WORKING
PAPERS

ECONOMIC ISSUES IN THE ENFORCEMENT

OF THE EQUAL CREDIT OPPORTUNITY ACT

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WORKING PAPER NO. 52

March 1982

BUREAU OF ECONOMICS
FEDERAL TRADE COMMISSION
WASHINGTON, DC 20580

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June 1981

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The United States Congress intended to prohibit discrimination on the basis of race, color, national origin, age, or marital status in consumer credit markets when it passed the Equal Credit Opportunity Act (ECOA).[1] Significant enforcement authority was granted to the Federal Trade Commission in the process.[2] Nearly

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[1] The purpose of the Act is to "require that financial institutions and other firms engaged in the extension of credit make that credit equally available to all creditworthy customers without regard to sex or marital status" (Title V--Public Law 93-495). It also amends the Consumer Credit Protection Act (Public Law 90-321) to make it "unlawful for any creditor to discriminate against any applicant, with respect to any aspect of a credit transaction, on the basis of race, color, religion, national origin, sex or marital status, or age (provided the applicant has the capacity to contract); because all or part of the applicant's income derives from any public assistance program; or because the applicant has in good faith exercised any right under the Consumer Credit Protection Act" (§701. Title VII--Public Law 90-321, Amended).

[2] Enforcement of the Act rests with numerous agencies, including the Comptroller of the Currency, the Federal Reserve Board, the Federal Home Loan Bank Board, the National Credit Union Administration, the Interstate Commerce Commision, and the Securities and Exchange Commission. However, "except to the extent that enforcement of the requirements imposed . . . is specifically committed to some other Government agency . . . the Federal Trade Commission shall enforce such requirements."

350 million credit accounts with thousands of lenders and other firms are affected.[3]

Noncompliance by creditors subject to FTC regulation can result in hundreds of thousands of dollars in punitive damage payments.[4] Throughout the Federal Government, however, enforcement of the Act has been besieged with difficulties.[5] Part of the difficulty is due to the necessity for such agencies as the FTC

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3 FTC's enforcement authority covers finance companies, oil companies, and retailers. For the year ending 1975, there were 490.9 million outstanding consumer loans with commercial banks, savings and loan associations, credit unions, finance companies, oil companies, and retailers. The accounts included credit and charge cards, open- and closed-end credit, mortages and conventional personal loans. Finance companies accounted for 40.5 million, or 8.25 percent, of the total. Oil companies and other nonretail credit-card issuers accounted for 110.9 million, or 22.6 percent, of the total, while retailers represented 40 percent, or 196 million accounts. (J. F. Smith, 1977, table 1.)

4 The Act poses civil liability for noncompliance (§706. Title VII). "Any creditor . . . who fails to comply with any requirement imposed under the Act shall be liable to the aggrieved applicant for punitive damages in an amount not greater than $10,000, in addition to any actual damages . . . except that in the case of a class action the total recovery . . . shall not exceed the lesser of $500,000 or 1 per centum of the net worth of the creditor." The Act states that punitive damages should depend on the amount of actual damages, the frequency and persistence of failures to comply, the resources of the creditor, the number of persons adversely affected, and the extent to which the creditor's failure of compliance was intentional.

5 See, for example, Sheila Ards, "The Effectiveness of the Federal Home Loan Bank Board's Complaint Handling Process," Washington, D.C.: Federal Home Loan Bank Board, May 1981.

to play multiple roles--to be policeman, judge, and jury.[6] But another significant part of the difficulty arises from the often conflicting goals of achieving efficient and equitable markets. Many economic commentators have concluded that in the market for consumer credit, some sort of discrimination is crucial because all customers are not equal credit risks. Some of the most efficient discriminators may well include membership in groups protected by the Act. Thus, it is argued, the goal of efficiency is pitted against the goal of equity.[7]

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6 The relevant authority for administrative enforcement of the ECOA is given in §704: "For the purpose of the exercise by the Federal Trade Commission of its functions and powers under the Federal Trade Commission Act, a violation of any requirement imposed under this title shall be deemed a violation of a requirement imposed under that Act. All of the functions and powers of the Federal Trade Commission under the Federal Trade Commission Act are available to the Commission to enforce compliance by any person with the requirements imposed under this title, irrespective of whether that person is engaged in commerce or meets any other jurisdictional tests in the Federal Trade Commission Act, including the power to enforce any Federal Reserve Board regulation promulgated under this title in the same manner as if violation had been a violation of a Federal Trade Commission trade regulation rule."

