IN SEARCH OF A GOOD JOB:
MOBILITY IN A DUAL LABOR MARKET

Evans G. Edwards

IN SEARCH OF A GOOD JOB:

MOBILITY IN A DUAL LABOR MARKET

A SENIOR HONORS THESIS

SUBMITTED TO THE WASHINGTON AND LEE UNIVERSITY

DEPARTMENT OF ECONOMICS

BY

EVANS G. EDWARDS

LEXINGTON, VIRGINIA

MAY 3, 1993

ABSTRACT

Dual labor market theory developed in the late 1960's as economists tried to explain how and why labor market outcomes deviated from neoclassical expectations. The theory held that the labor market was divided into a primary sector ("good" jobs characterized by high pay, security, good benefits and ample opportunities for promotion) and a secondary sector ("bad" jobs characterized by low pay, insecurity, and few chances for advancement). Moreover, dualists argued that there was a scarcity of primary sector jobs and, therefore, limited or no mobility between sectors. Internal labor markets, statistical discrimination, and efficiency wages were each blamed, in turn, for creating the dual labor market. By 1990, dual labor market theorists recognized a significant amount of inter-sectoral mobility, begging the question, "How do people move from bad jobs to good jobs?" Using survey responses obtained from two cohorts of recent male high school graduates who entered the labor force instead of attending four-year colleges, the use of social linkages (friends and family already employed in the primary sector) was found to be a statistically significant aid in realizing mobility. Given this finding, a two-tiered program of job placement assistance (aimed (1) at high school students and (2) at high school graduates who have several years of labor market experience) and a system of incentives for firms to create "good" jobs are advocated as ways to reduce labor market segmentation.

ACKNOWLEDGEMENTS

I extend my utmost appreciation to Professor Carl Kaiser, my primary adviser on this project. His kind patience and gentle exhortations were invaluable in transforming the project from a fuzzy idea into a black-and-white reality. Professor Kaiser helped me in innumerable ways, from the choice of a manageable topic down to suggestions for improving my concluding remarks, and I am in his debt. I also wish to thank Professor Michael Anderson for his advice on regression models and the interpretation of regression results, and Professors Arthur Goldsmith and Bruce Herrick for reading and commenting on earlier drafts of this paper. Throughout my three years at Washington & Lee Univerisity, the members of the Department of Economics have distinguished themselves by their willingness to help. This project both confirmed this willingness and affirmed, in my mind, the educational value of student access to gifted academicians.

Finally, I would like to express my immeasurable gratitude to my parents, Dr. and Mrs. R. Thomas Edwards, and my fiancee, Miss Anne Coffey. My parents provided me with the opportunity of a Washington & Lee education and, along with Anne, did much to make my time at Washington & Lee a joy. These three lent me support and encouragement when I doubted the viability of this project, and it is to them that I dedicate "In Search of a Good Job: Mobility in a Dual Labor Market."

E.G.E.
May 3, 1993

LIST OF FIGURES

TABLE OF CONTENTS

1

I. Historical Introduction

In the early 1950's, several visionary economists, exasperated by the American labor market's non-conformity to neoclassical principles, set out to study the workings of particular labor markets. These economists founded the institutional school, a school which recognized the importance of structural components (for example, labor unions and company job ladders) in the labor market's peculiar outcomes. In so doing, institutionalists like John Dunlop, Clark Kerr, and Lloyd Reynolds augmented conventional supply and demand analysis with a healthy dose of common sense, discovering (in the words of latter-day institutionalist Robert Solow) "that there is something special about labor as a commodity, and therefore about the labor market too."[1]

Lloyd Reynolds' study taught him that the market's "special" structure conferred certain advantages and disadvantages on labor force participants. Jobs varied both in their attractiveness and in their availability to potential employees. Regarding the chances of securing employment, Reynolds wrote:

> The best chance is enjoyed by those who have numerous friends, relatives, and other "contacts" in the area. The next best chance falls to those who are willing to make the rounds of company employment offices and the public employment

---

[1]Robert M. Solow, The Labor Market as a Social Institution (Cambridge, Massachusetts: Basil Blackwell, Inc., 1990), 3.

> service at regular intervals. Those who simply fill out application forms and then sit home waiting to be called have little chance of being hired.[2]

In this paper, I seek to explore the implications of combining differential job access with differential job quality. Dual labor market theory (which also grew out of close studies of individual labor markets) nicely incorporates this combination. The remainder of Chapter 1 and the entirety of Chapter 2 are devoted to a discussion of dual labor market theory. It is to this discussion that I now turn.

II. The Birth of Dual Labor Market Theory

The struggle to better understand the outcomes of the American labor market gave birth to dual labor market theory in the late 1960's. Of particular concern were the persistence of unemployment, the continued under-representation of minorities in economic activity, and the disturbing extent to which poverty afflicted post-industrial society. Frustrated with the explicative powers of marginal productivity theory, the human capital theory of investment, and the labor/leisure model (the three pillars of neoclassical economics),[3] a number of economists chose to examine the pathology of the modern labor market by studying ghetto neighborhoods. Spearheaded by Peter Doeringer's Boston-based

---

[2]Lloyd G. Reynolds, The Structure of Labor Markets (New York: Harper & Brothers, 1951), 49.

[3]Glenn G. Cain, "The Challenge of SLM Theories to Orthodox Theory: A Survey," Journal of Economic Literature 14 (December 1976): 1216.

research, the group arrived at the consensus that the labor market had been "dichotomized."[4]

According to these economists there existed two distinct sectors within the labor market. The first or **primary sector** was characterized by relatively high wages, good working conditions, job security, and abundant opportunities for advancement. Conversely, low wages, poor working conditions, job instability, and short or nonexistent job ladders typified the **secondary sector.** The emerging theory held that a paucity of primary sector jobs allowed employers to "ration" these positions, often using personal characteristics as selection criteria, and consigned a disproportionate number of minorities (especially blacks) to dead-end, secondary work.[5] Moreover, discrimination and a number of institutional arrangements conspired against movement out of the secondary sector.[6]

Foremost among the institutional conspirators (the paradigm) was the internal labor market. Indeed, Michael Wachter deemed the internal labor market, which structured and regulated the employment relationship, to be the definitive characteristic of a primary sector firm. While internal labor markets arose because

---

[4]David M. Gordon, Theories of Poverty and Underemployment (Lexington, Massachusetts: Heath, Lexington Books, 1972), 43-4.

[5]Peter Doeringer and Michael J. Piore, Internal Labor Markets and Manpower Analysis (Lexington, Massachusetts: Heath, Lexington Books, 1971), 165-6.

[6]Michael Wachter, "Primary and Secondary Labor Markets: A Critique of the Dual Approach," Brookings Papers on Economic Activity (BPEA) 3 (1974): 638.

jobs demanded a high degree of specialization and firm-specific training, Wachter believed they were no longer governed by the rational desire for economic efficiency. Instead, he found that internal labor markets were dominated by habit and custom (for example, the seniority system took little account of current productivity), and that they unnecessarily limited primary sector access to the occasional port-of-entry offering.[7]

