

FINAL

**The Glass Ceiling in Different Sectors
of the Economy: Differences Between
Government, Non-profit, and For-profit Organizations**

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EXECUTIVE SUMMARY

This paper explores the possibility of using a three-sector model of the economy for examining glass ceiling issues. It extends the work that has been done in the past fifteen years on the nonprofit sector, which suggests that non-governmental agencies that are predominately in the human services area are really part of a third sector. Although most third-sector agencies are private, they generally have a symbiotic relationship to the government that sets them apart from what is referred to here as the for-profit sector. This paper focuses specifically on patterns of employment for managers, professional and technical workers in three sectors: the government sector, the for-profit sector, and the third sector.

There has been a large literature that has examined differences in occupational status and earnings by sex and race. Generally, the literature on occupational status has found differences between men and women and between whites and nonwhites that cannot be explained by productivity differences between these groups. Studies that focus specifically on managers and professionals have similar results. Even highly-educated women and minorities have expressed dissatisfaction with their opportunities for advancement, because of discrimination. Very few studies have examined these issues in the context of a three-sector model of the economy.

The analysis presented in this paper relies on data generated from U.S. Census of Population public use tapes for 1950, 1960, 1970, 1980, and 1990. Wage and salary workers in the labor force were assigned to one of the three sectors--government, for-profit, and third sector--based on the class of worker and industry variables. It was possible then to examine trends from 1950 to 1990, with the help of a few adjustments that were necessary to insure comparability of the data across the different censuses.

The time from 1950 to 1990 was a time of major change in occupations, industries, and in the characteristics of the labor force:

- (1) There was a decline in agriculture and manufacturing and dramatic growth in a variety of service industries.
- (2) There was also a rapid expansion in highly-educated workers: managers, professionals, and technical workers. This was true for men and women and for American Indians, Asians, blacks, Hispanics, and whites.
- (3) Minorities doubled their representation in the labor force during this time, and the proportion of white women in the labor market increased by a third. White women experienced the largest numerical growth, however.

When focusing on sectoral change, both the government and the third sector grew, while the for-profit sector declined. The growth in the government ended by 1980, however, while the third sector continued to grow dramatically. In spite of declines in the for-profit sector, by 1990 70 percent of all employment was still in this sector, however.

Both government and the third sector drew in large numbers of minority and female workers, as these sectors grew. Part of the explanation for this may be the heavy reliance these sectors have of traditionally-female occupations. Nevertheless, black and American Indian women are more heavily reliant on these sectors for employment than any other group; and black and American Indian men are more reliant on these sectors for employment than any other group of men.

The government and third sector drew more heavily on highly-educated workers in general. In part, this can be attributed to the occupational structure of these sectors, which are more "top-heavy" in using professional and technical workers. Yet the for-profit sector employs more workers overall. Thus all sectors had opportunities for drawing in large numbers of minority and female managers, professional and technical workers over the course of the 40 years under question.

Throughout the 40-year period the percentage of female and minority male professional, technical and managerial workers (PTMs) in the government and third sector was higher than in the for-profit sector, with the possible exception of Asian males. Until

the 1970s as many as 85 percent of the new jobs for high-level workers in the for-profit sector were taken by white males. This changed in the past two decades, when white and Asian women began to take more jobs in the for-profit sector. Black, American Indian, and Hispanic female PTMs continued to be heavily reliant on government and third sector employment. Black men also began to lag behind black women in taking professional, technical and managerial jobs.

By 1990 clear differences by race and sex persist, with women of color being more heavily reliant on government and third sector employment:

- (1) Almost 90 percent of black female professionals, 74 percent of black female technicians and 50 percent of black female managers worked in government and the third sector.
- (2) American Indian female PTMs were a very close second in their dependence on government and third sector employment.
- (3) White and Hispanic female PTMs were also heavily dependent on these sectors, however: 83 percent of professionals, 57-59 percent of technicians, and 30-32 percent of managers depended on government and the third sector for employment.

