

THE EFFECTS OF WELFARE TIME LIMITS: WHAT DO WE KNOW?

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OF ALL THE U.S. WELFARE REFORM DEVELOPMENTS of the 1990s, the elimination of the entitlement status through the imposition of time limits on welfare receipt is among the most radical changes relative to previous policy. Under the Aid to Families with Dependent Children (AFDC) program, all single-parent families with at least one child under age 18 could receive benefits as long as they satisfied some income and wealth eligibility criteria. In contrast, the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA) prohibits states from using federal Temporary Assistance for Needy Families (TANF) funds to provide benefits beyond a 60-month lifetime limit. Many states have opted for even shorter limits.

Under TANF, welfare participation among single mothers dropped from 23 percent in 1996 to 8 percent in 2003 (solid line in Figure 1).¹ How much of this drop can be attributed to the effects of time limits? The empirical literature is mixed in its findings. Time limits might affect welfare use through both mechanical and behavioral effects. The direct mechanical effect arises simply from the fact that a family that reaches the limit should be dropped from the rolls (if the limit is enforced). However, even before limits become binding, there might be behavioral responses of recipients and eligibles. As formalized by Grogger and Michalopoulos (2003; hereafter GM), forward-looking families facing wage uncertainty and credit market constraints may reduce their current welfare use in order to preserve their welfare eligibility as insurance against a negative event in the future.

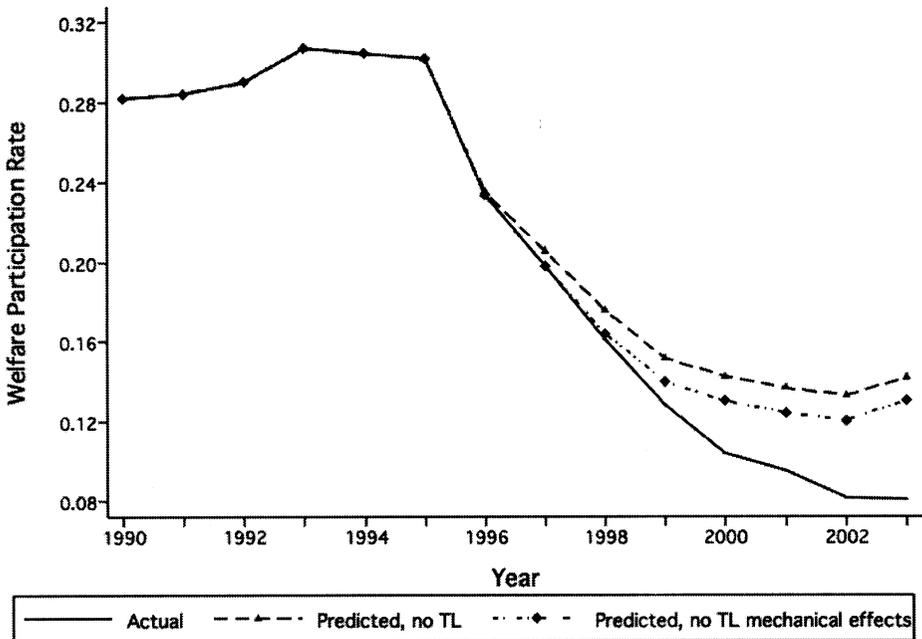
PRIOR RESEARCH ON THE EFFECTS OF TIME LIMITS ON WELFARE USE

The empirical literature has largely focused on how time limits affect welfare use before they actually become binding. Several early studies using only cross-state variation in the timing of implementation of time limits estimate that they had no significant effect on welfare use (Council of Economic Advisers, 1997, 1999; Moffitt 1999; Ziliak et al., 2000). A shortcoming of these studies