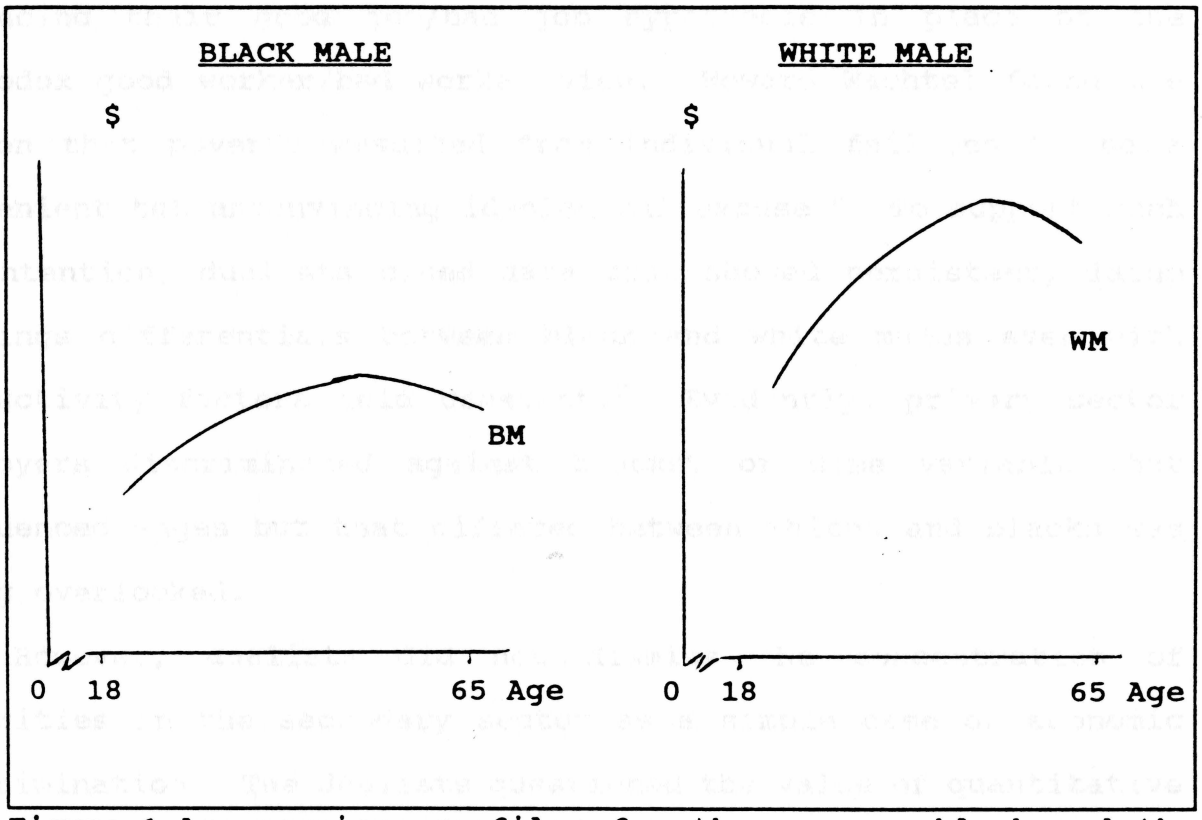


Figure 1-Age-earnings profiles for the average black and the average white male high school graduate.

Even with their inefficiencies, internal labor markets provided a mechanism for accumulating and eventually rewarding human capital. In contrast, secondary sector firms had undeveloped

[7]Ibid., 642-7.

internal labor markets and little or no return to human capital.[8] The lack of job ladders in the secondary sector was underscored for Robert Hall by a 1966 report on black and white male age-earnings profiles (see Figure 1 on previous page). The obvious disparity in the profiles led Hall to proclaim, "The whole notion of a career with steady advancement is relevant only for white males."[9]

At this point, the dualists broke with the neoclassicists by advancing their good job/bad job hypothesis in place of the orthodox good worker/bad worker view. Howard Wachtel found the notion that poverty resulted from individual failures to be a convenient but unconvincing ideological excuse.[10] To support such a contention, dualists cited data that showed persistent, large earnings differentials between black and white males even with productivity factors held constant.[11] Evidently, primary sector employers discriminated against blacks, or some variable that influenced wages but that differed between whites and blacks was being overlooked.

However, dualists did not dismiss the concentration of minorities in the secondary sector as a simple case of economic discrimination. The dualists questioned the value of quantitative

---

[8]Ibid., 651.

[9]Robert E. Hall, "Why is the Unemployment Rate so High at Full Employment?" BPEA 3 (1970): 393-4.

[10]Howard M. Wachtel, "Capitalism and Poverty in America: Paradox or Contradiction?" American Economic Review 62 (May 1972): 193-4.

[11]Cain, 1219.

productivity factors like years of formal schooling in determining whether or not secondary sector workers possessed the endowments to compete for primary jobs.[12] They argued that the menial nature of secondary work coupled with the lack of internal labor markets subjected secondary workers to a negative feedback phenomenon.[13] Peter Doeringer and Michael Piore explained that the feedback manifested itself in the low wages, high turnover, and substantial frictional unemployment of the secondary sector.[14]

Thus, workers in the secondary sector tended to have few if any promotions, checkered work histories, and frequent spells of unemployment. Over time, the dualists argued, workers stuck in the secondary sector were "scarred" by secondary sector employment. The lethargy and apathy of the secondary work place evinced itself as a set of conditioned reflexes in the frustrated worker. In short, secondary jobs turned otherwise capable individuals into "bad" workers who were less trainable (therefore, less employable in the eyes of primary employers) than when they first entered the labor force.[15] Doeringer and Piore described this phenomenon in their 1971 work, Internal Labor Markets and Manpower Analysis, "the behavioral traits...are reinforced by the process of working in secondary jobs and living among others whose life style is

---

[12]Wachter, 674.

[13]Wachter, 661.

[14]Wachter, 651.

[15]Ibid., p. 661.

accommodated to that type of employment."[16]

Though Doeringer and Piore's research appealed to common sense, economists called for corroborating empirical evidence. Paul Osterman, then a young graduate student at the Massachusetts Institute of Technology, was one of a handful of economists to answer the call. Osterman took issue with the practice of equating the primary sector with white-collar, "mental" jobs and the secondary sector with blue-collar, "menial" jobs, finding that in terms of "income, stability, and creativity, the distinction does not seem justified."[17] Eschewing the white-collar/blue-collar division, Osterman attached the "dual" tag to his tri-segmented conception of the labor market. Accordingly, he subdivided the primary sector into two groups of jobs - one tier where the workers had very little autonomy or attachment to their product, and another, "elite" tier where the workers enjoyed substantial autonomy and room for creativity. The resulting three divisions corresponded neatly to common sociological divisions, associating the secondary sector with the "lower class," the lower primary sector with the "working class," and the upper level with the "middle class." Osterman then presented a parking attendant as the classic example of the secondary employee, a skilled metal worker as the prototypical lower primary employee, and a university

---

[16]Doeringer and Piore, 175.

[17]Paul Osterman, "An Empirical Study of Labor Market Segmentation," Industrial and Labor Relations Review 28 (July 1975): 509.

professor as the typical upper primary employee.[18]

However, Osterman ran afoul of mainstream economists in applying his classification system to data from the 1967 Survey of Economic Opportunities. He developed earnings equations for each of the three segments, and found the results to agree with his predictions. Among other things, the variable *race* (black or white) held significant explanatory power only for the lower tier of the primary sector (where the bulk of the occupations fell). Apparently, secondary sector employers did not discriminate among what they perceived to be equally unskilled, unreliable workers, and upper primary employers relied upon traditional human capital variables (like years of education) in their hiring decisions.[19]

Unfortunately, the economists who had clamored for careful econometric studies of the dual labor market scorned Osterman's subjectivity. To them, Osterman's results seemed contrived, more a function of the occupations involved than the workers. Osterman's methodological failures spelled an end to the first wave of dual labor market theory. Neoclassicists appropriated the theory's insights and sent the radical economists off to work on an empirically-testable model.

---

[18]Ibid., 515-9.

[19]Ibid., 515-9.

2

Dual labor market theory, dormant for nearly a decade, experienced a re-birth in the mid-1980's. Its return was sparked by the recognition that the transition from the dead-end jobs of the youth labor market to more secure, higher-paying employment seemed to be both limited and patterned, by the continued failure of the market-clearing mechanism, and by the theory's concordance with the burgeoning literature on efficiency wages. In their 1985 study, "A Test of Dual Labor Market Theory," William T. Dickens and Kevin Lang contended that the existence of a secondary sector would be inconsequential if there was true mobility, and that the chief concern of dualists was whether or not rationing of primary sector jobs occurred. In short, they asked if there were qualified individuals who would like to work in the primary sector but could not find a job there?[1]

In order to test their question, Dickens and Lang assumed that workers chose a sector, based on its pecuniary and nonpecuniary characteristics, at the beginning of their careers and remained there. Since the primary sector offered the highest lifetime income and the most attractive nonpecuniary package (benefits, job security, working conditions, opportunities for promotion, et. al.) "normal" workers would select that sector. Some workers would deviate from this "norm," namely those who would be attracted to

---

[1]William T. Dickens and Kevin Lang, "A Test of Dual Labor Market Theory," American Economic Review (September 1985): 793-4.

the occasionally higher starting wages in the secondary sector because they planned on frequent moves in and out of the labor market and those who placed a premium on absenteeism, truancy, and sloughing, but workers generally would desire primary sector employment.[2] Nevertheless, with data "drawn from the thirteenth wave (1980) of the *Panel Study of Income Dynamics*,"[3] Dickens and Lang found that objective characteristics like age, education, marital status and race impacted the probability of being in the primary sector (these results are summarized in Figure 2 below).