- (4) Asian women had the least reliance on these two sectors, although like all women, they are over-represented in these sectors relative to men.

Although men are less reliant on government and the third sector overall, minority men are more reliant on these sectors than white men:

- (1) Among men, black men were most reliant on government and the third sector for employment: 70 percent of black male professionals, 48 percent of black male technicians, and 44 percent of black male managers.
- (2) As with women, American Indian males are a close second to black males in this respect.
- (3) This is in contrast to white males: 56 percent of white male professionals, 31 percent of white male technicians, and only 24 percent of white male managers are in the government and for-profit sectors.
- (4) Hispanic males follow blacks and American Indians in their reliance on these two sectors, while Asian male PTMs are slightly less dependent on these sectors in comparison to white males.

An examination of growth shares indicates that in the 1970s and 1980s white women took the largest share of new jobs for college-educated workers. But PTMs from minority groups were also taking a larger share of new jobs than they have in the past. For example, black female PTMs claimed a much larger share of occupational growth in government than would be expected given their size in the labor force: 13 percent in the 1970s and 9 percent in the 1980s. By the 1980s they surpassed black males in the shares of new jobs they claimed across all sectors. Nevertheless, American Indian and black female PTMs had the smallest shares of their growth going into the for-profit sector compared to other groups. In other words, while black women surpassed black males in the share of new jobs they obtained from the for-profit sector, their growth in the for-profit sector was a relatively smaller proportion of the total growth in black female PTMs. This anomaly is explained by the more rapid total growth in black female PTMs relative to their male counterparts.

An analysis of mean earnings suggests that in spite of the employment gains made by female PTMs in the past 40 years, by 1990 they were still earning less than their male counterparts. This was true for all women, in all racial and ethnic categories and in all sectors. White male PTMs have higher salaries than women and all other men. Only Asian men had salaries approaching those of white males, across all sectors. On average, college-educated women, in all sectors, earned as much as or less than a skilled blue-collar worker.

There does seem to be very good reasons for using a three-sector model of the economy since very clear patterns emerge by race and sex. It also provides a context for analyzing some of the changes that have occurred for women, since they have been benefitted from the growth in sectors that have relied heavily on female labor.

More work is needed to explore differences in the context of a three-sector model. It would be useful to examine more detailed occupations in this context, as this study only focused on one-digit occupations. More rigorous statistical analyses would be of value as well.

Policy implications fall into three categories. Affirmative action policies are needed to ensure that minorities and women have access to high-level jobs in all sectors of the economy. Education policies are needed to expand the pool of qualified persons from groups that have faced barriers to entry. Finally, attention needs to be paid to the implications of public policy changes which may have an impact on industries where particular demographic groups are over-represented or under-represented.



I. INTRODUCTION

The glass ceiling concept is straightforward: minorities and women experience barriers to upward mobility unrelated to their characteristics and abilities. It is a simple case of discrimination based on sex, race, or ethnicity. Nevertheless, the glass ceiling exists within a context that is not without some complexity. Not only have certain groups experienced difficulties moving up, patterns of employment across occupations, industries, and sectors of the economy show marked differences by race and sex. In other words, there appear to be differences in lateral as well as upward mobility. Thus, upward advancement occurs within a specific context of occupational, industrial, or sectoral segregation (i.e. segregation is defined simply and broadly as the over-representation of certain groups in certain fields). In addition, economic restructuring has affected the growth potential of many fields which, in turn, affects the opportunities for upward mobility for all workers in those fields, regardless of race/ethnicity or sex.

This study examines the glass ceiling in the context of a three-sector model of the economy. The three sectors are the government sector, the private, for-profit sector, and the non-profit or third sector.¹ This three-sector concept has evolved out of the literature on the nonprofit sector, which posits that a

¹. For reasons that shall be discussed shortly, the third sector--rather than the non-profit sector--will be the term used most often.

portion of what has traditionally been classified as the private sector has important financial and functional relationships to the public sector (e.g. Ginzberg, Hiestand, Reubens, 1965; Weisbrod, 1988; and Salaman, 1992). It has become, in a sense, a separable third sector that is neither public or private in the conventional sense of those terms. The third sector is primarily composed of non-governmental agencies in health, social welfare, and education fields, many membership organizations and associations, and arts organizations.

