joulfaian and Rider (2006) report an upward mobility rate of 54 percent between 1970 and 1995. Differences in tax structures over time also could affect intergenerational mobility to the extent that the tax system applying to one generation was more (or less) progressive than the system affecting the subsequent (or preceding generation). We could find no studies in the literature that directly examine the effect of the tax structure on intergenerational mobility.

⁴ Gentry and Hubbard (2005) focus the same analysis on entrepreneurship, showing how higher taxes and greater progressivity reduce entrepreneurship. See the section on **self employment**[see Mckernan and Salzman review] for further discussion of entrepreneurship.

⁵ Gentry and Hubbard (2004) perform numerous specification tests to confirm the robustness of these results. In particular, they do not rely solely on interstate variation in tax rates to identify the effects of tax progressivity.

TAX TREATMENT OF SAVINGS AND WEALTH

Tax policy affects the decision to save and allocate savings among different types of goods. Tax preferences especially favor home ownership and retirement savings. Low taxes on capital income increase the after-tax rate of return on investment, which should lead to greater investment and greater economic growth. The estate tax affects different generation's **wealth** accumulation. Aspects of the tax code that affect wealth accumulation can be especially important for intergenerational mobility.

Tax Expenditures

Tax expenditures for housing and retirement, in general, do not increase economic mobility since only higher income taxpayers who itemize their taxes benefit. Total tax preferences favoring home ownership likely will reach \$190 billion in 2007. The deductibility of mortgage interest on owner-occupied homes (\$80 billion), capital gains exclusions on home sales (\$37 billion), and the deductibility of state and local property taxes on owner-occupied homes (\$16 billion) are among some of the largest expenditures in 2007 (USOMB 2007). Evidence suggests that the mortgage interest deduction does little to encourage homeownership since most tax return filers with low or moderate incomes do not itemize their deductions or take advantage of this tax expenditure (Gale, Gruber and Stephens-Davidowitz 2007). The data suggest that the mortgage interest deduction does not enhance economic mobility. Instead, it encourages those people who buy homes to borrow more and buy larger homes than they otherwise would.

Anderson and Roy (2001) analyze the effects of an elimination of housing tax preferences and conclude that such a policy would increase the progressivity of the tax system, particularly if the government did not constrain itself to make the elimination revenue neutral by lowering tax rates simultaneously. Glaeser and Shapiro (2003) show that positive externalities arise from **homeownership** rather than from the level of housing consumption, but the externalities cannot be large enough to justify the magnitude of the tax preferences for homeownership.

The federal government spends over \$100 billion for tax expenditures on pension savings in 2007 mostly benefiting higher-income families (USOMB 2007). Burman et al. (2004) find that more than half of the tax benefits of Defined Contribution (DC) pension savings accrue to the top income decile, and 85 percent of the benefits of IRA tax deductibility accrue to the top 40 percent of households (despite the income limits on IRA accounts). Joulfaian and Richardson (2001) find the same pattern of DC plan participation by earnings (not household income as in Burman et al. 2004) for DC plans and for non-employee contributory plans, but their results show no real relationship between participation rates in IRAs and earnings.

Recent policies designed to increase retirement savings among low- and middle-income households may enhance relative intra- and intergenerational mobility. Research shows that households' participation and contributions respond positively to higher savings match rates. For example, when comparing the responses of an experimental and a control group, Duflo et al. (2006) show positive responses to an increase in the match rate in the nonrefundable Saver's Credit Program targeted towards low-income households. Nonetheless, Burman et al. (2004) report that only about 5 percent of tax filing units take advantage of the program, with roughly a third of the benefits accruing to each of the middle three quintiles.

Taxes on Capital Income

Both wealth accumulation during a lifetime and economic growth are also influenced by the tax rate on capital income. Low taxes on capital income increase the after-tax rate of return on investment, which

⁶ Of course, given the literature discussed earlier that links tax progressivity to reduced income mobility, the net effect may be to restrict mobility.

should lead to greater investment, greater economic growth and higher absolute mobility. The current treatment of capital gains (tax rates lower than those on earned income and the stepped-up basis of gains at death so that heirs do not pay tax on the gains realized during the decedent's lifetime), amount to tens of billions of dollars in tax expenditures each year.

Much of the empirical literature from 1980 and earlier finds large behavioral responses to declines in capital gains taxes (e.g. Feldstein et al., 1980). However, Poterba (1987) and Burman et al. (1997) find that high-income households do not shelter their capital gains from taxes very effectively. In particular, they do not use capital losses to offset taxable capital gains and minimize taxes. Instead, the effective tax rate on capital gains is similar to the statutory rate for most high-income households. These results suggest that behavioral responses to reductions in the tax rate on capital gains would be muted.

