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Welfare Reform, Saving, and Vehicle Ownership: Do Asset Limits and Vehicle Exemptions Matter?

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Abstract

This paper examines whether AFDC/TANF asset tests affect the asset holdings of low-educated single mothers, exploiting variation in asset limits and exemptions across states and over time. There are important reasons to examine vehicle assets in this context. For example, vehicles make up a very significant share of total wealth for poor families, and the variation in vehicle exemptions over time and across states far exceeds the variation in asset limits. Consistent with other recent research, I find little evidence that asset limits have an effect on the amount of liquid assets that single mothers hold. However, I find evidence that vehicle exemptions do have an important effect on vehicle assets. The findings suggest that moving from a $1500 vehicle exemption to a full vehicle exemption increases the probability of owning a car by 20 percentage points for low-educated single mothers relative to a comparison group. Also, the results indicate that single mothers are not substituting vehicle equity for liquid assets in response to more relaxed restrictions on vehicles.

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1. Introduction

The saving behavior of poor families has attracted the attention of both researchers and policy makers. Several studies have shown that poor families tend to have very few assets (Carney and Gale 2001; Ziliak 2003). Given that most of these families have limited access to formal credit markets (Sullivan 2005), low saving rates make it difficult for these families to invest in education, own a home, or make other significant investments in physical or human capital. Also, without a buffer of saving, poor families are not self-insured against negative income shocks, and these families may consequently become more dependent on public transfer programs. Some researchers have suggested that low saving rates among the poor limit economic mobility, exacerbating the cycle of poverty (Sherraden 1991).

Previous research has shown that, in theory, transfer programs can partly explain why saving rates are low among the poor (Hubbard, Skinner, and Zeldes 1995). These programs can discourage saving, not only because they provide a consumption floor, but also because they are means tested—eligibility requires a recipient's income and assets to fall below specified thresholds. This paper examines whether the AFDC/TANF asset thresholds affect the asset holdings of single mother families.[1] Many states implemented significant changes in their asset tests during the 1990s, resulting in an increase in both the limits on total assets and the exemptions for vehicle equity. Using nationally representative micro-data, I examine how this variation in eligibility rules across states and over time affects vehicle and liquid asset holdings for low-educated single mothers—a group with significant exposure to the welfare program.

There are important reasons to focus on vehicle assets within the context of a study of the saving behavior of the poor. Recent policy changes for vehicle exemptions far exceed the changes for asset limits. These changes may affect not only vehicle asset holdings, but also overall asset

[1] With the passage of the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) in 1996, Temporary Assistance to Needy Families (TANF) replaced Aid to Families with Dependent Children (AFDC).

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allocation. Also, vehicles are the single largest component of wealth for low-educated single mother families. While vehicles are somewhat illiquid, researchers have argued that durable goods are an important saving mechanism for families with limited exposure to financial institutions. In addition, vehicles are an important consumption good, particularly for welfare recipients transitioning into the labor force. Nevertheless, very little research has addressed the effects of asset restrictions on vehicle assets.

Consistent with other recent studies, I find little evidence that asset limits have an effect on the amount of liquid assets that single mothers hold. However, my results show that vehicle exemptions do have an important effect on vehicle assets. The findings suggest that moving from a $1500 vehicle exemption to a full vehicle exemption increases the probability of owning a car by 20 percentage points for low-educated single mothers relative to a comparison group. Additional analysis indicates that single mothers are not substituting vehicle equity for liquid assets in response to more relaxed restrictions on vehicles—increases in vehicle equity result in increases in total wealth.

In the following section I discuss the relationship between asset restrictions and wealth holdings. I also summarize the relevant policy reforms; provide additional motivation for why vehicle assets are an interesting outcome to examine in this context; and review the empirical literature investigating the effects of asset restrictions. Section 3 describes the data from the Survey of Income and Program Participation (SIPP) used in the analysis, and outlines the methodology. Results are presented in Section 4, and conclusions are offered in Section 5.

2. Background

Asset tests under the AFDC/TANF program typically apply to all assets except for owner-occupied housing equity and some fraction of the equity value of a vehicle.[2] For example, in a state

[2] Many states exclude other assets such as jewelry and burial plots. Traditionally, states have assessed the equity value of the vehicle (market value less vehicle debt) for the purposes of the asset test. (See notes to Table 1).

with a $1000 asset limit and a $1500 vehicle exemption, an individual with $250 in liquid assets and $2000 of equity in a vehicle satisfies the state's asset test ($250 + ($2000 - $1500) < $1000). However, an individual with $750 in a checking account and $2000 in vehicle equity will not satisfy the state's asset test.

Asset tests of eligibility for public transfer programs, in theory, will discourage families that participate in these transfer programs from holding assets. Likewise, with income uncertainty, asset restrictions will also discourage non-participants with a strong likelihood of participation in these transfer programs from accumulating wealth. Hubbard, Skinner, and Zeldes (1995) show that households with low permanent incomes can increase expected lifetime utility by maintaining low levels of assets, because holding assets can result in ineligibility for public transfers. This implies that asset tests may discourage saving for families that see welfare benefits as a viable alternative source of income. Because some assets are exempt from the tests, the implicit tax rate can vary across asset type. Thus, asset tests may also affect asset allocation. In addition, transfer programs such as AFDC/TANF may affect saving even in absence of an asset test by providing a consumption floor, reducing the need for precautionary saving.[3]

Although asset restrictions may discourage the permanent income poor from accumulating assets, the effect of asset limits and exemptions may be different for other households. Relaxing these restrictions, for example, will make transfer programs more attractive to some households that previously had not considered participating due to strict asset tests—in particular, households whose asset holdings are well above the old limits, but are relatively close to the new limits. These households have an incentive to respond to the increased limit by reducing asset holdings in order to maintain the option of participating in these transfer programs. By contrast, there are two groups

[3] In addition to the effect of public transfers, there are many other hypotheses for why saving rates are particularly low for this group. For example, as implied by a full consumption insurance model, poor families have less incentive to save for precautionary reasons if they insure by transferring assets between families. See Cochrane (1991) or Townsend (1994) for a discussion of full consumption insurance. Also, poor families might discount future consumption differently than other families (Lawrance 1991; Angeletos et al. 2001). In addition, these families may exhibit less life-cycle saving due to the relatively high replacement rates of Social Security for low-income groups.

of households that are not likely to exhibit any behavioral response to the presence of asset restrictions in public transfer programs: a) wealthy or high permanent income households and b) households with very few assets and very low permanent incomes. For the former, these restrictions are irrelevant because the probability of program participation is extremely low, while for the latter, the asset restrictions are not likely to be binding.

A. Policy Changes

Asset limits and vehicle exemptions under AFDC/TANF have varied over time and across states. These rules have undergone two periods of major reform during the 1980s and 1990s. The first was the Omnibus Budget Reconciliation Act of 1981 (OBRA 81), which made asset limits fairly uniform across states, and imposed dramatic reductions in the amount of vehicle equity that could be exempt from the asset test. OBRA 81 specified a maximum AFDC asset limit of $1000, although states could set a lower limit. OBRA 81 also imposed greater restrictions on vehicle equity. Prior to 1981, 32 states allowed the full value of one vehicle to be exempt from the AFDC asset test. OBRA 81 set a $1500 maximum for this exemption.[4]

Between 1982 and 1992 asset restrictions for the AFDC/TANF program remained virtually unchanged in nominal terms. States changed eligibility rules between 1992 and 1996 through welfare waivers—applications to the Secretary of Health and Human Services (HHS) to change certain program requirements. As shown in Table 1, during this waiver period states moderately relaxed asset limits, but dramatically relaxed restrictions on vehicle equity. Twelve states relaxed asset limits, but even the most generous limits remained at or below $5000 for a single recipient. During this same period, nearly half of the states offered more generous vehicle exemptions, with seven of these states exempting the full value of at least one vehicle. Changes in limits and exemptions continued after the passage of PRWORA in 1996. By 1999, seven states still had asset limits of $1000, while twenty-one states had exempted the full value of a vehicle.

[4] Other changes resulting from OBRA 81 include the exemption of equity in owner-occupied homes from asset tests. See Powers (1998) for more details.

At the same time that states changed asset limits and exemptions, they also changed other features of the AFDC program. Between 1992 and 1996, many states applied for HHS waivers to impose work requirements, time limits, or family caps. In addition, many states lowered the effective tax rate that AFDC placed on labor income. In 1996, PRWORA replaced the AFDC program with state administered TANF block grants. With PRWORA came mandated work requirements and time limits and new stipulations for minor parents. Besides these requirements, PRWORA gave states broad authority to restructure the nature of their welfare programs. See Blank (2002) or Grogger and Karoly (2005) for more details on these changes.

B. Vehicles

There are compelling reasons to examine vehicle assets in addition to liquid assets in the context of a study of the effects of welfare policy on saving. First, as discussed in Section 2A, the variation in vehicle exemptions far exceeds the variation in the limits on total assets. In the 1990s most states significantly relaxed the constraint on vehicle equity, so that by 1999 nearly half of all states offered a full exemption for at least one vehicle. At this same time, only seven states had relaxed their asset limits by more than $2000 between 1992 and 1999 (Table 1).

Another important reason to examine vehicle assets is that families with a high probability of participating in welfare are more likely to have vehicle equity than any other type of asset. As shown in Figure 1, more than 40 percent of all single mothers without a high school degree have some vehicle equity. This is significantly higher than the twenty-two percent that have money in a checking or savings account. These families hold very little in other forms of assets. Thus, vehicles account for a very large share of the total asset portfolio for low-educated single mother families. As evident in Figure 3, vehicles account for sixty-seven percent of non-housing assets for single mothers without a high school degree. This is a much greater fraction than is evident for a sample that includes those with a high school degree (Figure 2).

It is also important to look at vehicle assets in addition to liquid assets because the AFDC/TANF eligibility rules treat these assets differently. Due to vehicle exemptions, the implicit tax rate is lower for vehicle assets than for liquid assets. Thus, vehicle exemptions may not only affect the level of asset holdings, but they may also distort asset allocation, encouraging families to substitute vehicle equity for other types of assets.

