WELFARE TIME LIMITS IN THE UNITED STATES – EXPERIENCES WITH A NEW WELFARE-TO-WORK APPROACH

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CESIFO WORKING PAPER NO. 1210 CATEGORY 3: SOCIAL PROTECTION JUNE 2004

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Abstract

This paper reviews the evidence on welfare time limits in the United States. It primarily refers to experimental and econometric evaluations. Time limits affect welfare recipients both before and after their limits are reached. Time limits reduce welfare receipt and increase employment before recipients reach the limit, as recipients "hoard" their months of eligibility for future use. Once recipients begin to exhaust their benefit entitlements, welfare use falls sharply. A large proportion of time-limit leavers, however, continues to receive Food Stamps, Medicaid, etc. The impact on employment is mixed. Income effects change from positive to neutral in subsequent periods.

JEL classification: H53, I30, J20.

Keywords: welfare time limits, evaluations.

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The author thanks the Deutsche Forschungsgemeinschaft for financial support (DFG grant No. WE 2815/1). Comments and support by Jeff Grogger, Christian Holzner, Volker Meier and Martin Werding are gratefully acknowledged.

1 Introduction

In the past two decades, the system of basic social protection has been realigned in the United States. The reforms are marked by a change from passive to active social policies with the aim of integrating welfare recipients into the regular labour market. These welfare-to-work policies include financial stimuli (in-work benefits, cuts of other benefit entitlements, welfare time limits), work-first measures (job search assistance and workfare), training and skill development, and work support subsidies (like childcare and transportation assistance).

Most evaluations of welfare-to-work policies have been primarily directed at measuring the combined effects of all policy measures. There is very little knowledge of the effects of specific instruments. This knowledge, however, is crucial in order to design welfareto-work policies adequately. This paper will review the specific evidence on time limits on welfare use and refer primarily to experimental and econometric evaluations.

2 US time-limit policies

2.1 The evolution of time limits before 1996

In the US welfare has always been time-limited in the sense that adults could never receive Aid to Families with Dependent Children (AFDC) benefits after they no longer had any dependent children. In 1993 and 1994, however, the federal government began granting waivers of AFDC rules that enabled states to impose time limits on benefit receipt. States were authorised to test a variety of time-limit strategies. Many waiver programmes included "delayed work requirements" rather than the reduction or cancellation of assistance. Other states imposed "reduction time limits" in which only a proportion of the family's grant (usually the adult portion) was eliminated when the time limit was reached. There were only few waiver programmes that included "termination time limits" resulting in the cancellation of a family's entire welfare grant. Many of the early reduction and termination time limits were not lifetime limits that permanently reduced or terminated a family's grant but, rather, periodic time limits that reduced or terminated benefits for a certain period of time, after which regular assistance could again be provided (for example, benefits were limited to 24 months in a 60-month period) (Bloom et al. 2002a, pp. 1-2).

To illustrate these early developments, a closer look at time-limit policies in Connecticut, Florida and Texas is provided in the following. Connecticut's Jobs First programme is a state-wide welfare reform initiative that began operating in January 1996. In implementing Jobs First, Connecticut was one of the first states to impose a state-wide time limit on the receipt of cash assistance. Jobs First limits families to 21 cumulative months of cash assistance unless they receive an exemption or extension. The programme also includes unusually generous financial work incentives and requires recipients to participate in employment-related services targeted toward quick job placement. Jobs First was initiated under waivers of federal welfare rules that were granted before the passage of the 1996 federal welfare law (Bloom et al. 2002b, Summary Report, p. Sum-1).

Florida's Family Transition Program (FTP) began operating in February 1994 under waivers of federal welfare rules. FTP tested a model that combined a time limit on cash assistance receipt with an array of services and supports designed to help participants prepare for, find, and hold on to jobs. Its main goals were to increase self-sufficiency and reduce long-term welfare dependency. Most FTP participants were limited to 24 months of cash assistance receipt in any 60-month period (those least ready for a job were limited to 36 months in any 72-month period). The programme rules included several safeguards that could, in theory, lead to temporary benefit extensions for families reaching the time limit, partial (rather than full) benefit termination, or post-time-limit subsidised jobs. The AFDC group was not subject to a time limit. Apart from the time limit, FTP included financial work incentives, enhanced services and requirements and parental responsibility mandates (Bloom et al. 2000, Summary Report, pp. 2-4).