is that they constrain the effects of time limits to be independent of personal characteristics. On the contrary, the GM's model predicts that the "option value" of banking welfare eligibility is decreasing in the stock of remaining months of eligibility (that is, the difference between the state time limit and the number of periods of welfare use accumulated since the clock started to tick) and increasing in the time horizon over which benefits may be used (that is, given the AFDC/TANF categorical restriction, as long as minor children live in the home). The most recent empirical literature tests for, and provides evidence consistent with, reduced-form predictions of the GM's model. GM—on data from a reform demonstration in Florida—and Grogger (2002, 2003, 2004)—on nationally representative data—allow for age-dependence in the effects of time limits to test the prediction that behavioral effects should be greater among families with younger youngest children, because they have longer horizons of categorical eligibility. They find that time limits have statistically significant and economically sizable negative effects on welfare use. For example, Grogger (2004) estimates that behavioral responses to time limits account for 12 to 13 percent of the 1993-1999 decline in welfare use. A shortcoming of identifying the effects of time limits through age-dependent effects is that while this approach is theoretically valid at the moment of time limit implementation, as time passes it only correctly identifies the incentive to bank benefits perceived by people who have not used any of them. Fang and Keane (2004) estimate a reduced-form specification for welfare utilization that captures the effects of remaining eligibility under time limits through the inclusion of the minimum stock of benefits that a woman would possess if she always received welfare since her clock started. Time limits are found to explain 11 percent of the overall 1993-2002 decline in welfare use among single-headed families. In this approach as well, however, the characterization of the effects of time limits worsens as time passes from when the limit is introduced.

In Mazzolari (2007) I improve the characterization of the incentives and constraints faced by

Figure 1: Actual and Counterfactual Average Yearly Welfare Participation Rates across States



Source: Mazzolari (2007).

potential recipients under time limits by including in the analysis information on the number of remaining months of eligibility. This is crucial to capture the interaction of the time-limit rule with the actual growing stock of individuals facing binding time limits. In particular, it allows me not only to test the structural predictions of the GM model on the behavioral effects of time limits, but also to separately identify the mechanical effects of this provision. Controlling for remaining months of eligibility, however, involves a serious identification issue due to the endogeneity of current and prior participation. I address this issue by isolating variation in remaining months of eligibility at each point in time arising from differences in the timing and nature of state time limit policies, individual exposure to time limits, and an exogenous prediction of average welfare use based on socio-demographic characteristics.

DATA AND METHODS

I use data from the 1990, 1991, 1992, 1993, 1996 and 2001 panels of the Survey of Income and Program Participation (SIPP), whose combined

sampling periods extend from October 1989 to August 2003. The dependent variable in the empirical analysis is a welfare utilization indicator p_{its} equal to one if woman i living in state s receives positive welfare income in month t , and equal to zero otherwise. A crucial advantage of using samples drawn from the SIPP is that they include information sufficient to calculate the remaining stock of available months of eligibility, defined as the difference between the total stock of benefits made available in the state of residence (N_s) and welfare use accumulated since the state started to count months toward the limit (T_s), that is

$$S_{its} = N_s - \sum_{j=T_s}^{t-1} p_{ijs}$$

Information on individual prior welfare participation is obtained in the SIPP using both in-sample information and retrospective questions asked at the beginning of the panel.

The empirical specification relates the welfare utilization indicator p_{its} to observed socio-demographic characteristics (X_{it}),² a set of state-level policy and economic factors (V_{it}),³ and a set of time limit variables, specified as nonlinear functions of

S_{its} and the eligibility horizon (H_{it}), that is proxied by the number of months until a woman's youngest child turns 18.

The time limit variables are only defined if time limits are implemented ($t \geq T_s$)⁴ and are meant to test the structural predictions of the GM model. First, individuals with incomplete coverage under time limits – with a remaining stock of benefits less than the eligibility horizon, that is $0 < S_{its} / H_{it} < 1$ – should participate in welfare less than people not facing time limits (banking hypothesis). Given this general negative effect, an increase in coverage should make the incentive to preserve benefits weaker and participation more likely to happen. Second, even if the clock is running, time limits amount to a nonbinding constraint for families with remaining months of eligibility not smaller than their eligibility horizon ($S_{its} / H_{it} \geq 1$), so these families should behave as if time limits were not implemented (unconstrained hypothesis). Finally, what happens when recipients hit the limit? GM assume full enforcement of time limits and impose a terminal nonnegativity condition on the stock of months of remaining eligibility. However, some families who reach the limit do continue to receive TANF, mainly through extensions –that temporarily continue assistance even though a family has reached the limit– and exemptions –that temporarily stop the clock.⁵ I investigate the extent to which time limits have been enforced at the state level by looking at the impact on welfare use of having exhausted benefits ($S_{its} \leq 0$), when remaining months of eligibility are calculated abstracting from the possibility of exceptions to the limit rule.

