

# Working Papers

## **Welfare Reform and Asset Accumulation: Asset Limit Changes, Financial Assets, and Vehicle Ownership**

Yunju Nam

**Working Paper No. 07-04**

**2007**

Subsequently published as: Nam, Y. (2008). Welfare reform, asset limits, and financial asset accumulation among low-income households. *Social Science Quarterly* 89(1):133-154

Originally published as: Nam, Y. & Kam, C.D. (2005). Welfare reform and asset accumulation: Asset limit changes, financial assets, and vehicle ownership (CSD Working Paper 05-04). St. Louis: Washington University, Center for Social Development.



## **Center for Social Development**

 **Washington**  
WASHINGTON · UNIVERSITY · IN · ST · LOUIS  
George Warren Brown School of Social Work

**Welfare Reform and Asset Accumulation:  
Asset Limit Changes, Financial Assets, and Vehicle Ownership**

Yunju Nam, Ph.D.  
Assistant Professor  
George Warren Brown School of Social Work, Washington University in St. Louis  
ynam@wustl.edu

**Working Paper No. 07-04**

**2007**

Center for Social Development  
George Warren Brown School of Social Work  
Washington University  
One Brookings Drive  
Campus Box 1196  
St. Louis, MO 63130  
tel 314-935-7433  
fax 314-935-8661  
e-mail: [csd@gwbmail.wustl.edu](mailto:csd@gwbmail.wustl.edu)  
<http://gwbweb.wustl.edu/csd>

**ACKNOWLEDGEMENTS:** This study was supported in part by the Center of Social Development at Washington University in Saint Louis. The author is grateful to Michael Sherraden and Cindy Kam for thoughtful comments on earlier drafts of this paper and to Jin Huang, Jennie Munoz, and Youngmi Kim for their wonderful research assistance.

**Abstract**

**Welfare Reform and Asset Accumulation:  
Asset Limit Changes, Financial Assets, and Vehicle Ownership**

*Objective.* Over the past decade, federal and state governments have substantially liberalized asset limits in welfare. This paper examines whether this policy change promotes asset accumulation among the target population of actual and potential welfare recipients.

*Methods.* Utilizing household data from the Panel Study of Income Dynamics and state data, this study employs a difference-in-difference approach in order to determine whether state asset limits affect the target population's financial and vehicle asset accumulation. This study develops a new policy measure that considers the time period following the adoption of liberalized asset limits. *Results.* Analysis results suggest that increased asset limits may have successfully encouraged the target population's asset accumulation. The earlier a state raised its asset limit, the more likely welfare recipients were to accumulate financial assets and to possess bank accounts. *Conclusion.* It is recommended to liberalize asset eligibility rules to promote long-term economic advancement of poor households.

Key Words: Asset limits (Asset tests); financial assets; vehicle assets; welfare reform

## **Welfare Reform and Asset Accumulation: Asset Limit Changes, Financial Assets, and Vehicle Ownership**

Financial assets and physical properties play a critical role in determining a household's long-term well-being, especially for low-income households. Assets can improve economic stability by mitigating the adverse effects of sudden income loss and unexpected expenditures. They can promote economic development by enabling investment in education and entrepreneurship. They may improve the social and psychological well-being of asset holders (Sherraden 1991; Edin 2001; Shapiro 2001). Despite the potential benefits, asset holding among American households, especially low-income households, is quite low. Thirteen percent of American households have zero or negative net worth and 16 percent have zero financial assets (Carney and Gale 2001). Saving rates among poor households are much lower than among high- or middle-income households even after controlling for income (Ziliak 2003).

Low levels of asset accumulation among low-income households have been, at least partially, attributed to asset tests in public assistance programs. Asset tests require households to keep their financial and vehicle assets below limits set by federal or state governments in order to qualify for a variety of income maintenance programs. As such, asset tests can be detrimental to impoverished households by imposing a strong saving disincentive (Ziliak 2003; Neumark and Powers 1998; Powers 1998; Hubbard, Skinner, and Zeldes 1995).

In recognition of this problem, federal and state governments have substantially liberalized asset limits in the last two decades (Savner and Greenberg 1995; Corporation for Enterprise Development 2002). This study investigates whether these liberalizations in asset tests have stimulated financial and vehicle asset accumulation among the target population of likely welfare recipients, using household data from the Panel Study of Income Dynamics (PSID) and state-level data. This paper contributes to the existing research by utilizing a new

measure of state asset limit policy: the length of time since a liberalized policy has been adopted. In doing so, it is recognized that states introduced new asset limits at different time-points and that it might take time for the target population to learn about and adapt to policy changes. The new measure of policy changes in this study also broadens the approach to understanding the ways in which new public policies affect the target population.

## **BACKGROUND**

Most public assistance programs in the United States have asset limits in their eligibility rules. The program typically termed “welfare” [Aid to Families with Dependent Children (AFDC) prior to the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) and Temporary Assistance to Needy Families (TANF) after the PRWORA] is no exception. The Omnibus Budget Reconciliation Act (OBRA) of 1981 set limits at \$1,200 for vehicle asset and at \$1,000 for countable assets (cash on hand, values in saving and checking accounts, bonds, stocks, and vehicle values that exceed vehicle asset limit) at the federal level and prohibited state governments from raising these limits (Powers 1998). The vehicle asset limit increased to \$1,500 per household later and remained at that level until state governments began to raise their limits after the enactment of the Family Support Act of 1988 (Corporation for Enterprise Development 2002).

Restrictive asset limits have been blamed for low levels of asset accumulation among poor households. In order to qualify for asset-tested public assistance programs, low-income households are required to spend down or to maintain their financial and vehicle assets below the limits. Current and potential recipients, therefore, face strong disincentives to saving. Existing empirical research suggests that this saving disincentive has operated for various asset-tested income transfer programs and contributes to low saving rates among low-income households (Gruber and Yelowitz 1999; Hubbard, Skinner, and Zeldes 1995; Powers 1998; Ziliak 2003). For

example, using data from the National Longitudinal Survey, Powers (1998) studied the effects of the federalization of the AFDC program's asset-testing policy in 1981 that dramatically lowered asset limits in many states. She finds that higher asset limits are strongly associated with higher savings among current and potential welfare recipients: an increase of \$1 in asset limits raised a female head's savings by \$0.25.