The Achieving Change for Texans (ACT) demonstration operated in several Texas locations from June 1996 through March 2002. It stressed the temporary nature of welfare cash assistance and the need for people to move from welfare to work. ACT limited the number of months that able-bodied adult caretakers could receive Temporary Assistance for Needy Families (TANF). TANF recipients were assigned to one of three time limit tiers (12, 24 or 36 months) based on their educational attainment and work history. State time-limit policies took effect when adult TANF caretakers were offered a slot in the Choices programme (Texas' workforce development programme for TANF recipients). This programme consisted of expanded TANF eligibility rules and a personal responsibility agreement (PRA).¹ Time limits did not apply to families with young children, who were exempt from Choices participation requirements. Under Texas time limits, adult clients who exhausted their time-limited benefits were disqualified from re-ceiving TANF for five years (with exemptions). They could, however, receive twelve months of transitional Medicaid and child care (Schexnayder et al. 2003, pp. 1-5; Schexnayder 2003, pp. 2-3).

2.2 Time limits under the 1996 welfare reform law

The 1996 welfare reform made time limits a central feature of federal welfare policy. Under the law, states are prohibited from using federal TANF funds to provide assistance to families with an adult recipient for more than 60 cumulative months.² States can provide federally funded TANF assistance beyond 60 months to up to 20 percent of the state caseload, based on hardship. The time limit does not apply to "child-only cases" in which no adult is included in the welfare grant.

States are not required to impose time limits on assistance provided with state "maintenance-of-effort" (MOE) funds. Such funds may be used in a separate state programme that is not part of the TANF programme. Thus, the states can stop the federal time-limit clock by paying for a family's benefits with state funds, or they can use state funds to assist families who pass the federal limit and exceed the 20 percent cap. The fact that the federal time limit does not apply to state MOE funds gives states broad flexibility in designing time-limit provisions. States can establish a 60-month time limit, a shorter time limit, or no time limit at all. Also, they can designate certain categories of families as exempt from their state time limit, or they can allow benefit extensions to families who reach the limits (Bloom et al. 2002a, pp. 2-4 and chapter 2).

¹ PRA stated that clients had to co-operate with child support requirements, provide regular health check-ups for children, refrain from voluntarily quitting a paying job, participate in an employment services programme, refrain from drug and alcohol abuse, etc. Clients who failed to comply with PRA requirements without good cause received a financial penalty.

² The time limit does not affect eligibility for other public assistance programmes, such as Food Stamps and Medicaid. Nor do they apply to services that are not considered assistance (for example, child care subsidies for working families).

3 Evaluation challenges, methods and studies

3.1 Evaluation challenges

Evaluating the effects of time-limit policies creates a number of challenges. In order to produce a reliable estimate of a policy effect, one must control for all other environmental influences. If, for example, unobservable characteristics of female-headed families affect both welfare use (and labour market outcomes) and the states' time limit policies, then one has to control for such unobservables in order not to produce biased results. Another problem involves distinguishing the effects of time limits from the effects of other welfare reform elements. Furthermore, the effects have to be separated from economic performance effects. Last but not least, the interaction of different welfare reform components has to be taken into consideration. Complementarities between programme components are to be found wherever the effects of one particular policy arrangement depend on the simultaneous implementation of other arrangements.

Apart from controlling for other influences, evaluations of welfare time limits have to define adequately the outcome indicators. In addition to welfare use and labour market outcomes, social benefits such as reduced crime or better health are of interest. Moreover, evaluations should not only provide evidence on short-run outcomes but should include long-run effects. And, finally, evaluations should not only focus on direct effects (treatment effects) but should take into account indirect effects (substitution effects, etc.), too (Martin and Grubb 2001).

Evaluations are also confronted with problems of data availability. Time-limit policies have been introduced only recently. Therefore, data sets designed to collect information on this new policy approach are only partially available. Another problem arises from the fact that states design and implement time-limit policies. The programmes are thus diverse. This creates problems of comparability of evaluations. Furthermore, not all programme elements can be easily measured and coded, and it is especially difficult to obtain information on implementation practices of enacted programme rules (Blank 2002, pp. 1120-21; Pavetti and Bloom 2001).

3.2 Evaluation methods

Microeconomic evaluations are the standard tool to determine the effectiveness of timelimit policies. They assess the effects that time limits have on those directly affected. The effects are measured on the basis of individual and household-level data.

Three microeconomic approaches have been mainly used to study the effects of timelimit policies. The intention of leavers' studies is to analyse the behaviour and wellbeing of those who leave welfare because of time limits. These studies generally use administrative and survey data. Persons on welfare at a specific point in time are surveyed at some later point regarding their employment and income situation. Leavers' studies have a great disadvantage, however. They tell us almost nothing about the true effects of welfare time limits. At best they provide information on how ex-welfare recipients are faring, but nothing causal about policy can be deducted from these studies (Blank 2002, pp. 1123-24). That is why we do not include leavers' studies in our evaluation survey.