Characteristic	% of Workers in Each Category in Secondary Sector
Married	12.1
Not Married	15.9
Education>12 years	9.7
Education=12 years	12.5
White	10.5
Nonwhite	31.1
Age<25	19.1
Age25-29	11.5

Source: William T. Dickens and Kevin Lang, "A Test of Dual Labor Market Theory," American Economic Review (September 1985): 800.

Figure 2-Partial Summary of Results from Dickens and Lang.

Dickens and Lang's findings were important in several ways. The percentage of nonwhites relegated to the secondary sector

---

[2]Ibid., 796.

[3]Ibid., 797.

(31.1%) was nearly three times as great as the percentage of whites (10.5%), suggesting the none too revolutionary prospect that blacks were "discriminated against when seeking primary employment."[4] In addition, those under age 25 were 40% more likely to be in the secondary sector than those between age 25 and 29 (19.1% of those under age 25 were in the secondary sector as opposed to only 11.5% of those age 25-29), while those who were not married were nearly 24% more likely to be in the secondary sector than those who had a spouse. Lastly, and of the least influence, those with only a high school diploma were about 22% more likely to be in the secondary sector than those with some post-secondary education.

Though mainstream economists showed some interest in the preceding comparisons, what really grabbed their attention was the empirical test run by Dickens and Lang. On the basis of their OLS estimations, Dickens and Lang rejected the single labor market model but found support for "the predictions of dual market theory that there {were} no returns to education or experience in the secondary sector."[5] Both the methodology and the conclusion seemed sound, and, in November 1985, economists Ian McDonald and Robert Solow published an article entitled "Wages and Employment in a Segmented Market." McDonald and Solow began with a simple graphical model of the dual labor market (see Figure 3 on page 13). In the model, the primary sector was artificially constrained to M workers, and no inter-sectoral mobility occurred. The only way for

---

[4]Ibid., 799.

[5]Ibid., 798.

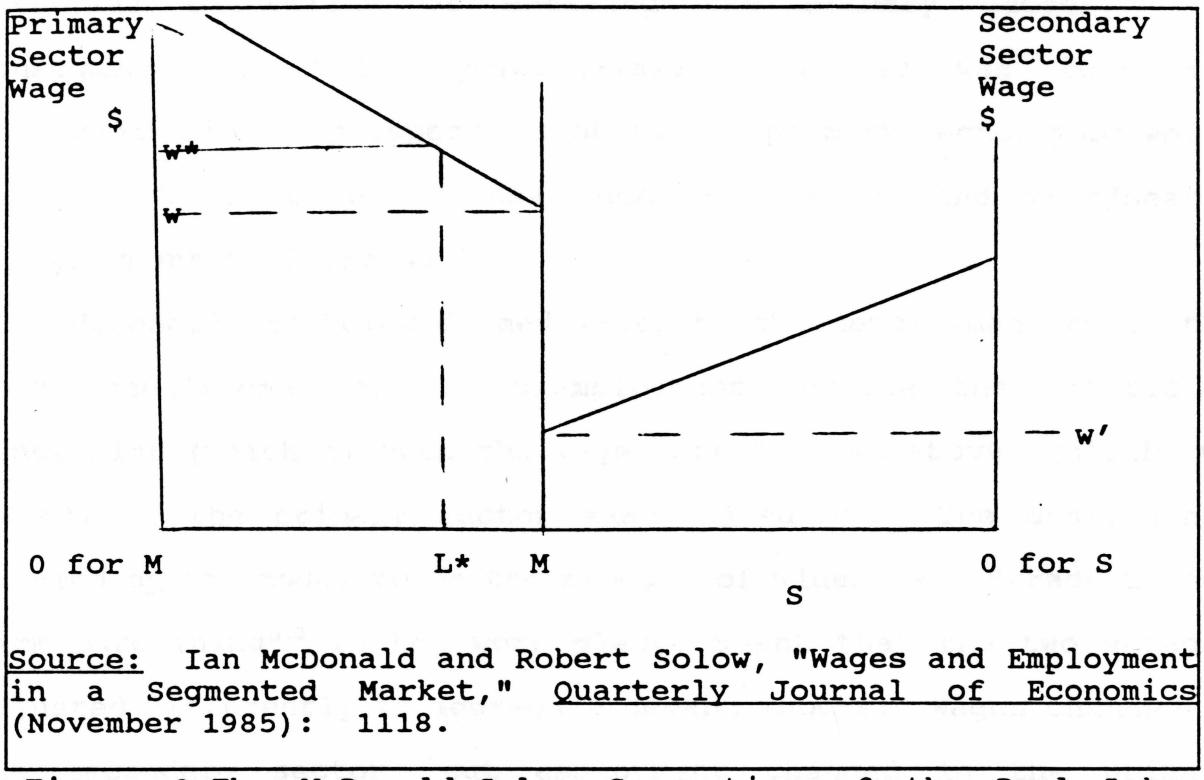
secondary workers to become primary workers was to leave their secondary job, enter a pool of wait/search unemployment, and, from that pool (a pool which, by definition, was outside the fully-employed secondary sector), move into a primary job. Thus, **w**, the equilibrium wage in the primary sector, exceeded **w'**, the equilibrium wage in the secondary sector, with the difference, **w - w'**, being a rent to primary workers. Additionally, if labor supply to the primary sector were inelastic (as depicted in Figure 3), primary workers could push their wage rate up to the above-equilibrium wage **w***. The cost of receiving **w*** then became unemployment in the primary sector; in Figure 3, **w*** led to **M - L*** unemployed primary workers.[6]

Having laid out their model in graphical form, McDonald and Solow explored its implications for wages and unemployment. Three types of unemployment were identified: (1) the temporary unemployment of primary workers who were laid-off due to a decline in aggregate demand, (2) the frictional unemployment (or float) of secondary sector workers caused by slowly-adjusting wages, and (3) the wait/search unemployment of workers who have left the secondary sector in hopes of gaining entry into the primary sector.[7] McDonald and Solow noted that the business cycle "played out mainly in the production of durable goods, the primary sector par

---

[6]Ian M. McDonald and Robert M. Solow, "Wages and Employment in a Segmented Labor Market," Quarterly Journal of Economics (November 1985): 1118.

[7]Ibid., 1117.



Source: Ian McDonald and Robert Solow, "Wages and Employment in a Segmented Market," Quarterly Journal of Economics (November 1985): 1118.

Figure 3-The McDonald-Solow Conception of the Dual Labor Market.

excellence"[8] presenting secondary workers with an omnipresent choice between remaining in their low-paying jobs or leaving to enter a transitional pool of workers searching for primary employment. Secondary workers could, of course, keep their secondary jobs and search the primary sector on their own time, but doing so would severely hamper their chances of gaining primary employment (recall the "scarring" effect from page 6). In deciding whether or not to make such a move, secondary workers weighed the probability of acquiring a primary job (the possible utility of the primary sector) against the probability of a long stint of wait/search unemployment and/or periodic lay-offs (the

[8]Ibid., 1123.

potential disutility of entering the primary sector). A consequence of this decision-making dynamic was that any improvement in the prospects of obtaining primary sector jobs would cause workers to desert the secondary sector and wait/search unemployment to increase.[9]

McDonald and Solow deemed wait/search unemployment to be the most troublesome form of unemployment because the artificial constraint (which allowed the wage rate to rise above equilibrium to **w***) of the primary sector exacerbated it. The constraint, assumed by the model to be the product of widespread "trade union-firm bargaining"[10] in the work place, meant that the two sectors adjusted differently to aggregate demand shocks: Wages changed in the secondary sector, but employment changed in the primary sector.[11] Moreover laid-off primary workers resisted employment in the secondary sector, adhering instead to a sense of work place propriety that forbade "reverse mobility." At the macro-level, this meant that there were "prevalent physical and social barriers to mobility,"[12] and that shocks to the economy would be reflected in changes in aggregate employment and aggregate income as well as well as in prices.[13]

In their paper, "A Theory of Dual Labor Markets with

---

[9]Ibid., 1124-27.

[10]Ibid., 1137.

[11]Ibid., 1136.

[12]Ibid., 1137.

[13]Ibid.