Recognizing the disincentives of asset limits, both federal and state governments began to liberalize AFDC/TANF asset tests in the early 1990s. The Family Support Act of 1988 allowed states to request a waiver from the federal government to raise asset limits. The PRWORA of 1996 abolished the federal asset limits for TANF, allowing states to create their own thresholds (Savner and Greenberg 1995; Corporation for Enterprise Development 2002). State governments accordingly increased their asset limits in AFDC/TANF during the 1990s<sup>1</sup> (Corporation for Enterprise Development 2002; Savner and Greenberg 1995; Urban Institute 2005). As of the year 2000, 43 states had relaxed their rules on countable asset limits to some degree and all states had raised vehicle asset limits.

[Table 1 About Here]

A couple of existing studies have empirically tested whether increased asset limits facilitated asset accumulation among the target population of likely welfare participants (Sullivan 2006; Hurst and Ziliak 2006). Using PSID data, Hurst and Ziliak (2006) found that gaps in asset accumulation between likely and unlikely welfare program participants (female-headed households with children vs. other types of households) do not significantly differ

---

<sup>1</sup> Some states introduced special account programs for welfare recipients during the 1990s. These special accounts have separate and higher asset limits than general accounts but withdrawals are limited to certain types of activities (e.g., higher education). This study does not include this policy measure because it often overlaps with state Individual Development Accounts (IDA), an asset-building program (matched saving program) for low-income households. IDA programs probably affect the asset accumulation of the comparison group in this study (e.g. male-headed households) as well as the target population (female-headed households with children).

between states with and without generous asset rules. These findings apply for various asset measures, including financial assets, possession of a bank account, and ownership of a house or business. An exception is vehicle ownership: more generous countable asset limits appear to significantly promote likely welfare recipients' vehicle ownership. Sullivan (2006) used data from the Survey of Income and Program Participation (SIPP) and found that liberalized vehicle asset limit is associated with an increase in vehicle ownership for single mothers without a high school degree while relaxation of countable asset limits does not have any statistically significant association with vehicle ownership. While both studies reach the conclusion that relaxed asset limits appear to promote vehicle ownership, each identifies a different cause. Hurst and Ziliak (2006) link increased vehicle ownership with changes in countable asset limits, while Sullivan (2006) contributes it to relaxed vehicle asset eligibility rules. Both studies conclude that relaxed countable asset limits have not promoted the target population's financial asset accumulation.

These two studies focus mainly on the degree of liberalization in asset tests, i.e. the actual dollar amounts of asset limits. While these measures are valid and valuable, they may not fully capture the effects of policy changes. Since it may take time for the target population to learn about and adapt to policy changes, analyses should also take into account the elapsed time since a policy change has occurred. In addition, states that adopted new asset limits early often have lower asset limits than states introducing new asset rules later. For example, California increased its countable asset limit to \$2,000 in 1994, which is much lower than that of North Dakota (\$8,000) or Nebraska (\$6,000). These two states raised their countable asset limits in 1998, four years later than California. Given the considerable variation in when state governments adopted new asset policies, the length of time since policy change occurred may be even more illuminating than the extent of policy changes at the time of a study.

This article builds on and expands prior studies of asset tests and asset accumulation among likely welfare recipients. In addition to measures of policy changes used in the two existing studies (Sullivan 2006; Hurst and Ziliak 2006), this study includes a new measure of policy changes: the elapsed time after policy adoption. With this new policy measure, this study estimates the effectiveness of relaxed asset limits more broadly than previous studies.

## **DATA AND METHODOLOGY**

### **A. Data, Sample, and Descriptive Statistics**

This study combines household data from the Panel Study of Income Dynamics (PSID) with state-level data capturing variation in state-level policies and economic conditions. The PSID initially interviewed a nationally representative sample of 4,802 families in 1968. Since then, the PSID has interviewed respondents about economic and demographic characteristics annually until 1997 and biennially thereafter. When weighted, the sample is designed to be representative of the non-immigrant U.S. population as a whole (Hill, 1992).

The PSID collects data on households' assets and liabilities in its wealth supplement. The PSID's wealth data contain extensive information regarding assets and liabilities. The wealth data in the PSID is reported to be of high quality in comparison to other survey data (Curtin, Juster, and Morgan 1989). The PSID collected wealth data every five years between 1984 and 1999 (in 1984, 1989, 1994, and 1999) and biennially after 1999. This study uses the PSID wealth data collected in 1994 and 2001 and other household data collected between those years.

This study employs the same sample selection criteria used in Hurst and Ziliak (2006). The sample is limited to households headed by the same heads who maintained the same marital status throughout the observation period (1994-2001). Marriage, divorce, and death of spouse may cause dramatic changes in financial assets and physical properties. The sample is restricted to households whose heads were 18-44 years old in 1994 and had less than 16 years of education



because they are more likely to receive welfare than other groups. Among female-headed households, the sample includes only those who consistently have at least one child during the observation period (female-headed households with children sample) or have no children in any year for the same period (female-headed households without children sample). Households that moved from one state to another are excluded from the sample. Ohio residents are removed from the sample because Ohio was the only state without the countable asset limit as of 2000.<sup>2</sup>

The final sample consists of 1,363 households. The sample is divided into two groups: the target population of likely welfare recipients (277 female-headed households with children) and a non-target group (1,086 male-headed households and female-headed households without children). This study does not define the target population based on an individual household's welfare experience because welfare rule changes may affect not only current and past welfare recipients but also households who may potentially receive welfare in the future. Two previous studies, Hurst and Ziliak (2006) and Sullivan (2006) use the same criteria in defining the target population. The target group received welfare at much higher rates than the comparison group. Forty-eight percent of the households in the target group received welfare at least once during the observation period whereas 2 percent of the households in the comparison group did (Please refer to Table 2 for details).

In addition, this study creates an additional comparison group, consisting of male-headed households with children (N=565). This comparison group is used in some of analyses to check robustness of findings. As in the main comparison group, this group's welfare program participation was very low (about 2 %). This study also creates another sample for robustness

---

<sup>2</sup> The only difference from Hurst and Ziliak's (2006) sample is that this study does not exclude those with missing wealth data. The PSID imputed missing data on wealth and did not provide any indicator of imputation at the time when the author retrieved data.

check: a sample composed of households headed by those with less than 13 years of schooling. This sample consists of 914 households (188 female-headed households and 726 male-headed household and female-headed households without children). The difference in welfare participation rates is larger between target and non-target groups in this sample: 56 percent of the target group ever received welfare between 1994 and 2001 while only two percent of the comparison group did.