There are several reasons why policy makers who are concerned about the saving behavior of the poor might be less interested in changes in vehicle assets than changes in other assets such as housing or financial wealth. Vehicle assets are less likely than other assets to hold their value or appreciate. Also, vehicle assets are less liquid than other forms of saving, making them less effective as a means of buffering against negative income shocks. Nevertheless, durable goods such as vehicles can be an important saving mechanism for poor households. Browning and Crossley (2001) argue that durable goods provide an important source of consumption smoothing for low-income households. For example, a household may purchase durables when transitory income is high while postponing purchases of durables during income shortfalls, effectively smoothing consumption over uncertain income steams. Fernandez-Villaverde and Krueger (2004) show that it is optimal household behavior to accumulate durables early in the life-cycle as these durables provide both consumption flows and collateral for insurance against variable income. Poor households may choose to save through durables simply because they have limited access to checking or savings accounts at financial institutions (Caskey 1994).

The effect of welfare policy on vehicle ownership also has important implications for the well-being of single mother families because vehicles may be a particularly important consumption good for welfare recipients transitioning into the labor force. Some researchers have argued that vehicles are an important outcome to examine because concerns about transportation for poor families have risen in the wake of recent reforms to welfare policy that have placed significant emphasis on work. Ong and Blumenberg (1998) suggest that transportation is a major obstacle to

sustainable employment for former welfare recipients. Other research finds positive effects of car ownership on both employment and hours of work (Raphael and Rice 2002; Bansak, Mattson, and Rice 2004). These effects are disproportionately large for workers that are spatially isolated from employment opportunities (Raphael and Stoll 2001). As shown in the following section, most working single mothers use their own car to commute to work.

C. Previous Empirical Work

Two empirical studies examine the effect of asset restrictions under the AFDC/TANF program on the saving behavior of the poor: Powers (1998) and Hurst and Ziliak (Forthcoming).[5] Powers (1998) considers how total net wealth, which includes housing equity but excludes vehicle equity, responds to the changes in the asset limit mandated by OBRA 81. She examines a small sample of single mothers (N=229) from the 1979 and 1984 waves of the National Longitudinal Survey-Young Women (NLS-YW), identifying the policy effect by exploiting cross-state variation in the change in the asset limit between 1978 and 1983. She finds a fairly large effect: a $1 increase in the asset limit results in 25 cents of additional saving for households headed by a single mother between the ages of 24 and 34 in the base year.

Due to data limitations, Powers does not include vehicle equity in her measure of household assets. As explained in the previous subsection, excluding vehicle assets is particularly problematic for an analysis of the saving behavior of poor households. Also, due to other limitations in the data, the findings in Powers (1998) are not likely to be representative of the population of all single mothers. The NLS-YW originated in 1968 with a sample of women aged 14 to 24. Thus, the sample of single mothers in Powers (1998) is limited to women between the ages of 24 and 34 at the base year of her study and these women are at least 29 years old in the post-OBRA 81 wave. This excludes a substantial portion of single mothers who are exposed to these transfer

[5] Other studies have analyzed the effects of asset restrictions for different programs. For example, Gruber and Yelowitz (1999) examine the effect of asset restrictions under the Medicaid program. They show that Medicaid eligibility has a large negative effect on household wealth. Neumark and Powers (1998) also find significant effects of the asset tests imposed under SSI on the saving behavior of an elderly sample. See Orszag (2001) for a summary of the empirical literature on the effects of asset restrictions.

programs. This may imply that the findings overstate the responsiveness of saving to asset restrictions for younger single mothers for whom the restrictions may not be binding because these younger mothers are much less likely to have accumulated assets.

Hurst and Ziliak study the more recent reforms to asset restrictions under AFDC/TANF that were implemented either through waivers or PRWORA. Like Powers, they estimate how saving behavior responds to cross-state variation in changes in the asset rules. Using the Panel Study of Income Dynamics (PSID), which provides asset data for the same households in 1994 and 2001, they examine how asset holdings for single mother households change over this seven-year period. Unlike Powers' findings, Hurst and Ziliak (Forthcoming) conclude that changes in asset restrictions have no measurable effect on changes in liquid assets for single mother families. The authors argue that one explanation for this finding is that a substantial fraction of these households have very few assets, and therefore the constraint on assets is not binding. They show that, for a sample of single mothers without a college degree, more than 80 percent have liquid wealth below the state-mandated limit of $1000. However, this argument might be less applicable to constraints on vehicle equity, because limits on vehicle assets may be more likely to bind for this sample. Hurst and Ziliak also show that, conditional on not owning a vehicle in 1994, every $1000 increase in the asset limit increases the probability of owning a vehicle in 2001 by 13 percentage points. They do not consider the effect of vehicle exemptions on vehicle ownership, and they find no effect of asset limits or vehicle exemptions on the probability of having a positive change in vehicle equity over their seven-year period.

My paper contributes to the existing literature in several important ways. First, unlike previous studies, I present detailed evidence on changes in vehicle assets, which are a critical component of saving for single mother families. Moreover, recent policy changes may be particularly important for vehicle equity. Second, the empirical literature investigating the effects of asset limits has reached little consensus. This study provides additional empirical evidence for this

debate; my results for liquid assets confirm the findings of Hurst and Ziliak using a different dataset—a more generous limit on assets does not increase liquid asset holdings. Third, in addition to examining the effects of policy changes that occurred after PRWORA, I also present evidence on the effect of policy changes that occurred during the pre-RRWORA waiver period. It is important to examine the waiver period in isolation because rules governing state welfare programs became highly idiosyncratic post-PRWORA, making it very difficult to characterize the nature of program changes using a few simple parameters. Fourth, I use a much larger dataset that provides more than five times as many observations as previous studies. The larger sample enables me to more precisely estimate the effects of recent policy changes by better targeting my analysis on a narrowly defined demographic group with significant exposure to welfare. I focus on single mothers with less than a high school degree, while previous research has looked at single mothers with less than a college degree. Single mothers without a high school degree are much more likely to participate in welfare. In the early 1990s 72 percent of these single mothers received welfare during the previous year, as compared to 42 percent for single mothers without a college degree. By 1998, these participation rates had fallen to 50 percent and 29 percent respectively.[6]

3. Data and Methodology

A. Data and Descriptive Statistics

The empirical analysis draws on data from the Survey of Income and Program Participation (SIPP). The SIPP provides data for a stratified sample representative of the U.S. civilian noninstitutionalized population. Respondents provide demographic and economic information over the course of several years at four-month intervals. Within each panel, the survey will periodically include an asset and liability topical module which collects detailed wealth information. Respondents report the make, model, and year for all vehicles. From these data the SIPP calculates

[6] These participation rates are based on the author's calculations using adjusted data from the March Current Population Survey. Because welfare receipt is significantly underreported in the March CPS, I adjust the reported numbers using administrative data reported in Bavier (1999).

a market value for each car. Other asset and liability questions cover liquid assets such as checking and savings accounts, U.S. savings bonds, private equity investments, and other financial investments, as well as real estate wealth, business equity, and assets in retirement accounts. Additional information is also provided for liabilities including vehicle loans, mortgage loans and unsecured debt. Unfortunately, the SIPP does not ask households to report the amount of cash held outside of financial institutions. However, data from the Survey of Consumer Finances (SCF), which does ask about cash assets, suggest that cash holdings are a small fraction of asset holdings, even for poor families.[7]

I pool data from the 1992, 1993, and 1996 Panels of the SIPP. In the 1992 Panel, respondents report asset information in the fourth wave (early in 1993) and again one year later in the seventh wave. Similarly, in the 1993 Panel respondents report asset information in the fourth wave (early in 1994) and again one year later. In the 1996 Panel, respondents are asked about their stock of assets and liabilities four times over the duration of the panel at one year intervals. Assets are first reported in the third wave which starts at the end of 1996.

Data on changes in various AFDC/TANF program rules over time and across states are gathered from four sources: Meyer and Rosenbaum (2001); U.S. House of Representatives, Committee on Ways and Means (Various Years); HHS (Various Years); and Urban Institute (2002). Under the New Federalism project the Urban Institute has compiled data dating back to 1996 on asset limits and vehicle exemption levels as well as many other program parameters for each state.

To concentrate on a group of families that is likely to have significant exposure to the AFDC/TANF program, the analysis that follows focuses on families headed by single mothers without a high school degree. By looking at low-educated single mothers I focus on the at-risk population that is most likely to be affected by reforms in AFDC/TANF asset restrictions.

[7] This is based on the author's calculations using the 1998 SCF.

Table 2 provides a preliminary look at samples of low-educated single women between the ages of 18 and 54 from the SIPP for the years 1992 through 1999. I present descriptive information for single mothers and a comparison group of single women without children—a group which is much less likely to be affected by recent changes to welfare policy. Both groups of women, however, experience similar economic outcomes, and have similar wages—particularly when one conditions on educational attainment (Meyer and Sullivan 2004). The SIPP data for these years include 5,153 single mothers with a high school degree or less, 1,837 of which did not finish high school, and 3,148 single women without children, 792 of which did not finish high school.[8] As shown in Table 2, there are some differences across these two groups. Single mothers (Columns 1 and 2) are younger, less educated, and more likely to be minority than the comparison group of single women without children (Columns 3 and 4). Also, single women without children are more likely to own a car and they are wealthier than single mothers.

The evidence on asset holdings in Table 2 suggests that restrictions on vehicle equity are much more likely to bind than restrictions on liquid assets. Forty-three percent of all single mothers without a high school degree own an automobile (Column 1). For a sample of those with a high school degree or less, 58 percent own cars (Column 2). The majority of these women with a job drive their own vehicle to work. The median equity value of a single car (not reported) is $1825 for single women with a high school degree or less and $1500 for those without a high school degree. Average vehicle equity for low-educated single mothers far exceeds the average value of liquid assets. More than a quarter of all single mothers with a high school degree or less, and nearly half of those with cars, have vehicle equity greater than $2500 in real terms, which alone would make them ineligible for AFDC under the pre-waiver rules.[9] By contrast, less than fifteen percent of these low-educated single mothers have liquid assets that exceed the restriction on liquid assets.