Another approach to study the effects of time limits are random assignment or social experiments. In this case, the difference between the outcomes for an experimental ("treatment") group and a control group are used as a measure of the programme effect. From a group of potential participants, the experimental group is randomly chosen to be subjected to time limits. The control group is randomly chosen not to be subjected to any such limits and thus is unaffected by them, this being the only difference between the two groups (Schmidt et al. 2001, pp. 23-32).

When appropriately designed, experimental evaluations are viewed as highly reliable. Still, these experiments may have limitations. This is the case when programmes also influence the control group or when the experimental group is not stable over time. By their nature, experimental programmes may have less significant effects than larger or permanent welfare reforms. They cannot easily capture the entry effects of welfare time limits (Moffitt and Pavetti 2000, p. 528). Moreover, the distributional effects on individual persons within the experimental group cannot be measured.³ And last but not least, experimental evaluations are expensive and time-consuming. That is why administrations are reluctant to undertake experimental evaluations (Blank 2002, pp. 1122-23; Garfinkel, Manski and Michalopoulos 1992; Hagen and Steiner 2000, pp. 51-53).

The third evaluation approach uses econometric assessments. In contrast to social experiments, these are based on non-experimental data collection. One of the main problems of this procedure is to address adequately the problem of a selection bias resulting from non-random participation of individuals in time-limit programmes. In this case, participation in a specific measure is correlated with factors that may also influence the success of the measure. Different approaches are favoured in the evaluation studies under consideration: Regression estimates including state effects, year effects, demographic controls, etc., event history analysis, a combination of a structural model and quasi-experimental models and a discrete-choice dynamic programming model.

³ Experiments can, however, be used to estimate changes in the distribution of earnings, income, etc. as a whole (Bitler, Gelbach and Hoynes 2003).

3.3 Evaluation studies

The literature evaluating welfare time limits can be usefully grouped into three sets of studies. Econometric caseload studies mainly focus on pre-PRWORA waivers (1992-1996 period), but a few extended their analysis beyond 1996.⁴ Their objective is to explain caseload decline. Most studies concluded that welfare reform had some effect on welfare use. Only a few of the studies attempted to sort out the effect of individual components of welfare reform policies, including time limits (CEA 1999; Ziliak et al. 2000; Hofferth et al. 2002).⁵

In a second group of studies, welfare reform waiver programmes including time limits have been studied through random assignment experiments in Arizona, Connecticut, Delaware, Florida, Indiana, Texas and Virginia.⁶ With the exception of Texas these AFDC waiver evaluations did not isolate the effects of state time limits separately from other welfare interventions. Nevertheless, the studies on Connecticut and Florida provide useful information on the programme impacts during the period before and after families begin reaching the time limit (Bloom et al. 2002b; Bloom et al. 2000). The evaluation of the Texas Welfare Reform Waiver is of even greater interest. It is the only random assignment evaluation that isolates the effects of a state time limit and a personal responsibility agreement for TANF recipients from other welfare reform components and from each other (Schexnayder et al. 2003).

The third group of studies may be called new econometric time-limit studies. They analyse the effects of welfare time limits empirically and are able to isolate the effects of time limits. Six papers have been prepared up to now: Grogger and Michalopoulos (2003), Grogger (2002), Grogger (2003), Grogger (2004), Meyer and Rosenbaum (2001) and Swann (2003).

⁴ A summary of the major empirical studies can be found in Blank (2001, table 1 and table 2) and in Blank (2002, table 6).

⁵ Other relevant studies not presented here because of their sample periods are CEA (1997), MaCurdy et al. (2000) and Moffitt (1999).

⁶ See Mills et al. (2003), Bloom et al. (2002b), Fein and Lee (2001), Bloom et al. (2000), Beecroft et al. (2003), Schexnayder et al. (2003) and Wemmerus et al. (2003). A summary has been prepared by Bloom et al. (2002a).

4 Anticipatory effects of time limits

4.1 General considerations

Time limits may affect welfare receipt in two distinct ways. Once time limits are imposed, ex-recipients can no longer use cash assistance. However, time limits may also reduce welfare receipt before recipients reach the limit. They provide incentives for recipients who might need welfare in the future to leave welfare as rapidly as possible in order to preserve their benefits for the future. This is the anticipatory or behavioural effect of welfare time limits.

Predictions on the long-run behavioural effects of time limits are yielded by models of dynamic inter-temporal optimisation. In these models, an individual considers the implications of current behaviour for future options and takes present actions to increase both future and current utility. These models can generate behaviour reflecting hoarding of benefits and declines in entry rates to retain claims on benefits for a later time period. The magnitude of the hoarding effect depends heavily on the time-preference rates of recipients and eligibles as well as on liquidity constraints (Moffitt and Pavetti 2000, pp. 510-512).