## **B. Measures**

The major independent variables in this study are state-level asset limits in welfare program. The state welfare policy data were created using various sources, including Savner and Greenberg (1995) and the Urban Institute's Welfare Rules Database (Urban Institute 2005). In creating the state asset limit policy dataset, this study counts policies that applied to the majority of current welfare recipients for the majority of a year as instances of policy change. Accordingly, a policy change is counted only if it was applied statewide, not limited to certain experimental sites in a state. For those states that set different asset limits by family size, this study uses the asset limit that is likely to have applied to the majority of welfare families (e.g. an asset limit for a family with two or more members instead of that for a single individual). This study uses asset limits on current welfare recipients, not those on welfare applicants. Due to these additional restrictions, the state policy measures used in this study are slightly different from those reported in Hurst and Ziliak (2006).<sup>3</sup>

---

<sup>3</sup> Hurst and Ziliak (2006) use asset limits different from those used in this study for some states. They use an average of two countable asset limits (\$5000, an average of \$4,000 for single individuals and \$6,000 for households with two or more members) for Nebraska and use asset limits for welfare applicants for New Hampshire and Oregon. Their countable asset limit for Washington (\$4,000) is different from \$3,000 in the Urban Institute (2005) and State Policy Demonstration Project ([http://www.spdp.org/medicaid/table\\_6.htm](http://www.spdp.org/medicaid/table_6.htm)). Hurst and Ziliak (2006) utilize the values of the vehicle limits when states adopted new limits for the *first* time for three states (North Carolina, South Carolina, and South Dakota), instead of vehicle asset limits as of 2000. Vehicle limits of District of Columbia, Mississippi, and West Virginia used in Hurst and Ziliak (2006) are different from those in this study.

As briefly mentioned above, this study develops two separate sets of asset policy measures. The first type of measure, which is the dollar amount of the asset limit (as it applies to countable assets and vehicles) is identical to that used in Sullivan (2006) and Hurst and Ziliak (2006). For countable asset limit, the variable measuring the actual amount of limits is used in analyses. Since several states eliminated the vehicle asset limit during the 1990s, this study creates two vehicle asset limit policy variables: one indicates whether a state has a vehicle asset limit or not (1 if a state has a vehicle asset limit and 0 otherwise) and the other is a continuous measure of the actual amount of vehicle asset limit for states with vehicle asset limits (0 for states without limits). The second set of asset limit policy variables is unique to this study: the number of years since a new asset limit was introduced for each type of asset. This variable ranges from zero (for states that made no changes to asset limits) to seven years for countable asset limits and from two to seven years for vehicle asset limits.

The main dependent variables are financial assets, bank account ownership, and vehicle assets. This study focuses on financial and vehicle assets because they are counted toward asset limits in determining welfare eligibility. Welfare systems do not count non-financial assets (e.g., home values) or debt into countable assets when determining welfare eligibility (Corporation for Enterprise Development 2002). Accordingly, the household's financial and vehicle asset holdings are the appropriate measure in estimating the impact of asset policy changes. This study pays attention to bank account ownership since opening a bank account is often the first step in accumulating financial assets and other types of wealth (Beverly et al. 2003).

In creating financial asset accumulation variables, this study measures change in financial assets between the observation periods (1994 and 2001), as did Hurst and Ziliak (2006). The value of the financial asset variable is created by combining the amount of money in checking/saving accounts and other financial institutes and the cash values of stocks and mutual

funds or investment trust. The values of financial assets in 1994 and 2001 are converted into constant 1996 dollars using the Consumer Price Index (CPI). The level of change in financial assets is created by subtracting the amount of financial assets held in 2001 from that in 1994.

In analyzing financial asset accumulation, this study uses three types of dependent variables: 1) a dichotomous variable, indicating whether a household achieved any positive saving in financial assets between the two time periods (1 if any positive changes in the level of financial assets, and 0 otherwise), 2) the actual dollar amount of change that an individual household experienced between 1994 and 2001 (in 1996 dollars), and 3) the natural logarithm of the dollar amount of financial asset change. The third measure, the logarithm of financial asset change, is unique in this study. This variable is used in Heckman model that investigate the association between asset policy and the amount of savings while considering the possibility that those who succeeded in saving may differ from those who did not (e.g., the former may have learned about asset limit policy changes earlier than the latter). This study uses a natural logarithm instead of the actual amount because several extremely high values make the distribution skewed. The third measure has valid values solely for those who have positive values for the second measure because negative and zero values in the second measure become missing through the conversion process.

The bank account ownership variable is a dichotomous variable that assigns a value of one to households that report having any positive value in checking or saving accounts and a value of zero otherwise. The vehicle ownership variable is created in the same way (1 if a household reports to own at least a vehicle and 0 otherwise).

### **C. Analytic Methods: Difference-In-Difference Approach**

This study employs a difference-in-difference approach. This approach assesses the effectiveness of a policy through assessing whether the impact of a policy change on the target

group (likely welfare recipients) is different from the impact on the non-target population (those with low probability of receiving welfare). The approach thus controls for unobserved confounding factors, such as state residents' propensity toward saving. The analytical model is as follows:

$$S_i = \alpha + \beta_P P_i + \beta_T T_i + \beta_{T \times P} P_i \times T_i + \beta_X X_i + \varepsilon$$

where  $S_i$  represents an asset measure for an individual household  $i$

$P_i$  indicates a vector of asset limit policies in the state of an individual household  $i$

$T_i$  is a dummy for the target group

$X_i$  is a vector of control variables, including household and state characteristics

$\varepsilon_i$  is the residual for individual household  $i$

The coefficient on the interaction term between state asset limit and high-risk of receiving welfare,  $\beta_{T \times P}$ , is the primary interest of this study. It identifies whether and to what extent the target and comparison groups react in different ways to changes in asset limit policies. It is expected that the effect of asset limit policies, should they have any effect, will be concentrated among those with a higher-risk of receiving welfare. If asset limit policies encourage asset accumulation, especially among the target population, then  $\beta_{T \times P}$  should be positive and significant, indicating that the state policy environment stimulates asset accumulation among the target group in a significantly different way from how it affects the comparison group.