Application to Industrial Policy, Discrimination, and Keynesian Unemployment," Jeremy Bulow and Lawrence Summers offered a different explanation of the primary sector wage premium. Theirs was an efficiency wage story, stemming from employers' inability to perfectly measure the effort that workers put forth. By paying workers a wage premium (i.e. a wage over and above the workers' opportunity cost) to elicit work, firms made it costly for employees to lose their jobs. In other words, the premium took on a supervisory role and, as long as firms maintained the premium over and above the prevailing secondary sector wage, contributed directly to productivity just as standard factors of production did.[14]

By assuming that all workers provided identical amounts of effort for a given wage, Bulow and Summers showed how wage premiums persisted in periods of unemployment. Primary employers would not reduce their wages relative to the secondary sector, because to do so would create an incentive for workers to shirk.[15] Further, this notion of a wage premium or efficiency wage helped to explain why minority groups were under-represented in the primary sector.

---

[14]Jeremy Bulow and Lawrence Summers, "A Theory of Dual Labor Markets with Application to Industrial Policy, Discrimination, and Keynesian Unemployment," Journal of Labor Economics 4 (1986): 377, 388.

For a concrete example of a wage premium increasing productivity recall the enormous gains made by Ford Motor Company when it introduced the $5 day (the prevailing wage had been $2-3/day) in 1914. This change is recounted in H.L Arnold and F.L. Faurote. Ford Methods and the Ford Shops. New York, 1915.

[15]Ibid., 384.

Minority groups historically had a "very high separation rate,"[16] a fact which primary employers interpreted as a sign that minorities were unattached to their work and more apt to shirk. Therefore, primary employers statistically discriminated ("rationally" discriminated) against minority groups, and tacitly rejected the idea that frequent job changes were more a symptom of lousy jobs than lazy attitudes.

Like other economists who took part in the revival of dual labor market theory, Bulow and Summers recognized that there was limited, inter-sectoral mobility. They agreed with McDonald and Solow about the nature of this mobility, positing that workers had to leave the secondary sector, enter a transitional pool of the unemployed, and form a queue (a waiting line) for primary employment. Whether or not those in the queue ultimately moved into the primary sector depended on their place in line and what primary employers thought about them. In short, Bulow and Summers embraced the feedback version of dual labor market theory.

In the late 1980's, Howard Wial, then a graduate student at MIT studying under Osterman and Piore, took issue with the feedback model. According to Wial, the feedback model trivialized the extent of inter-sectoral mobility and failed to account for workers' labor market perceptions.[17] His study, "Getting a Good Job: Mobility in a Segmented Labor Market," lay the foundation for

---

[16]Ibid., 399.

[17]Howard Wial, "Getting a Good Job: Mobility in a Segmented Labor Market," 30 (Fall 1991): 397.

the empirical work I have undertaken and present in subsequent chapters. His data was qualitative and leaned toward sociology, and, since he conducted a case study, his results were not readily generalizable. Nevertheless, his aim was to come to a more complete understanding of how individuals move from the secondary sector to the primary sector, and I discuss his work at some length here.

Wial's research entailed 96 open-ended interviews with 30 men each of whom had grown-up in one of three distinct Boston neighborhoods. The interviews included questions about, (1) what were good jobs and what were bad jobs, (2) how the worker learned about and obtained jobs, and (3) whether or not the worker knew someone in the specific job before accepting a position?[18] The interviewees defined "good" jobs as those which were suitable for lifetime employment by adult males and "bad" jobs as those that were deemed undesirable for long-term employment. Most importantly, good jobs had to "offer high pay and considerable job security."[19] A subset or "customary group" of commonly-held good jobs emerged in each neighborhood, providing residents with a set of exemplars with which to characterize non-customary jobs. Jobs labeled good jobs need not hold the promise of making one rich, as one worker put it, "'You just want to make a good steady living.'"[20]

---

[18]Ibid., 398-9.

[19]Ibid., 400-1.

[20]Ibid., 402-3.

The transition from bad jobs to good jobs approximated the males' movement out of adolescence into adulthood. In order to make that transition, the interviewees relied on their social networks of extended family and friends. They viewed the set of primary jobs available to them as the customary group plus any other good jobs held by members of their social networks and asserted that getting a good job required luck (walking into a firm that happened to be accepting applications at the time) and/or the help of a friend or relative who will "put in a good word with the boss."[21] They attached little value to special skills and abilities or previous work experience in gaining mobility. Hiring practices reinforced the interviewees' passive method of job search, for primary employers tended to "hire the first qualified job applicants, {and} workers with friends and relatives in such firms have an advantage in obtaining these jobs."[22]

Wial's contribution to the body of dual labor market literature came from his exploration of worker perceptions and from his observation that both socialization and objective job characteristics played a role in shaping these perceptions. His study indicated that specific groups were linked to specific primary jobs not that workers with certain social, psychological, and cultural characteristics were tied to the primary sector in general. A consequence of this specificity was the call for a

---

[21]Ibid., 403-5.

[22]Ibid., 406-8.

demand-side policy of targeting particular secondary jobs for direct conversion (perhaps by creating a strong labor union) to primary ones. In light of his findings, the novel policy of direct conversion appeared far more efficacious than affirmative action programs. As a starting point, Wial suggested that "{i}deal targets would be secondary jobs in which many adult members of disadvantaged groups are currently employed."[23] Wial's work also posed a pair of subtle, new challenges to dualism. For one, the observation that individuals relied on their social linkages to learn about and obtain primary sector employment did not necessarily fit with the common notion that these jobs were rationed. If state-supported job placement services (like the Virginia Employment Commission) took positive steps to reach out to the historically disadvantaged and apprise them of "good" job openings, then the primary sector could be laid open to the entire labor force. True, those with friends and family members already working for primary employers would still have an advantage, but, by understanding the passivity of job search and seeking to redress it, employment services could buoy the position of minorities in the job market.

Secondly, the psychological parallel drawn between becoming an adult and moving into the primary sector suggested that the labor market (especially in large, urban areas like Boston) could better be segmented into youth and adult sectors than "good" and "bad" ones. Recall that, according to Wial's definition, jobs suitable

---

[23]Ibid., 413-5.

for the lifetime employment of adult males made up the primary sector, and those men not yet in that sector hoped that their linkages would allow them someday to jump into the primary sector. Thus, individuals regarded secondary sector employment as the transitory work of young adults - an acceptable, teenage unpleasantness that a 25 year-old ought not endure. Implicitly, of course, this meant that a 25 year-old would not <u>have</u> to endure the secondary sector, because linkages, luck, and expectations (of one's peers as well as one's prospective employers) would promote him beyond it.

3

I. Empirical Hypotheses

My study seeks to develop a more complete understanding of inter-sectoral mobility in the dual labor market. In short, I ask, "How do young men move from bad jobs to good jobs?" I find Wial's contention that social linkages (networks) are an enormous aid in the search for a good job intuitively appealing and, in Chapter 4, put it to a more formal test than he did in "Getting a Good Job: Mobility in a Segmented Labor Market." I start with the premise that the dual labor market concept is a sensible one, that the labor market roughly can be divided into a primary sector ("good" jobs) and a secondary sector ("bad" jobs). The literature suggests that a number of factors may influence the likelihood of a particular young man being placed in one sector over the other. For the purposes of my work, the relevant variables are a young man's age, race, and whether or not his high school curriculum specifically prepared him for the work place. Additionally, since Wial's results emphasize the role played by social linkages, I include a variable for whether or not a young man has had the help of a family member or friend (the social network) in locating and/or obtaining work, and another variable for whether or not the school or a state-supported employment commission provided help.

In brief, I posit that active assistance either from social networks or school and public job placement services play an

important part in the placement of a young man in the primary sector. For clarity's sake, my study, like Wial's, focuses on how social linkages influence mobility (the movement from the secondary sector to the primary sector). A young man whose social network has aided him in the search for employment is more likely to obtain a good job than someone who has not had that aid, *ceteris paribus*. Accordingly, I expect these men to identify the help of family members or friends as their method of job search for good jobs more often than for bad jobs. That is not to say that bad jobs are never obtained with the help of family members or friends or that good jobs are only obtained in this manner, but rather that such help is associated with good jobs much more so than with bad jobs.

Similar to the way in which social linkages impact job prospects, the aid of school job placement and public job placement services ought to enhance a young man's chances of moving into the primary sector. Importantly, the two sources of this aid proffer their services at different times: school job placement occurs before a young man enters the full-time work force whereas public job placement is offered to a young man after he has been in the work force (and usually struggled) for a length of time. A young man who works with his high school in order to secure employment upon graduation may (depending on the particular employment he has found) place himself in the primary sector and avoid the secondary sector altogether. Conversely, a young man who turns to the Virginia Employment Commission likely

has spent some time in the secondary sector and experienced the pang of unemployment before realizing the desirability of stable, higher-paying work. The employment commission helps young men already in the work force move into rather than begin in the primary sector. Nevertheless, the employment commission and the school job placement office both serve as clearinghouses, listing job vacancies and interviewing and referring would-be job holders. The clearinghouses are, as the name implies, reactive entities, counting on interested firms and needy individuals to seek them out. In that way, they differ dramatically from social networks (where friends and relatives provide insider tips on upcoming openings) and constitute a distinct method of job search.