A serious endogeneity issue arises from including the actual remaining stock of benefits S_{its} in a model that explains current welfare use p_{its} , because S_{its} depends on individual welfare participation in previous periods, which is likely to be correlated with some unobservable factors that also explain p_{its} . For example, a woman with unobserved barriers to work is more likely to have received benefits in the past and to have a low S_{its} , but she is more likely to be receiving benefits today as well. Also, a woman who used welfare at time $t - 1$ because of a negative wage shock starts period t with a depleted stock of benefits, but she is also more likely to use welfare because of state dependence (Chay, Hoynes, and Hyslop 1999). Both cases would result in a relationship between S_{its} and p_{its} of the opposite sign than that predicted by the

banking hypothesis. Moreover, states may grant extensions to people who have exhausted their benefits but can prove to the welfare office to be facing a particular hardship or not to be able to find work despite diligent efforts. As a result, the event $S_{its} \leq 0$ is likely to be endogenous to some unobserved factors that also make it more likely to be granted an exemption, and this works against finding evidence of enforcement.

To address the endogeneity of S_{its} , I start from noticing that welfare use counting toward the limit can be expressed as the fraction of time a woman actually spent on welfare (k_{it}) of the total time she might have spent since her state started her clock (E_{its}). The latter is capped by either the number of months elapsed since the implementation of time limits ($t - T_s$) or the age in months of a woman's oldest child and identifies an exogenous source of variation in S_{its} , as long as the legislative environment is taken as exogenous. To reduce the concern of policy endogeneity, I include in the specification state fixed effects and state time-varying effects (linear and quadratic trends or alternatively state-year effects). Then I simulate remaining benefits as $Z_{its} = N_s - \hat{k} * E_{its}$, where \hat{k} is an exogenous prediction obtained as the average welfare reciprocity rate predicted at the national level and in the pre-reform period on the base of some socio-demographic characteristics. Finally, I instrument the functions of S_{its} and H_{it} by the same functions of Z_{its} and H_{it} . To allow for the possibility that other determinants of welfare use have heterogeneous effects, I interact V_{its} with the age of the youngest and the oldest child, and the characteristics used to simulate remaining benefits.

RESULTS

The instrumental variables (IV) estimates provide evidence in favor of the existence of both mechanical and behavioral effects of time limits on individual welfare use, and are robust to many specification checks. I use the regression coefficients to quantify how much of the post-reform steep decline in welfare participation among the population of single mothers is attributable to time limits. The dashed line with triangles in Figure 1 provides estimates of what welfare use would have looked like if time limits had never been imposed. These predictions are obtained by setting the time limit implementation dummy equal to zero for all t . As graphically shown by an increasing distance

between actual and counterfactual welfare use profiles, the effects of time limits grew over time. They decreased welfare use by 2.1 percentage points as of 1999, while, as of 2003, they caused welfare use to drop by 5.8 percentage points. This reduction amounts to 25 percent of the 1996 welfare utilization rate of 23.3 percent, and accounts for 38 percent of the overall 15.2 percentage points drop in welfare use observed between 1996 and 2003. My estimate largely exceeds the one in Fang and Keane (2004).

The share of these reductions due to mechanical effects increases over time as well. The dashed line with diamonds depicts estimated welfare utilization rates if we shut down mechanical effects only, so that differences between the two counterfactual welfare profiles amount to the effects of time limits due to banking behaviors. Changes in behavior account for all of the reductions attributable to time limits in 1998, but for less than 20 percent of the reductions in 2003. Mechanical reductions grew from 1.1 percentage points in 1999 to 4.7 percentage points in 2003, and they would have been even larger in the absence of exceptions to time limits.