The statistical method of estimation varies with the type of dependent variable. For the dichotomous dependent variable (e.g. positive change in the level of financial assets, or bank account or vehicle ownership), this study uses a linear probability model. Results using a logistic regression or a linear probability model with robust standard errors do not differ substantively

from those reported in this paper. In the analyses with the continuous variable measuring the amount of changes in financial assets between the two observation periods, this study employs regressions with bootstrapped standard errors, following Hurst and Ziliak's (2006). Regression analyses with robust standard errors do not produce disparate results from those reported in this paper. Since a few cases with extreme values in the continuous dependent variable may influence analysis results (Greene 2003), this study runs a series of additional analyses. This study runs the same analyses reported here after deleting the top and bottom 1 % of the sample and runs median regressions (Greene 2003). These analyses produce results similar to those reported in this paper. For the third dependent variable (the natural logarithm of dollar amount of positive savings), this study uses the Heckman model because of a selection bias: the valid values of this dependent variable (for those had positive saving) had different characteristics than the others (those with zero or negative savings) (Greene 2003). This analysis uses bank account ownership in 1994 as an instrumental variable. Bank ownership at the beginning of the observation is likely to affect whether an individual household saved or not but not likely to affect how much it saved during the observation period [Results of additional analyses are available from the author].

Each regression controls for household heads' characteristics in 1994 (race, education, and age) and family characteristics (household size in 1994, change in household sizes between 1994 and 2001, average family income during the observation period and its quadric form, and change in family income between 1994 and 2001). Two measures of state economic conditions are used in this study: 1) change in state unemployment rates between 1994 and 2001 (based on the Bureau of Labor Statistics data), and 2) per capita GSP (state equivalent to GDP, available from the Bureau of Economic Analyses) in 1994. This study also controls for the asset possession at the baseline (the value of financial assets in 1994 in financial assets regressions, bank account or vehicle ownership in 1994, in respective regression). This study weighted the

data with 2001 family weight variable (the weight variable of the last observed year) both for descriptive and multivariate analyses, as recommended by Hill (1992).<sup>4</sup>

### FINDINGS

Table 2 summarizes household characteristics and the distribution of financial and vehicle assets in the sample. The target group has lower levels of education and income and higher levels on household size and number of children in comparison with non-target group. The target group's wealth is much lower than that of the comparison group. The average financial asset value among the former was only about \$2,000 in 1994 while the average value was almost \$20,000 among the latter. Only 38 percent possessed a bank account and 62 percent owned a vehicle in 1994 among the target group, whereas 77 percent and 87 percent of the comparison group did, respectively. Interestingly, gaps in bank account and vehicle ownership narrowed between the two groups: the gap fell from 39% in 1994 to 23% in 2001 for bank account ownership and from 25% to 16% for vehicle ownership.

[Table 2 About Here]

Table 3 reports multivariate analysis results on two dependent variables: the probability of saving financial assets (positive changes in financial assets) and amount of change in financial assets between 1994 and 2001. Following the example of Hurst and Ziliak (2006), this paper estimates the effect of countable asset limits, first. This study conducts two sets of analyses to capture the effects of the two distinct types of policy measures. Model 1 uses the dollar amount of countable asset limit as in Hurst and Ziliak (2006) and Model 2 utilizes the number of years since a liberalized asset limit was adopted in a state, a measure unique in this study.

---

<sup>4</sup> This study runs a series of additional models to check the robustness: a model with state dummy variables, a model using state asset limits for welfare applicants instead of those for welfare recipients, and a model including IDA program variable (whether a state had state-funded IDA programs or not in 2000). Results from these models are not substantially different from those reported in this paper.

Table 3 shows the results of three sets of analyses: 1) analyses using all male-headed households and female-headed households without children as the comparison group, 2) analyses based on male-headed households with children as the comparison group, and 3) a sample consisting of households whose heads have less than 13 years of school. Table 3 reports only key coefficients of interest: asset limit policy variables, the target population, and the interaction terms [Full estimation results are available from the author upon request].

[Table 3 About Here]

As shown in the first panel of results, which estimates the probability that a household will save any financial assets, the coefficient on the interaction term between the dollar amount of the countable asset limit and the target population indicator is not statistically significant in all three analyses. This result suggests that a higher countable asset limit does not significantly increase the target population's probability of saving financial assets. Results based on the different measure of asset policy (the number of years elapsed from the adoption of new limit) tell a different story. The interaction term between the policy variable and the target population indicator is significantly positive in all three types of analyses ( $p < 0.05$ ). These results suggest that the longer a liberalized policy change had been in effect, the greater the probability that a likely welfare recipient had saved financial assets.

The second panel of Table 3 reports results using the continuous measure: the dollar amount of change in financial assets between the two observed periods. The results based on the dollar amount of countable asset limit are consistent with those in Hurst and Ziliak (2006). The coefficients of the interaction term between the target population indicator and policy variable are not statistically significant in any of three models. In addition, the coefficients of the interaction term have different signs across models (two are negative and one is positive) as shown in Hurst and Ziliak (2006). The measure of the elapsed time does not show any significant



effect, either. The coefficients of the interaction term have positive signs (as expected) in all three models, unlike those based on the dollar amount of asset limit. The coefficients of this measure range from 1055 to 3883, suggesting that one year early adoption of higher asset limit may have increased the target population's saving at least by \$1,054.

Table 4 summarizes the results using the natural logarithm of the dollar amount of financial assets accumulated during the observation period [Full estimation results are available from the author upon request]. The Heckman model used in these analyses produces two sets of estimations: one estimates how changes in asset limit policies influence the level of financial asset savings among those who succeeded in saving financial assets (first panel), and the other assesses how these policy changes affect one's probability of being selected into the sample in the first panel (probability of having positive saving) (second panel). Results from these analyses suggest that the dollar amount of the asset limit has a significantly positive effect on the target population's amount of savings accumulation (as displayed by the statistically significant coefficients of the interaction term in all six models including this measure). At the same time, the elapsed time since asset limits were liberalized significantly increases one's probability of saving a positive amount of financial assets (as shown in significantly positive coefficients of interaction terms in all six models that include this measure).

[Table 4 About Here]

These results analyzing financial asset accumulation indicate that asset limit policies affect potential welfare recipients' financial asset accumulation in fascinating ways. The more time that a liberalized policy has existed, the more likely the target population is to save, suggesting that they need time to learn about and adapt to the policy change. Among those who managed to save, the more liberalized the countable asset limit policy in the state of residence, the more financial assets female-headed households with children were able to save, provided

they saved anything. If we can assume that those who succeeded in saving are more likely to be aware of increased asset limits and to adapt to the policy change than others, this finding suggests that the level of generosity in asset limit policy may influence the level of financial asset accumulation among the target population who have learned about and utilized the opportunities created by this policy change.