Just as it is possible to predict the influence of the social linkage and placement help variables on inter-sectoral mobility, so too can the impact of the other important variables be anticipated. One of these important variables is a young man's race. Referring back to the summary of Dickens and Lang's "A Test of Dual Labor Market Theory" found on page 10, their results show that a non-white male is nearly 300% as likely as a white male to be in the secondary sector. This intimates that given a sample of recent male high school graduates a white male has a far higher probability of being in the primary sector than a black male. If other factors were held constant (they were not by Dickens and Lang), then discrimination would be the obvious root of the discrepancy.

In addition to the race variable, age is another significant demographic variable affecting a young man's labor market fortunes. Referring again to Dickens and Lang, males under the age of 25 are 40% more likely to be in the secondary sector than those between age 25 and 29. This, in turn, implies that, assuming the hypothetical sample from the preceding paragraph includes only those who have been out of high school for 11 years or less, earlier graduates possess a higher probability of being in the primary sector than more recent graduates. It seems reasonable to believe (as Wial would) that men age 25 to 29 are far more apt to have made the transition from youth to adulthood than men under the age of 25 (a group which would include teenagers). Moreover, the discrepancy would be even greater if the secondary sector's scarring effect (discussed on pages 5-6) did not partially offset the advantages (mental and emotional maturation, networking, and work experience) accrued through time in the labor force.

Along with social linkages, placement help, race, and age, the work place preparation provided by a young man's high school curriculum is the final important variable. My study is limited to high school graduates who chose not to pursue a four year college degree (at least not immediately upon graduation from high school). Theoretically, these males are competing for jobs in which nothing more than a high school diploma is required. Yet, a "standard" high school education does not prepare one in any way to be an electrician or a welder (considered by most to

be good jobs). Therefore, a "specialized" education in either business-oriented or vocational courses should increase the likelihood of a young man acquiring a good job. As far as the hypothetical sample is concerned, a young man who took part in a specialized high school curriculum (as defined above) has a somewhat higher probability of being in the primary sector than one who followed the standard curriculum.[1]

The above explication identifies five variables that influence the probability that a young man is in the primary sector. They may be summarized as follows:

CurJob = f(Race, Age, HSPrep, Link, Help) (1)

where **CurJob** is whether or not the man is currently in a primary sector job, **Race** (race, white or black), **Age** (early or recent

---

[1]Originally, I considered adding two more variables, marital status and whether or not a young man lives on his own, to my model. "Marital status" is a standard question on job applications and employers value married employees because they tend to be heads of households who, in the words of Dickens and Lang, "have a greater desire for stable primary work" (799) than their single counterparts. Similarly, leaving one's parents' home is, albeit to a lesser degree than marriage, a common sign of the transition from adolescence to adulthood. Independence brings with it bills to pay and the attendant need to find a job that will provide enough money so that these newfound financial obligations can be met. A question of cause and effect surrounds these variables, for it is unclear if marriage and independence from one's parents create pressure to move into the primary sector or if they are facilitated by already holding primary sector employment.

Preliminary regressions (following the format laid out in Chapter 4) run with marital status and independence from one's parents in the model produced results that were both counter-intuitive and lacking statistical significance. These results support the "effect" proposition, the idea that primary sector employment precedes marriage and independence from one's parents.

high school graduate), **HSPrep** (whether or not the high school curriculum was specifically designed to prepare the graduate for the work place), **Link** (whether or not the current job was located and/or obtained with the help of a family member or friend), and **Help** (whether or not the current job was located and/or obtained with the help of a school or public job placement service). In addition, each of the five independent variables can be simplified into a dummy variable, where **Race** is 1 for a white male and 0 for a black male, **Age** is 1 for an older high school graduate and 0 for a more recent graduate, **HSPrep** is 1 for a vocational or business curriculum in high school and 0 otherwise, **Link** is 1 for a man who has used his social linkages to find and/or obtain his current job and 0 for not using social linkages, and **Help** is 1 for a man who has enlisted school or public job placement assistance to find and/or obtain his current job and 0 otherwise. This means that the way in which each independent variable influences the dependent variable **CurJob** can be predicted. The predicted effect of each "turned on" variable (when it assumes a value of 1) on **CurJob** is shown below:

$$\mathbf{CurJob} = f(\mathbf{Race}, \mathbf{Age}, \mathbf{HSPrep}, \mathbf{Link}, \mathbf{Help}) \quad (2)$$

(+ + + + +)

II. Methodology

During January and February of 1993, I administered my survey (see Appendix A) over the telephone to 37 male graduates of a single high school in Roanoke, Virginia. The sample

includes black and white males from the classes of 1984, 1985, and 1989 (age 21 to 27) who did not continue their studies at a four year college the autumn after their graduation from high school (identified as such through school archives and conversations with classmates). I designed the survey as a uniform means for collecting the desired demographic and work-related data. Aside from information on the interviewee's year of graduation, race, marital status, independence from parents or guardians, and the applicability of his high school course of study, I sought to have the interviewee trace his entire work history since graduating from high school. Specifically, I asked the interviewee to list the jobs which he had held since graduation, how those jobs were obtained, how long he remained on each job, whether he considered the job to be "good" or "bad," and to account for periods of additional schooling and unemployment.

One might think that categorizing a job as either "good" or "bad" is a difficult proposition, but those I interviewed readily embraced the distinction. Their quick responses lend support to Wial's finding that individuals periodically use that simple construct to evaluate their jobs. Since my purpose is to look at inter-sectoral mobility, when an interviewee said his job was "bad" I had him to tell me why in a sentence or two. Conversely, when an interviewee said his job was "good" I asked which of the characteristics typically associated with a good job (questions 14-20 of the survey) were possessed by that job. In that way, I

was told the relative importance of the characteristics by young men who are out there working in the labor market everyday.

III. Data

Wial's chief contribution to dual labor market theory was his contention that a good job is defined by sociological factors and objective job characteristics. Individuals judge the quality of a job on the basis of who works there (and what they think of those people) and on a number of more tangible qualities. These qualities include pay, benefits, job security, opportunities for promotion, on-the-job training, relations with superiors, and work schedule. Which of these qualities are most often identified with "good" jobs? Which are identified less often? Below, in Figure 4, I present a ranking of these qualities for the entire sample, for the more recent graduates, and for the two earlier classes.

Quality	Full Sample	Early Grads	Late Grads
Job Security	93.5%	90%	95.2%
Good Relations	90.3	80	95.2
Good Benefits	83.9	100	76.2
O-T-J Training	83.9	100	76.2
Promo Chance	80.6	80	81.0
Good Hours	67.7	70	66.7
Good Pay	64.5	80	57.1

Figure 4 - The characteristics of a good job (in terms of the % of interviewees in each group who have had a first good job that identified the characteristic with their good job).

Not surprisingly, all of the factors are linked with good jobs more than 50% of the time. For the group, job security and good relations with one's superiors are the most important factors, cited by over 90% of those in the sample who have had at least one good job. Indeed, job security and good relations are the top two factors among younger men, perhaps a sign that the rollercoaster Eighties have made today's young people more mindful of the future. The older graduates, 50% of whom are married, place more emphasis on fringe benefits than their younger counterparts, and the entire sample downplays the importance of good pay in the determination of a good job.

A complete listing of the good jobs and bad jobs identified by the men in the sample can be found in Appendices B and C. The most common way to break into the primary sector is to enlist in the military, and 22.9% of those in the sample mention military service as their first good job. Two occupations, electrician's apprentice and waiter, are cross-listed as both good and bad jobs. The young man who regarded the job of waiter as a good job said that he lives at home and enjoys the money that he can earn in tips. The interviewee who considered the job of electrician's apprentice to be a bad job did so because, though he recognized the opportunity for advancement, he despised the pay he made and the hours he had to work as an apprentice. Other than that the set of good jobs and bad jobs is pretty much what one might expect from young men with a 12th grade education.