The evidence on the effects of capital income taxes on savings is mixed. There is little to no debate that capital taxes reduce the after-tax rate of return, but the link to private saving is more tenuous, as is the link to wealth transfers and economic mobility. Boskin (1978) found a strong negative relationship between capital income taxation and savings, but subsequent analysis by Bosworth (1984) among others considerably weakened that link. For a review of these effects, see Toder and Rueben (2007).

Estate Taxes

As the **wealth** literature review details, the vast majority of wealth accumulation occurs through intervivos and bequest transfers. Thus, the tax treatment of these transfers can have enormous effects on intergenerational mobility since as much as one third of income persistence can be accounted for by wealth. However, the effects of the estate tax on wealth accumulation and on transfers of wealth are theoretically ambiguous. The estate tax reduces the incentive to save for those whose saving is at least partly motivated by the desire to leave a bequest. For example, Kopczuk and Slemrod (2001) find that aggregate reported estates in the United States were somewhat smaller than would be predicted based on other variables during periods of relatively high marginal estate tax rates. A recent review of the literature by Joulfaian (2006) concludes that estate taxes depress the value of estates by as much as 10 percent.

However, if the reason for bequests is that wealthy people are dying unexpectedly at younger ages rather than a desire to provide for heirs after death, then lowering taxes on estates will have no effect on bequests (CBO 2006). Joulfaian and McGarry (2004) study of both the gift and estate taxes finds that while the wealthy do change the timing of gifts in response to tax changes, very little of that wealth is transferred during the lifetime of the wealthy individual. Kopczuk (2006) also finds that the desire to hold onto one's wealth dominates tax incentives as a motivator for transfers. Regardless of the motive for the bequest, research shows that large bequests can reduce the labor supply and incomes of transfer recipients, thereby reducing intergenerational mobility (Holtz-Eakin, Joulfaian and Rosen 1993)

GOVERNMENT INVESTMENT IN MOBILITY-ENHANCING GOODS

The federal government invests in education and health care through both direct expenditures and tax subsidies. Steuerle et al. (forthcoming 2008) details this and other mobility-related spending in the 2006 federal budget. Other sections of this literature review summarize the effects of **education and health** on mobility. This section delves deeper into the mechanism through which government invests in education and health to explore the progressivity underlying government spending and subsidies.

Investments in Health Care.

It is difficult to establish causality between health and economic mobility. Investments in health face difficulty in overcoming the strong link between socioeconomic status and health. There is ample evidence that health and wealth are related. Hertz (2006) suggests that health accounts for 8 percent of the intergenerational correlation of income. However, health itself is affected by a multitude of factors, including spending on health care services, genetics, lifestyle, and neighborhood environments. As Kronstadt's review on the links between **Medical Care and Health Insurance** points out, it is also difficult to establish the link between government investments in health programs such as Medicaid because such programs do not appear to eliminate health disparities. Studies find it very difficult to sort out selection issues in their attempts to isolate the effects of particular government programs on health care.

The literature suggests that health could contribute to intragenerational mobility through its effects on work. Some recent research focuses on how the U.S. employer-based health insurance system affects work. Since the federal government provides large subsidies to promote employer health insurance, it is necessary to consider those linkages to economic mobility. The exclusion of employer contributions from taxes amounts to one of the largest tax expenditures, at over \$132 billion in fiscal year 2006 (U.S. Office of Management and Budget 2006). The benefit of this tax expenditure largely accrues to higher income families who more likely have employer-insurance on their job and a higher marginal tax rates (Burman and Gruber 2005).

Some studies have examined the effect of employer-provided health insurance on job mobility. Employees with coverage may need to remain in their current job unless a new job provides insurance and covers preexisting health conditions. A reduction in job mobility could reduce mobility by limiting an employee's ability to move to a job with higher pay. Madrian's (2006) review suggests a fairly even split between those studies that find a decrease in job mobility due to a potential loss of health insurance from a job change, those that find no statistical relationship between health insurance and job choice, and those whose results vary idiosyncratically with the analysis. Sanz-de-Galdeano (2006) finds that the Health Insurance Portability and Accountability Act (HIPAA) that limits pre-existing condition clauses to 12 months to help overcome the problem of job lock due to health insurance has no significant effect on reducing job lock.

Researchers also point out that job mobility may be enhanced by health insurance coverage under a spouse's plan (Madrian 1994) or under COBRA which makes insurance portable from one employer to another employer for a limited time. Gruber and Madrian (1994) find empirical evidence that spouse's insurance and COBRA do enhance job mobility. To the extent that the job mobility is toward higher earnings, this will enhance economic mobility.