[8] I delete observations that are missing the state of residence. I can uniquely identify the state of residence for forty-five separate states as well as the District of Columbia.
[9] All dollar figures in the analysis are converted to constant 1996 dollars using the CPI-U.

Moreover, seventy-five percent of all low-educated single mothers, and more than eighty-five percent of those without a high school degree, have liquid assets valued at less than half of the pre-waiver asset limit.

Table 3 examines changes in asset holdings for single mothers before and after states change vehicle exemptions, and compares these trends to those for single women without children. The "Pre Exemption Change" sample includes single women living in state-years where the nominal vehicle exemption is still $1500. The "Post Exemption Change" sample includes single women living in state-years where the vehicle exemption is greater than $1500. The results show that vehicle ownership for single mothers increases both in absolute and relative terms after states relax vehicle exemptions. Vehicle ownership for single mothers without a high school degree increases by 10.5 percentage points after these limits are relaxed. The increase for single mothers with a high school degree or less is 7.1 percentage points. By contrast, vehicle ownership for single women without children remains virtually unchanged. For single mothers without a high school degree, vehicle ownership increases by 8.4 percentage points relative to the comparison group.

The value of vehicle assets also increases for single mothers. For those without a high school degree vehicle equity increases in absolute terms by 32.5 percent, although most of this increase is due to greater vehicle ownership rather than increased value conditional on ownership. There is some evidence that vehicle equity for this group increases in relative terms as well, by 22 percentage points, but this change is not statistically significant. Traditionally, most states have applied the equity value of the vehicle against the asset test. By focusing on equity value states with strict limits on vehicle assets may not only discourage vehicle ownership, but also provide an incentive for potential welfare recipients to accumulate vehicle debt. However, Table 3 shows that the market value of vehicles for low-educated single mothers increases by more than equity value both in absolute and relative terms, indicating that vehicle debt actually increases after vehicle exemptions become more generous. Debt as a fraction of vehicle value (not reported) increases for

low-educated single mothers that own cars both in absolute terms and relative to the comparison group. During this period, 38 percent of low-educated single mothers with cars have some vehicle debt, and 9 percent have zero or negative vehicle equity. There is also some evidence that liquid assets increase for the lowest educated women, but this change is not statistically significant and much of this increase is driven by a drop in liquid assets for the comparison group.

These differences in trends of vehicle assets need not be driven by changes in the vehicle exemption. The employment rate of single mothers increased sharply after 1993 in absolute terms and relative to comparison groups (Meyer and Rosenbaum 2001). By 1999 the employment rate of single mothers was more than 10 percentage points higher than it was in 1992. While reforms to welfare policy almost surely contributed to the rise in relative employment rates, research has shown that other policy changes played a major role.[10] If increased employment generates an increase in demand for vehicles as a means for transportation to work, then changes in relative employment rates could explain why vehicle ownership rises faster for single mothers than for single women without children. Although the difference in vehicle ownership rates in Table 3 may be driven by changes in employment rates across these groups of women, this evidence still suggests that policy changes did have an important effect on vehicle ownership rates for single mothers. The analysis that follows will isolate the effect of changes in asset limits and exemptions from other policy changes and mitigating factors that are likely to affect the vehicle ownership rates of single mothers.

B. Methodology

The empirical methodology exploits the significant variation in asset restrictions over time and across states to estimate the effects of changes in these asset restrictions on asset holdings for

[10] Meyer and Rosenbaum find that the EITC is responsible for a large share of employment increases through 1996, with a smaller, but still important role for welfare benefit cuts and changes in welfare programs under waivers. Ellwood (2000) attributes recent employment increases to welfare reform, the EITC, and improvements in macroeconomic conditions.

the period from 1992 through 1999. For a sample of low-educated single mothers I estimate the following model:

(1) $V_{ist} = \beta_1 Exemption_{st} + \beta_2(Exemption_{st} * Exemption\ Value_{st}) + \beta_3 Asset\ Limit_{st}$

$+ \beta_4(Asset\ Limit_{st} * Benefit_{ist}) + \beta_5 Benefit_{ist} + \beta_6 X_{ist} + \beta_7 Z_{st} + \gamma_s + \tau_t + \varepsilon_{ist}.$

where V_{ist} is an outcome for family *i* in state *s* in year *t*. In the analysis that follows, V_{ist} represents an indicator for whether a family owns a vehicle or a measure of vehicle or liquid assets or non-housing wealth. $Exemption_{st}$ is an indicator for whether state *s* has a limit on vehicles in year *t* (1 = no full exemption, 0 = full vehicle exemption), $Exemption\ Value_{st}$ is the real dollar value of the exemption given the state does not exempt the full value of a vehicle, and $Asset\ Limit_{st}$ is the real value of the restriction on total assets for eligibility for AFDC/TANF. X_{ist} is a vector of demographic variables including family size, number of kids, whether the family lives in a rural area, and the race, education, and a cubic in age of the single mother. Z_{st} is a vector of time-varying state characteristics including the average manufacturing wages in a state, the quarterly state-level unemployment rate, and indicators for other state welfare policies. γ_s is a time-invariant state effect that reflects unobservable heterogeneity across states, while τ_t is a time effect that reflects aggregate trends such as trends in vehicle ownership. In all of the results that follow, I report heteroskedasticity consistent standard errors that are assumed to be independent across states, but not across individuals within a state.

To capture differences in the value of participating in welfare across states and over time, I include in the model a measure of the maximum benefit in a state for a given family size ($Benefit_{ist}$), as well as an interaction of the maximum benefit with the value of the asset limit. The interaction term allows the effect of the asset limit to differ across states depending on welfare generosity.[11] If more generous asset limits encourage saving particularly in states with higher welfare benefits, then one would expect (β_4) to be positive. The maximum benefit is adjusted to account for the

[11] I also estimated models that include an interaction of the vehicle limit and welfare generosity. These models yield results very similar to those reported in Section 4.

difference in the cost of living across states using the cost of living index from Meyer and Rosenbaum (2001). This measure of real benefits allows me to express the attractiveness of welfare on a common scale across states and over time.

At the same time that asset restrictions changed as a result of waivers, states also restructured other program rules, affecting the probability that a family participates in AFDC/TANF. For example, during the 1990s many states imposed work requirements and time limits, which placed a lifetime limit on welfare receipt. These other changes in welfare policy may also affect saving behavior. For example, work requirements may increase precautionary motives to save directly, or increase saving through their effect on earnings. Similarly, a time limit may reduce the probability of participating in welfare or simply lower the option value of welfare, increasing the incentive to save for precautionary reasons. To capture other changes in state policies, I include in the analysis indicators for other major changes to state welfare rules. All baseline specifications include an indicator for whether the state has implemented a time limit and an indicator for whether the state has terminated an AFDC case under waiver rules. These measures follow Meyer and Rosenbaum (2001). In Section 4C other policies are considered.

It is important to note that the passage of PRWORA in 1996 allowed states to dramatically change the nature of their welfare programs, resulting in highly idiosyncratic state programs post-PRWORA. This is a major obstacle for cross-state studies of welfare reform, as it is very difficult to characterize the nature of program changes using a few simple parameters (Ellwood 2000). Furthermore, the effect of asset restrictions on saving will certainly depend on the probability of being on welfare, and this probability changed dramatically after 1996—caseloads fell by more than forty percent between 1996 and 1999 (Meyer and Sullivan 2004). For this reason, in Section 4 I also examine the effects of policy changes that occurred prior to the passage of PRWORA.

Estimates from Equation (1) may be vulnerable to omitted variable bias if states that offer higher benefits or more generous asset restrictions differ from other states in ways that are

important for determining vehicle ownership or saving decisions. For example, general attitudes towards saving may be different across states and these attitudes may be correlated with welfare policies. To address this, all specifications include state fixed-effects (γ_s) which capture time-invariant characteristics of the state. I also control for some observable, time-varying characteristics of the state such as average manufacturing wages in a state and the quarterly state-level unemployment rate.[12]

Even in a model that includes state fixed-effects, estimates of Equation (1) will be biased if unobservable, time-varying factors that lead states to change asset rules are also correlated with the probability of owning a vehicle in that state. To address this important concern, I also estimate a model similar to Equation (1) for a sample including both single mothers and a comparison group of single women without children, interacting an indicator for single motherhood with the main policy variables and including the single motherhood indicator as an explanatory variable. As long as the unobservable factors affect single mothers and single women without children similarly, this specification captures the effect of the policy changes on assets for single mothers relative to the comparison group.

Although one can follow families over time within panels of the SIPP, the panels are not long enough to estimate individual fixed-effects in this context. The 1992 and 1993 SIPP Panels only provide asset information in two waves, and both observations in these panels are prior to changes in asset restrictions for most states. The 1996 Panel offers up to four observations on assets for each family. However, for many families all four observations occur after the state has changed the rules for asset restrictions. Thus, I treat the SIPP waves as repeated cross-sections. An important concern with this approach is that the composition of who is a single mother may change over time, and single motherhood is not completely exogenous to changes in welfare policies; the level of welfare benefits and eligibility rules could affect marriage or fertility. However, the consensus in

[12] For state wages I take the average weekly earnings of production workers in manufacturing for each state in a given year from Moffitt (2002).

this literature is that the effect of welfare policies on single motherhood is small (Hoynes 1997). Moreover, single motherhood is not likely to change significantly over short time periods. While the bulk of my analysis focuses on the period from 1992 to 1999, the results I report below are qualitatively similar, and in many cases stronger, for the subsample of single mothers from the pre-PRWORA period.