The research presented here is unique in that it examines glass ceiling issues in the context of this emerging literature. It is argued that some important patterns emerge when examining glass ceiling issues in a three-sector context. This study is also historical in presenting the changing employment patterns of women and minorities in managerial and professional jobs, within the three sectors, from 1950-1990. It relies on U.S. Census of Population Public Use Tapes from 1950, 1960, 1970, 1980 and 1990.²

The next section provides an overview of the literature that has contributed to the current analysis, followed by a discussion of the methodological issues involved in using the census data that are analyzed. The next three sections discuss the results from analyzing census data for 1950-1990: first giving an overview of occupational, industrial, and sectoral changes over this period; next examining the distribution of employment for professional,

². The one-percent sample was used for each census year. Altogether, the 5 censuses encompassed almost 15 million records.

technical and managerial workers across sectors, by race and sex, between 1950 and 1990; and, finally, a discussion of earnings differences as of 1990. The paper ends with a conclusion and recommendations for further research.

Finally, before proceeding, it should be noted that the tables relevant to a given section are provided at the end of that section. Because of the large number of tables included in this analysis, this was the best way of presenting the tables close to the discussion of them, without interrupting the flow of the discussion.

II. REVIEW OF THE LITERATURE

There is a very large amount of literature on discrimination faced by women and members of racial or ethnic minority groups (particularly African Americans and Hispanics). Glass ceiling issues are faced by a subset of these groups: those in professional and managerial positions who have the potential to achieve high-status positions of authority. The literature specifically focused on this group is more limited, but professionals and managers were affected by many of the broad trends that has affected all workers in the U.S. economy since the end of World War II.

Probably first and foremost has been the dramatic shift of employment into services, from health and human services to professional services (Browning and Singlemann, 1978; Stanback, Bearse, Noyelle, and Karasek, 1981). Concomitant with, and partly because of these changes, was a significant growth in the employment of professional and managerial workers (Singlemann and Tienda, 1985; Tienda and Ortiz 1987), the growth of traditionally-female occupations bringing in large numbers of new, female workers into the economy (Sokoloff, 1992), and the growth in the services-oriented public and non-profit sectors (Salaman, 1992).

At the same time, major political changes occurred resulting in civil rights legislation prohibiting discrimination in employment based on race, ethnicity, or sex. There is considerable disagreement as to the effect of affirmative action on employment outcomes (Leonard, 1985). Economic shifts may have been as

important or more important in motivating change (Sokoloff, 1992). Further, some have argued that affirmative action has only resulted in many professionals from excluded groups being directed into a narrow range of public relations-oriented jobs (Jones, 1986; Collins, 1989; Reskin and Ross, 1992). Some groups--such as low-income minority males--seem to have lost ground in spite of affirmative action, largely due to the loss of manufacturing jobs that occurred with the rise in services (Wilson, 1987). Nevertheless, overt discrimination in employment has become less acceptable although there is considerable evidence that minorities and women still do not get the same pay as white males even when controlling for their productivity characteristics (Treiman and Hartmann, 1981; Farley and Allen, 1989; Cotton, 1990; Sorensen, 1991).

An important variable in the wage differences found, particularly for women, has been occupational segregation, or the "crowding" of women in certain jobs that offer lower pay (Bergmann, 1980; Reskin, 1984). Some have argued that women choose less-demanding occupations that tend to offer lower wages, given their current or planned child-bearing and family responsibilities (Polocheck, 1979; O'Neill 1983). But other studies show that occupational segregation occurs regardless of the work characteristics of women (Sorensen, 1989) and that many of the jobs taken by women can be just as onerous and stressful as those taken by men (Jacobs and Steinberg, 1990; Burbridge, 1994a). Segregation has not only been found in terms of occupations but in terms of

rank within occupations and across firms (Halaby, 1979; Bielby and Baron, 1984). Occupational segregation has been found for minorities as well as women, with minority women crowded into the lowest-status jobs (Tienda and Guhleman, 1985; Malveaux, 1988; Farley and Allen, 1989; and Sokoloff, 1992).