Grogger and Michalopoulos (1999) show that the strength of the behavioural effect may vary with the age of the youngest child in the family. The reason is that welfare acts as insurance in the consumer's life-cycle utility-maximisation problem, and the value of retaining one's eligibility for such insurance rises the longer the horizon is, over which it could be used to offset low earnings. Since a family can no longer receive welfare once its youngest child turns 18, families with the youngest children have the greatest incentive to preserve their future eligibility by reducing their current welfare use (Grogger and Michalopoulos 2003, p. 531).

4.2 Caseload studies

The effects of welfare reform on welfare utilisation rates during the 1990s have been analysed in many studies. Almost all of the literature on caseloads utilises regression analysis on some sort of panel data over time. Only a few of the studies attempted to estimate the specific effect of welfare time limits. CEA (1999) used aggregate state-level caseload data from 1976 to 1998 on all states and the District of Columbia. State, year, and state-specific time trends were included to capture unobserved factors that may be correlated with observed variables. Ziliak et al. (2000) used state-level monthly panel data from 1987 to 1996 to assess the importance of state-level experiments with welfare reform and economic growth by estimating a model of AFDC caseloads of the

female population, aged 14 to 55. Hofferth et al. (2002) evaluated the association between welfare policies implemented by states in the early to mid-1990s and the rate at which female household heads with children exit AFDC for work or for non-work reasons. They used data from the Panel Study of Income Dynamics, covering calendar years 1989 through 1996 (Table 1).

Neither of these three studies finds that time limits have had a significant effect on welfare caseloads. This evidence remains, however, unsatisfying because of evaluation and methodological problems. According to Grogger (2004) these problems arise because of the relatively restrictive controls for policy endogeneity that were employed in the caseload studies, and the implicit assumption maintained in the caseload studies that the effects of time limits were invariant with respect to the age of the youngest child in the family.

4.3 Random assignment studies

Another way of measuring the impact of a policy change such as a time limit is to conduct a random assignment study. When states began to impose time limits under federal waivers in 1994, they were in fact required to conduct evaluations of this type. These AFDC evaluations were, however, not designed to isolate the impact of time limits. It is thus impossible to say how much of the observed reduction in welfare use was attributable to time limits as opposed to other programme features. At first glance, the relatively small caseload reductions may suggest that welfare recipients were not "hoarding" their months for future emergencies. Different programme components may, however, have worked in different directions. Time limits interacted with expanded earned income disregards and sanctions. Whereas expanded disregards normally hold people on welfare longer, time limits cause them to leave welfare faster. Sanctions remove individuals from eligibility thereby reducing the possible impact of time limits (Pavetti and Bloom 2001).

The only AFDC waiver evaluation designed to isolate the effects of state time limits from other welfare reform interventions was Achieving Change for Texans (see chapter 2). The time limits experiment operated in Bexar County, which includes the San Antonio metropolitan area. Adult caretakers assigned to the experimental group were subject both to Texas time limits and the Choices programme. Control group members only needed to meet the requirements of the Choices programme. From June 1996 through September 2000, 29,795 cases were assigned to participate in the time limits experiment.

After more than five years of operation, the time limits experiment produced statistically significant but small reductions in TANF receipt. The difference between the experimental group and the control group amounted to 0.6 percentage points for caretakers. Children and families as a whole also received TANF for significantly less of time, though again the effects were small. Employment rates increased slightly but self-sufficiency earning declined slightly. Reduced TANF use and employment were greatest among those who were best prepared to enter the workforce (caretakers in Tier 1 and 2, who had the most education and work history), and those with short histories of welfare receipt. The effects of the ACT demonstration presented here are not only due to behavioural changes but consist also of TANF exits after reaching time limits (Schexnayder et al. 2003 and Table 1).

A number of factors may have contributed to the small size of the effects of the ACT demonstration. According to Schexnayder (2003, p. 32), the most likely reasons include the structure of Texas time limit policies with its many exemptions from state time limits, client confusion about the details and the intention of both time limit and PRA policies, clients paying more attention to their immediate needs rather than future consequences imbedded in these policies and the exclusion of policies that supported employment from the set of policies included in the ACT experiment.

4.4 New econometric time-limit studies

Although evidence from administrative caseload data as well as the results of the ACT experiment suggested that time limits had no or little effect on welfare use, Grogger and Michalopoulos's (2003) analysis found them to have a substantial effect. Their analysis is based on the theoretical prediction that welfare time limits generate incentives to conserve benefits for future use, and that the strength of this incentive should vary among families. As was discussed before this incentive is bigger for families with younger youngest children than for families with older youngest children. As eligibility for aid under TANF (as under AFDC) ends when the youngest child in the family becomes 18, the former group of families have longer eligibility horizons than the latter group. Forward-looking families with younger children facing both wage uncertainty and credit market constraints should therefore be more reluctant to utilise benefits today, and prefer to preserve them for the future.