4. Results

A. Vehicle Assets

Table 4 shows estimates of Equation (1) for single mothers without a high school degree in the SIPP from 1992 through 1999. Consistent with the difference-in-differences results in Table 3, the estimates in Table 4 indicate that vehicle exemptions have an important effect on vehicle assets. Column 1 shows probit estimates for the effect of asset restrictions on an indicator for vehicle ownership. The probability of owning a vehicle is lower in states that have a limit on vehicle equity than in states that exempt vehicles, but this difference decreases as the exemption increases. As a test of the effect of a change in vehicle exemptions, I compare a single mother in a state with a $1500 vehicle exemption in real terms, which was the limit for most states prior to the waiver period, to a single mother in a state with a full vehicle exemption ($\beta_1 + (1.5)\beta_2$), as was common by 1999. The estimates in Column 1 suggest that a single mother in a state with a $1500 exemption is 11.6 percentage points less likely to own a car than a comparable single mother living in a state that fully exempts a vehicle (p-value = 0.137). This point estimate is fairly large given that only 43 percent of these single mothers own vehicles during this time period. Within states that do not fully exempt vehicles, each $1000 increase in the exemption results in a 2.1 percentage point increase in vehicle ownership rates (p-value = 0.008).[13]

[13] Estimation of a model that includes one-year lags of the asset rules provides no indication of a delayed response to these rules changes. I can reject the hypothesis that vehicle ownership increases with the lagged values of the state vehicle exemptions.

Asset restrictions may not only affect vehicle ownership but also the value of vehicles that families own. For example, families may allow their vehicles to depreciate, or own vehicles of lower quality in order to satisfy the asset tests. For vehicle equity (Columns 2 through 6), I estimate quantile regressions in addition to mean regressions because the distribution of vehicle equity is highly skewed.[14] The results for vehicle equity are consistent with those for vehicle ownership. A single mother in a state with a $1500 exemption holds $390 less vehicle equity than a comparable single mother living in a state that fully exempts a vehicle (-471+1.5*53.9). This effect is marginally significant (p-value = 0.067) and represents a 44 percent change at the mean of vehicle equity for this truncated sample. Similarly, moving from a vehicle exemption of $1500 to a full vehicle exemption increases vehicle equity by $342 for a single mother at the 60th percentile of the distribution of vehicle equity (p-value = 0.084) and by $595 for a single mother at the 75th percentile (p-value = 0.136). These estimates represent 88 percent and 50 percent increases in vehicle equity at their respective points in the distribution. The effect of vehicle exemptions is slightly greater for the market value of vehicles (Column 7) than for the equity value.[15]

As discussed in the previous section, states dramatically overhauled their welfare programs after the passage of PRWORA, making it more difficult to precisely characterize the nature of these changes. By contrast, during the pre-PRWORA waiver period, states implemented a more limited number of specific changes which are arguably easier to characterize empirically. For this waiver period the effect of vehicle exemptions is somewhat larger (Column 8). The likelihood of owning a

[14] For all OLS regressions, I truncate the sample at the top 2.5 percent of the distribution of the dependent variable due to extreme outliers in the distribution of assets. I do not estimate median regressions because only 45 percent of these single mothers have nonzero vehicle equity. For the quantile estimates, I report bootstrapped standard errors that allow for within state dependence by resampling at the state level, taking all observations for a given state, rather than at the state-year level. These bootstrap standard errors are estimated using 200 replications. In general, this resampling procedure significantly increases the magnitude of the standard errors for the quantile regressions.

[15] Although assessing the market value of vehicles for the asset test has become more common, most states still assess the equity value. (See notes to Table 1). Including an indicator for whether a state assesses the market value or equity value of a vehicle (1 = market value) has virtually no effect on the results reported above; the coefficient on this indicator variable is positive, but not significant. Also, excluding from the sample single women living in state-years where the market value of vehicles is assessed does not change the results presented in Tables 4 through 7.

car for a single mother in a state with a $1500 exemption is 26.2 percentage points lower than the likelihood for a single mother in a state with a full exemption (-0.274 + 1.5*0.008) and this response is statistically significant (p-value = 0.016). For this pre-PRWORA period, I also find that vehicle equity and market value respond significantly to changes in vehicle exemptions (results not reported). As discussed in Section 2, Welfare participation rates were much lower post-PRWORA than during the waiver period. This suggests that the response should be larger prior to PRWORA; as the probability of participating in welfare falls, single mothers should be less likely to respond to changes in welfare rules.

Unlike the results for vehicle exemptions, there is little evidence that the limits on total assets have any effect on vehicle assets. The estimates for both the direct effect of the value of the liquid asset limit as well as the effect of this value interacted with the maximum benefit are very small. Incorporating this interaction term, I consider the effect of the asset limit for a state with a real maximum benefit of $380—the average maximum benefit for this sample of single mothers across all states during this time period. Thus, my null hypothesis for the effect of the asset limit is $\beta_3 + 3.8\beta_4 = 0$. The effect of this policy change is not economically significant in any of the specifications in Table 4. The estimate of the effect of the asset limit on vehicle ownership (Column 1), for example, is -0.1 percentage points (-0.003 + 3.8*0.001).

The point estimates for the coefficients on other explanatory variables show that race and whether the family lives in a rural area are important predictors of vehicle ownership, while the effect of welfare generosity is small and not statistically significant. As discussed in Section 3B, included in all of these specifications are controls for other state-level changes in AFDC/TANF policy. In most cases, the point estimates on these policy variables are positive suggesting that vehicle assets are higher in states that have implemented a time limit or terminated cases under new welfare rules. However, the effects are generally small and the standard errors on these estimates are large.

As mentioned in Section 3B, the analysis presented in Table 4 may be biased if unobservable, time-varying factors that lead states to change asset rules are also correlated with the probability of owning a vehicle or holding vehicle equity. To address this, I estimate the effect of asset restrictions on vehicle assets for single mothers relative to a group of single women without children. The results for these relative effects of changes in asset restrictions are presented in Table 5. These results are quite similar to those presented in Table 4, although the results for vehicle equity are somewhat less precise. Again, we see evidence that more generous vehicle exemptions result in greater vehicle ownership, but that the asset limit has no effect.[16] For example, the difference in vehicle ownership rates between those in states with a full vehicle exemption and those in states with a $1500 exemption is 20 percentage points greater in absolute value for single mothers than for single women without children (-0.237+1.5*0.025), and this effect is statistically significant (p-value = 0.022). The results also show that moving to a full vehicle exemption increases vehicle equity in relative terms by $565 (p-value = 0.090). The quantile estimates for the effect of vehicle exemptions on vehicle equity are similar to those reported in Table 4, although the standard errors are larger. The relative effect of vehicle exemptions on the market value of vehicles is large ($\beta_1 + (1.5)\beta_2 = -1011$) and statistically significant. Also, the effects are still evident, and larger, for the pre-PRWORA sample period.

The results in Table 5 suggest that a policy that fully exempts vehicles would lead to approximately a $565 increase in average vehicle equity, which, holding other components of the asset portfolio fixed, implies a 28 percent increase in non-housing wealth for single mothers without a high school degree. However, non-housing wealth may not increase if these women are substituting vehicle equity for other assets that are not exempt for the AFDC/TANF asset test. Previous research has shown that other policies aimed at encouraging saving have had strong

[16] For single women without children, I assign a maximum benefit equal to the AFDC/TANF maximum for a family of two in each state. Consequently, for this sample of all single women the average state maximum AFDC/TANF benefit level is about $300. Thus, to consider the effect of asset limits for this sample I test the hypothesis that $\beta_3 + (3.0)\beta_4 = 0$.

effects on the allocation of assets but little effect on the level of saving (Engen, Gale, and Scholz 1996). To address this concern, the following section considers whether other assets also respond to changes in asset restrictions.

B. Liquid Assets and Wealth

To determine the effect of recent policy changes on non-housing wealth and the allocation of assets, I also consider whether changes in asset restrictions affect the holdings of liquid assets. There is some disagreement in the previous literature over the effect of liquid asset limits. While Hurst and Ziliak (Forthcoming) find that liquid assets do not respond to the recent changes in the limit on total assets, Powers (1998) reports a sizeable response to changes stemming from OBRA 81. The theoretical predictions for the effect of vehicle exemptions on liquid asset holdings are not clear. On the one hand, relaxing the vehicle exemption may encourage families to substitute vehicle equity for liquid assets in response to the more generous exemption. Also, more generous vehicle exemptions may make welfare more attractive to some families, encouraging them to hold fewer liquid assets for precautionary reasons. On the other hand, if the exemption is initially binding to the extent that some vehicle equity is counted towards the limit on total assets, then relaxed exemptions provide more room for liquid assets under the asset test, allowing families to increase liquid asset holdings.

Following the approach taken for vehicle assets, I examine the effect of changes in asset limits and vehicle exemptions on liquid asset holdings and non-housing wealth by re-estimating Equation (1), substituting a measure of liquid assets or non-housing wealth as the dependent variable.[17] I estimate OLS models and quantile regressions for liquid assets and wealth as well probit models where the dependent variable is an indicator for whether or not the family has any liquid assets. The results for single mothers without a high school degree in Table 6 suggest that families are not substituting out of liquid assets into vehicle equity in response to more generous

[17] Liquid assets include money in checking and savings accounts, savings bonds, stocks, and other financial investments. Wealth includes all liquid assets and vehicle equity, but excludes real estate assets.

vehicle exemptions. In fact, the sign of $\beta_1 + (1.5)\beta_2$ is negative in most cases, suggesting that liquid assets increase with more generous exemptions. Although the estimates are somewhat imprecise, in most cases I can reject the hypothesis that liquid assets or wealth fall significantly as vehicle exemptions become more generous. The findings suggest that a single mother in a state with a $1500 vehicle exemption is 18.2 percentage points less likely to have any liquid assets than a comparable single mother living in a state with a full vehicle exemption (p-value = 0.002; Column 1). The analogous result for single mothers relative to the comparison group is very similar (Column 6). The OLS estimates (Column 2) suggest that the level of liquid assets increases by $196 in response to more generous exemptions (p-value = 0.034). However, the estimates for the effect of vehicle exemptions from quantile regressions at the 75th percentile of liquid assets are small and indistinguishable from zero (Column 3). Evidence on non-housing wealth holdings (Columns 4, 5, 9, and 10), which include both liquid and vehicle assets, is consistent with the findings for the components of wealth. The response of total wealth to more generous vehicle exemptions is similar in magnitude to the response of vehicle assets, suggesting much of the change in wealth is due to a change in vehicle assets. While the standard errors for these regressions for non-housing wealth are large, in some cases I can reject the hypothesis that wealth falls in response to a policy that exempts vehicle equity (Column 9). Point estimates from median regressions are consistent with those from OLS, but are smaller in absolute value.