Before breaking the sample out into subgroups based on labor market experiences and age, I first want to provide an overview of the complete sample. The sample is made up predominantly of graduates of the later class (72.7%). 83.7% are white, 81.1% are single, 78.4% have not found their HS curricula applicable in the work place, and 59.5% are independent of their parents or guardians. Thus, the sample, taken as a whole, brings a mixed bag of advantages and disadvantages to the search for primary sector employment (good jobs). Young, single, and without the benefit of their high school curricula tying directly into the work environment, the men in the sample appear handicapped. However, they are also overwhelmingly white and over half of them are living on their own.

In fact, though nearly half (48.6%) admitted to having had a bad job, 83.7% have had an initial good job. The flip side of these statistics is that a surprising 51.4% of the men in the sample entered the primary sector without ever having had a bad job, and that 32.4% of the sample had the experience of a bad job prior to their first good job. In other words, over half of the young men in the sample began their working life in good jobs, and, contrary to the assumptions of the McDonald-Solow model on pages 11-13, 2/3 of those who were not so fortunate had been able to move into good jobs. What is striking is that the interviewees have spent an average of 40.3 months (3 $^{1}/_{3}$ years) in their first good jobs. When they leave their first good job, they only do so in order to move to another good job that a

member of their social network has recommended or to return to formal schooling.

How then do these men go about obtaining employment? 41.9% of those who have had a first good job made use of family members or friends in finding that job. This was the most common method of locating a first good job, far more frequently utilized than high school help (25.8%), responding to a want ad, or the "lucky" walk-in method (22.6% for the latter two). On the other hand, the luck method is the method of choice for finding the first bad job. 58.8% of those who have had a first bad job "walked into" it, whereas only 23.5% called upon their social networks to obtain secondary sector employment.

For the purposes of this study, the way in which young men obtained their first good job or their first bad job is nowhere near as relevant as the way in which those 32.4% who exhibit inter-sectoral mobility found their first good jobs. 56.5% of this subgroup called upon their family and friends in locating their first good jobs, 30.4% responded to want ads or used the "luck method," and 9.7% found their first good jobs with the help of the Virginia Employment Commission. Reliance on social linkages clearly triumphs over the other methods not only for those who have had a bad job prior to their first good job but also for those who pass into the primary sector without a stint of secondary employment. True, response to want ads and the luck method are the dominant methods of search for bad jobs, but that is because those jobs are so abundant that employment in them

requires no special connection.

The sample results underscore two further points of distinction between good jobs and bad jobs. The first is the difference in the average number of each type of job held. Those who have held an initial bad job have had, on average, 1.82 bad jobs as compared to an average of 1.26 good jobs for those who have held a first good job. Bad job holders move in and out of bad jobs more frequently than good job holders because bad jobs offer poor pay and minimal security. These bad job holders hope that their next move will be into the primary sector, but the checkered work histories that result from jumping from job to job hinder mobility. For example, the men who constitute the 16.3% of the sample that has never had a good job (all of whom are younger graduates) have had, on average, 2.67 bad jobs since June 1989. The second point to bear in mind is that 31.8% of the men who exhibited inter-sectoral mobility experienced a period of unemployment just before beginning their first good job. Given the importance of social linkages in the search for a good job, whether a young man is employed or not when he learns of a good job opening seems to be random chance. However, this figure tends to refute the notion that an individual must leave the secondary sector and enter the queue of wait/search unemployed in order to gain entry into the primary sector. As long as the young men have a network of family and friends who are already in the primary sector and do not themselves establish a pattern of employment instability they can keep their bad jobs while they

wait for their networks to apprise them of good job openings.

Finally, I should say something about the different labor market experiences of the earlier graduates and the more recent graduates. 100% of the earlier graduates and 77.8% of the more recent graduates have held a first good job. 70% of the earlier graduates moved into the primary sector from a bad job whereas over $^1/_3$ of the more recent graduates who have held a first good job moved <u>directly</u> from high school into the primary sector. This fact suggests that, in high school, the younger men were more concerned about their future than their predecessors.[2] In that way, they are products of the late 1980's, wary of the turbulent American work place and motivated to secure stable employment as soon after graduation as possible.

IV. Problems in Interpreting Survey Results

As with all surveys, the validity of my results are a function of the honesty of those I interviewed. Individuals are sensitive about their work histories for, as Robert Solow recognizes, "{w}e live in a society in which social status and

---

[2]There is a demand-side alternative to this explanation. The earlier graduates finished high school in 1984 and 1985, years in which the unemployment rate was over 7% whereas the younger graduates finished school in 1989 when the unemployment rate was 5.2%. Thus, jobs, in general, were more abundant in 1989 than in 1984-5, and young men <u>should</u> have had somewhat better job prospects. Bruce E. Kaufman, <u>The Economics of Labor Markets, 3rd Edition</u> (Orlando, Florida: Dryden Press, 1991).

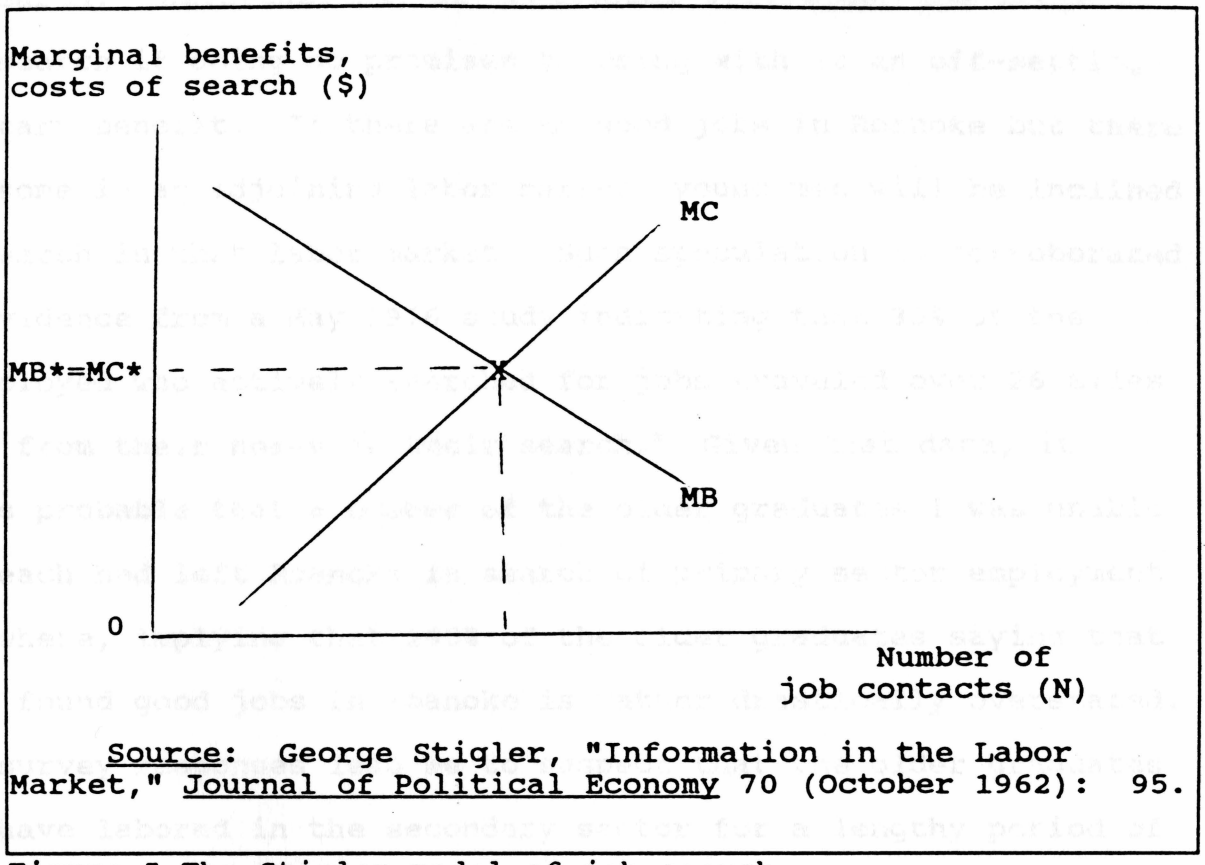
self-esteem are strongly tied both to occupation and income."[3] Secondly, as Arthur Goldsmith cautions, the classification of a job as good or bad may be state dependent. For example, an interviewee may have had an exhausting day at work and call his job "bad" when, in actuality, it has the objective characteristics of a good job. Thirdly, my sample relies disproportionately on the more recent high school graduates (27 of the 37 interviewees). Since I managed to reach only 10 of the 64 earlier class members that I called, I may not have an accurate representation of those earlier classes (I certainly do not have a statistically significant representation). This fear coupled with 100% (10 out of 10) of the older graduates saying that they have held a first good job causes me to wonder about the work experiences of those I failed to reach. If I assume that the vast majority have left the Roanoke Valley, does that mean that they were successful in finding good jobs or miserable failures?