Table 1: Anticipatory effects of time limits

Study	Programme	Period	Dependent variable	Method; Data	Results			
Caseload studies								
CEA (1999)	Pre-PRWORA waivers; TANF program- Mes	1976-1998	Log (AFDC caseloads)	Econometric approach includ- ing state, year and state-time trends; State administrative data	No significant effect of time limits on welfare caseloads			
Ziliak et al. (2000)	Pre-PRWORA waivers	1987-1996	Log (AFDC caseloads + female population, Aged 14-55)	Econometric approach includ- ing state effects and time trends; estimated models with lagged dependent variables and first differences; Monthly state administration data	No significant effect of time limits on welfare caseloads			
Hofferth et al. (2002)	Pre-PRWORA waivers	1989-1996	Prob (Exit welfare conditional on spell duration)	Event history analysis includ- ing demographic controls and state fixed effects; Penal Study of Income Dyna- mics data on welfare spells	The relationship between time limits and wel- fare exits is largely insignificant			
Random assignment studies								
Schexnayder et al. (2003) Schexnayder (2003)	Achieving Change for Texans (ACT), based on an AFDC waiver; Time limits experi- Ment	1996-2001	TANF receipt; Employment; Earnings	Random assignment evaluation; Data for programme group and for control group	The time limits experiment produced statisti- cally significant but small reductions in TANF receipt; Employment rates increased slightly; Self-sufficiency earnings declined slightly; Reduced TANF use and employment were greatest among those who were best prepar- ed to enter the workforce and those with short histories of welfare receipt			
New econometric time-limit studies								
Grogger, Michalopoulos (2003)	Florida's Family Transition Pro- Gram (FTP)	Recruitment into the experiment from May 1994 until Oct. 1996; 24-month fol- low-up period	Welfare receipt	Regression estimates; Data from FTP, a randomised welfare reform experiment	FTP's lime limits by themselves would have reduced welfare receipt by 16 percent			

Study	Programme	Period	Dependent variable	Method; Data	Results
Grogger (2002)	Pre-PRWORA waivers; TANF program- Mes	1990-1999	Welfare receipt	Regression estimates; Data from the Survey of In- come and Program Participa- tion (SIPP); Single mothers aged 18-54	Relative to families with children over age 13, families whose youngest child was 10 years old reduced welfare use by 3 percentage points, on average, in response to time limits. For families whose youngest child was 3 years old, the average reduction was 10 percentage points; The most welfare-dependent recipients do not respond to time limits
Grogger (2003)	Pre-PRWORA waivers; TANF program- Mes	1978-1999	Welfare use; Employment; Earnings; Income	Regression estimates; Data from March Current Population Survey; Female-headed families	Time limits have had important effects on welfare use and work, accounting for about one-eighth of the decline in welfare use and about 7% of the rise in employment since 1993; they have had no significant effect on earnings or income
Grogger (2004)	Pre-PRWORA waivers; TANF program- Mes	1978-1999	Welfare use	Regression estimates; Data from March Current Population Survey; Female-headed families	Time limits have negative effects on welfare use; those effects are stronger, the younger the youngest child in the family is; Time limits may account for 12 to 13 percent of the decline in welfare use during the late 1990s among female-headed families
Swann (2003)	Pre-PRWORA waivers	1967-1991; Forecast up to 2015	Welfare use	Discrete-choice dynamic pro- gramming model; Data from the Panel Study of Income Dynamics	Five-year time limit results in an overall reduction in time spent on welfare of about 60 percent; The reduction in person-years due to the behavioural effect is about 31 percent of the total reduction or about 19 percent of baseline AFDC

Source: Compilation of the author.

Grogger and Michalopoulos (2003) tested this prediction using data from a randomized experiment, the Florida Family Transition Program (see chapter 2). In a first step, they used a difference-in-difference method. In order to isolate the effects of time limits, they compared the effects of FTP on families with younger children with the effects on families whose youngest children exceed a threshold age, which is 13 in case of a federal five-year time limit. For the latter group of families, time limits are a non-binding constraint. This group is affected by FTP's other reforms only and not by time limits, whereas the former group is affected by all reforms (including time limits). The difference-in-difference estimates rely, of course, on the assumption that the other reforms had age-invariant effects. Numerous tests for age-invariance failed to reject it. As a second step, the authors used regression methods to estimate the effect of time limits on welfare receipt. The regression approach has advantages over the difference-in-difference estimates. It controls for personal characteristics of the experiment participants, it allows us to consider alternative functional forms for the age-FTP interaction, etc. The regression estimates of Grogger and Michalopoulos (2003) suggest that, in the absence of other features of the programme that worked to increase welfare use, FTP's time limit would have reduced welfare receipt by 16 percent. These are strong anticipatory responses to time limits (Table 1).