Table 6 also provides evidence on the effect of the asset limit on the holdings of liquid assets and non-housing wealth. These estimates show virtually no evidence that increases in the asset limit increase the liquid asset holdings of single mothers either in a statistical or economic sense. The point estimates for the effect of a $1000 increase in the asset limit for a single mother without a high school degree in a state with an average maximum welfare benefit are negative in all specifications. Also, in many of the specifications I can reject the null hypothesis that liquid assets increase in response to changes in the asset limit, and in all cases I can reject that liquid assets

increase by an economically significant amount. These findings are consistent with Hurst and Ziliak (Forthcoming), who also find no effect of the asset limit on liquid assets for single mothers. The results also suggest that the asset limit has no effect on total non-housing wealth (Columns 4, 5, 9, 10)—in all cases the estimated effect is negative, and in most cases I can reject the hypothesis that wealth increases with these limits.

If liquid assets do not fall, how do single mothers finance increases in vehicle assets? During the 1990s both disposable income and total consumption increased for many single mothers (Meyer and Sullivan 2005). In addition, some of the increase in vehicle spending may have been financed by a decrease in spending on other components of consumption. Data on expenditures from the Consumer Expenditure (CE) Survey for the 1992-1999 period show that vehicle spending as a share of total expenditures for low-educated single mothers has grown both in absolute terms and relative to single women without children.

C. Other Samples and Robustness Checks

Results for both vehicle and liquid assets for other samples that include single mothers with a high school degree are reported in Table 7. In general, these results are similar to those reported for those without a high school degree, although the magnitudes of the effects are smaller in percentage terms. One might expect the effects to be smaller for this sample, because single mothers with a high school degree have a lower probability of participating in welfare than those that do not graduate high school, and therefore they are less likely to respond to changes in welfare policy. For the sample of only single mothers with a high school degree there is very little response of vehicle ownership to vehicle limits either in absolute terms or relative to single women without children. Estimates for vehicle equity and market value (not reported) also indicate that vehicle assets are less responsive to vehicle limits for this group. For the combined sample of single women with a high school degree or less, there is some evidence that vehicle ownership responds to limits. Moving from a $1500 vehicle exemption to a full vehicle exemption increases the

probability of owning a car by 8.9 percentage points for single mothers relative to single women without children (p-value = 0.076). Again, we see that more generous vehicle limits do not result in a reduction in liquid asset holdings. In addition, consistent with the earlier results, all of the specifications in Table 7 show virtually no evidence that more generous limits on total assets result in greater vehicle or liquid assets.

One potential concern with the results for vehicle assets reported thus far is that the states that become more aggressive about requiring welfare recipients to work may also relax vehicle exemptions. In this case, the increased emphasis on work, rather than more generous vehicle exemptions, leads to greater vehicle ownership. The results presented above control for this if the other welfare policy variables included in Equation (1) capture the heterogeneity in state welfare reforms that may affect demand for vehicles. The results are not sensitive to the precise characterization of these policy variables. The results do not change, for example, when other policy variables are included such as indicators for the implementation of a state work requirement or an indicator for the implementation of full-family sanctions for failing to comply with work requirements.

The findings reported in Tables 4 through 7 are robust to a variety of other specifications, sample restrictions, and estimation techniques. For example, I verify that the results hold for a sample that excludes low-educated single mothers who own a home (15 percent of the sample). Also, the results are qualitatively similar for a variety of quantile regressions. I also consider the effects for a sample of single women with less than a college degree, which is the sample used in previous studies on asset restrictions. My results for this larger sample are similar to those reported in Table 7 for single women with a high school degree or less, although the point estimates for the larger sample are slightly smaller in absolute value.

The OLS results presented earlier are fairly sensitive to outliers. While truncation does not change any of the signs of the point estimates for the coefficients on the policy variables, the

parameter estimates for these truncated samples tend to be smaller than those for the full sample. To test the robustness of the OLS results, I estimate a tobit model of the effect of asset restrictions on asset holdings, assuming the dependent variable is censored at zero. These models address the fact that desired assets may be negative. Estimates from these tobit models for vehicle equity, liquid assets, or wealth are similar to those reported for OLS. I also considered how asset restrictions affect a variety of other outcomes that reflect the saving behavior of poor families. In general, I find that asset restrictions have little impact on debt—either vehicle debt or other non-housing debt. This is not surprising given that very few low-educated single mothers have substantial amounts of consumer debt (Sullivan 2005). Also, the results for non-housing net worth are consistent with those reported for non-housing wealth above. In addition, I verify that asset limits in the Food Stamps program do not affect the baseline results presented here.[18]

With panel data, one could examine whether households that initially appear constrained by the vehicle limits are the ones that respond to more generous limits. Unfortunately, as explained in Section 3B, there are limitations with using the panel data in the context of this study. However, analysis that exploits the longer 1996 SIPP panel provides some evidence that these limits may be binding constraints initially. For example, nearly a quarter of all vehicles purchased by low-educated single mothers living in states that have relaxed the vehicle exemption within the past two years have equity values that exceed the old limit but fall below the new limit.

Given the panel nature of the SIPP, nonrandom attrition is a potential source of bias. This is a particular concern if the holdings of vehicle or liquid assets differ noticeably for attritors and nonattritors. A comparison of demographic characteristics for those in the first wave of each panel

[18] Throughout this sample period the Food Stamps asset limit was fixed at the federal level at $2000 for non-elderly households and the vehicle exemption was fixed at $4650. However, as AFDC/TANF asset restrictions were relaxed, the Food Stamps limit may have become the effective limit in some states for households potentially eligible for both programs. To allow for possible interactions with the Food Stamps program, I substitute the effective asset and vehicle limits—the minimum of each limit across the two programs in each state-year—for the baseline measures of asset restrictions in Equation (1). These results indicate that an increase in the effective vehicle exemption by $1000 increases vehicle ownership by 3.5 percentage points (p-value = 0.021), which is similar to estimates of β_2 in Table 4. The effect of the effective asset limit is not distinguishable from zero.

shows that single mothers that subsequently attrit are very similar to those who do not attrit. While the attritors are slightly less educated, are less likely to own a home, and have smaller families, only the difference in family size is statistically significant. These differences are consistent with those reported for earlier SIPP panels (Zabel 1998). Furthermore, estimates of Equation (1) for a sample of low-educated single mothers from only the first wave of each panel yields results that are qualitatively similar to those reported in Tables 4 through 7.

D. Assets Restrictions and Commuting to Work

As discussed in Section 2B, in addition to accounting for a substantial fraction of total assets for low-educated single mothers, vehicles are a particularly important outcome to examine in light of recent reforms to welfare that require recipients to work in order to maintain eligibility. Previous studies have suggested that access to adequate transportation is critical for stable employment of welfare recipients. Recent research that examines the effect of owning a vehicle finds that car ownership increases both the probability of being employed as well as work hours (Bansak, Mattson, and Rice 2004).

The 1996 SIPP panel provides some limited information on commuting for workers. Using these data, I can test the hypothesis that changes in AFDC/TANF asset restrictions affect how single mothers commute to work by examining whether these policy changes had an effect on the likelihood that a single mother drives to work. Unfortunately, due to data limitations, I can only examine the effect of asset restrictions on driving to work for the post-PRWORA period.[19] In general, these results show some evidence that more generous vehicle exemptions increase the likelihood that a single mother drives to work, but the results are imprecise. As shown in Table 8, there is some evidence that relaxing vehicle exemptions increases the probability that a single mother drives to work. A working single mother in a state with a $1500 vehicle exemption is 16.9 percentage points less likely to drive her own car to work than a comparable single mother living in

[19] Data on modes of transportation to work are only available in the 1996 panel of the SIPP, waves 3, 6, 9, and 12.

a state without a limit on vehicles (p-value = 0.158). The response for the larger sample of single mothers with a high school degree or less is smaller but statistically significant (p-value = 0.048). Comparing single mothers to single women without children, there is still some indication that vehicle exemptions affect whether a single mother drives to work, but these effects are smaller and not statistically significant. There is little evidence that more generous asset limits increase the likelihood that a single mother drives to work.

5. Conclusions

This study examines whether recent changes in asset restrictions for the AFDC/TANF program have an impact on the asset holdings of low-educated single mother families. There are important reasons to focus on vehicle assets within the context of a study of the saving behavior of the poor. Recent policy changes for vehicle exemptions far exceed the changes for asset limits. These changes may affect not only vehicle asset holdings, but also asset allocation. Also, vehicles are the single largest component of wealth for low-educated single mother families. While vehicles are somewhat illiquid, researchers have argued that durable are an important saving mechanism for families with limited exposure to financial institutions. In addition, vehicles are an important consumption good, particularly for welfare recipients transitioning into the labor force.

Consistent with Hurst and Ziliak (Forthcoming), who argue that asset restrictions do not have an important effect on the saving behavior of the poor, I find little evidence that the limit on assets discourages asset accumulation for single mother families. This suggests that while asset limits may, in theory, discourage saving for some families, as suggested by Hubbard, Skinner, and Zeldes (1995), these limits do not appear to be binding for families most likely to participate in welfare. However, unlike previous research, I show that exemptions for vehicle equity do have an important effect on vehicle assets. The findings suggest that moving from a $1500 vehicle exemption to a full vehicle exemption increases the probability of owning a car by 20 percentage points for low-educated single mothers relative to a comparison group—an economically and

statistically significant response. However, the response of vehicle ownership to an incremental, $1000 change in the vehicle exemption is small. The evidence also suggests that more generous vehicle exemptions result in greater vehicle equity. For this low-educated sample, moving to a full vehicle exemption increases average vehicle equity by about $565. These findings hold across a wide variety of specifications. The results are even stronger for a sample from the waiver period prior to the passage of PRWORA. Also, single mothers without a high school degree are more responsive to the policy changes than more educated single mothers.