DIFFERENT TYPES OF TIME LIMITS

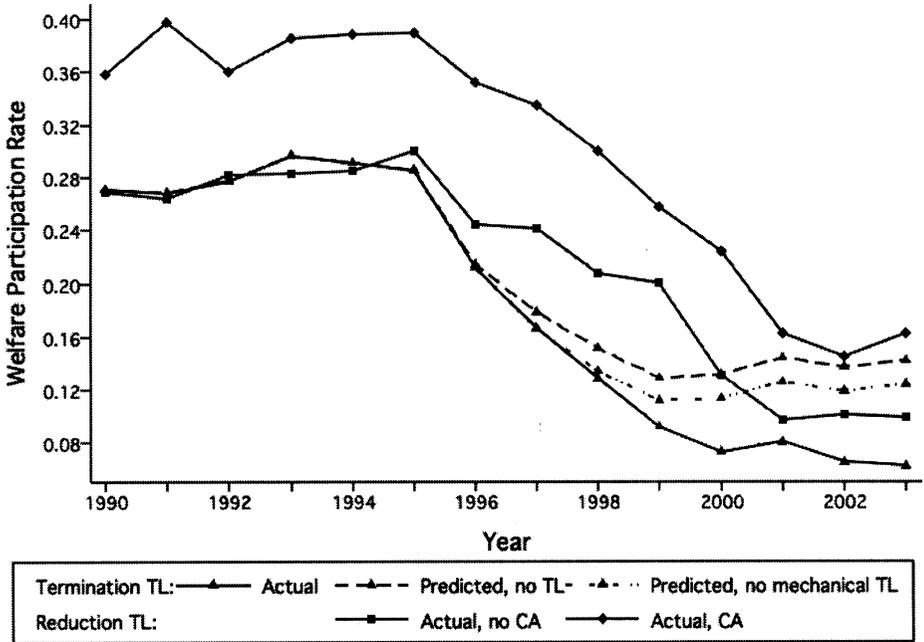
States have used their flexibility under the federal law to adopt a wide variety of time limits that differ not only in length, but also in other ways. Twenty-four states have adopted the simple PRWORA standard of a 60-month lifetime limit, while five states impose a lifetime limit shorter than 60 months (ranging between 24 and 48 months). Eleven states impose not only a lifetime limit (of 60 or less months) but also “intermittent limits” that are implemented either by limiting individuals to receive no more than x months of receipt in every y months of calendar time, or by obliging recipients to stay out of the program for z months after receiving benefits for x months. One state (Massachusetts) imposes no lifetime limit, but only intermittent limits. Finally, eight states have relaxed the time limits implicit in PRWORA by adopting “reduction” rather than termination policies (six have lifetime limits, while two have only intermittent limits). A reduction limit is a limit only for adults, so that children can continue to receive benefits beyond 60 months. There are only two states that chose not to impose any sort of time limit on cash assistance (Michigan and Vermont).

The impact of time limits on welfare use should be modeled as a function of the many ways in which actual state policies have been implemented. In Mazzolari (2007) I move some steps in this direction.⁶

First, the effects of time limits on welfare use are expected to be different in states that implemented termination time limits versus states where the penalty for reaching the limit is only loss of the adult portion of benefits (Arizona, California, Indiana, Maryland, New York, Oregon, and Rhode Island). Indeed, as shown in Figure 2, average welfare use among the population of single mothers dropped more sharply and sooner after welfare reform in states implementing termination time limits (solid line with triangles) versus states implementing reduction time limits (solid line with squares, except CA). California (separately represented by the solid line with diamonds) has the highest reciprocity rates throughout the period, but – as the other states offering coverage for children beyond the limit – it experienced relatively low and late drops in welfare use. These differences are suggestive of the role that termination time limits might play in explaining welfare drops. In a model for the individual decision to use welfare, I indeed find evidence of time limits being enforced in the subsample of individuals facing termination limits, but not in the one of those subject to reduction limits. The point estimates of banking effects are similar in the two samples, but they are statistically significant only in case of termination time limits. The dashed and dotted lines with triangles in Figure 2 provide estimates of what welfare use would have looked like in states with termination time limits if those limits had respectively never been imposed or never been enforced. In these states, time limits caused welfare use to drop by 36 percent, between 1996 and 2003, accounting for 52 percent of the 14.9 percentage points drop in welfare use. Mechanical effects account for 79 percent of the reductions attributable to time limits in 2003. In particular, if not for families hitting the limit, welfare use would have not decreased in the early 2000s, but it would have slightly increased instead, as it was the case in the states that adopted reduction limits.