While Grogger and Michalopoulos (2003) analyse data from a randomized demonstration project that was conducted in a single county, Grogger (2004)⁷ analyses data from a nation-wide source: the Current Population Survey (CPS). He attempts to reconcile the results from the caseload literature (no effect of time limits) with the results of Grogger and Michalopoulos (2003) (substantial effects of time limits). Like in a subset of the caseload literature, he analyses data from CPS. As in Grogger and Michalopoulos (2003), he allows the effects of time limits to depend on the age of the youngest child in the family. This allows him to determine whether it is the data source or agedependence that lead to different results across the two sets of studies. Grogger's estimates are based on an identification strategy that exploits two differences in the way that states implemented time limits. First, states implemented time limits at different times (prior or after PRWORA). Second, states implemented different bundles of reforms at different times. These differences in the timing and nature of welfare reform across the states provide a means of estimating the effects of time limits and, to a limited extent, of disentangling the effects of time limits from the effects of other reforms.

Grogger uses data from March CPS that provide information on welfare utilisation and family composition, from which he determines the age of the youngest child in the fam-

⁷ Grogger (2004) is based on Grogger's NBER Working Paper 7709 of May 2000.

ily. The sample period extends from 1978 through 1999. Grogger limits the sample to female-headed families. For his estimates he uses two regression models. The initial model does not make use of the predicted age-dependence of time limits. The second model takes the effect of time limits to be dependent on the age of children. Estimating models that constrain the effects of time limits to be independent of age, Grogger obtains results similar to those of the caseload studies. When he allows for age dependence and employs controls for time-varying state-level unobservables that may be correlated with the timing of welfare reform, however, he finds that time limits have negative effects on welfare use. In particular these effects are stronger, the younger the youngest child in the family is. The estimates suggest that the anticipatory responses to time limits have decreased welfare use by 6 to 7 percent, accounting for 12 to 13 percent of the decline in welfare use among female-headed families during the late 1990s (Grogger 2004 and Table 1).

Grogger (2003)⁸ extends the preceding analysis. In addition to estimating the effects on welfare use, he estimates the effects of time limits on employment, earnings and income among female-headed families, again using data from March CPS for the period 1978 through 1999. His results suggest that time limits have had important effects on welfare use and work, accounting for about one-eighth of the decline in welfare use and about 7 percent of the rise in employment since 1993. They have had no significant effects on earnings and income, however (Table 1).

In his 2002 paper, Grogger used a similar approach as in his 2003 and 2004 publications. He used data from the Survey of Income and Program Participation (SIPP) to replicate his earlier estimates based on CPS. He exploited the SIPP to relax some of the restrictive assumptions that were implicit in his previous work. The data used covered the period from 1990 through 1999. Grogger focused on single mothers between the ages of 18 and 54. He estimated the effects of time limits on welfare use by regressing the welfare-use dummy on a time-limit dummy and an interaction between the timelimit dummy and a function of the age of the youngest child in the family. Grogger's (2002) results again suggest that time limits may have played an important role in reducing welfare use. Relative to families with children over age 13, families whose youngest child was ten years old reduced welfare use by three percentage points, on average, in response to time limits. For families whose youngest child was three years old, the average reduction was ten percentage points. The most welfare-dependent recipients did not respond to time-limits (Table 1).

⁸ Grogger (2003) is based on Grogger's NBER Working Paper 8153 of March 2001.

In a parallel effort, Swann $(2003)^9$ also has analysed the behavioural effects of welfare time limits. His econometric strategy is, however, different. He formulates a stochastic dynamic programming model and estimates its parameters. The decision to participate in welfare each period is modelled jointly with the decisions to work or marry. Women are assumed to maximise their expected lifetime utility. Uncertainty exists because future wages, marriage offers and utility are unknown. The framework is structural in the sense that the empirical analysis is closely tied to the economic problem recipients are assumed to solve and, consequently, the parameter estimates have a behavioural interpretation. Maximum likelihood is used to estimate the parameters of the econometric model. Two different time-limit strategies are simulated. They consist of a five-year time limit after which benefits end and a two-year time limit after which non-exempt recipients must work. The main data source used is the Panel Study of Income Dynamics (PSID). The data cover 1967 through 1991. Forecasting equations are estimated up to 2015. Policy simulations show that a five-year time limit results in a 60 percent reduction in person-years of AFDC receipt and a nine percent reduction in recipients. Almost a third of this reduction is behavioural and occurs because recipients are forwardlooking. The reduction in person-years due to the behavioural effect is about 31 percent of the total reduction or about 19 percent of baseline AFDC. A two-year "delayed work requirement" results in a smaller - though still significant - overall reduction in time on AFDC with an increase in the amount of time spent combining work and welfare (Table 1).