The evidence presented here also suggests that more generous vehicle exemptions do not decrease liquid asset holdings and that total non-housing wealth increases, suggesting that single mothers are not substituting out of liquid assets in response to more relaxed restrictions on vehicles. In addition, I present some evidence that more generous vehicle exemptions increase the probability that working single mothers drive to work.

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Figure 1
Fraction with Positive Values for Selected Assets, Single Women

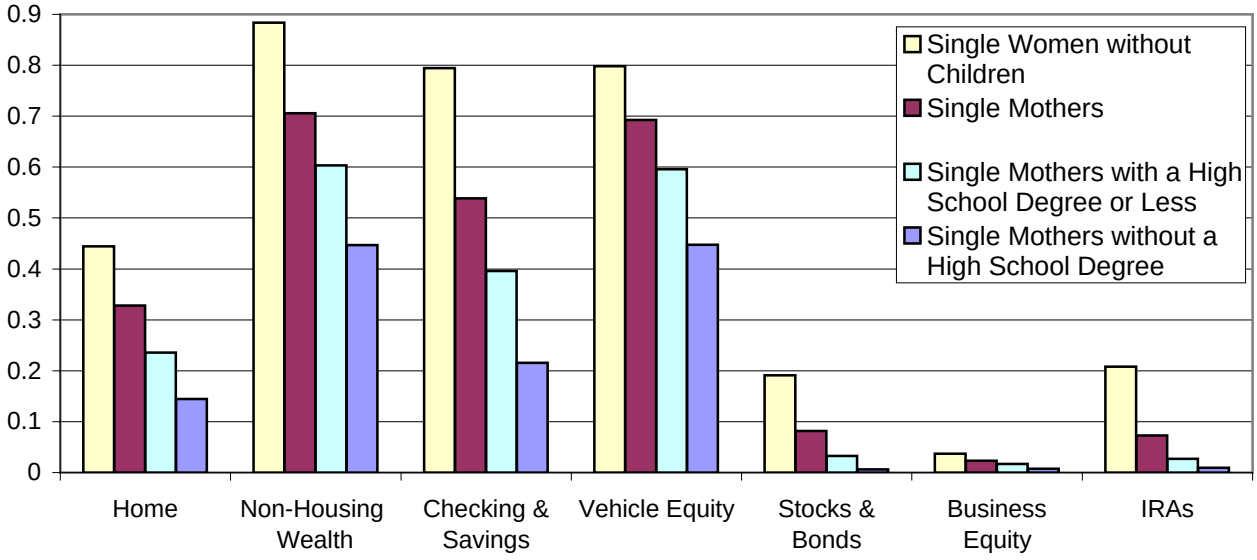


Figure 2
Components of Non-Housing Wealth, Single Mothers, High School Degree or Less

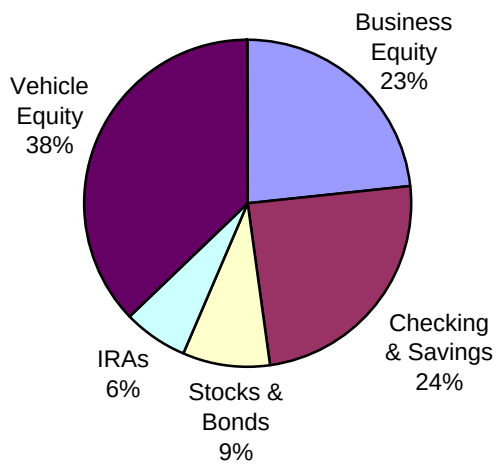
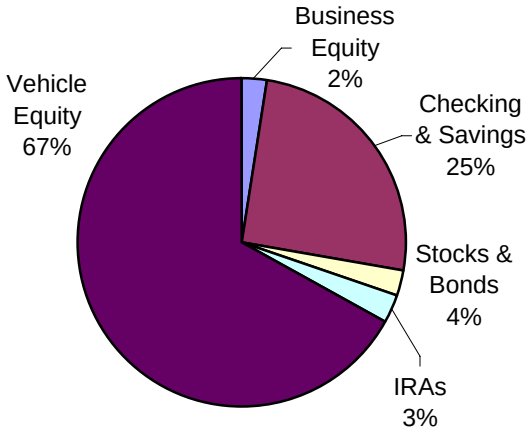


Figure 3
Components of Non-Housing Wealth, Single Mothers, No High School Degree



Notes: Asset data are from the SIPP Panels 1992 (wave 4), 1993 (wave 7) and 1996 (waves 3, 6, 9 and 12). Non-housing wealth includes checking & savings accounts, savings bonds, stocks, other financial investments, vehicle equity, business equity, and IRA accounts.

Table 1--State Asset Rules and Benefit Amounts for the AFDC/TANF Program, 1992-1999

	Asset Limit			Vehicle Exemption			Maximum Monthly AFDC/TANF Benefit		
	1992	1996	1999	1992	1996	1999	1992	1996	1999
Alabama	2,000	2,000	2,000	1,500	exempt	exempt	164	164	164
Alaska	1,000	1,000	1,000	1,500	1,500	exempt	923	923	923
Arizona	1,000	1,000	2,000	1,500	1,500	exempt	347	347	347
Arkansas	1,000	1,000	3,000	1,500	1,500	exempt	204	204	204
California	1,000	2,000	2,000	1,500	4,500	4,650	633	596	626
Colorado	1,000	2,000	2,000	1,500	exempt	exempt	356	356	356
Connecticut	1,000	3,000	3,000	1,500	exempt	exempt	680	636	636
Delaware	1,000	1,000	1,000	1,500	4,650	4,650	338	338	338
District of Columbia	1,000	1,000	2,000	1,500	1,500	4,650*	409	415	379
Florida	1,000	1,000	2,000	1,500	1,500	8,500	303	303	303
Georgia	1,000	1,000	1,000	1,500	4,650*	4,650*	280	280	280
Hawaii	1,000	1,000	5,000	1,500	1,500	exempt	693	712	570
Idaho	1,000	1,000	2,000	1,500	1,500	4,650*	315	317	293
Illinois	1,000	3,000	3,000	1,500	1,500	exempt	367	377	377
Indiana	1,000	1,000	1,500	1,000	1,000	5,000	288	288	288
Iowa	1,000	5,000	5,000	1,500	3,000	3,889	426	426	426
Kansas	1,000	1,000	2,000	1,500	1,500	exempt	403	429	429
Kentucky	1,000	1,000	2,000	1,500	1,500	exempt	228	262	262
Louisiana	1,000	1,000	2,000	1,200	1,200	10,000	190	190	190
Maine	1,000	1,000	2,000	1,500	exempt	exempt	453	418	450
Maryland	1,000	1,000	2,000	1,500	1,500	exempt	377	373	417
Massachusetts	1,000	2,500	2,500	1,500	5,000*	5,000*	579	579	565
Michigan	1,000	1,000	3,000	1,500	exempt	exempt	459	459	459
Minnesota	1,000	1,750	5,000	1,500	1,500	7,500	532	532	532
Mississippi	1,000	1,000	2,000	1,500	1,500	4,650*	120	120	145
Missouri	1,000	5,000	5,000	1,500	exempt	exempt	292	292	292
Nebraska	1,000	5,000	6,000	1,500	exempt	exempt	364	364	364
New Hampshire	1,000	1,000	2,000	1,500	1,500	exempt	516	550	575
New Jersey	1,000	1,000	2,000	1,500	1,500	9,500*	424	424	424
New Mexico	1,000	1,000	3,500	1,500	1,500	exempt	324	389	439
New York	1,000	1,000	2,000	1,500	1,500	4,650*	577	577	577
North Carolina	1,000	3,000	3,000	1,500	5,000*	exempt	272	272	272
Ohio	1,000	1,000	exempt	1,500	4,600*	exempt	334	341	373
Oklahoma	1,000	1,000	1,000	1,500	5,000	5,000	324	307	292
Oregon	1,000	2,500	2,500	1,500	9,000	10,000	460	460	460
Pennsylvania	1,000	1,000	1,000	1,500	1,500	exempt	421	421	421
South Carolina	1,000	1,000	2,500	1,500	1,500	10,000*	200	200	204
Tennessee	1,000	1,000	2,000	1,500	1,500	4,600	185	185	185
Texas	1,000	1,000	2,000	1,500	4,600*	4,650*	184	188	201
Utah	1,000	2,000	2,000	1,500	8,000	8,000	402	426	451
Virginia	1,000	1,000	1,000	1,500	7,500*	7,500*	354	354	354
Washington	1,000	1,000	1,000	1,500	1,500	5,000	531	546	546
West Virginia	1,000	1,000	2,000	1,500	1,500	exempt	249	253	328
Wisconsin	1,000	1,000	2,500	1,500	2,500	10,000	518	517	673

Notes: Limits and exemptions reflect the restrictions that apply to the majority of the recipients in a given state in that year. All limits refer to the equity value except those with a "*" which denotes that the limit applies to the market value. Many states offer exceptions to these rules for some families. For example, some states exempt vehicles if used to transport disabled family members or for commuting for work or training. All numbers reported here are in nominal terms, but these state rules are converted to constant 1996 dollars for the empirical analysis. Maximum benefits are for a family of three (a parent with 2 children).

Source: Asset Limits and Vehicle Exemptions: Urban Institute (2002), HHS (Various Years); Maximum benefit: Meyer and Rosenbaum (2001) and U.S. House of Representatives, Committee on Ways and Means (Various Years).