Table 5 summarizes results based on two other types of asset accumulation: bank account and vehicle ownership [Full estimation results are available from the author upon request].

Unlike Hurst and Ziliak (2006), this study includes those who did not have own a bank account or a vehicle in 1994 in the sample because it cannot be assumed without empirical evidence that states' decisions about asset limits are not correlated with their residents' needs for and actual ownership before policy changes. Therefore, this study uses the full sample in analyzing the relationship between relaxed asset limit policies and these two types of asset ownership.

Recognizing that those who owned a bank account or a vehicle in 1994 were more likely to do so in 2001, this study controls for the ownership status of respective property in the base year in the models.

[Table 5 About Here]

As shown in Table 5, the study produces results identical to those in Hurst and Ziliak (2006) regarding the relationship between bank account ownership and the amount of countable asset limit. When measuring the state policy with the traditional measure used in Hurst and Ziliak (2006), liberalized asset policy does not show a significant effect on the target population's probability of having a bank account in 2001. However, the elapsed time since liberalizing asset limits again shows a statistically significant effect. The interaction term between the policy variable reflecting time and the target population indicator has a significantly positive coefficient at the 0.05 level in all three models, indicating that the more time that has

passed since liberalization, the more likely it is that likely welfare recipients possess bank accounts, *ceteris paribus*. These results confirm the utility of considering the time dimension as well as the dollar amount of a policy change in order to understand how a policy affects its target population.

Table 5 also reports results estimating the probability of vehicle ownership. Relaxed asset limit policy, either measures with the dollar amount of asset limit or years since a new policy was adopted, does not show a significant effect on vehicle ownership among female-headed households with children. Findings on vehicle ownership in this study differ from those reported by Hurst and Ziliak (2006) who reported that a relaxed countable asset limit raised vehicle ownership among the target population in a statistically significant way. The discrepancy between the two studies can be attributed to several factors. While Hurst and Ziliak (2006) limited their sample to those who did not own a vehicle in 1994, this study uses the full sample and controlled for vehicle ownership in the base year. As described fully in footnote 3, this study assigned slightly different values to some states' countable asset limits from those by Hurst and Ziliak (2006). This study weighted the data with 2001 family weight variable whereas Hurst and Ziliak (2006) did not. When replicating Hurst and Ziliak's (2006) analysis using the same sample selection criteria (only those who did not own a vehicle in 1994) and same definition of policy variable without weighting the data, this study obtained results similar to theirs: the dollar amount of countable asset limits has a significantly positive association with the target population's probability of having an automobile. Accordingly, the different results between the two studies appear to be due to the sample selection criteria, slightly different state asset limit values, and the use of the sample weight.<sup>5</sup>

---

<sup>5</sup> This study also examines the relationship between asset limits and changes in financial and vehicle assets between 1994 and 1999. Neither actual amount of countable asset limit nor the number of years since the new policy adoption significantly increases the target population's financial or vehicle assets. The coefficients of the interaction

In order to evaluate whether the relationships between countable asset limit policy and the target population's asset accumulation reported above may be artifacts of other policies, this study conducts analyses that include other welfare reform policies: vehicle asset limit policies, time-limits on lifetime welfare receipt, and state maximum welfare benefit. Like other analyses reported above, these analyses replicate Hurst and Ziliak's (2006) models.

Table 6 summarizes the results for this robustness check, using three different types of asset accumulation that show significant impacts of liberalized asset limit policy as shown in Tables 3-5: positive savings in financial assets, natural logarithm of financial asset change, and bank account ownership. These analyses use all male-headed households and female-headed households without children as the comparison group. The addition of these policy variables does not change the main findings regarding the impact of countable asset limits on financial asset accumulation. As in previous analyses, the elapsed time since liberalization significantly increases the target population's likelihood of saving a positive amount of financial assets ( $p < 0.1$ ) and of owning a bank account ( $p < 0.05$ ). The dollar amount of countable asset limits show a significant effect in the analysis of the natural logarithm of the financial asset change ( $p < 0.1$ ).

[Table 6 About Here]

The results of this study suggest there is no statistically significant relationship between vehicle asset limits and target population's probability of saving financial assets and of owning a bank account. None of interaction terms between vehicle asset policy variables (measured either with the dollar amount or years since the adoption of a new limit) has a statistically significant

---

terms, however, have the same sign as those reported in this paper in the analyses that show significant effects of new asset limits on asset accumulation between 1994-2001 (positive coefficient of the interaction with the number of years after the adoption of a new policy in the positive saving and bank account analyses and positive coefficient of the interaction term with the amount of asset limit in the logarithm of financial asset saving analysis).

coefficient. Liberalized vehicle asset limit policies, however, show significantly negative effects on the natural logarithm of the dollar amount of financial asset change: both interaction terms are large and statistically significant at the 0.01 level. Analysis result on the dollar amount of financial asset change also show a similar pattern of the relationship with vehicle asset limits: a positive coefficient of the interaction term with having a vehicle limit and significant and negative coefficient of the interaction term with the dollar amount of vehicle limit [not reported in Table but full results are available from the author]. These findings suggest that generous vehicle assets may lower that target population's financial asset accumulation if all other things are equal. Negative effects of liberalized vehicle limits on financial asset accumulation may be explained with their potential influence on spending on vehicles. It is plausible that generous vehicle asset limits may have encouraged the target population to spend their financial assets in buying expensive vehicles and therefore, may have lowered financial assets among this population. This explanation has not been empirically tested and warrants further investigation.

## CONCLUSIONS

This paper examines the impact of liberalized asset limits on asset accumulation among likely welfare recipients, using two distinct measures of policy liberalization: 1) the generosity of asset limit policies and 2) the elapsed time during which these liberalized policies have been in place. The analyses of this study show that liberalized asset limit policies are positively associated with the target population's probabilities of saving financial assets and possessing bank accounts. The longer a liberalized countable asset limit has been in place, the more likely the target population is to achieve a positive change in financial assets and to possess a bank account. Analysis results also suggest that the level of generosity in asset limit policy may influence the level of financial asset accumulation among members of the target population provided they can save anything. Considering even modest levels of assets can improve the

quality of life among low-income families (Edin 2001), findings of this study support that we maintain or expand the liberalization of asset eligibility rules in various public assistance programs in order to promote long-term well-being of low-income households.