5 Effects after families reach time limits

5.1 Leaver studies

Apart from anticipatory or behavioural effects, welfare time limits affect families after they have reached the time limits. By the end of 2001, about 54,000 families had reached the federal 60-month time limit and 176,000 the relevant state time limit. The vast majority reached state time limits of fewer than 60 months. Of the 231,000 families affected, about 93,000 cases were closed down at the time limit, without an extension or further safety-net benefits, and another 38,000 had their benefits reduced. Nearly 29,000 cases had their TANF case closed but were receiving alternative benefits through a state or locally funded programme. The remaining 71,000 cases received an extension and

⁹ Swann presented his paper for the first time in 1996, as a working paper of the University of Michigan.

were terminated later, left TANF voluntarily or continued to receive assistance (Bloom et al. 2002a, ch. 3).

Some of the key questions about time limits concern how families fare after their benefits are terminated. Bloom et al. (2002a, ch. 6) review the results of eight surveys of individuals whose welfare cases were closed because of time limits. All of these eight post time-limit studies were conducted in states with limits of fewer than 60 months and during periods of low unemployment. Most studies found that individuals who lost benefits because of time limits were more likely to have large families and live in public or subsidized housing, compared with people who left welfare for reasons other than time limits. The post-exit employment rates vary widely across states, ranging from less than 50 percent to more than 80 percent. Large proportions of time-limit leavers continue to reveive Food Stamps, Medicaid, and other assistance after exit. Most time-limit leavers reported lower income and more material hardships after leaving welfare than before, but time-limit leavers did not consistently report fewer or more hardships than people who left welfare for other reasons.

5.2 Random assignment studies

The studies reviewed by Bloom et al. (2002a) provide useful results. They have, however, the same limitation as other studies on welfare leavers. Data on the post-welfare circumstances of families do not necessarily provide evidence about the effects of time limits. If, for example, a study finds that some people go to work after their benefits are canceled, there is no way to know how many of them would have gone to work even if they had been allowed to stay on welfare. Unfortunately, direct evidence from random assignment studies is absent. But useful results can be gained by examining the pattern of overall programme effects during the period before and after families begin reaching the time limit. The random assignment studies of Connecticut's Job First programme and of Florida's Family Transition Program monitored programme and control group members for four years – well beyond the point when families began reaching the state's time limits (see chapter 2).

Figure 1 and figure 2 illustrate the Connecticut and the Florida programme's effects on cash assistance receipt (top panel), employment (middle panel), and income (lower panel). In Connecticut, programme group members started reaching the 21-month time limit in quarter 7 as indicated by the vertical line. The vertical lines in figure 2 indicate the timing of the 24 month and 36-month time limits of Florida's FTP. The top panel shows that, when families started reaching the time limit and had their benefits can-

celed, welfare receipt of the programme group was reduced abruptly (compared to the control group).

Grogger and Karoly (2003, pp. 164-166 and Figure 5.6) constructed non-experimental difference-in-difference estimates on the amount of these mechanical effects by subtracting the pre-time limit programme impact from the post-time limit programme impact. Between quarter 7 and quarter 8, the mechanical effects of time limits led welfare use to fall by 12.5 percentage points in Connecticut, which amounts to 23 percent of the 53.9 percent rate of welfare receipt in the control group in quarter 7. In Florida, the mechanical effects of time limits led welfare use to fall by 3.1 percentage points or 8.3 percent. These effects are smaller than one might have expected.¹⁰

Returning to Figure 1 and Figure 2, the middle panel shows a very different pattern for employment. In Connecticut, the impact was relatively constant throughout the follow-up period, with no sudden change when families started reaching the time limit. Recipients did not respond to benefit termination by going to work, because most of the families were already employed. In Florida, there was a slight jump in the employment impact around quarter 8, when people started reaching the 24-month time limit, but the impact declined afterwards (there was no such jump around quarter 12).

The income effects display still another pattern. In the pre-time limit period, when the programme increased both work and welfare, the programme group in Connecticut had substantially higher income than the control group. After the time limit, the two groups had about the same income. The members of the programme group lost the expanded earnings disregard when their cases were closed at the time limit. Although their earnings were higher than those of the control group they ended up with about the same amount of income. As in Connecticut, the income effects in Florida changed from positive to neutral late in the follow-up period after many families reached time limits (Bloom et al. 2002a, pp. 70-74; Table 2).

¹⁰ The difference between the impacts of the two programmes is mainly due to the greater generosity of the Jobs First financial incentive. The Jobs First treatment group accumulated months on welfare at a much faster rate than the FTP treatment group. As a result, a higher fraction of the Jobs First treatment group was dropped from the rolls during the first post-time limit quarter than was true for the FTP treatment group.





NOTE: ^aTotal income includes earnings, AFDC/TANF, and Food Stamps. SOURCES: Bloom et al. 2002b; Bloom et al. 2002a, p.71.



