

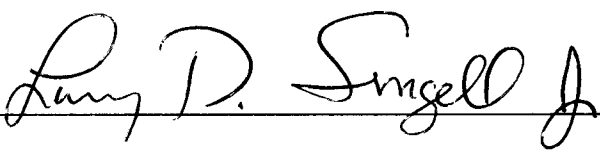
**Decisions, Decisions: Employer Discrimination, Consumer Discrimination, and Their
Role in the Number and Success of Black Entrepreneurs**

Honors Thesis

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INTRODUCTION

It is generally believed among economists that employer discrimination in the workplace induces disadvantaged workers to start their own firms to avoid discrimination. However, these selfemployed workers may not avoid lower earnings if customer discrimination also exists. The purpose of this paper is to explore the role of employer discrimination in the decisions of blacks to start their own firms, as well as the role of customer discrimination in earnings differentials among black and white-owned firms. It will also look at other determinants of black entrepreneurship, such as market structure and the presence of black elected officials where they locate their firms.

Heywood (1988) contends that market structure plays an important role in the success of black-owned firms. Competitive markets are more conducive to entry than monopolistic markets, allowing easier access to the marketplace by entrepreneurs. However, most competitive industries require a relatively large amount of customer contact, allowing for customer discrimination. Borjas and Bronars (1989) contend that if customer discrimination exists, black entrepreneurs will still earn less than their white counterparts, assuming no cost for information on the race of the seller. Bates and Williams (1993) find that black elected officials have a positive effect on the success rate and amount of revenue for black firms in their jurisdiction. This study will include variables for all of the factors mentioned above.

The next section presents an empirical framework for analysis with four ordinary

least squares regressions using data from the *Manufacturing Census*. The results confirm the hypothesis that employer discrimination, in the form of wage differentials, does play a role in the decision of blacks to start their own firms. They also support the claim that black-owned firms with relatively more customer contact suffer from lower earnings than those with little customer contact.

LITERATURE REVIEW

Discrimination in the labor market takes three forms: a taste for discrimination, market power discrimination, and statistical discrimination. Taste for discrimination models require that agents (employers, employees, customers) be prejudice against a particular group of people, e.g., minorities and women, hence, the term “taste.” Neither statistical discrimination nor market power discrimination models require that prejudice tendencies be present, but instead base discrimination on profit incentives when a group or groups can be easily distinguished.

Agents in the labor market have a distaste for members of a minority group in taste for discrimination models, where employers, employees, and consumers can be the source of discrimination. Employer discrimination occurs when an employer harbors a distaste for hiring workers from a particular group, say blacks. This taste leads to the perception that black workers are less productive than white workers. Collectively, this perception by employers leads to black workers earning less than a white workers for the same amount of output in the market. The difference between black and white wages is known as the discrimination coefficient. Discrimination cannot persist in the competitive marketplace,

however, because the discriminating employer, based on biased preferences, will hire too few blacks. This will lead to higher costs, and therefore lower profits, than the nondiscriminator.

For employee discrimination, white workers who discriminate against blacks will need to be compensated for the disutility of working with black workers. Firms segregate the workers by race to avoid paying the white workers the premium they would demand if they were to work with blacks; thus, in a segregated work force, the wages are predicted to be the same for both races.

In customer discrimination, it is the consumer who discriminates against a particular group. If white consumers discriminate against blacks, then they will pay less for a product or service provided by a black producer. As a consequence, black workers contribute relatively less to firm output and thus earn a lower wage.

Market power discrimination does not require agents to harbor a prejudicial attitude against a particular group. The monopsonist, for instance, is interested in maximizing profits, and can do so by paying those workers with more elastic supply curves lower wages. Studies have shown that labor supply curves for blacks tend to be more elastic than those for whites, leading to the monopsonist discriminating against blacks simply because it is profitable.