There is also considerable evidence that minorities and women are more highly represented in the public sector and less so in the private sector (Borjas and Tienda, 1985; Moss, 1988; Sokoloff, 1992). Even here, they are often concentrated in lower ranking or human services-oriented jobs (Stafford, 1991; Idson and Price, 1992). A related finding is that they are more highly concentrated in certain industries that often are dominated by government and nonprofit sectors (Woody, 1992; Burbridge, 1994a).

When specifically focusing on managers and professionals, the same patterns persist. Minority and female professionals receive lower returns to education, suffer from occupational segregation, and are highly concentrated in the public sector (Collins, 1983; Fulbright, 1986; Parcel and Mueller, 1989; Sokoloff, 1992; Reskin and Ross, 1992). Studies of black and female professionals and managers show high levels of dissatisfaction with their opportunities for advancement and feelings that they are not supported by their company or agency (Jones, 1986; Fulbright, 1986; Fernandez, 1981; Burbridge, 1994a). Analyses specifically focusing on authority and job responsibilities consistently find that minority and women managers have less job authority and autonomy, even when controlling for personal characteristics and occupational

attainment (Kleugel, 1978; Jaffee, 1989; Hill, 1980; Jacobs, 1992; Reskin and Ross, 1992; McQuire and Reskin, 1993).

Most studies of professionals and managers have focused on the private sector, but some have examined issues of upward mobility in the public and nonprofit sectors (Stafford, 1991; Rodgers and Smith, 1993; Burbridge, 1994b). While all studies indicate difficulties in achieving upward mobility for minorities and women in all sectors--private, non-profit, and for-profit sectors--very few comparative analyses have been conducted across all three sectors, particularly with an historical focus.

III. METHODOLOGY

To date, much of the literature on the nonprofit sector has focused on philanthropy, tax issues, management and organizational issues, funding and revenues, and voluntarism. Less has focused on paid employment. One of the problems in estimating employment in the nonprofit sector, and in making comparisons to other sectors, is that surveys have not included nonprofit employment as a class of employment until the 1990 census. Generally, the data only identify government employees and private employees (i.e. nonprofit and for-profit employees in the same category). The solution to this has been to identify a set of three-digit industries in which nonprofits predominate and to assume that all non-governmental employees in these industries are nonprofit workers (Virginia Ann Hodgkinson, et al., 1992).

This methodology is problematic since some workers in the for-profit sector are mis-classified as nonprofit workers. For example, the health industry includes workers in all three sectors; yet with this methodology they will be coded as either government or nonprofit workers only. Further, the earlier census years present less industry detail; more three-digit industries are provided in the 1980 and 1990 census years than in the 1950 and 1960 census years. Thus, workers in some industries--for example, "doctors offices"--would be subsumed under "health services" and be coded as either government or nonprofit workers. In subsequent years, when this industry category is separated out, it is possible

to classify workers in doctors offices as in the private, for-profit sector.

These limitations do not defeat this analysis, however. The argument that is made here is that the expansion of health, education and social services industries has had a profound effect on the employment of minorities and women who have made tremendous gains in these areas. Defining a nonprofit sector, or more generally a third sector, as consisting of non-governmental workers in these industries is a valid category for making comparisons. As the literature on the nonprofit sector has documented, there is a symbiotic relationship between the government and third sector firms--including for-profit firms such as for-profit hospitals--since they are heavily reliant on government expenditures (e.g. Medicaid and Medicare expenditures) and are subject to a wide range of government regulations.

