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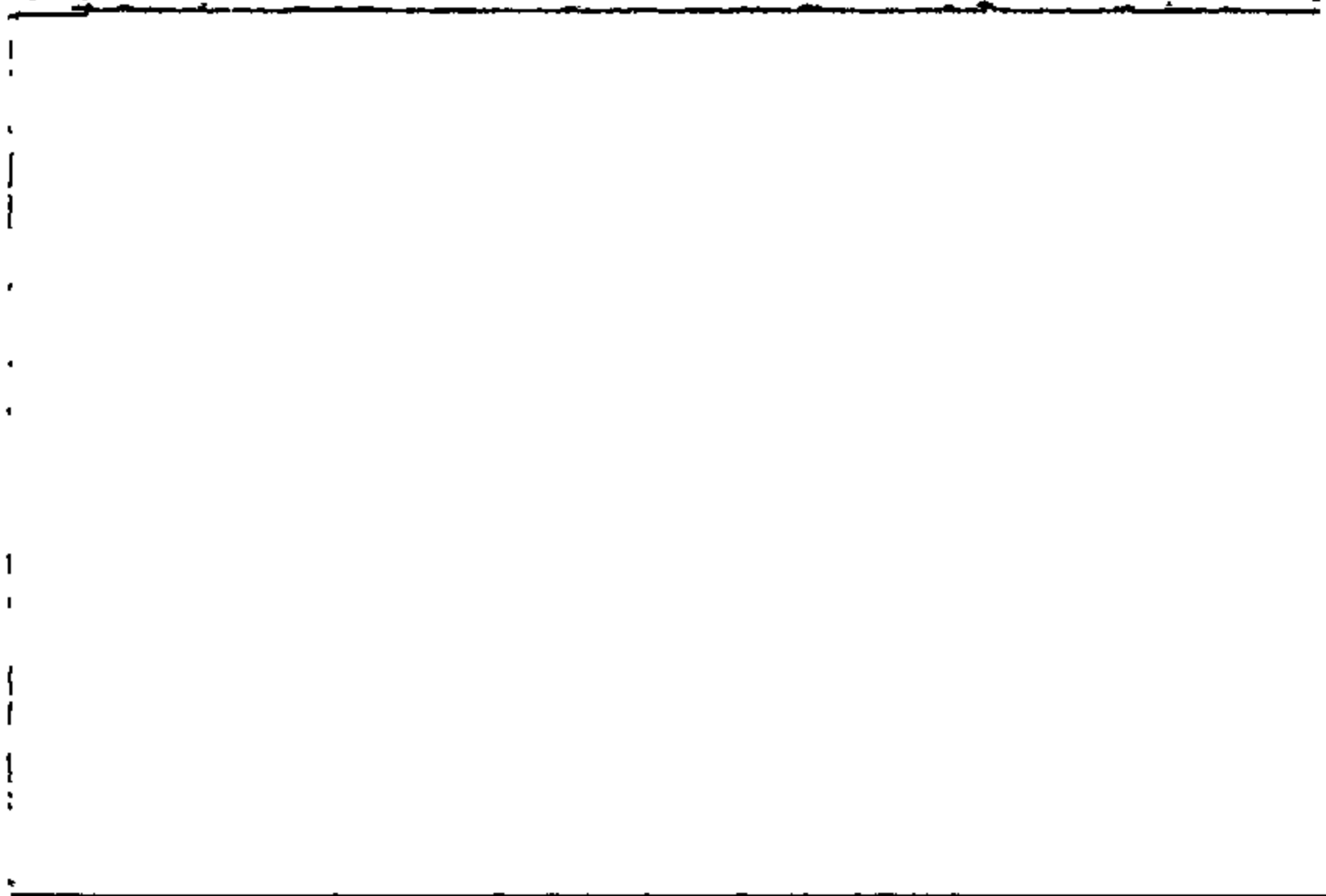
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WELFARE FRAUD AND WELFARE STIGMA

by

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A B S T R A C T

The paper argues that welfare fraud and welfare stigma, apparently two phenomena of opposite nature, may be modeled with the aid of a single aparatus, thus allowing a comparative investigation of participants' take up of welfare benefits. Focusing on public exposure stigma generated through reporting or work requirements in welfare programs, it is shown, *inter alia*, that not only may an ineligible individual participate in a welfare program while an eligible (yet a stigmatic individual) may not, but once on welfare, the former may utilize the program more intensively than the latter. This suggests that the truly needy could be more effectively assisted if less efforts were directed towards the enforcement of reporting and work requirements, and more resources shifted to enforcing eligibility conditions and combatting dishonest claiming.