7 James Smith (1977, p. 620) has succinctly characterized this view: "Given the degree of competition in the market for consumer credit, the costs of complying with the ECOA will be passed along to consumers. This process may manifest itself in higher credit charges, increased rejection rates or higher prices for merchandise in the case of retail-related credit. All of the developments are likely to result in consumers paying more to get equal credit opportunity." Of course, an implication here is that there is full compliance on the part of firms. It can be shown, however, that to the extent that the probability of detection is less than one, and the severity of punishment is limited by statute to 1 percent of net worth, there will tend to be some degree of rational noncompliance.

I propose to examine a third, largely ignored, difficulty. The Act does not proscribe all discrimination. Discrimination on the basis of income, or length at residence, or credit history is, with few exceptions, perfectly legal. It is well known that many of these variables are correlated with race, sex, and other variables now generally excluded from credit applications. How does one determine whether "illegal discrimination" exists? Although a test--the "effects test"--has been developed to answer this very question in the context of labor markets, there are still numerous unaddressed issues. The purpose of this comment is to raise the following six economic issues and to outline the practical implications they have for ECOA enforcement efforts.

1. Selection Bias

In order to detect noncompliance with the Act, the enforcement agency must rely on complaints or samples drawn in conjunction with other monitoring activities.[8] Sample selection bias is a problem frequently encountered in samples drawn from files of a company suspected of noncompliance. The data gathered represent only those files actually completed and acted upon. Since many applicants are discouraged by lenders at an early stage, prior to

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8 There is no monitoring facility explicitly concerned with ECOA compliance by finance companies, retail creditors, or oil companies. However, the Comptroller of the Currency and the Federal Reserve Board do collect ECOA compliance data in conjunction with their regular bank-monitoring efforts. The Federal Home Loan Bank Board relies upon customer complaints. See Ards, 1981.

the submission of a formal application,[9] analysis based on such a restricted sample may disguise illegal discrimination. Further, many simple tests--such as those for race discrimination--cannot be conducted using even the restricted sample. The Act proscribes collection of race data for applicants prior to the granting of credit. As a result, race is only coded for accepted applications. The sample must be restricted further in order to perform any meaningful analysis of discrimination, and the bias introduced by the consequent restriction is obvious.

Techniques exist for correcting for some of the selection biases discussed,[10] but none of these techniques has been applied to the numerous studies of discrimination in lending.[11] In the absence of correction for selection bias, results that show no discrimination in credit markets should be viewed skeptically.

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9 Discouragement on a prohibited basis is proscribed by section 202.5(a): "A creditor shall not make any oral or written statement, in advertising or otherwise, to applicants or prospective applicants, that would discourage on a prohibited basis a reasonable person from making or pursuing an application."

10 See James Heckman, "Common Structure of Statistical models of Truncation, Sample Selection, and Limited Dependent Variable and a Simple Estimator for Such Models," Annals of Economic and Social Measurement, Vol. 5 (1976), 475-92.

11 See, for example, Robert Schafer, Mortgage Lending Decisions: Criteria and Constraints (Cambridge, Mass.: MIT-Harvard Joint Center for Urban Studies, 1978; John Marshall, The Impact of the Equal Credit Opportunity Act on Discriminatory Lending Practices: Bank Charge Cards (Cambridge, Mass.: Abt Associates, Inc., 1981); Robert Schafer and Helen Ladd, Equal Credit Opportunity: Accessibility to Mortgage Funds by Women and by Minorities (Washington, D.C.: U.S. Department of Housing and Urban Development, 1980).

2. Demand vs. Supply Specifications

One method frequently employed to determine whether a lender has discriminated is to estimate the probability distribution for loan acceptances as a function of race, sex, age, and other variables. A second method is to estimate the amount lent. Both of these methods may misspecify the underlying credit market mechanisms at work.