Figure 2: Florida's Family Transition Program (FTP): Ouarterly AFDC/TANF Receipt, Employment, and Total Incor

NOTE: ^aTotal income includes earnings, AFDC/TANF, and Food Stamps. SOURCES: Bloom et al. 2000; Bloom et al. 2002a, p.73.

Table 2: Effects after families reach time limits

Study	Programme	Period	Dependent variable	Method; Data	Results			
Random assignment studies								
Bloom et al. (2002b)	Jobs First, Con- necticut's Welfare Reform Initiative; Time limits ex- periment	1996-2001	Quarterly AFDC/TANF receipt; Employment; Total income	Four-year follow-up of the impact of the Jobs First pro- gramme on programme and control group members	Reduction of welfare receipt after reaching the time limit; No employment effect after benefit termination (welfare recipients were already employed); Income effect: Programme group not better off than con- trol group			
Bloom et al. (2000)	Florida's Family Transition Pro- Gram	1994-1999	Quarterly AFDC/TANF receipt; Employment; Total income	Four-year follow-up of the impact of Florida's FTP on programme and control group members	Reduction of welfare receipt after reaching the time limit; Slight jump in the employment impact when people started reaching the 24-month time limit, that impact de- clined afterwards; no jump at the 36-month limit; Income effect changed from positive to neutral late in the follow-up period after many families had reached time limits			
New econometric time-limit studies								
Meyer and Rosenbaum (2001)	Pre-PRWORA waivers	1984-1996	Employment; Hours worked	Combination of a structural model and quasi-experiment- al models; Data from the March CPS and the merged Outgoing Rotation Group data	Termination time limits and time limits for work together increase employment of single mothers by about 3 percent			
Swann (2003)	Pre-PRWORA waivers	1967-1991; Forecast up to 2015	Welfare use	Discrete-choice dynamic programming model; Data from the Panel Study of Income Dynamics	Five year time limit results in an overall reduction in time spent on welfare of about 60 percent; The reduction in person-years due to the mechanical effect is about 69 percent of the total reduction or about 41 per- cent of baseline AFDC			

Source: Compilation of the author.

5.3 New econometric studies

Apart from the random assignment studies, there are two econometric studies on the mechanical effects of time limits. Meyer and Rosenbaum (2001)¹¹ examine the major policies, including the introduction of time limits, affecting the labour supply of single mothers during the 1984 to 1996 period. They compare changes in employment for single mothers to those for single women without children, taking into account the differential treatment of these two types of women under welfare and tax laws. They estimate a structural model of employment combining it with quasi-experimental methods. The data used come from the Current Population Survey. Meyer and Rosenbaum use the March CPS Annual Demographic File and the merged Outgoing Rotation Group data. They estimate the effect of a time limit measure, including both termination time limits and "delayed work requirements". They find these policies to increase employment by about 3 percent. They also find that actual benefit terminations due to time limits substantially increase employment (Table 2 and Grogger and Karoly 2003, p. 200).

Swann (2003), whose study has been presented in chapter 4.4, shows that a five year time limit results in a 60-percent reduction in person years of AFDC receipt. More than two thirds of this reduction is mechanical and occurs because families have reached time limits. The reduction in person-years due to the mechanical effect is about 69 percent of the total reduction or about 41 percent of baseline AFDC (Table 2).

6 Conclusions

Time limits first emerged in state welfare reform programmes operated under federal waivers before 1996, and then they became a central feature of federal welfare policy in the PRWORA. Time limits have received much attention and generated strong controversies.

Time limits may affect welfare receipt and employment in two distinct ways. Once time limits are imposed, ex-recipients can no longer use cash assistance. However, time limits may also reduce welfare receipt and increase employment before recipients reach the limit. One random assignment study and several econometric studies suggest that time limits reduce welfare use during the pre-time limit period, indicating that recipients change their behaviour even before their benefits are exhausted. Recipients leave welfare in order to "hoard" their months of eligibility for future use. Two studies suggest

¹¹ Meyer and Rosenbaum (2001) is based on their NBER Working Paper 7363. Some of their estimates can be interpreted as anticipatory.

that time limits also increase employment during the pre-time limit period. There is insufficient evidence for assigning the direction of the impact of time limits on any other outcome.

So far, only a minority of welfare recipients has reached time limits. Welfare use falls abruptly once recipients begin to exhaust their benefits. A large proportion of those who reach a time limit, however, continues to receive Food Stamps, Medicaid, etc. The impact on employment is mixed. Two studies suggest a slight increase, one study suggests no change in employment. The income effects changed from positive to neutral in the follow-up period after many families reached time limits. The post-time limit consequences could increase substantially, once a higher proportion of the caseload reaches the limit.

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