I. INTRODUCTION

Welfare fraud and welfare stigma are, at first sight, two welfare-related phenomena of opposite nature: while the latter often prevents individuals from participating in a welfare program despite being eligible for a welfare receipt,[1] the former involves participation of individuals whose true characteristics (which are not fully known to the welfare authority) disqualify them from receiving benefits.[2] However, fraud and stigma do share a common feature, as they both imply that participation incurs a cost (or disutility) to the participant, aside from that involved in applying for the program and complying with possible reporting or work regulations. Stigma involves feelings of shame and lack of self-respect arising from being on welfare, whereas fraud involves the risk of getting caught and punished for illegal benefit collection. While the cost of stigma may be strong enough to prevent participation in a welfare program, the (expected) cost of fraud may be weak enough to induce participartion.

Despite widespread concern with minimizing abuse and dishonesty in welfare programs and the extensive flow of research on the closely related issue of tax evasion,[3] welfare fraud has gained relatively modest attention in the public finance literature. Greenberg, Moffitt and Friedman (1981), Greenberg and Halsey (1983), and Wolf and Greenberg (1986) have addressed the issue of fraud in transfer programs that results from earnings misreporting. Yaniv (1986) and Burgees (1992) have considered the fraudulent receipt of unemployment benefits, resulting either from being actually employed or from dissatisfying the job-search regulation, respectively. Lantto (1989) has focused on the fraudulent collection of disability benefits by capable working claimants.

Welfare stigma has been even less successful in drawing economists' attention, the only contributions being made by Weisbrod (1970), Moffitt (1980, 1983) and Ranney and Christine (1987). Moffitt (1983) distinguishes between two different ways by which stigma can manifest itself in welfare programs: a flat amount of disutility arising from the mere fact of participation itself, and a variable amount which varies with the size of the benefit. These two stigma components are essentially independent of other people's knowledge of one's participation, and may arise even if one's identity were kept in complete secrecy. However, social stigma is usually generated through *public exposure*. Welfare programs, although not publishing their list of participants in the papers, very often set periodical checkups, reporting, vocational training or public-work requirements on claimants which involve outdoor contacts with professional staff as well as with other claimants and familiar community members.[4] While this source of stigma may be captured by Moffitt's flat disutility component if there is just a one-time reporting requirement (upon filing an application, for example), it necessitates a different modeling structure if public exposure varies with the amount of time on welfare.

With this in mind, the present paper sets up a simple model of welfare participation which allows for both benefit-related and public exposure stigma. It is shown that benefit-related stigma plays the same role as the expected punishment in a welfare fraud model, enabling therefore a comparative investigation of fraud and stigma behavior. Section II introduces the model, Section III derives comparative behavioral implications, and Section IV concludes. A major finding is that public exposure stigma may constitute a stronger deterrent to participation than the risk of getting caught and punished for dishonest benefit claiming (in both discouraging participation and reducing its duration), questioning the effectiveness of work-intensive welfare programs in adequately assisting not only the unemployable but also the *employable* needy population.

II. THE MODEL

Consider an individual who is entitled to participate in a welfare program which pays a benefit of b dollars per day of participacion. Suppose, however, that the benefit payment is conditioned upon spending a fraction, $0 \leq k \leq 1$, of the workday on complying with a certain attendance regulation (such as reporting at an official labor exchange, enrolling in vocational training or engaging in public work), which we may generally term "work requirement". Thus, the benefit paid by the welfare program may be viewed as a compensation to a participant's work efforts, the "effective" benefit per day of participation being b/k. As long as the work requirement does not occupy the whole workday (i.e., as long as $k<1$), the effective benefit is greater than the money benefit.