This study may help understand contrasting findings between the two recent studies (Hurst and Ziliak 2006; Sullivan 2006) and an older study (Powers 1998). Using the amount of asset limit measure, Hurst and Ziliak (2006) and Sullivan (2006) have shown that asset limits have essentially no effect on financial asset accumulation. These recent findings run in stark contrast to Powers' (1998) study showing that higher AFDC asset limits had a significantly positive association with likely welfare recipients' saving.

The differences between Powers (1998) and the two recent studies (Hurst and Ziliak 2006; Sullivan 2006) may be attributable to the distinct characteristics of policy changes studied. First, the nature of the changes in asset limit policies was quite different: in one case, asset limits were reduced (made more stringent); in the other, asset limits were raised (liberalized). Powers (1998) examined the impact of changes in asset limit policies after the Omnibus Budget Reconciliation Act (OBRA) was passed. In this case, asset limits were reduced in many states, and welfare recipients, especially those with wealth beyond the newly reduced asset limits, probably would have learned about policy changes soon after the OBRA took effect because welfare offices would have informed them about their loss of eligibility. In contrast, Hurst and Ziliak (2006) and Sullivan (2006) investigated the effects of increased asset limits during the 1990s. In this case, the process by which welfare recipients would learn about policy changes would have been quite different. Welfare offices do not always provide complete information about eligibility rule changes to individuals who are not at risk of losing eligibility, and at any case, learning about the changes would have likely taken more time (Kahn and Polakow 2000). Furthermore, the two policy contexts have quite different implications for the target population:

when asset limits are reduced, target households might respond with spending down their savings in order to qualify for welfare; when asset limits are raised, target households are expected to respond with reduced consumption and greater savings in order to take advantage of new opportunities provided by welfare reform. Spending down savings can be done quickly; accumulating savings takes much longer. In summary, Powers (1998) investigated a policy change that would have affected the target population immediately after it had been implemented while the two recent studies (Hurst and Ziliak 2006; Sullivan 2006) examined a policy change which would have taken time to demonstrate its effects on the target population. The findings of this study support this explanation by showing that an alternative measure, one reflecting a time-dimension, is able to detect policy effects that traditional measures of policy change do not. It is, therefore, recommended to take into account the time dimension of a policy change as well as the extent of a policy change in estimating its effectiveness.

## References

- Beverly, Sondra G., Amanda Moore McBride, and Mark Schreiner. 2003. A Framework of Asset-Accumulation Stages and Strategies. *Journal of Family and Economic Issues* 24 (2):143-56.
- Carney, Stacie, and William G. Gale. 2001. Asset Accumulation among Low-Income Households. In *Assets for the Poor: The Benefits of Spreading Asset Ownership*, edited by T. M. Shapiro and E. N. Wolff. New York: Russell Sage Foundation.
- Corporation for Enterprise Development. 2002. *The 2002 Federal IDA Briefing Book: How IDAs Affect Eligibility for Federal Programs*. Washington, D. C.: Corporation for Enterprise Development.
- Curtin, Richard T., F. Thomas Juster, and James N. Morgan. 1989. Survey Estimates of Wealth: An Assessment of Quality. In *The Measurement of Saving, Investment, and Wealth*, edited by R. E. Lipsey and H. S. Tice. Chicago: University of Chicago Press.
- Edin, Kathryn J. 2001. More than Money: The Role of Assets in the Survival Strategies and Material Well-Being of the Poor. In *Assets for the Poor: The Benefits of Spreading Asset Ownership*, edited by T. M. Shapiro and E. N. Wolff. New York: Russell Sage Foundation.
- Greene, William H. 2003. *Econometric Analysis*. 5th ed. Upper Saddle River, N.J: Prentice Hall.
- Gruber, Jonathan, and Aaron Yelowitz. 1999. Public Health Insurance and Private Savings. *Journal of Political Economy* 107 (6):1249-74.
- Hill, Martha S. 1992. *The Panel Study of Income Dynamics: A User's Guide*. Newbury Park, California: Sage Publications.
- Hubbard, R. Glenn, Jonathan Skinner, and Stephen P. Zeldes. 1995. Precautionary Saving and Social Insurance. *Journal of Political Economy* 103 (2):360-99.



- Kahn, Peggy, and Valerie Polakow. 2000. Struggling to Stay in School: Obstacles to Post-Secondary Education under the Welfare-to-Work Regime in Michigan. Ann Arbor, MI: Center for the Education of Women, University of Michigan.
- Neumark, David, and Elizabeth Powers. 1998. The Effect of Means-Tested Income Support for the Elderly on Pre-retirement Saving: Evidence from the SSI Program in the U.S. *Journal of Public Economics* 68 (2):181-206.
- Powers, Elizabeth T. 1998. Does Means-Testing Welfare Discourage Saving? Evidence from a Change in AFDC Policy in the United States. *Journal of Public Economics* 68 (1):33-53.
- Savner, Steve, and Mark Greenberg. 1995. The CLASP Guide to Welfare Waivers:1992-1995. Washington, D.C: Center for Law and Social Policy.
- Shapiro, Thomas M. 2001. The Importance of Assets. In *Assets for the Poor: The Benefits Of Spreading Asset Ownership*, edited by T. M. Shapiro and E. N. Wolff. New York: Russell Sage.
- Sherraden, Michael. 1991. *Assets and the Poor: A New American Welfare Policy*. Armonk, N.Y. & London: Sharpe.
- Sullivan, James X. 2006. Welfare Reform, Saving, and Vehicle Ownership: Do Asset Limits and Vehicle Exemptions Matter? *Journal of Human Resources* 41 (1):72-105.
- Urban Institute 2005. Welfare Rules Database Available from <http://www.urban.org>.
- Ziliak, James P. 2003. Income Transfers and Assets of the Poor. *Review of Economics and Statistics* 85 (1):63-76.