Just as the monopsony model does not require prejudice, neither does the statistical discrimination model. The classic example is that of male teen-age drivers. Statistics show that, on average, male teenage drivers are involved in more automobile accidents than their female counterparts. Hence, all teenage males pay a higher insurance

rate than females or older drivers. An individual teenage male may be a good driver, but he is still stuck with the higher rate by virtue of being associated with the group of teenage male drivers. This model can be generalized to race and gender labor issues, as well. The subsequent analysis in this paper focuses on the decision of blacks to start their own firms. Thus, the remainder of the literature survey will focus on articles that are directly relevant to the issue of black entrepreneurship.

In his essay "Discrimination in Labor Markets," Edward P. Lazear (1991) develops a hierarchy of importance among various forms of discrimination. He outlines three forms: racial, sexual, and age. Racial discrimination is the most important, followed by sexual discrimination, then age discrimination. Lazear explains some of the difficulties in measuring discrimination, and uses several examples of how a market may appear to discriminate against a minority group, when, in fact, the opposite is true. In addition, Lazear examines the effectiveness of legislation in reducing discrimination in the labor market. He points out that the wage gap between men and women has decreased somewhat, while the wage gap between whites and blacks remains unchanged. Lazear concludes that "...the picture on discrimination laws is mixed. In theory, they are a good idea, but implementation has been uneven and the laws are perhaps harmful. But because they are enforced so poorly, even bad implementation seems to have little detrimental effect on the economy."

Racial discrimination against minorities in hiring practices, bleak promotional prospects, and lower wages will theoretically result with minorities starting their own firms. Robert L. Moore (1983), in his article "Employer Discrimination: Evidence From

Self-Employed Workers,” studies the ratio of black to white self-employed workers compared with black to white wage and salary earners. Moore develops a model to determine the existence of evidence of employer discrimination. According to Moore, if employer discrimination exists, then we should see 1) a higher black/white earnings ratio for self-employed blacks than their wage-salary counterparts, and 2) an overrepresentation of self-employed blacks (to avoid racist employment practices, blacks will start their own firms). He estimates an ordinary least squares model with the following form:

$$\text{Annual Earnings} = A_0 + A_1\text{SCHOOL} + A_2\text{EXP} + A_3\text{SOUTH} + A_4\text{WEST} + A_5\text{NEAST} + A_6\text{WHITE} + A_7\text{URBAN} + A_8\text{AHRW},$$

where

SCHOOL	number of years completed
EXP	age-schooling-6
SOUTH	dummy variable: 1 if worker is in the south, zero otherwise
WEST	dummy variable: 1 if worker is in the west, zero otherwise
NEAST	dummy variable: 1 if worker is in the northeast, zero otherwise
WHITE	dummy variable: 1 if white, zero if otherwise
URBAN	dummy variable: 1 if worker lived in SMSA, zero otherwise
AHRW	annual hours worked per year = "weeks worked" x "hours/week"

Moore uses the 1978 *Current Population Survey* as his data source. He finds the coefficient for the earnings differential to be significantly greater than zero for wage earners, but not for self-employed persons. Moreover, he finds minorities actually

underrepresented in self-employment, and concludes that "...this study does not find the black/white... earnings ratio to be higher in general for self-employed workers compared to their wage and salary counterparts, as one would expect if employer discrimination were an important source of earnings differentials by race...." Moore does mention, however, that if there are barriers to entry for minorities in self-employment, then his model's predictions should be reexamined.

One of the assumptions made by classical economists is that competitive markets are incompatible with discrimination. In a competitive industry, no barriers to entry exist, but if the industry is monopolistic then entry is unlikely. John S. Heywood (1988) contends that monopolistic industries are where we find persistent discrimination. He sites studies that examine the relationship between market structure and discrimination; those studies find the correlation to be significant. Heywood examines two models: first, a taste for discrimination by employers, and second, a taste for discrimination by employees (but not employers). Both models predict the emergence of black-owned firms in monopolistic industries, since discrimination is greater in these industries; however, because barriers to entry exist, blacks will have a tougher time entering and succeeding in the market.