Suppose, however, that participation in the program gives rise to stigma of two possible components: a benefit-related component, which deflates the value of the benefit to a participant by some fraction, $0 \leq \gamma \leq 1$, and a public exposure (work-related) component, which augments the time spent on complying with the work requirement by some multiple $1 \leq \delta \leq 1/k$. Thus, a dollar received from public assistance may be worth less than a dollar received from any other income and an hour spent in public work may seem longer than an hour spent in any other work. Suppose further that the individual must decide on whether and to what extent to participate in the program during a given period (a month, for example). Suppose, for simplicity, that he does not work elsewhere but receives N dollars of non-labor income (which is not high enough to disqualify him from receiving welfare benefits). The utility derived from participation, U, is assumed, for simplicity, to be quasi-linear in income, Y, and total working time, K, positively related to the former and negatively related to the latter. The individual's problem can thus be stated as that of choosing the number of days on welfare, D, so

as to

$$\text{Max } U = Y - Z(K)$$

$$\text{s.t. } Y = N + \gamma bD, \quad K = \delta kD, \qquad\qquad (1)$$

where $Z(K)$ is increasing and strictly convex (i.e., $Z'(K) > 0$, $Z''(K) > 0$).

Differentiating (1) with respect to D, equating to zero and rearranging, the first-order condition for an interior maximum is[3]

$$\frac{\gamma b}{\delta k} = Z'(\delta kD), \qquad\qquad (2)$$

which states that participation in the program should be carried out until the marginal disutility of work equals the "stigma adjusted" effective benefit per day of participation (SAEB). Obviously, both stigma coefficients act to decrease the effective benefit.

A sufficient condition for participating in the welfare program is clearly SAEB > $Z'(0)$. In labor economics terms, $Z'(0)$ represents the individual's "reservation wage", which is the minimal wage rate necessary to induce him to work. Participation thus requires that the effective benefit offered by the welfare program (filtered, however, through a stigma prism) exceeds the participant's reservation wage. Workfare programs usually set k such that b/k equals the minimum wage,[6] aiming at assisting individuals who are willing to accept minimum wage jobs but are unable to find them in the labor market. However, in the presence of stigma, setting the effective benefit at the minimum wage level may not suffice to induce participation: a sufficiently low value of γ or a sufficiently high value of δ would decrease the effective benefit below the reservation level - preventing the individual from participating in the program. Even when work requirements

are almost nill (i.e., when k approaches zero), a free-of-effort increase in income (although deflated by $\gamma < 1$) may be rejected, if it involves a strong feeling of shame and discomfort (i.e. a high value of δ) accompanying the one-time act of filing an application for benefits at the welfare authority office.

Consider now a non-working individual whose (relatively high) non-labor income disqualifies him from receiving welfare benefits. Suppose, however, that the individual is an amoral utility maximizer, who may decide to nderreport his true income to qualify for the program if he finds that it might be worth his while financially. If he does so, his dishonest claiming will be detected with some probability $0 \le p \le 1$. Suppose that in case of detection the individual will be obliged to pay a penalty, which is a multiple $\pi > 1$ of the fraudulently received benefits, bD. The expected gain from participation is thus $(1-p\pi)bd$. Substituting $1-p\pi = \gamma$ into equations (1)-(2), the welfare stigma model is easily transformed into a welfare fraud model. While $p\pi > 1$ would obviously deter the individual from participating in the program (as the expected gain would drop to zero or become negative), a sufficiently low value of $p\delta$ below unity may induce participation.[7]

III. BEHAVEIORAL IMPLICATIONS

Given that the participation condition *is* satisfied, equation (2) may be used to determine the relative stay on welfare of participants who differ in their stigma and honesty characteristics, as well as their response to possible changes in the parameters of the program. To simplify the comparative analysis, we hereafter assume that welfare stigma is generated through public exposure only,[8] distinguishing between four types of participants (Table 1): honest non-stigmatic (HNS), honest stigmatic (HS),

dishonest non-stigmatic (DNS), and dishonest stigmatic (DS). Assuming also that all participants have identical utility functions, consider first the following proposition:

Proposition 1: (a) An HS participant will stay on welfare a shorter duration than an HNS participant. Similarly, a DS participant will stay on welfare a shorter duration than a DNS participant. (b) A DNS participant will stay on welfare a shorter duration than an HNS participant. Similarly, a DS participant will stay on welfare a shorter duration than an HS participant. (c) An HS participant will stay on welfare a shorter duration than a DNS participant if the product of their stigma and fraud coefficients equals or exceeds unity.