**Table 1. State AFDC/TANF Asset Limit Policies.**

State	Countable Account Limit		Vehicle Limit	
	Year	Amount	Year	Amount
Alabama	1997	2000	1997	No limit
Alaska	No change	1000	1997	No limit
Arizona	1998	2000	1996	No limit
Arkansas	1997	3000	1997	No limit
California	1994	2000	1994	4650
Colorado	1997	2000	1997	No limit
Connecticut	1995	3000	1995	9500
Delaware	No change	1000	1996	4650
D. C.	1999	2000	1999	4650
Florida	1998	2000	1998	8500
Georgia	No change	1000	1997	4650
Hawaii.	1997	5000	1997	No limit
Idaho	1997	2000	1997	4650
Illinois	1997	3000	1997	No limit
Indiana	1997	1500	1999	5000
Iowa	1994	5000	1994	3959
Kansas	1998	2000	1997	No limit
Kentucky	1997	2000	1997	No limit
Louisiana	1998	2000	1998	10000
Maine	1998	2000	1996	No limit
Maryland	1997	2000	1997	No limit
Massachusetts	1996	2500	1996	5000
Michigan	1997	3000	1995	No limit
Minnesota	1998	5000	1997	7500
Mississippi	1999	2000	1999	4650
Missouri	1995	5000	1995	No limit
Montana	1997	3000	1997	No limit
Nebraska	1998	6000	1998	No limit
Nevada	1997	2000	1997	No limit
N. Hampshire	1997	2000	1997	No limit
New Jersey	1997	2000	1997	9500
New Mexico	1997	3500	1997	No limit
New York	1998	2000	1998	4650
N. Carolina	1996	3000	1996	No limit
N. Dakota	1998	8000	1998	No limit
Ohio	1997	No limit	1996	No limit
Oklahoma	No change	1000	1998	5000
Oregon	1996	10000	1995	10000
Pennsylvania	No change	1000	1998	No limit
Rhode Island	No change	1000	1997	4600
S. Carolina	1997	2500	1997	No limit
S. Dakota	1998	2000	1998	No limit
Tennessee	1997	2000	1997	4600
Texas	1997	2000	1997	4650
Utah	1996	2000	1996	8000
Vermont	No change	1000	1994	No limit
Virginia	No change	1000	1997	7500
Washington	1998	3000	1998	5000
West Virginia	1998	2000	1997	No limit
Wisconsin	1997	2500	1997	10000
Wyoming	1997	2500	1997	12000

**Table 2. Descriptive Statistics for the Full Sample, Target Group, and Comparison Group**

	Full Sample	Target Group Female Heads with Children	Comparison Group Male Heads and Female Heads without Children
On Welfare in 1994***	0.06	0.39	0.01
On Welfare Between 1994-2001***	0.08	0.48	0.02
Age ***	34.39	31.80	34.76
African-American ***	0.20	0.61	0.14
Household Size in 1994 ***	2.90	3.21	2.85
Change in Household size (1994-2001)	0.01	0.06	0.00
Number of Children***	1.19	2.08	1.06
% with Children under 17***	0.59	1.00	0.53
Head's Education in 1994 ***			
Less than High School	0.13	0.29	0.11
High School Degree	0.51	0.37	0.53
Some College	0.36	0.34	0.37
Averaged Family Income (1994 and 2001)***	\$38,709.35	\$13,740.67	\$42,357.22
Mean	\$33,841.96	\$11,859.56	\$39,080.11
Median			
Change in Family Income (1994-2001)			
Mean	\$9,184.63	\$9,651.91	\$9,116.36
Median	\$6,287.39	\$7,126.97	\$6,138.73
Change in State Unemployment Rate (1994- 2001)	-1.29	-1.34	-1.18
Per Capita GSP in 1994 (in \$1000) *	27.32	28.03	27.22
Financial Assets in 1994 ***			
Mean	\$17,191	\$1,998	\$19,411
Median	\$1,588	\$0	\$2,117
Change in Financial Assets (1994-2001)			
Mean	\$4,829	\$1,433	\$5,326
Median	\$0	\$0	\$9
Saved Financial Assets (1994-2001) *	0.50	0.41	0.51
Possessed Bank Account in 1994***	0.72	0.38	0.77
Possessed Bank Account in 2001***	0.78	0.58	0.81
Owned a Vehicle in 1994***	0.84	0.62	0.87
Owned a Vehicle in 2001***	0.87	0.73	0.89
N	1,363	277	1,086

\* p < 0.1; \*\* p < 0.05; \*\*\* p < 0.01, t-tests and  $\chi^2$  tests of differences between the target and comparison groups.

**Table 3. Countable Asset Limits on Positive Saving and Dollar Amount of Change in Financial Assets**

Comparison Group and sample composition	A. All male heads and female heads without children (fewer than 16 years of schooling)		B. Male heads with children (fewer than 16 years of schooling)		C. All male heads and female heads without children (fewer than 13 years of schooling)	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
<b>Positive Saving (Dichotomous)</b>						
Countable Asset Limit Amount (in thousands)	0.010 (0.014)		-0.020 (0.018)		0.018 (0.018)	
<b>Countable Asset Limit Amount × Target Group</b>	0.041 (0.046)		0.075 (0.047)		0.045 (0.065)	
Countable Asset Limit Elapsed Years Since Liberalization		-0.007 (0.010)		-0.029 (0.015)		0.000 (0.012)
<b>Countable Asset Limit Elapsed Years × Target Group</b>		0.054** (0.026)		0.071** (0.029)		0.078** (0.029)
Target Group	-0.107 (0.127)	-0.220** (0.108)	-0.237* (0.143)	-0.344** (0.136)	-0.129 (0.166)	-0.323** (0.117)
<b>Change in Financial Assets (Continuous)</b>						
Countable Asset Limit Amount (in thousands)	371.60 (1428.68)		-1666.18 (1402.07)		1537.35 (2153.54)	
<b>Countable Asset Limit Amount × Target Group</b>	-1006.65 (2448.87)		1474.47 (2422.07)		-2715.31 (3828.74)	
Countable Asset Limit Elapsed Years Since Liberalization		-1426.20 (1258.00)		-3293.93 (1837.19)		667.23 (1303.41)
<b>Countable Asset Limit Elapsed Years × Target Group</b>		1959.76 (1666.17)		3883.21 (2245.37)		1054.54 (1761.92)
Target Group	-3750.96 (9570.92)	-13595.2 (9895.1)	-17888.1** (7589.3)	-30089.8** (11975.5)	2480.83 (9422.94)	-7491.07 (13353.43)
N		1,363		842		914

Standard errors appear in parentheses.