Heywood goes on to model the relationship between barriers to entry and black-owned firms. He uses data from the 1977 *Survey of Minority-Owned Business Enterprises* and finds that even with the strong incentive for blacks to enter monopolistic industries, the rate of black-owned competitive firms is ten times that of black-owned monopolistic firms. He points out that the most competitive firms are in the retail and service sectors, comprising sixty-nine percent of black business receipts, while in the least competitive

nonregulated sector is manufacturing, which makes up only seven percent of black receipts, confirming the prediction that barriers to entry "prevent otherwise anticipated entry of black firms into concentrated markets." He concludes that as the U.S. economy becomes more competitive through deregulation and other policies, that "...[i]n addition to improving allocative efficiency and benefiting consumers, such policies may increase the ease of minority entry, thereby yielding higher employment and earning rates for minorities."

George J. Borjas and Stephen G. Bronars (1989) explore another explanation for the difference in self-employment rates for whites and minorities: consumer discrimination. Borjas and Bronars use the assumption of imperfect information, i.e., "consumers can obtain information about the price of the good and race of the seller only at a cost." Two implications arise from this assumption. First, consumer discrimination causes the income level of self-employed minorities to be lower than that of their white counterparts. Second, while high-ability minorities will likely try to expand their firms into the white market, consumer discrimination will cause the minorities to lower the price of their goods to attract white buyers, leading to relatively smaller gains. Their model, therefore, predicts whites to positively select into self-employment, while minorities will not, but will prefer to work in salaried positions. Their data source is the 1980 *Census of Population*. They used data on white, black, Hispanic, and Asian men living in SMSA's and not working in the agriculture sector. Borjas and Bronars find the results of the estimation of their model to be consistent with its predictions. Among whites, the least-skilled workers select salaried positions, while the most abled workers select into self-employment. With

minorities, the opposite is true, i.e., the least-skilled select self-employment, while the most-skilled select into salaried positions. In addition, they find the following:

White self-employed persons are positively selected regardless of occupation, while minority self-employed workers are never positively selected. Conversely, white salaried persons are not positively selected, while minority salaried persons are always positively selected.

They also find the ratio of white/minority income in self-employment to be to be very close to the ratio of white/minority salary. This result is true only for blacks and Hispanics; Asians typically earn more than whites in the self-employment sector.

Timothy Bates and Darrell L. Williams (1993) study the impact of black mayors on the black business community in their article, "Racial Politics: Does It Pay?" They hypothesize that black elected officials positively affect the black business community. They used data from *The Characteristics of Business Owners (CBO) Database* and *Survey of Minority-Owned Businesses*, both compiled by the U.S. Census Bureau, *Local Area Business Income* and *City Government Finances*, both published by the U.S. Department of Commerce, *Employment and Earnings* published by the U.S. Bureau of Labor Statistics, and finally *Black Elected Officials: A National Roster*, which is published annually by the Joint Center for Political Studies. The publications were from 1982 and 1987, and were used to compared the difference in the number of black officials in each city studied between the two years with the change in growth of black-owned firms. They estimated an ordinary least squares model with the following specification:

$$\text{SALES} = b_{0,t} + b_{1,t} \text{DEMAND} + b_{2,t} \text{UNEMP} + b_{3,t} \text{MAYOR82} + b_{4,t} \text{NMAYOR} + u,$$

where

DEMAND Measure proxied by INCOME or GOVTEXP (see descriptions below).

SALES Total sales according to the 1987 and 1982 Surveys of Minority-Owned Businesses in metropolitan statistical areas (MSAs) with 100 or more black-owned firms.

INCOME Nonfarm personal income in 1982 and 1987 by MSA (U.S. Bureau of Economic Analysis , 1989: table 4; 1990: table 4).

GOVTEXP Total municipal government expenditures for the fiscal year. Includes all fiscal years that close within the 12 months ending 30 June 1983 and 30 June 1988 for the 1982 and 1987 samples, respectively (U.S. Bureau of the Census, 1985: table 5; 1990: table 5; Moulder, 1987; Desantis, 1990).