Both methods assume that what is being measured is a proxy for the supply of loans. The first method at best approximates the choice behavior of lenders only if varying amounts requested are controlled for. Such control is rarely made. The second method, at first glance, clearly captures decisions both of lenders and of buyers: the amount lent is an equilibrium amount that balances the quantity demanded and the quantity supplied. Upon further reflection, though, it is possible to question the validity of this simple interpretation. With interest ceilings and differing risks among borrowers, credit rationing may occur.[12] For some consumers, the observed amount lent corresponds to a supply and demand equilibrium. For others it corresponds to the supply relationship only; quantity demanded may be greatly in excess of this amount.[13]

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12 Stiglitz and Weiss, "Credit Rationing in Markets with Imperfect Information," Econometric Research Program, Princeton University, August 1980.

13 But it is not obvious that demand will always exceed supply in the rationing situation. Evidence exists from FTC case files

(footnote continued)

Statistical routines have been developed to estimate both equilibrium and disequilibrium market models such as those implied above. However, discrimination in these models must be interpreted very carefully. Care must be taken to distinguish between lender discriminatory acts and borrower preferences.

3. Treatment of Protected Income

Amendments to the Equal Credit Opportunity Act prohibit exclusion of certain types of income, including welfare benefits, from consideration by lenders in making loans.[14] More than any

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(footnote continues)

revealing that amounts requested for accepted applications tend to be less than the amounts actually extended. This suggests that it is often profitable, once a good credit risk has been identified, to extend as much credit as that borrower can bear rather than as much as he or she desires.

[14] §701(a)(2) makes it unlawful to discriminate "because all or part of the applicant's income derives from any public assistance program" (Title VII, Public Law 90-321) 202.6(b)(5). Regulation B, Board of Governors of the Federal Reserve System, states: "A creditor shall not discount or exclude from consideration the income of an applicant or the spouse of the applicant because of a prohibited basis or because of the income is derived from part-time employment, or from an annuity, pension, or other retirement benefit; but a creditor may consider the amount and probable continuance of any income in evaluating an applicant's credit-worthiness. Where an applicant relies on alimony, child support, or separate maintenance payments in applying for credit, a creditor shall consider such payments as income to the extent that they are likely to be consistently made. Factors that a creditor may consider in determining the likelihood of consistent payments include, but are not limited to, whether the payments are received pursuant to a written agreement or court decree; the length of time that the payments have been received; the regularity of receipt; the availability of procedures to compel payment; and the creditworthiness of the payor, including the credit history of the payor where available to the creditor under the Fair Credit Reporting Act or other applicable laws."

other protection afforded by the Act, this prohibition poses serious econometric issues. The problem is essentially that protected income, such as retirement income or unemployment compensation, is very strongly correlated with employment status and expected streams of future income. Lenders, who presumably want to minimize default risk, may use employment or future income as predictors of the likelihood of repayment of a loan. Here the line between illegal and cost-justified discrimination becomes a very narrow one.

There is an intuitive way of forming a judgment concerning protected income. Default equations or models of the cost of servicing loans can be estimated as a function of source of income either by using the firm's restrospective data or by using industrywide information. The result would provide for simulating how much each dollar of protected income considered adds to the cost of the loans. This permits a determination of cost-justified (as opposed to illegal) discrimination. The problem with this approach is that even if representative samples of former borrowers can be found in firm or industry records, the records may confirm prior--possibly inaccurate--beliefs of lenders.

The self-fulfilling prophecy could work this way. Firm A believes that most people receiving welfare income are poor credit risks. It makes loans to them, but at lower amounts. The welfare recipient, unable to borrow as much as she needs from Firm A, goes to Firm B to borrow the balance. Given suitable assumptions, the total cost of the two loans is greater and the monthly payments higher than they would be if there were only one loan of the same size. The borrower is then more likely to fall behind in her payments. When she does, Firm A--believing that the debtor will default because she is a welfare recipient and perhaps knowing that she cannot carry any more debt because she already has another loan from Firm B--refuses to extend the payments or to refinance and commences default proceedings. Firm A confirms what it believed all along.[15]

An alternative approach toward the problem of protected income is to use non-credit-related data to estimate the likelihood that income streams and expenditure patterns differ for various types of income. Data exist for pursuing such an approach. The Center for Credit Research at Purdue has compiled extensive information on creditors and borrowers in diverse markets, and the University of Michigan's Debt Panel Survey (1967-70) could be used for tracking borrowers' expenditures and income.