\* p &lt; 0.1; \*\* p &lt; 0.05; \*\*\* p &lt; 0.01 (two-tailed)

**Table 4. Countable Asset Limits on Logarithm of Financial Assets Change Amount**

Comparison Group and sample composition	A. All male heads and female heads without children (fewer than 16 years of schooling)			B. Male heads with children (fewer than 16 years of schooling)			C. All male heads and female heads without children (fewer than 13 years of schooling)		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
<b>Ln (Change in Financial Assets)</b>									
Countable Asset Limit Amount (in thousands)	0.06 (0.06)		0.04 (0.06)	-0.05 (0.10)		-0.03 (0.09)	0.01 (0.08)		-0.01 (0.07)
<b>Countable Asset Limit Amount × Target Group</b>	0.74*** (0.27)		0.74*** (0.27)	0.79*** (0.28)		0.73*** (0.27)	1.45*** (0.55)		1.42** (0.56)
Countable Asset Limit Elapsed Years Since Liberalization		0.10* (0.06)			-0.10 (0.08)			0.07 (0.06)	
<b>Countable Asset Limit Elapsed Years × Target Group</b>		0.22 (0.18)			0.44** (0.20)			0.49 (0.31)	
Target Group	-1.49 (0.96)	-0.69 (0.91)	-1.48 (0.96)	-1.81* (0.95)	-1.79* (0.95)	-1.62* (0.94)	-3.87** (1.77)	-2.71 (1.76)	-3.80** (1.79)
<b>Selection into positive saving</b>									
Countable Asset Limit Amount (in thousands)	0.02 (0.03)			-0.05 (0.05)			0.06 (0.05)		
<b>Countable Asset Limit Amount × Target Group</b>	0.13 (0.13)			0.24* (0.14)			0.16 (0.19)		
Countable Asset Limit Elapsed Years Since Liberalization		-0.02 (0.03)	-0.02 (0.03)		-0.06 (0.04)	-0.06 (0.04)		0.00 (0.03)	0.00 (0.03)
<b>Countable Asset Limit Elapsed Years × Target Group</b>		0.15** (0.07)	0.15** (0.07)		0.19** (0.08)	0.17** (0.08)		0.23** (0.10)	0.22** (0.10)
Target Group	-0.37 (0.35)	-0.65** (0.32)	-0.63** (0.31)	-0.88** (0.41)	-1.06*** (0.40)	-0.97** (0.39)	-0.44 (0.50)	-0.98** (0.44)	-0.96** (0.45)
N		1,363			842			914	

Standard errors appear in parentheses.

\* p &lt; 0.1; \*\* p &lt; 0.05; \*\*\* p &lt; 0.01 (two-tailed)

**Table 5. Bank Account and Vehicle Ownership: Models with General Account Limit**

Comparison Group and sample composition	A. All male heads and female heads without children (fewer than 16 years of schooling)		B. Male heads with children (fewer than 16 years of schooling)		C. All male heads and female heads without children (fewer than 13 years of schooling)	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
<b>Bank Account Ownership</b>						
Countable Asset Limit Amount (in thousands)	-0.002 (0.009)		-0.018 (0.014)		-0.002 (0.012)	
<b>Countable Asset Limit Amount × Target Group</b>	0.023 (0.040)		0.041 (0.042)		0.028 (0.063)	
Countable Asset Limit Elapsed Years Since Liberalization		-0.007 (0.008)		-0.018 (0.011)		-0.001 (0.009)
<b>Countable Asset Limit Elapsed Years × Target Group</b>		0.049** (0.022)		0.056** (0.024)		0.047** (0.030)
Target Group	0.016 (0.115)	-0.117 (0.098)	-0.046 (0.126)	-0.169 (0.113)	0.021 (0.175)	-0.092 (0.139)
<b>Vehicle Ownership</b>						
Countable Asset Limit Amount (in thousands)	0.000 (0.006)		-0.003 (0.006)		0.002 (0.007)	0.000 (0.006)
<b>Countable Asset Limit Amount × Target Group</b>	0.001 (0.038)		-0.001 (0.039)		-0.033 (0.054)	0.001 (0.038)
Countable Asset Limit Elapsed Years Since Liberalization		-0.002 (0.006)		-0.006 (0.006)		0.006 (0.006)
<b>Countable Asset Limit Elapsed Years × Target Group</b>		0.006 (0.018)		0.008 (0.018)		-0.024 (0.023)
Target Group	0.002 (0.093)	-0.020 (0.070)	-0.087 (0.100)	-0.118 (0.079)	0.039 (0.130)	0.057 (0.091)
N	1,363		842		914	

Standard errors appear in parentheses.

\* p < 0.1; \*\* p < 0.05; \*\*\* p < 0.01 (two-tailed)

**Table 6. Asset Limits and Asset Accumulation: Models with Other Policy Variables**

	Positive Saving (Dichotomous)		Ln (Saved Assets) (Continuous)		Bank Account	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Countable Asset Limit Amount (in thousands)	0.008 (0.015)		0.008 (0.072)		-0.004 (0.010)	
<b>Countable Asset Limit Amount × Target Group</b>	0.046 (0.046)		0.435* (0.259)		0.052 (0.038)	
Any Vehicle Limit	-0.076 (0.089)		-0.946* (0.498)		-0.092 (0.066)	
<b>Any Vehicle Limit × Target Group</b>	0.344 (0.301)		6.507*** (1.625)		0.158 (0.195)	
Vehicle Limit Amount (in thousands)	0.009 (0.013)		0.136* (0.071)		0.007 (0.010)	
<b>Vehicle Limit Amount × Target Group</b>	-0.037 (0.052)		-1.194*** (0.261)		0.017 (0.031)	
Countable Asset Limit Elapsed Years		-0.021 (0.015)		0.085 (0.081)		-0.007 (0.010)
<b>Countable Asset Limit Elapsed Years × Target Group</b>		0.058* (0.034)		0.107 (0.270)		0.061** (0.031)
Vehicle Limit Elapsed Years		0.028 (0.021)		-0.020 (0.116)		0.000 (0.016)
<b>Vehicle Limit Elapsed Years × Target Group</b>		-0.005 (0.043)		0.274 (0.366)		-0.021 (0.037)
Target Group	-0.044 (0.230)	-0.097 (0.206)	1.040 (1.215)	0.240 (1.433)	-0.102 (0.171)	0.037 (0.160)
N	1,363		1,363		1,363	

Standard errors appear in parentheses.

\* p &lt; 0.1; \*\* p &lt; 0.05; \*\*\* p &lt; 0.01 (two-tailed)