UNEMP Unemployment rate during January 1982 and January 1987 (U.S. Bureau of Labor Statistics, 1982: table D-1; 1987 table D-1).

MAYOR82 Dummy variable equal to one if black mayor in 1982, zero otherwise.

NMAYOR Dummy variable equal to one if black mayor in 1987 but not 1982, zero otherwise.

According to the above hypothesis, if the number of black elected officials is greater in 1987, then the black business community ought to see significant growth. After running the regression, they found significant support for their hypothesis: "The results indicate that black-owned firms in cities with black mayors have higher total revenues, greater average sales revenues, and lower rates of failure compared to black-owned firms with no black mayor." In addition, it appears that the longer a black mayor is in office, the more significant is the impact on black-owned firms. After controlling for government expenditures and other factors, Bates and Williams find a \$167.4 million increase in sales and an additional 860 black-owned businesses in those cities in which the mayor was black

in both 1982 and 1987.

The literature points to several relevant variables to consider when developing a model to measure the effects of discrimination on minority-owned firms. Market structure, consumer as well as employer discrimination, and the presence of minority elected officials all seem to significantly affect the minority business community.

EMPIRICAL MODEL

To determine the role that discrimination plays in the decision of blacks to start their own firms, the empirical analysis will take the form of OLS regressions, with number of black firms as the dependent variable in the case of employer discrimination. If workers face discrimination by employers, they may decide to start their own firms. In those areas where discrimination against blacks is prevalent, we should see higher incidence of black-owned firms. Wage differentials will proxy for employer discrimination. In the case of customer discrimination, sales of black firms will be the independent variable. In those areas where consumers harbor discrimination against blacks, sales of black firms will be lower than otherwise. The following models will be estimated:

Model 1

$$BFIRM = B_0 \text{Constant} + B_1 \text{OFIRMS} + B_2 \text{WDIFF} + B_3 \text{WHOLESL} + B_4 \text{RETAIL} + B_5 \text{DIFRTAIL} + B_6 \text{DIFWHOLS} + B_7 \text{YEAR87} + u,$$

where

BFIRM = number of black firms

WDIFF	=	wage differential between black and white workers in the service sector
NBLK	=	black population
WHOLESL	=	dummy variable indicating number of firms in the wholesale sector; 1 if firm is wholesale, zero otherwise
RETAIL	=	dummy variable indicating number of firms in the retail sector; 1 if firm retail, zero otherwise
DIFRTAIL	=	wage differential between black and white workers in the retail sector (WDIFF x RETAIL)
DIFWHOLS	=	wage differential in the wholesale sector (WDIFF x WHOLES)
YEAR87	=	dummy variable controlling for year of data: 1 if year is 1987, zero otherwise

u is stochastic error term.

A second estimation will add three variables to the original model:

Model 2

$$BFIRM = B_0 \text{Constant} + B_1 \text{OFIRMS} + B_2 \text{WDIFF} + B_3 \text{WHOLESL} + B_4 \text{RETAIL} + B_5 \text{DIFRTAIL} + B_6 \text{DIFWHOLS} + B_7 \text{BELECT} + B_8 \text{NBLKBANK} + B_9 \text{PCTURB} + B_{10} \text{YEAR87} + u,$$

where the new variables are

BELECT	=	number of black elected officials
NBLKBANK	=	number of black banks
PCTURB	=	percent of urban population.

In the case of customer discrimination, the amount of black sales will be the dependent variable, and will take the following form:

Model 1

$$BSALES = B_0 \text{Constant} + B_1 \text{OSALES} + B_2 \text{WDIFF} + B_3 \text{WHOLESL} + B_4 \text{RETAIL} + B_5 \text{DIFRTAIL} + B_6 \text{DIFWHOLS} + B_7 \text{YEAR87} + u,$$

where all variables are the same with the following exceptions:

BSALES = amount of sales by black firms, and replaces BFIRM as the dependent variable
 OSALES = amount of sales by nonblack firms, replaces OFIRMS from the original model.