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15 But why would Firm A make loans to welfare recipients at all? The answer may be that the firm recognizes that not all welfare recipients fail to pay their debts. Although the rates of default may be higher than average, the higher ex post costs--taking into account tax writeoffs from bad loans--may be recovered via higher revenues from small loans. A number of small loans to equally risky borrowers may yield the same total expected profits as one larger loan. Yet the ex post profit to the one risky borrower is rarely as great as that earned from many equally risky borrowers.

4. Discovery of Protected Class

While race or sex, which are generally not on application forms, may nonetheless be discerned by credit interviewers, other information, such as religion or national origin, may not be so readily apparent. The Act proscribes discrimination on the basis of any of these factors. Yet an allegation of discrimination requires a clear statement of the aspect of prohibited discrimination in which the accused has engaged. Limited experience with discrimination cases suggests that many of the protected classes overlap to such an extent that it is difficult to pinpoint statistically the object of discrimination.

An example will illustrate the problem. An elderly, light-skinned black woman who is employed part-time and has a modest Social Security income and an A-1 credit history is denied a loan for which she is by all objective standards qualified. There are no other applicants with identical racial, color, age, sex, and income characteristics. A test of race, sex, color, or age discrimination provides no evidence of overall disparate treatment by the firm. However, no test can be performed on skin color, for lack of data. At once there is the problem of sample selection bias, because other potential applicants are not included in the sample. There is also the problem of omitted variables or unobservables. Ignoring these, however, still leaves in this example the problem that the obviously discriminated-against applicant is a member of a subgroup that is an intersection of many protected classes, against none of which the firm is found to discriminate.

The standard econmetric procedure for dealing with the general problem above is to introduce interaction terms or variables that capture the overlaps, but in the specific example given above, this strategy might prove inadequate because the composition of the subgroups would be so small. These and other limitations may warrant development of alternative criteria for appropriately identifying the object of discrimination.

5. Credit Life Insurance

The statistical implications of observables, like zip codes, being highly correlated with unobservables, like race, are well known. Omitting race from a predictive equation assigns a relatively heavy weight to the explanatory power of the included variable, zip codes. The legal implications are also straightforward. To the extent that zip code is a consistent predictor of race and loans are always denied on the basis of certain zip codes, if there is an effect of disparate treatment of some racial group, the use of zip codes in making credit decisions is proscribed by ECOA. However, the statistical and legal implications of a number of observables, and unobservables that are correlated in a known way, are less well known or understood. Qualifying for credit life insurance illustrates this.

Regulation B prohibits discrimination on the basis of age and also on the basis of unavailability of credit insurance due to the age of the applicant.[16] Older applicants are less likely to qualify for credit life insurance, because they are more likely to die and therefore less likely to repay their debts. But age may not be the crucial factor here. The crucial factor may be health, occupation, or some other variable used in actuarially determining the probability of death. If age is correlated with both good credit history and probability of poor health, then it will have an ambiguous effect on default rates. The elderly would have lower default rates because of their good repayment habits; they would have higher default rates because they may not live to repay. Yet the ambiguity of the net effects does not distract from the fact that age would tend to be a strong predictor of default. Thus, omitting it from the evaluation of an application may reduce the reliability of the evaluation and may ultimately result in higher costs to the firm. However, this arises because some other variables, originally omitted from the analysis and perhaps unobservable, are highly correlated with age. If still other variables are strongly correlated with the omitted or unobserved variable, then it is entirely possible that the explanatory power of any default equation without age would be as high as that with age.

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16 Regulation B, Board of Governors of the Federal Reserve System; §202.7(e) reads: "Differentiation in the availability, rates, and terms on which credit-related casualty insurance or credit life, health, accident, or disability insurance is offered or provided to an applicant shall not refuse to extend credit, and shall not terminate an account because credit life, health, accident, or disability insurance is not available on the basis of the applicant's age."