Table 2
Descriptive Statistics, Single Women, Ages 18-54, 1992-1999, SIPP

	Single Mothers		Single Women without Children	
	No High School Degree	High School Degree or Less	No High School Degree	High School Degree or Less
	(1)	(2)	(3)	(4)
No High School Degree	1.000	0.363	1.000	0.238
	(0.000)	(0.007)	(0.000)	(0.008)
Age	33.19	33.42	42.75	40.24
	(0.201)	(0.112)	(0.344)	(0.189)
Family Size	3.389	3.076	1.000	1.000
	(0.030)	(0.016)	(0.000)	(0.000)
Race (White=1)	0.604	0.611	0.697	0.780
	(0.011)	(0.007)	(0.016)	(0.007)
Fraction Owning Vehicles	0.428	0.582	0.548	0.729
	(0.012)	(0.007)	(0.018)	(0.008)
Fraction of Workers who Drive to Work[a]	0.600	0.728	0.660	0.780
	(0.021)	(0.010)	(0.027)	(0.011)
Vehicle Equity	1,153	1,862	1,806	2,936
	(65.8)	(50.3)	(125.0)	(77.1)
Vehicle Equity for those with Vehicles	2,692	3,197	3,293	4,026
	(132.3)	(76.5)	(205.9)	(96.6)
Vehicle Market Value	2,057	3,355	2,958	4,768
	(98.0)	(74.2)	(174)	(105.5)
Vehicle Market Value for those with Vehicles	4,802	5,760	5,394	6,538
	(184.4)	(106.3)	(270)	(127)
Liquid Assets	861	2,161	2,158	6,425
	(132.2)	(139.4)	(342)	(307)
Non-Housing Wealth	2,014	4,023	3,964	9,362
	(156)	(159.8)	(374)	(330)
Vehicle Equity				
50th Percentile	0	490	474	1,470
75th Percentile	1,196	2,842	2,450	4,650
90th Percentile	3,920	5,845	5,730	8,173
Liquid Assets				
50th Percentile	0	0	0	291
75th Percentile	13	344	290	3,332
90th Percentile	870	2,661	3,792	17,330
Non-Housing Wealth				
50th Percentile	0	751	711	3,280
75th Percentile	1,764	3,889	3,915	9,226
90th Percentile	5,486	9,300	10,870	23,436
N	1,837	5,153	792	3,148

Notes: Statistics are means unless reported otherwise. Standard errors are in parentheses. Data are from the following SIPP panels: 1992 (waves 4 and 7), 1993 (waves 4 and 7), and 1996 (waves 3, 6, 9, and 12). Vehicles include all cars, vans, and light trucks, excluding recreational vehicles (RV's) and motorcycles. Liquid assets include checking and savings accounts, savings bonds, stocks, and other financial investments. Unlike Figures 1-3, non-housing wealth here does not include business equity or IRAs, because these data are not reported in some waves. Dollar values are in 1996 dollars.
a. Transportation data are only available in the 1996 panel. See Table 8 for sample sizes for this variable.

Table 3
Vehicle Assets and Liquid Assets Before and After Changes in State Vehicle Exemptions, Single Women, Ages 18-54, 1992-1999

	Single Mothers			Single Women without Children			Diff in Diff
	Pre Exemption Change	Post Exemption Change	Difference or Ratio	Pre Exemption Change	Post Exemption Change	Difference or Ratio	(3) - (6)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
No High School Degree							
Fraction Owning a Vehicle	0.379	0.484	0.105*	0.538	0.559	0.021	0.084*
	(0.017)	(0.016)	(0.023)	(0.028)	(0.023)	(0.036)	(0.043)
Equity Value of Vehicles	1,001	1,326	1.325*	1,714	1,896	1.106	0.219
	(82.3)	(102)	(0.149)	(174.3)	(178)	(0.153)	(0.214)
Market Value of Vehicles	1,682	2,481	1.475*	2,877	3,038	1.056	0.419*
	(133)	(143)	(0.144)	(267.2)	(230)	(0.126)	(0.192)
Liquid Assets	876	946	1.079	2,497	2,176	0.871	0.208
	(236)	(202)	(0.371)	(689)	(517)	(0.317)	(0.488)
N	823	1,014		322	470		
High School Degree or Less							
Fraction Owning a Vehicle	0.549	0.620	0.071*	0.727	0.732	0.005	0.066*
	(0.010)	(0.009)	(0.014)	(0.012)	(0.011)	(0.016)	(0.021)
Equity Value of Vehicles	1,885	1,836	0.974	3,046	2,816	0.925	0.049
	(69.8)	(72.6)	(0.053)	(113.7)	(105.3)	(0.049)	(0.072)
Market Value of Vehicles	3,139	3,599	1.147*	4,688	4,856	1.036	0.111
	(111)	(98.9)	(0.051)	(159)	(141)	(0.046)	(0.069)
Liquid Assets	2,411	2,575	1.068	7,977	7,911	0.992	0.076
	(291)	(309)	(0.182)	(861)	(674)	(0.136)	(0.227)
N	2,353	2,800		1,399	1,749		

Notes: The "Pre Exemption Change" sample includes single women living in state-years where the nominal vehicle exemption is still $1500. The "Post Exemption Change" sample includes single women living in state-years where the vehicle exemption is greater than $1500. * denotes significance at the 5% level. See notes to Table 2.

Table 4
Probit, OLS, and Quantile Estimates of the Effect of Asset Restrictions on Vehicle Ownership and Vehicle Equity, Single Mothers, No High School Degree, Ages 18-54, 1992-1999, SIPP

Dependent Variable	Vehicle Ownership	Vehicle Equity	Vehicle Equity	Vehicle Equity	ln(Vehicle Equity)	ln(Vehicle Equity)	Vehicle FMV	Vehicle Ownership
Model	Probit[a]	OLS[b]	60th Quantile	75th Quantile	60th Quantile	75th Quantile	OLS[b]	Probit[a]
Sample Years	All	All	All	All	All	All	All	1992-1996
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
State Has Vehicle Limit (1 = Yes) (β_1)	-0.147	-471	-379	-872	-0.814	-0.536	-597	-0.274
	(0.082)	(222)	(211)	(489)	(0.912)	(0.755)	(337)	(0.110)
Has Vehicle Limit*Value of Limit (1000s) (β_2)	0.021	53.9	24.3	184.5	0.098	0.106	12.5	0.008
	(0.008)	(24.8)	(25.4)	(101)	(0.103)	(0.095)	(42.0)	(0.016)
Asset Limit (1000s) (β_3)	-0.003	-7.90	-0.49	12.3	0.075	-0.002	11.33	0.027
	(0.001)	(4.82)	(259)	(448)	(0.584)	(0.447)	(7.98)	(0.073)
Maximum AFDC/TANF Benefit (100s)	-0.018	33.5	64.7	140	0.182	-0.259	276	0.014
	(0.038)	(79.3)	(100)	(277)	(0.428)	(0.485)	(195)	(0.059)
Asset Limit*Maximum Benefit (β_4)	0.001	-0.75	-1.90	-5.04	-0.026	-0.008	-5.64	-0.005
	(0.000)	(1.13)	(34.9)	(77.3)	(0.115)	(0.093)	(1.87)	(0.015)
Race (White = 1)	0.280	566	461	916	5.227	3.439	996	0.315
	(0.034)	(114)	(34.4)	(71.1)	(0.100)	(0.238)	(176)	(0.042)
Rural (Rural = 1)	0.134	51.2	217	217	0.622	0.684	241	0.145
	(0.044)	(142)	(44.1)	(93.9)	(0.131)	(0.308)	(273)	(0.054)
Time Limit Implemented	0.009	287	127	305	0.3186	0.246	229	-0.142
	(0.071)	(206)	(66.8)	(143)	(0.196)	(0.466)	(304)	(0.081)
Case Terminated	0.073	69.1	66.4	308	0.040	0.949	209	0.300
	(0.065)	(249)	(79.7)	(173)	(0.236)	(0.563)	(428)	(0.196)
$\beta_1 + (1.5)\beta_2$	-0.116	-390.2	-342.4	-595.4	-0.667	-0.377	-578.8	-0.262
$\beta_3 + (3.8)\beta_4$	0.001	-10.77	-7.704	-6.854	-0.023	-0.032	-10.10	0.008
P-values from tests of linear restrictions:								
H_0: $\beta_1 + (1.5)\beta_2 = 0$	0.137	0.067	0.084	0.136	0.413	0.586	0.074	0.016
H_0: $\beta_3 + (3.8)\beta_4 = 0$	0.108	0.000	0.957	0.972	0.943	0.911	0.023	0.799
N	1,837	1,791	1,837	1,837	1,837	1,837	1,791	1,006

Notes: "FMV" is the fair market value of a vehicle. In addition to the variables listed, all models include a full set of state and year dummies, a cubic in the age of the female head, family size, and several state level variables including the quarterly unemployment rate and average weekly earnings in the state. See the text for more details. All dollar values are in real terms (1996 $). The standard errors in parentheses are heteroskedasticity consistent and corrected for dependence within a state.

a. Reported point estimates for the probit models are average derivatives.

b. In OLS models, I truncate the sample at the top 2.5 percent of the distribution of the dependent variable.

Table 5

Probit, OLS, and Quantile Estimates of the Effect of Asset Restrictions on Vehicle Ownership and Vehicle Equity, Single Mothers Relative to Single Women without Children, No High School Degree, Ages 18-54, 1992-1999, SIPP