The final estimation is, predictably, like Model 2 (on black firms), with BSALES replacing BFIRM, and OSALES replacing OFIRMS, thus the model takes the following form:

Model 2

$$\text{BSALES} = B_0 \text{Constant} + B_1 \text{OSALES} + B_2 \text{WDIFF} + B_3 \text{WHOLESL} + B_4 \text{RETAIL} + B_5 \text{DIFRTAIL} + B_6 \text{DIFWHOLS} + B_7 \text{BELECT} + B_8 \text{NBLKBANK} + B_9 \text{PCTURB} + B_{10} \text{YEAR87} + u.$$

In Model 1 (on black firms), we expect the relationship between OFIRMS and BFIRM to be positive; the number of other firms indicates population and/or ease of entry into the market. In either case, the correlation is expected to be positive; i.e., we would expect states with relatively large populations, such as California or New York, to have more total firms, and hence more black firms, and the same is true for ease of entry.

The wage differential in each sector would also have a positive relationship, since the differential is indicative of employer discrimination against blacks. If workers are facing employer discrimination, then they may be better off self-employed; therefore, if discrimination against blacks is prevalent, we should see more black firms than if the no discrimination exists. The strongest relationship, however, would be with the retail sector, which is the most competitive, followed by the wholesale sector,

and finally the service sector. Note that the service sector would have the least positive relationship; this is because those blacks who are most-abled and educated (attributes associated with the service sector) tend to select into salaried positions. The dummy variable YEAR87 is expected to be positive; we expect more black firms in 1987 than in 1977.

Black elected officials are also expected to have a positive correlation with the number of black firms. These officials will most likely try to enhance the black business environment by enacting legislation that is conducive to blacks having a better success rate in the business community. The number of black banks would also contribute positively. Start-up costs and credit are needed to start almost any business, and black-owned banks may be more likely to take risks with black customers venturing into self-employment. Since most African-Americans live in urban areas, we would expect more black firms to show up in those areas.

To measure customer discrimination, sales of black firms will be used as the dependent variable. If customer discrimination is present, then we expect a relationship between firms with a relatively large amount of customer to have a less positive correlation than those firms with little customer contact. In the retail and service sectors there is more contact, therefore the magnitude of the coefficient is expected to be smaller in the wholesale sector.

DATA

Data for this study were taken from the 1977 and 1987 *Census of Business*. To

determine the wage differential in each state, an auxiliary regression was run using data from the U.S. Census for the years 1970 and 1980. A log wage was used as the dependant variable, while the independent variables were a vector of explanatory variables and a black dummy variable, with the dummy equal to one if black, zero otherwise. The wage differential is the coefficient of the black dummy variable. In 1977, there were twenty-nine states a sufficient number of observations to compute the wage differential, while in 1987 there were forty-one states with the information (states like Montana, Vermont and Idaho, to name a few, do not have a large enough black population to compute the wage differential). Only three out of eight industries were represented in all states in 1977, so we limited the entire data set to those industries, which are retail, wholesale, and service. It would be interesting to see how a more complete data set, i.e., one with all states and industries represented, would fare under the same analysis.

RESULTS

Table 1 represents the results of the regressions on the number of black firms. The coefficient of the wage differentials in the service and wholesale sectors are insignificant; however, the differential in the retail sector is significant and positive. These results are consistent with our prediction that the retail sector would show the strongest relationship among the sectors on the number of black firms. Both the number of nonblack firms and black population show significantly positive relationships with the number of black firms. Black elected officials show a positive relationship, with the

t-score indicating significance at the ten percent confidence level. The number of black banks is also positively correlated and significant.

Table 2 shows the results on the sales of black firms. Black population has a strongly significant positive relationship with black sales. Sales in the service and wholesale sectors are both negative and significant, but the coefficient for retail is not significantly different than zero. The service sector has the smallest coefficient, as expected, and is followed by retail and wholesale, respectively. What this suggests is that customer discrimination is more prevalent in those industries where a relatively large amount of customer contact is required.