The literature offers two conflicting explanations for this flight. Wial notes that "{m}en who grew up in the study neighborhoods and later obtained professional or managerial jobs would be especially likely to move out of their neighborhoods,"[4] thereby hinting that those who flee the place where they grew up have somehow escaped. Of course, Wial did not seek to exclude

---

[3]Robert M. Solow, The Labor Market as a Social Institution (Cambridge, Massachusetts: Basil Blackwell, Inc., 1990), 9.

[4]Howard Wial, "Getting a Good Job: Mobility in a Segmented Labor Market," Industrial Relations, 30 (Fall 1991): 400.



Source: George Stigler, "Information in the Labor Market," Journal of Political Economy 70 (October 1962): 95.

Figure 5-The Stigler model of job search.

college graduates from his study the way I have, and it is they, not high school graduates, who escape to the professional and managerial ranks. The Stigler model of job search provides a more plausible explanation for the migration of the older graduates (see Figure 5 above). According to this model, individuals tolerate the increasing marginal cost of search (movement to the right along the **MC** curve in Figure 5) until that cost intersects the decreasing marginal monetary gain (movement to right along the **MB** curve) from a prolonged search (at point **X**). Travel expenses are a major part of the rising marginal cost

of search.[5] Nevertheless, an individual will widen the scope of his search if doing so promises to bring with it an off-setting monetary benefit. If there are no good jobs in Roanoke but there are some in an adjoining labor market, young men will be inclined to search in that labor market. Such speculation is corroborated by evidence from a May 1976 study indicating that 35% of the unemployed who actively searched for jobs traveled over 26 miles away from their homes in their search.[6] Given that data, it seems probable that a number of the older graduates I was unable to reach had left Roanoke in search of primary sector employment elsewhere, implying that 100% of the older graduates saying that they found good jobs in Roanoke is rather drastically overstated. The survey responses lead me to suspect that the older graduates who have labored in the secondary sector for a lengthy period of time or who go through a number of bad jobs may revise their standard of what constitutes a good job downward (that less appealing work becomes "suitable" for long-term employment) in order to maintain their self-worth. In any event, my sample would have been improved by a larger cohort of older graduates.

---

[5]George Stigler, "Information in the Labor Market," Journal of Political Economy 70 (October 1962): 94-8.

[6]Carl Rosenfeld, "Job Search of the Unemployed, May 1976," Monthly Labor Review (November 1977): 41.

4

I. Regression Results

I used a linear probability model to test the hypothesis that the probability of a young man currently being in the primary sector (**CurJob**) is a function of **Race**, **Age**, **HSPrep**, **Link**, and **Help**. The results are summarized in Figure 6 below:

The regression equation is:

CurJob = 0.076 + 0.260 **Race** + 0.347 **Age** + 0.091 **HSPrep** + 0.352 **Link** + 0.674 **Help**

Predictor	Coefficient	T-ratio	Stdev	p	VIF
Constant	0.0763	0.38	0.2023	0.709	
Race	0.2596	1.46	0.1774	0.153	1.2
Age	0.3475	2.42	0.1433	0.021	1.1
HSPrep	0.0914	0.64	0.1431	0.528	1.4
Link	0.3519	2.26	0.1559	0.031	1.7
Help	0.6741	3.94	0.1711	0.000	1.4

R-sq = 44.1%
R-sq(adj) = 35.1%

F = 4.89 p = 0.002

Figure 6-Summary of OLS Regression Results

Since all of the variables in the above regression equation are binary ("dummy") variables, the dependent variable **CurJob** can be interpreted as the probability that a young man will be in the primary sector given the values for **Race**, **Age**, **HSPrep**, **Link**, and

Help.[1] Recalling the definitions of the independent variables from Chapter 3, the coefficients on these variables can be understood as follows:

0.260 **Race** - a white male possesses a 0.26 higher probability (26% greater likelihood) of currently being in the primary sector than a black male, *ceteris paribus*.

0.347 **Age** - an older male graduate possesses a 0.347 higher probability (34.7% greater likelihood) of currently being in the primary sector than a later male graduate, *ceteris paribus*.

0.091 **HSPrep** - a male graduate who's high school curriculum was ostensibly designed to prepare him for the work place (i.e., a business or vocational curriculum) possesses a 0.091 higher probability (9.1% greater likelihood) of currently being in the primary sector than a male graduate who partook of a different curriculum, *ceteris paribus*.

0.352 **Link** - a male graduate who received help from a family member or friend in locating and/or obtaining his current job possesses a 0.352 higher probability (35.2% greater likelihood) of currently being in the primary sector than a male graduate who did not receive such help, *ceteris paribus*.

0.674 **Help** - a male graduate who received help either directly from his school or from the Virginia Employment Commission in obtaining his current job possesses a 0.674 higher probability (67.4% greater likelihood) of currently being in the primary sector than a male graduate who did not enjoy such help, *ceteris paribus*.

The size of the coefficients immediately underscores one of the great limitations of OLS regression with binary variables, for, if each independent variable were to take on a value of 1 (all of the independent dummy variables were turned on), the dependent variable would assume a value of 1.8. To say that the probability of a young man currently being employed in the primary sector is larger than 1 (the likelihood greater than 100%) is simply non-sensical. (Indeed, this problem persists even with the recognition

---

[1]G.S. Maddala, Introduction to Econometrics (New York: MacMillan Publishing Company, 1988), 268-9.

that, by definition, the **Link** and **Help** variables cannot be turned on simultaneously). However, the specter of a nonsensical value on the dependent variable presents an intractable problem for any linear probability model, a problem that can only be overcome by switching to a logistical model (LOGIT regression) that restricts the dependent variable between 0 and 1.[2]

In addition to the possibility of non-sensical results, the regression model in Figure 6 violates the assumption of normal error terms because the dependent variable "and, hence, the random error can take on only two values."[3] Fortunately, my sample is considered "large" because it includes 37 observations (the standard rule of thumb regards a sample size of 30 or more as "large")[4] and inferences drawn on the basis of least squares regression remain valid for practical purposes.[5] Therefore, I can move from the caveats of nonsense and non-normality to an examination of the model's efficacy.

The first question is whether or not the positive sign on each of the coefficients seems reasonable. Is it reasonable to believe that being white, being older, having taken courses geared to the

---

[2]William Mendenhall and Jerry Sincich, A Second Course in Business Statistics: Regression Analysis, 4th Edition (New York: Dellen Publishing Company, 1993), 443.

[3]Ibid., 442.

[4]David A. Anderson, Dennis J. Sweeney, and Thomas A. Williams, Statistics for Business and Economics, 4th Edition (St. Paul, Minnesota: West Publishing Company, 1990), 247.

[5]Mendenhall and Sincich, 442.

work place, having the help of family or friends, or having the help of school or a state-supported employment commission increases a male graduate's chances of obtaining a job? Certainly; it is both reasonable and expected that turning on any of the independent variables will favorably influence his current job status. Secondly, how well does the estimated regression equation fit the data? The adjusted R-squared, the coefficient of determination, in Figure 6 is 35.1%, meaning that the independent variables **Race**, **Age**, **HSPrep**, **Link**, and **Help** explain more than 1/3 of the variance of the dependent variable **CurJob**. Considering the difficulty in fitting a least squares line to binary data and the fact that social scientists typically deem R-squares as low as 25% to be useful when analyzing cross-sectional data, the regression equation appears to provide a fairly good fit. Moreover, the F statistic of 4.89 has a p-value of 0.002 attached to it so I can, at the .01 level of significance, reject the null hypothesis that all the coefficients equal 0 and assert that the dependent variable is related to at least one of the independent variables (or, alternatively, that the adjusted R-squared explains a significant amount of the variance of **CurJob**).