Access to health insurance may also alter the labor supply decisions of workers. Buchmueller and Valletta (1999) and others report strong negative effects of husband's insurance coverage on wives' hours of work. This suggests that in families without health insurance through the husband's employment, wives are both more likely to work and are likely to work more than they would otherwise (see also

Olson, 1998; Schone and Vistnes, 2000; and Wellington and Cobb-Clark, 2000). Bradley et al. (2005) reports dramatically larger reductions in labor force participation of breast cancer surviving wives insured through their husbands compared with those insured through their own-employment.

In sum, the evidence on whether employer-provided health insurance limits job mobility is mixed, but there seems to be more evidence that access to a spouse's employer-insurance health coverage may limit women's labor force participation. This could, in turn, limit some families' relative economic mobility. It is far clearer that the government investment in employer-provided health insurance primarily enables higher income households to purchase more health care. The evidence suggests the tax treatment of health insurance does not enhance economic mobility.

Education

Grawe's review concludes that public investments in **education** targeted on low-income families have positive effects on relative inter- and intragenerational mobility. Specifically, increases in parent education lead to better educational outcomes for children, public expenditures on higher education limit the effect of family finances on college attendance, and early education initiatives raise low-income childhood achievements.

However, Carasso, Reynolds and Steuerle (2008) show that the total federal investment in education is small relative to many of the other tax expenditures reviewed here. The federal government spent almost \$40 billion on primary and secondary education and \$22 billion on higher education in 2006. (Most spending for primary and secondary education occurs at the state and local levels.) Since most of this spending is not targeted exclusively on low-income families, it is not likely to have a large effect on economic mobility. Federal funding for Head Start, amounting to \$6.8 billion in 2006 (Carasso, Steuerle and Reynolds 2007) likely does have a positive effect on economic mobility. As the review of the education literature points out, since gains from these investments especially benefit at-risk children, they likely foster relative mobility within and across generations.

The **effectiveness of job training programs** appears to be weaker than for traditional education programs suggesting that government investments in Pell grants that help low-income individuals to complete college have stronger, positive effects on economic mobility than federally funded training programs such as the Workforce Investment Act (WIA).

Child Care

Aside from education, the federal government invests in child care directly and indirectly to promote work among families with dependent children. Since increased work likely leads to higher earnings, it is likely to affect economic mobility. Direct government spending on child care targets low-income families while indirect spending through the child care tax credit tends to favor higher-income families.

The federal government spent about \$12 billion on child care targeted towards low-income families in 2005, including the Child Care and Development Block Grant and child care subsidies through the Temporary Assistance for Needy Families (TANF) program. The Child and Dependent Care Tax Credit (CDCTC) benefits more moderate income families. Tax expenditures on child care were just over \$3 billion in 2006. While the CDCTC falls as adjusted gross income increases (with a maximum credit of 35 percent on incomes below \$15,000), most of the benefits go to moderate and higher-income families. Dickert-Conlin et al. (2005) show that almost 70 percent of all child care tax credit dollars go to households with income above \$40,000. Many low-income families do not benefit because they have no tax liability.

⁷ Wellington and Cobb-Clark (2000) also find smaller but significant effects of wives' insurance on labor supply of husbands.

Much larger, but not strictly tied to child care, are the child tax credits (CTCs) which are \$42 billion in tax expenditures and another \$16 billion in direct outlays in 2006 (U.S. Office of Management and Budget 2006). In 2007, tax filers may claim a refundable credit equal to 15 percent of the excess of earnings over \$11,750, up to the \$1,000 maximum per child. Though the CTC was designed to complement the EITC, which reaches its maximum at the earnings level at which the CTC takes effect, many of the neediest families do not benefit because their incomes are too low to qualify for the credit (Burman and Wheaton, 2007).

While child care spending and subsidies increase the income of parents who get them and thus potentially increase relative mobility, whether they increase parents' work effort is unclear. Schaefer et al. (2006) review this literature and report estimates of responsiveness of work to child care subsidies that vary widely. Estimates range from very low (roughly a 4 percent increase in employment for a subsidy equal to 50 percent of the cost of care) to substantial (an 11 percent increase in employment in low-income, non-welfare households for a \$1000 annual increase in the subsidy). Anderson and Levine (2000) report average labor supply elasticities with respect to the market price of child care between –0.05 and –0.35, with much larger effects for low-skilled women. However, since positive effects do seem to accrue to low-income families it is likely that investments in child care targeted to these families do enhance relative economic mobility.

GOVERNMENT SPENDING ON INCOME SUPPORTS AND MOBILITY

The government also spends large sums directly on programs that contribute to basic living standards, especially for low-income people. To some extent, these programs increase the relative economic position of beneficiaries and intragenerational mobility. They may also have positive effects on intergenerational mobility to the extent that government income supports increase incomes for one generation relative to another.