The obvious consequence of such a correlation of observables with unobservables or omitted variables would be the initial semblance of possible discrimination against the elderly when possibly in fact there is none.

There are admittedly no standard conventions for dealing with the dual problems of omitted and unobservable variables. Controlling for such observables as availability of credit life insurance, which could easily be overlooked in an analysis of age discrimination, is a logical first step in the example described above.

6. Past and Current Versus New Customers

Refinancing, consolidation of loans, and solicitation of current customers for extension of new credit is a way of life in the finance industry. Experience with a customer is valuable in making lending decisions. It is conjectural as to whether, on average, past or current customers are treated more favorably than new ones.[17] But it seems reasonable that information--on, for example, borrower repayment habits--obtained directly from exerience with a customer would be treated differently from similar information obtained from other sources. If the net effect is that new applicants must have superior qualifications relative to

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[17] George Benston, in a study of lenders in Maine, finds no statistical differences between the two groups except age. "The Impact of Maturity Regulation on High Interest Rate Lenders and Borrowers," Journal of Financial Economics 4 (1977), pp. 23-49.

current or past customers, then there are clear implications for ECOA enforcement efforts.

When a group has been discriminated against in the past, one possible consequence of legislative mandates like the ECOA is the improvement in the position of the more qualified or advantaged members of the previously discriminated-against group. Alternatively, discrimination in a previous generation may result in unequal economic outcomes in a current generation even though there may exist "equal opportunity" in the present.[18]

A firm that previously discriminated against a protected group in the granting of credit undoubtedly would still have numerous past customers from the protected group when it begins to comply with the ECOA. Suppose that the firm lends only to previous customers among the protected group. An appearance of compliance would emerge when the analyst controls for protected group status but not for previous customer status. In fact, there

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[18] See, for example, the argument advanced by Glenn C. Loury, "Is Equal Opportunity Enough?" American Economic Review, Vol. 71, no. 2, May 1981.

may still be very unequal credit, although the firm may be exercising a policy of "equal opportunity."[19]

It is easy to derive many other examples where at first there is an appearance of compliance but then "discrimination-cum-equal-opportunity" is discovered. Generally, then, it can be argued that strict enforcement of ECOA does not guarantee equal credit.

Conclusion

It is difficult to completely segregate the question of how to detect illegal discrimination in credit markets from the question of whether the "illegal discrimination" has an economically meaningful rationale. It is even more difficult to separate the concerns for "how to" from "whether." However, we contend that inaccurate assessments of the degree and magnitude of certain market outcomes, like discrimination in lending, may obscure the policy discussion on the appropriate level and direction of compliance enforcement.

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19 To make this possibility evident, suppose that the firm extended credit to new applicants in a fixed proportion to current and past customers, without regard to group membership. Then, because of past discrimination, the analyst will find--controlling for both group membership and previous customer status--that there is still discrimination. Loury (1981) contends (in the context of labor markets) that asymptotically the gap--in this case, between lending to protected and to unprotected group members--would disappear. But surely in the short run a statistical finding of discrimination would be obtained even though most commentators would regard the firm's actions as nondiscriminatory.

The policy implications could be dramatic. For example, the findings of the Harvard-MIT Joint Urban Studies Center suggest that there is no illegal discrimination against women in mortgage lending.[20] Even if there were, it is argued by the authors of the study, it would not persist in the face of market competition. Thus it could be concluded that the appropriate level of enforcement of the ECOA as it pertains to female home-mortgage customers should be low relative to minorities (in which case discrimination was observed by the study's researchers). Regrettably, the Harvard-MIT results are flawed considerably by failing to give sufficient attention to such problems as selection bias. Are the results markedly changed when the little wrinkles like omitted variables or preapplication sample withdrawal are ironed out?

Further research effort is needed to place into focus a number of the economic and econometric issues that could shape enforcement of compliance with the ECOA. In doing so we may achieve a broader goal of discovering efficient means for reaching social ends.

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20 Schafer and Ladd, Equal Credit Opportunity.

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