Second, given cross-state variation in the length of the limit, I estimate how much shorter limits accelerated the caseload reduction. When restricting the analysis to termination policies, there are 17 states that implemented lifetime or intermittent

Figure 2: Average Yearly Welfare Participation Rates across States by breadth of coverage when the limit is reached



Source: Mazzolari (2007).

limits shorter than the 60-month federal limit. In these states (and only there), there is evidence of families being dropped from the rolls because they hit the limit and time limits are found to decrease welfare use by 55 percent in 2003 (84 percent of the decline is due to mechanical effects). On the contrary, in states implementing the standard 60-month termination lifetime limit, individual welfare use is affected only through behavioral effects that account for a 10 percent reduction in welfare use.

AREAS FOR FUTURE RESEARCH

In light of the great deal of variation across states' time limit policies other than in the length of the limit, more work should be devoted to understanding how the way in which states shaped their own time limits affected the overall impact of the policy. Also, because implementation of time limits has been accompanied by other welfare reform provisions, an important research question is how different reforms interact. Economic theory predicts that such interactions exist (Moffitt and

Pavetti, 2000), but unfortunately there is not much scope for successfully investigating them. In fact, states have implemented different reform bundles, so that it is difficult to learn about these interactions from cross-state comparisons.

My analysis, as most of the previous work on this topic, has aimed primarily to estimate how time limits affect welfare use. Future work will study the income sources of women banking benefits. Assessing what alternative sources of income a family that is banking benefits is relying on is an important policy question, because it would shed light on whether the reform succeeded in making benefits perceived as temporary while promoting a transition from welfare to work.⁷

Also, to date, there is no available evidence on how time limits affected other important outcome variables, such as consumption or child well-being. This represents a further important area for future research that should focus in particular on those families exhausting their benefits and not being granted extensions.

Finally, a full assessment of the effects of time limits requires information on their effects on

family composition decisions. Fertility and marriage choices are assumed to be exogenous in my analysis, and this assumption is justified by the fact that the empirical literature on the effects of welfare reform on family composition decisions is mixed, and for some, inconclusive (Grogger, Karolyn, and Klerman 2002). However, the lack of evidence from the available data is also consistent with marriage and fertility patterns being more sluggish and resistant to change than welfare (or work) behavior. Now that a decade has elapsed since PRWORA, more work might provide new insights on this issue.

Notes

- ¹ For reviews of the economic literature on the effects of the 1996 reform on welfare use, see Blank (2002) or Grogger, Karolyn, and Klerman (2002).
- ² The observable socio-demographic characteristics I control for are number and ages of children, mother's age, marital status, education, race, nativity, cohort of entry in the United States if foreign-born, and a dummy for metropolitan residence.
- ³ V_{ts} includes two welfare reform variables: (1) a dummy that takes the value of one if the state in which a woman lives has a major statewide waiver in effect in month t and (2) a dummy that is equal to one in all months after the state first implemented its TANF program. It also includes the monthly unemployment rate, the AFDC/TANF maximum monthly benefit for a family of three, and the Earned Income Tax Credit (EITC) maximum payment. These variables vary by state and time, some at monthly level (unemployment rate and waiver and TANF dummies), the others on a yearly basis. The EITC maximum credit also varies by family size.
- ⁴ Given that the dates since time limits started to be counted do not overlap completely either with waiver or with TANF implementation dates, it is possible to separately identify a time limit, a waiver and a TANF dummy.
- ⁵ See Bloom et al. (2002) for a survey of state extension and exemption policies. Most state welfare laws include the option of extensions, usually because the family faces a particular hardship or because the parent was unable to find work despite "diligent efforts." Most states also allow for exemptions that temporarily stop the clock, primarily for recipients that are incapacitated or are victims of domestic violence. Federal law allows an exemption up to 20 percent of their caseload from the time limit restriction and, hence, to use federal funds to pay benefits to that 20 percent. State money must be used above that limit.
- ⁶ The results presented in the previous section are obtained by setting the state time limit N_s equal to the most binding time limit imposed in the state (that is, the intermittent time limit if in place) and no distinction is made between reduction and termination policies.
- ⁷ Grogger (2003) estimates that behavioral effects of time limits contribute to the rise in employment among single-mothers in the late 1990s.

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