This review focuses on Social Security, the major social insurance program in the United States, and Food Stamps, currently the largest, means-tested income support program. Earlier literature focused on how the Aid to Families with Dependent Children (AFDC) program showed that it perpetuated the low economic position of some participant families and therefore depressed economic mobility. However, the Temporary Assistance for Needy Families (TANF) program that replaced AFDC in 1996 has a very different structure than AFDC. Only 40 percent of TANF spending actually covers cash assistance to low-income families, and families no longer have an entitlement to benefits. Most TANF spending covers other supports such as child care and temporary assistance to help families avoid enrolling in the program. It is unlikely that TANF has much effect on economic mobility.

Social Security

In 2006, Social Security benefits totaled \$546 billion and over 49 million people received benefits (Social Security Administration 2007). Benefits clearly raise beneficiaries' living standards. Porter et al. (1999) report that 75 percent of adults age 62 and older are lifted out of poverty by the program. Engelhardt and Gruber (2004) suggest that Social Security explains the dramatic decline in poverty among older adults—from roughly one in three in 1960 to one in 10 in 1995. However, this overall rate masks considerable heterogeneity in the population. While poverty rates have been declining for all groups of elderly Americans, the poverty rate of those aged 80 and above is nearly twice that for those ages 65 to 69. Similarly, poverty rates for never-married, widowed or divorced seniors are roughly four times the rate for married seniors (Engelhardt and Gruber 2004).

Social Security disability insurance (SSDI) benefits also replace lost income to adults under age 62 who can no longer work. Cohen et al. (2002) show that disability rates are higher among low earners, and combined with the progressive benefit structure of Social Security (i.e. Social Security replaces a higher fraction of low earnings than it does of high earnings), disability benefits enhance relative intragenerational mobility. However, Kronstadt points out in her review of the literature on disability that some research suggests that government disability benefit programs act as work disincentives. To the extent that they depress work and lifetime earnings, they may depress economic mobility both within and across generations.

Survivor benefits for workers who die prior to retirement age also promote intragenerational income mobility. Just as low earners are more likely to become disabled, so are they more likely to die before retirement. Survivor benefits increase the progressivity of Social Security by raising the incomes of low earner families by a higher percentage of lifetime-covered earnings than for high earner families (Smith et al., 2003; Cohen et al., 2002). Liu and Rettenmeier (2003) find similar results. The growing consensus in the literature, then, is that survivor and disability benefits are progressive (though life-course differences, like differential mortality by income do partially offset the system's progressive intent), generating greater relative income mobility.

⁸ The Earned Income Tax Credit (EITC) costs the federal government roughly the same as food stamps. The effects of the EITC are covered earlier in the review of how the tax structure affects economic mobility.

⁹ See, for example, Antel (1992) and Gottschalk (1996).

Social Security may also affect total savings. If anticipated benefits reduce other saving, then the effects outlined above will be muted to some degree. A number of authors, especially in the context of a lifecycle model of consumption and saving, find significant reductions in the overall capital stock by unfunded social security programs. Many of these depend on the replacement rate of the social security system, but estimates of the reduction in the capital stock range from 10 to 25 percent (Auerbach and Kotlikoff, 1987; Imrohoroglu et al., 1999; and Conesa and Krueger, 1999).

Food Stamps

During fiscal year 2007, 26 million people received food stamps in an average month for a total annual cost of over \$30 billion. Food stamps, extended nationwide for the first time in 1974, can raise the annual income of a household of three by over \$5,000 in 2007. Food stamps also reduce poverty. When food stamps are included with cash income, Jolliffe et al. (2005) estimate that food stamps have relatively little effect on the poverty rate for children because relatively few families receive enough in food stamp benefits to lift them above the poverty threshold but they reduce the poverty gap for children by 20 percent. Wheaton (2007) estimates that food stamps lifted over three million people from poverty overall in 2004. Given the program's effects on family incomes and purchasing power, receipt of benefits should increase the intragenerational mobility of beneficiary families. Families that receive food stamps may also improve their income position relative to their parents' generation before the program was enacted. We can find no studies that examine the effect of an income measure that includes food stamps on the IGE.

One recent study evaluates the health impact of the roll out of the food stamp program (FSP) during the 1960s and 1970s using the variation in the month the FSP began operating in each U.S. county (Almond, Hoynes and Schanzenbach 2007). These authors find that food stamps improved birth outcomes (increased birth weights) for both whites and African Americans with larger impacts for births to African American mothers. As described in **Prenatal Conditions and Health at Birth** higher birth weights increase intra- and intergenerational mobility through their positive influence on educational attainment, health, and income in later life.

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¹⁰ Wheaton (2007) uses the March 2005 Current Population Survey (CPS) and simulation procedures to correct for underreporting of food stamps on the CPS to estimate the effect of food stamps on poverty.

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