Tables 3.1 and 3.2 show which industries were classified as for-profit industries (i.e. all non-governmental workers are coded as for-profit workers) and which industries were classified as third sector industries (i.e. all non-governmental workers are coded as nonprofit workers). Since third sector industries come out of the Professional Services major industry category, these are listed using the two- and three-digit categories. The other industries--manufacturing, construction and so on--are just listed as one-digit categories (i.e. the detailed industry categories subsumed under the major categories are not listed).

While primarily comprising health, social service and education industries, the third sector also includes various membership and religious organizations, libraries and museums. Unfortunately, nonprofits such as legitimate theaters or public radio and TV stations are subsumed under larger categories in which there are large numbers of for-profits. Thus, data from these industries were not available to be included in the third sector.³

Each year new industries were added to the census but in most cases this represented a separating out of new categories out of old categories. For example, child day care services was taken out of the educational services category in 1970 and made into a separate industry category in 1980. In 1990 it separates into two categories: child day care services and family child care homes. These additional industries do not affect the sectoral classifications in most cases; child day care workers were classified as third sector workers, regardless of whether they are the educational services category, the child day care category, or the family child care category.

A few sectoral re-classifications were made, however. For example, in 1990 management and public relations services is classified as a for-profit industry, even though workers in this category were classified as third sector workers when this industry was subsumed under miscellaneous professional services in 1980. Generally, these kind of changes had minimal impact on the sector

³. In this respect, the categories used for the nonprofit sector in this paper are more restricted than those used by others (e.g. Virginia Ann Hodgkinson, et al., 1992).

variable (less than .1 percent of the sector percentages). There were also some name changes in the industry categories that are not presented, since they are not relevant to the analysis.

The biggest changes that occurred were between the 1970 and 1980 census years, so for 1970 two census files were created: 1970a, which was made comparable to 1950 and 1960, and 1970b which was made comparable to 1980 and 1990. In 1970b, 1980, and 1990 it was possible to shift out of the third sector obvious private sector industries, such as doctors offices or non-governmental vocational and technical schools. The 1970a file, in being made comparable to 1950 and 1960, still includes doctors offices as a nonprofit industry, in spite of the availability of that industry category in the 1970 data. Nevertheless, the differences in the sector variable were small when comparing 1970a and 1970b. This is comforting since it suggests that estimates going back to 1950 are fairly accurate and that the availability of more detailed codes would only have made a difference of a few tenths of a percentage point at most.

Two 1970 files were created for other reasons, however. First, reliable data on Hispanics are not available in 1950 and 1960, so the 1970a file is made comparable to 1950 and 1960 in having no separate category for Hispanics; 1970b is made comparable to 1980 and 1990 in having a separate category for Hispanics.

The occupational categories were also subject to major changes in between 1970 and 1980. While in this study only one-digit occupational codes (major occupational categories) were used, even

these changed. By re-ordering the 1970 three-digit codes (detailed occupational categories), however, it is possible to obtain one-digit occupational codes in 1970 that are fairly comparable to the one-digit occupational codes in 1980 and 1990 (Rytina and Bianchi, 1984). Thus, the 1970a file contains the old one-digit occupational codes, comparable to 1950 and 1960; and the 1970b file contains the new one-digit codes, comparable to 1980 and 1990, based on a re-ordering of the underlying three-digit codes.

Table 3.3 shows the relationship between the categories used for 1950-1970a and those used for 1970b-1990. The earlier censuses combine professional and technical workers into one category, but professional specialty workers and technicians are separated in the later censuses. Similarly, service workers split into two categories: protective service and service occupations. The two farm-related occupations are collapsed into one, however, in the later census years. In addition to these changes, the titles of the occupational classifications are changed even when they essentially represent the same types of workers. The reader may find Table 3.3 useful when following the discussion of results for 1950-1970a and 1970b-1990.

Thus, the 1970a and 1970b files are different in three respects: the coding of the sector variable, the coding of the sex-race variable (to include Hispanics in 1970b), and in the coding of the one-digit occupational codes. What this means, of course, is that the 1950, 1960 and 1970a data files requires separate analysis from the 1970b, 1980, and 1990 data files. While this does not