Table 1: Participation Typology

	Honest	Dishonest
Non-Stigmatic	HNS $\gamma = 1$ $\delta = 1$	DNS $\gamma < 1$ $\delta = 1$
Stigmatic	HS $\gamma = 1$ $\delta > 1$	DS $\gamma < 1$ $\delta > 1$

To prove this proposition, denote by D° the solution of (2) for an HNS

participant ($\gamma=\delta=1$). Suppose now that the HNS participant develops stigmma syndroms, which turn him into an HS participant ($\delta>1$). This would decrease SAEB and increase $Z'(\delta kD^o)$, implying that SAEB $<$ $Z'(\delta kD^o)$. Since $Z'(\delta kD)$ increases in D, the new equilibrium would obtain at $D^\delta<D^o$. Similarly, denoting by D^γ the solution of (2) for a DNS participant, the same argument implies that a DS participant would reach equilibrium at $D^{\gamma\delta}<D^\gamma$. This proves Proposition 1(a). Consider alternatively an HNS participant who experiences an increase in his non-labor income which disqualifies him from participation. Suppose, however, that law enforcement provides incentives for dishonest participation ($\gamma<1$). This would decrease SAEB, leaving $Z'(\delta kD)$ unchanged. Consequently, SAEB $<$ $Z'(\delta kD^o)$, leading to a new equilibrium at $D^\gamma<D^o$. The same argument applies to showing that a DS participant must reach equilibrium at $D^{\gamma\delta}<D^\delta$, thus proving Proposition 1(b).

The above results imply that both HS and DNS participants will stay on welfare less than an HNS but more than a DS participant (i.e., the north-eastern and south-western occupants of Table 1 will stay on welfare somewhere *between* their side neighbours). While an HNS participant would clearly stay the longest time on welfare and a DS participant the shortest, the relative stay on welfare of HS and DNS participants is not unambiguous. However, equation (2) implies that

$$D^\delta \overset{<}{\underset{>}{=}} D^\gamma \quad \text{if} \quad \delta Z'(\delta kD) \overset{>}{\underset{<}{=}} \frac{Z'(kD)}{\gamma} \tag{3}$$

at either D^γ or D^δ, as both terms must equal b/k at equilibrium, or

$$D^\delta \overset{<}{\underset{>}{=}} D^\gamma \quad \text{if} \quad \delta\gamma \overset{>}{\underset{<}{=}} \frac{Z'(kD)}{Z'(\delta kD)} . \tag{3'}$$

Since the right-hand-side of (3') is a fraction, it follows that $D^o < D^\gamma$ if (but not only if) $\delta\gamma \geq 1$, which proves Proposition 1(c). Given that $\delta\gamma \geq 1$, the order of participation will be $D^o > D^\gamma > D^\theta > D^{\gamma\theta}$ (that is: HNS, DNS, HS, DS, in descending order). The order of the middle pair, $D^\gamma > D^o$, is of special importance, as it implies that stigma may be a stronger deterrent o participation than the risk of getting caught and punished for dishonest claiming, not only through discouraging participation, but also through reducing its duration. This sheds doubts on policy makers ability to ensure that work-intensive ('workfare') programs serve indeed the truly needy.

Consider now the effects on welfare duration of possible changes in the parameters of the program, summarized by the following proposition:

Proposition 2: (a) An increase in the benefit level, b, would increase every participant's stay on welfare. (b) An increase in the work requirement, k, would decrease every participant's stay on welfare. (c) An increase in the benefit level "compensated" by an equal percentage increase in work requirements (so as to leave the effective benefit, b/k, unchanged) would decrease every participant's stay on welfare.

The proof of this proposition is straightforward. An increase in b increases SAEB, implying that SAEB > $Z'(\delta kD)$ at any D. The new equilibrium must thus obtain at a higher D, proving Proposition 1(a). An increase in k decreases SAEB and increases $Z'(\delta kD)$, leading to SAEB < $Z'(\delta kD)$ at any D. The new equilibrium must thus obtain at a lower D, proving Proposition 1(b). A "compensated" increase in b and k does not affect SAEB but increases $Z'(\delta kD)$. The new equilibrium must again obtain at a lower D, proving Proposition 1(c). This result implies that a given level of the effective benefit may correspond to different participation levels of either participant, depending on the absolute values of b and k. Notice, however, that while a sufficiently large increase in k (or a sufficiently

large decrease in b) will drive any participant out of the program, a "compensated" increase in k and b, though decreasing welfare duration, has no such power, as it leaves the exit (entry) condition [SAEB > Z'(0)] unchanged.