Dependent Variable	Vehicle Ownership	Vehicle Equity	Vehicle Equity	Vehicle Equity	ln(Vehicle Equity)	ln(Vehicle Equity)	Vehicle FMV	Vehicle Ownership
Model	Probit	OLS	60th Quantile	75th Quantile	60th Quantile	75th Quantile	OLS	Probit
Sample Years	All	All	All	All	All	All	All	1992-1996
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Single Mother*State Has Vehicle Limit (1 = Yes) (β_1)	-0.237	-617	-586	-970	-1.544	-0.844	-1007	-0.524
	(0.092)	(373)	(643)	(957)	(0.847)	(0.872)	(580)	(0.159)
Single Mother*Has Vehicle Limit*Value of Limit (1000s) (β_2)	0.025	34.85	29.18	36.63	0.171	0.033	-2.53	0.024
	(0.018)	(92.4)	(136.4)	(268)	(0.149)	(0.197)	(118.0)	(0.045)
Single Mother*Asset Limit (1000s) (β_3)	0.058	-29.6	267	828	0.666	-0.176	-113.0	0.193
	(0.082)	(414)	(770.2)	(936)	(0.844)	(0.898)	(448)	(0.098)
Single Mother*Maximum AFDC/TANF Benefit (100s)	0.066	-8.72	326	813	0.947	0.034	-297	0.208
	(0.078)	(346)	(529)	(805)	(0.728)	(0.871)	(455)	(0.106)
Single Mother*Asset Limit*Maximum Benefit (β_4)	-0.028	7.55	-126	-412	-0.309	0.072	49.87	-0.107
	(0.039)	(199)	(320.0)	(468)	(0.376)	(0.438)	(215.0)	(0.075)
State Has Vehicle Limit (1 = Yes)	0.092	271	426	425	1.143	0.155	364.1	0.288
	(0.090)	(353)	(641)	(1023)	(0.955)	(0.940)	(547)	(0.134)
Has Vehicle Limit*Value of Limit (1000s)	-0.003	24.6	-10.96	108	-0.119	0.128	30.8	-0.02
	(0.018)	(96.6)	(127.5)	(270)	(0.156)	(0.209)	(109.6)	(0.041)
Asset Limit (1000s)	-0.063	18.4	-266	-818	-0.616	0.159	117	-0.157
	(0.082)	(415)	(692)	(881)	(0.727)	(0.869)	(450)	(0.087)
Maximum AFDC/TANF Benefit (100s)	-0.101	44.6	-299	-617	-1.122	-0.183	586	-0.217
	(0.084)	(383)	(684)	(876)	(0.772)	(0.993)	(539)	(0.125)
Asset Limit*Maximum Benefit	0.029	-7.63	125	407	0.289	-0.075	-54.98	0.102
	(0.039)	(199)	(311)	(459)	(0.358)	(0.450)	(215)	(0.075)
$\beta_1 + (1.5)\beta_2$	-0.200	-564.6	-542.6	-915.5	-1.288	-0.795	-1011	-0.488
$\beta_3 + (3.0)\beta_4$	-0.026	-6.98	-111.4	-406.4	-0.261	0.040	36.56	-0.128
P-values from tests of linear restrictions:								
H_0: $\beta_1 + (1.5)\beta_2 = 0$	0.022	0.090	0.296	0.221	0.079	0.244	0.041	0.002
H_0: $\beta_3 + (3.0)\beta_4 = 0$	0.476	0.970	0.768	0.479	0.567	0.999	0.837	0.391
N	2,629	2,563	2,629	2,629	2,629	2,629	2,563	1,389

Notes: Models also include an indicator for single mother families as well as the variables listed in Table 4.

Table 6
Probit, OLS, and Quantile Estimates of the Effect of Asset Restrictions on Liquid Assets and Non-Housing Wealth, Single Women, No High School Degree, Ages 18-54, 1992-1999, SIPP

	Single Mothers					Single Women				
Dependent Variable	Indicator of Liquid Assets>0	Liquid Assets	Liquid Assets	Non-Housing Wealth	Non-Housing Wealth	Indicator of Liquid Assets>0	Liquid Assets	Liquid Assets	Non-Housing Wealth	Non-Housing Wealth
Model	Probit	OLS	75th Quantile	OLS	50th Quantile	Probit	OLS	75th Quantile	OLS	50th Quantile
Sample Years	All	All	All	All	All	All	All	All	All	All
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
State Has Vehicle Limit (1 = Yes) (β_1)	-0.209	-222	-23.5	-505	-224	-0.208	-736	-197	-910	-740
	(0.068)	(97)	(78.9)	(472)	(155)	(0.073)	(268)	(292)	(596)	(684)
Has Vehicle Limit*Value of Limit (1000s) (β_2)	0.018	17.4	2.31	70	21.4	0.008	69.2	29.6	-44.4	98.5
	(0.007)	(11.0)	(9.63)	(46.0)	(29.3)	(0.011)	(57.0)	(22.7)	(117.2)	(121)
Asset Limit (1000s) (β_3)	-0.076	-78.5	-1.55	-200.6	-40.8	0.051	546	216	709	492
	(0.023)	(36.4)	(46.8)	(128)	(99.2)	(0.066)	(302)	(204)	(589)	(1092)
Asset Limit*Maximum Benefit (β_4)	0.02	12.0	0.37	30.71	3.47	-0.043	-311	-130	-462	-262
	(0.006)	(8.88)	(5.75)	(33.5)	(21.8)	(0.031)	(145)	(118)	(275)	(410)
$\beta_1 + (1.5)\beta_2$	-0.182	-196.3	-20.05	-400.3	-191.6	-0.196	-631.9	-152.8	-976.6	-591.7
$\beta_3 + (3.8)\beta_4$	-0.015	-32.91	-0.132	-83.92	-27.60	-	-	-	-	-
$\beta_3 + (3.0)\beta_4$	-	-	-	-	-	-0.078	-385.6	-174.3	-677.5	-292.4
P-values from tests of linear restrictions:										
H_0: $\beta_1 + (1.5)\beta_2 = 0$	0.002	0.034	0.782	0.358	0.140	0.002	0.006	0.595	0.064	0.410
H_0: $\beta_3 + (3.8)\beta_4 = 0$	0.006	0.019	0.997	0.039	0.912	-	-	-	-	-
H_0: $\beta_3 + (3.0)\beta_4 = 0$	-	-	-	-	-	0.011	0.011	0.336	0.016	0.459
N	1,837	1,791	1,837	1,791	1,837	2,629	2,563	2,629	2,563	2,629

Notes: The coefficients reported in columns (6) through (10) are for the interaction of the variables listed above and an indicator for single mother families. See Tables 4 and 5 for the list of other variables included in these specifications.

Table 7
Probit and OLS Estimates of the Effect of Asset Restrictions on Vehicle Assets, Liquid Assets, and Non-Housing Wealth, Single Women, Ages 18-54, 1992-1999, SIPP

	Single Mothers				Single Women			
	High School Degree Only		High School Degree or Less		High School Degree Only		High School Degree or Less	
Dependent Variable	Vehicle Ownership	Liquid Assets	Vehicle Ownership	Liquid Assets	Vehicle Ownership	Liquid Assets	Vehicle Ownership	Liquid Assets
Model	Probit	OLS	Probit	OLS	Probit	OLS	Probit	OLS
Sample Years	All	All	All	All	All	All	All	All
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
State Has Vehicle Limit (1 = Yes) (β_1)	-0.031	99.8	-0.059	6.53	-0.063	-89.8	-0.114	-460
	(0.035)	(113)	(0.037)	(117)	(0.052)	(223.4)	(0.052)	(239)
Has Vehicle Limit*Value of Limit (1000s) (β_2)	0.001	8.66	0.008	7.70	0.011	7.66	0.017	20.9
	(0.007)	(14.1)	(0.006)	(14.9)	(0.009)	(53.2)	(0.010)	(38)
Asset Limit (1000s) (β_3)	-0.005	-40.0	-0.006	-36.5	0.025	645.1	0.040	543
	(0.001)	(35.8)	(0.001)	(34.8)	(0.072)	(266.1)	(0.052)	(210)
Asset Limit*Maximum Benefit (β_4)	0.000	10.77	0.001	7.5	-0.012	-336.4	-0.020	-300
	(0.000)	(10.1)	(0.000)	(8.6)	(0.035)	(126.4)	(0.025)	(96)
$\beta_1 + (1.5)\beta_2$	-0.030	112.8	-0.047	18.086	-0.047	-78.3	-0.089	-429.1
$\beta_3 + (3.8)\beta_4$	-0.005	0.907	-0.002	-7.904	-	-	-	-
$\beta_3 + (3.0)\beta_4$	-	-	-	-	-0.011	-364.1	-0.020	-355.2
P-values from tests of linear restrictions:								
H_0: $\beta_1 + (1.5)\beta_2 = 0$	0.363	0.263	0.187	0.864	0.352	0.693	0.076	0.054
H_0: $\beta_3 + (3.8)\beta_4 = 0$	0.000	0.915	0.000	0.420	-	-	-	-
H_0: $\beta_3 + (3.0)\beta_4 = 0$	-	-	-	-	0.703	0.007	0.404	0.000
N	3,316	3,233	5,153	5,024	5,672	5,530	8,301	8,093

Notes: See notes to Tables 4 and 6.

Table 8
Probit Estimates of the Effect of Asset Restrictions on the Probability of Driving Own Car to Work, Single Mothers and Single Women without Children Who Work, Ages 18-54, 1996-1999, SIPP

Dependent Variable	1 = Drive to Work			
Sample	Single Mothers		Single Women	
	No High School Degree	High School Degree or Less	No High School Degree	High School Degree or Less
	(1)	(2)	(3)	(4)
State Has Vehicle Limit (1 = Yes) (β_1)	-0.184	-0.083	-0.086	-0.055
	(0.117)	(0.044)	(0.140)	(0.055)
Has Vehicle Limit*Value of Limit (1000s) (β_2)	0.01	0.002	-0.011	0.005
	(0.014)	(0.006)	(0.024)	(0.009)
Asset Limit (1000s) (β_3)	0.00	0.003	-0.077	0.142
	(0.003)	(0.001)	(0.193)	(0.045)
Asset Limit*Maximum Benefit (β_4)	0.00	-0.001	0.039	-0.066
	(0.001)	(0.000)	(0.093)	(0.021)
$\beta_1 + (1.5)\beta_2$	-0.169	-0.080	-0.103	-0.048
$\beta_3 + (3.8)\beta_4$	0.000	-0.001	-	-
$\beta_3 + (3.0)\beta_4$	-	-	0.040	-0.056
P-values from tests of linear restrictions:				
H_0: $\beta_1 + (1.5)\beta_2 = 0$	0.158	0.048	0.407	0.314
H_0: $\beta_3 + (3.8)\beta_4 = 0$	0.214	0.520	-	-
H_0: $\beta_3 + (3.0)\beta_4 = 0$	-	-	0.651	0.003
Mean of Dependent Variable (Fraction of Sample that Drives)	0.600	0.728	0.618	0.748
N	553	2,163	849	3,583

Notes: Samples include single women who are working at the time of the survey. Data are from the 1996 Panel of the SIPP. The coefficients reported in columns (3) and (4) are for the interaction of the variables listed above and an indicator for single mother families. See notes to Table 4.