Interestingly, in Model 2, the number of black officials is negatively related, and significantly so. Perhaps this would be a good area for research. The number of black banks shows a very strong positive relationship with black sales, while the percent of urban population is insignificant. Adding these three variables seems to absorb the significance of the original variables; it may be that multicollinearity is present in this model.

SUMMARY

This paper explores (1) the role of employer discrimination in the decision of African-Americans to start their own firms, and (2) the role of customer discrimination in the earnings differentials among black and white-owned firms. The theoretical framework for both models is based on assumptions found in taste for discrimination models, most notably those found in employer and customer discrimination models. In

an employer discrimination model, if a worker is facing discrimination from an employer, he or she will be more likely to start his or her own firm than a worker who is in a nondiscriminating labor situation. The model presented in this paper predicts that employer discrimination, in the form of wage differentials, does play a role the number of black firms, which would indicate discrimination as a determinant in black entrepreneurship. In a customer discrimination model, entrepreneurs facing customer discrimination will have lower earnings than those who do not. The customer discrimination model developed in this paper predicts a larger earnings differential for those black-owned firms with more customer contact than those with little of no customer contact.

The empirical analysis uses data from the Manufacturing Census and shows that indeed, the wage differential in each sector contributes to the number of black firms. Market structure seems to be an important determinant, as well. Competition seems to be more conducive to black entrepreneurship. In addition, the presence of black elected officials and the number of black banks play an important role. The analysis also indicates the presence of customer discrimination. Those black firms facing a relatively large amount of customer contact made significantly lower earnings than those with little customer contact. These findings present a dilemma to those concerned with differences in earnings among minorities and whites. On one hand, minority workers wishing to escape employer discrimination would do better to enter a competitive market than a monopolistic one, but on the other hand they will be more likely to face customer discrimination, so it is questionable whether they will be better off.

Table 1

Regression on Number of Black Firms

Variable	Model 1	Model 2
Constant	79.550 (780)	1623.3** (1083.0)
OFIRM	0.59084E-01* (0.6105E-02)	0.46890E-01* (0.6738E-02)
WDIFF	7.6403 (22.12)	-6.6066 (22.85)
NBLK	0.23133E-01* (0.4892E-02)	0.58197E-01 (0.7524E-02)
WHOLESL	-3752.8* (852.9)	-3938.2* (843.4)
RETAIL	-4218.9* (810.5)	-4222.4* (794.8)
DIFRTAIL	56.781* (28.00)	57.273* (27.46)
DIFWHOLS	34.336 (28.28)	36.657** (27.74)
BELECT		142.84** (94.19)
NBLKBANK		14.659* (4.950)
PCTURB		-10.307 (9.557)
YEAR87	1741.3* (347.5)	950.44* (424.4)

standard error in parantheses

* significant at the .05 confidence level

** significant at the .1 confidence level

Table 2
Regression on Sales of Black Firms

Variable	Model 1	Model 2
Constant	19102.0 (0.3011E+05)	-34070.0 (0.3449E+05)
OSALES	0.2059E-04 (0.2059E-03)	-0.16723E-02* (0.2030E-03)
WDIFF	-1460.1** (892.9)	-155.87 (718.8)
NBLK	2.3178* (0.2089)	0.42682* (0.2354)
WHOLESL	-0.12849+E06* (0.3707E+05)	-21486.0 (0.2887E+05)
RETAIL	-1767.8 (0.3438E+05)	37954.0** (0.2569E+05)
DIFRTAIL	788.73 (1176.0)	3385.55 (873.0)
DIFWHOLS	1640.5** (1200.0)	121.09 (899.1)
BELECT		-6562.1* (3055.0)
NBLKBANK		2231.5* (180.3)
PCTURB		364.12 (302.1)
YEAR87	47852.0* (0.1400E+05)	28011.0* (0.1293E+05)

standard error in parantheses

* significant at the .05 confidence level

** significant at the .1 confidence level

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