Workfare stigma has so far been captured by a constant, greater than unity, coefficient ($\delta > 1$), independent of the effective benefit. One may speculate, however, that the stigma coefficient is some function of the effective benefit, so that the first-order condition for utility maximization should actually be stated as

$$\frac{\gamma b}{b} = Z'[\delta(\frac{b}{k})kD]. \tag{2'}$$
$$\delta(\frac{b}{k})k$$
$$k$$

While this modification of the participant's equilibrium has no effect on Proposition 1, it may affect Proposition 2, depending on the exact relationship assumed between the stigma coefficient and the effective benefit [i.e., the sign of $\delta'(b/k)$]. On the one hand, one may argue that the higher the effective benefit, the higher the pay for public work, thus the more respectable it becomes relative to labor market alternatives; hence $\delta'(b/k) < 0$. On the other hand, the higher the effecive benefit, the lower the effort required relative to the size of the benefit, thus the greater the assisting nature of the benefit and the more demeaning it becomes to engage in public work; hence, $\delta'(b/k) > 0$. It can easily be verified that under the latter assumption the effect on welfare duration of an increase in b or k becomes ambiguous, whereas under the former assumption the effect on welfare duration remains the same as stated in Proposition 2(a) and 2(b). Notice, however, that under *both* assumptions

Proposition 3(c) still holds.

III. CONCLUSIONS

We have shown that welfare fraud and welfare stigma, apparently two phenomena of opposite nature, may be modeled with the aid of a single aparatus, thus allowing a comparative investigation of participants' take up of welfare benefits. Focusing on public exposure stigma generated through reporting or work requirements in welfare programs, it has been found that not only may an ineligible individual participate in a welfare program while an eligible (yet a stigmatic individual) may not, but once on welfare, the former may utilize the program more intensively than the latter. Another interesting finding is that participants are more sensitive to changes in work requirements than to (same percentage) changes in the benefit rate (even if, in the case of stigamtic participants, their stigma coefficient varies with the effective benefit), highlighting the strong deterrent effect embodied in workfare programs.

A major argument, analyzed by Besley and Coate (1992), in favor of work requirements in welfare programs is that they may serve as a means of *screening* claimants so that only the truly needy apply for benefits. This is argued for developing economies, where setting administrative mechanisms to determine need is too costly, as well as for developed economies, where the welfare agency may be able to attain reliable estimates on claimants' incomes, yet is unable to observe their *opportunities* (i.e., whether they have deliberately reduced their work hours to qualify for benefits). Besley and Coate point out, however, that to the extent that some fraction of the poor is *unemployable*, work requirements may be flawed as a means of achieving more accurate targeting of benefits, since truly needy individuals who cannot work would be deterred from participation. The

present paper stresses that work requirements may give rise to public exposure stigma, deterring also truly needy individuals who are *employable*. To counter-act the stigma effect, given that needy employables are willing to accept minimum wage jobs, work requirements should be set low enough to raise the effective benefit *above* the minimum wage. Alternatively, less efforts could be directed towards the *enforcement* of work requirements. The resulting savings in supervision costs may be shifted to increasing enforcement of eligibility conditions and combatting dishonest claiming.

FOOTNOTES

[1]Moffitt (1983) estimated that in 1976 only about 45 percent of the families eligible for ADFC (Aid to Families with Dependent Children) participated in the program, attributing non-participation to welfare stigma.

[2]Sinclair (1987, p. 281) suggests (following an incident in Bedfordshire where nearly 1,000 benefit recipients discontinued their claims for benefit following an anouncement that their circumstances were to be examined in detail by Social Security officials in 1985) that there could be as many as 100,000 unemployment benefit recipients in the UK who were obtaining benefits illegally.

[3]See Cowell (1990) for a lucid survey of the tax evasion literature.

[4]As argued by Gueron (1990), a central component of the U.S. Family Support Act of 1988 (FSA) is the effort to transform welfare from a means-tested entitlement into a reciprocal obligation to actively search for a job or to participate in activities that prepare for work. See also her comprehensive discussion of U.S. welfare employment programs requiring claimants to take entry-level jobs in public or nonprofit agencies involving maintenance, clerical, park upkeep, or human service functions.

[5]The second-order condition, $-(\delta k)^2 Z''(\delta k D) < 0$, is obviously satisfied by the assumptions on $Z(K)$.

[6]See Gueron (1990, p. 89).

[7]Accurately, participation requires that $p\pi < 1 - (\delta k/b)Z'(0)$.

[8]Indeed, Moffitt's (1983) estimates failed to support his hypothesis that stigma varies also with the amount of the benefit (i.e., that $\gamma < 1$).

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