The regression results suggest that the **Help** variable has the strongest relationship to **CurJob** because it has the largest coefficient (0.674) and exhibits the highest level of statistical significance (with a t-ratio of 3.94). The null hypothesis, which claims that the coefficient on **Help** equals 0, can be rejected at the .01 level. At the .05 level, the null hypothesis can be

rejected for **Age** (with a t-ratio of 2.42) and **Link** (with a t-ratio of 2.26). However, the null hypothesis cannot be rejected for **Race** (with a t-ratio of 1.46) and **HSPrep** (with a t-ratio of 0.64), marking the two variables as insignificant at even the most generous (0.10) of the conventional levels. Lastly, and fortunately, all of the variance inflation factors (VIFs) fall between 1 and 2 so there is no need to fear a high degree of correlation (multicollinearity) among the independent variables.

II. Interpretation of Results

To reiterate, the estimated regression model laid out in Figure 6 accounts for 35.1% of the variance in the dependent variable **CurJob.** Somewhat surprisingly, the two networking variables, the personal networking variable **Link** and the institutional networking variable **Help**, are more strongly significant than the two demographic variables, **Race** and **Age.** In fact, the **Race** variable in this model is not significant at any conventional level. I realize that dual labor market theory developed in the 1960's in response to the abysmal performance of blacks in the American labor market, but my model does <u>not</u> permit me to conclude that a young man's race provides important insight into his labor market fortunes. This result coupled with the importance of the networking variables supports the idea that who you know matters more than what you look like or what you know in today's labor market. Furthermore, the ascendancy of social linkages and placement assistance suggests both the diminution of

racial discrimination and the continued failure of employers to base hiring decisions solely on an applicant's potential productvity. The insignificance of the **HSPrep** variable (which, a priori, was expected to be important) reaffirms the latter suggestion.

The strength of the networking variables hints at an alternative way of viewing the dual labor market. In a high school where over 50% of the graduates continue their educations at four year institutions, the definitive characteristic of those who enter the labor market with just a high school diploma may well be an impoverished economic status. If so, white/black differences are overshadowed by economic homogeneity. Those with social linkages to the primary sector, regardless of their race, enter the labor market and accept whatever job is offered them, comforted by the knowledge that their friends and family members will tell them of primary sector openings as they arise; the wise among those without social linkages seek the school's assistance in finding a job in order to compensate for their lack of contacts; and, those who have neither social linkages nor the school's help face the greatest danger of wallowing in the secondary sector. Accordingly, the dual labor market is perpetuated, for entry into the primary sector rests upon informational rather than productivity advantages.

The significance of the **Age** variable coupled with the finding that 2/3 of those who did not begin their working lives in the good jobs had been able to move into the primary sector (see page 30) points to substantial inter-sectoral mobility. Young men achieve

mobility through social linkages, response to want ads and "luck", and the Virginia Employment Commission. On page 31, I noted that over half of the young men who exhibit inter-sectoral mobility located their first good job with the help of family and/or friends while fewer than 10% obtained their first good job with the help of the Virginia Employment Commission. Therefore, the **Help** variable owes its influence to the high school placement office finding good jobs for young men immediately upon graduation. The fact that most of those who identified military service as their first good job (see page 29) signed up through on-campus recruitment programs included in **Help** also strengthens the variable. In short, the **Link** variable is far more important than **Help** as an aid in moving from the secondary sector into the primary sector.

5

Based on both the descriptive results of Chapter 3 and the regression results of Chapter 4, I concur with Howard Wial in concluding that social linkages play a prominent part in inter-sectoral mobility for young men. True, aid from the high school placement office seems to be the surest way to gain immediate entry into the primary sector (in large part because the slots guaranteed by firms to work-study programs are often converted into permanent positions for student participants upon graduation), but the high school's services are of no help to young men once they have graduated. The men who finish high school and begin their working lives in the secondary sector likely will remain there until friends and family members alert them to more attractive opportunities.[1] Unfortunately, the generalizability of these conclusions to women and other labor markets is constrained by my methodology (a case study of recent male high school graduates) and the limited sample size (37 observations). Nevertheless, finding

---

[1]For a real-world example of the impact that social linkages can have on labor market outcomes consider the effects of the court order in the Gautreaux housing-desegregation case. In the late 1970's, 4,000 low-income Chicago families were relocated in middle-income, "scatter-site" housing. Studies by the Northwestern University Center for Urban Affairs indicated "huge employment gains for the adults, who, surrounded by a world of work, found it for themselves." In 1992, the Center reported on the "scatter-site" children, 95% of whom graduated from high school and 50+% of whom went on to college. Moreover, "Gautreaux students were nearly twice as likely as those who stayed in the inner city to find jobs." Jonathan Alter, "The Body Count at Home," Newsweek, 28 December 1992, 55.

an intuitive distinction between primary and secondary sector employment and sizable inter-sectoral mobility in my sample brings my research into general agreement with the prevailing state of dual labor market theory.

On page 19, I mentioned briefly how the Virginia Employment Commission (VEC) could assist the disadvantaged in their struggle for inter-sectoral mobility. The purpose of the assistance would be to narrow the informational gap that separates workers with social linkages from those without such networks. Narrowing this gap would weaken the modern labor market's essential duality and make it a closer approximation to Lloyd G. Reynold's vision of a "perfect market mechanism" where "news of a vacancy spread simultaneously to all workers who might be interested in it, so that all would have an equal chance to apply."[2] In order to accomplish this feat, the VEC would have to overcome its image as a resource of last resort and become an accepted destination for qualified job-seekers and primary job listings. Additionally, the success or failure of the VEC's make-over would be intimately linked to the macroeconomic climate in which it took place. If the make-over was attempted in a contracting economy, when good jobs are scarce commodities to be "hoarded and jealously guarded,"[3] primary employees would exert enormous pressure on their employers

---

[2]Lloyd G. Reynolds, The Structure of Labor Markets (New York: Harper & Brothers, 1951), 48.

[3]C. Stewart Sheppard and Donald C. Carroll, Editors, Working in the 21st Century (New York: John Wiley & Sons, 1980), 83.

to spurn the VEC's "equality of opportunity" program and leave the informal "word of mouth" system intact.

Revamping the VEC's services might improve the labor market outcomes of disadvantaged youths, but it aims to do so only after youths have spent some time in the secondary sector. Peter Doeringer cautions:

> The availability of job development, placement, and follow-up services of school-based career/job specialists is also indispensable to the labor market success of minority and disadvantaged youths....Such youths frequently need the labor market brokering services that are traditionally provided by family, friends, and relatives in the white middle-and-upper income community.[4]

In practice, this "job development" has largely been limited to vocational courses and work-study positions in low-tech firms. Doeringer calls for the widespread institution of cooperative education programs that offer high school students meaningful apprenticeships with high-tech, primary sector employers. The Pennsylvania Youth Apprenticeship Program (PAYAP) is a prototype of the direction that Doeringer (and many others) want high schools across the country to take. The program's founders began the program in response to the plight of the high school's "forgotten half," those who do not go on to four-year colleges after graduation. PAYAP plugs high school juniors into skilled apprenticeships with blue-collar firms in an attempt to provide

---

[4]Peter Doeringer, Editor, Turbulence in the American Workplace (New York: Oxford University Press, 1991), 37.

prestigious alternatives to traditional academic curriculums."[5] Comparable to PAYAP, New York City's cooperative education program with Con Edison teaches high school seniors how to be general utility workers. The basic training includes "pulling cable, installing conduits, and terminating service,"[6] and, provided the graduates pass Con Ed's standard exam, leads to an entry level position for the high school graduates.[7] At the moment, the most obvious shortcoming of employer-specific training like that offered by PAYAP and the Con Ed program is its scarcity. In 1992, there were only about 40 high school apprenticeship programs enrolling about 1,000 young people nationwide.[8]

Of course, there is not unanimity on the merits of high school apprenticeship programs. Paul Osterman has identified a moratorium period that lasts for several years after young people leave high school in which "youths work in secondary firms because these firms find youths to be a satisfactory source of labor while primary firms do not."[9] Youths, for their part, find that secondary work meets their baseline requirements for it is casual, exacts little penalty for unstable behavior, and provides spending money without

---

[5]John Holusa, "The Apprentice's Youthful Trade," New York Times 1 November 1992, 4(A).

[6]Robert Waddell, "Con Ed's Early Line on Workers," New York Times 1 November 1992, 4(A), 7.

[7]Ibid.

[8]Holusa, 4(A).

[9]Paul Osterman, Getting Started (Cambridge, Massachusetts: MIT Press, 1980), 16.

any significant responsibility or long-term commitment. Instead of being scarred by the work place they scar it with the continuance of their "adolescent patterns...of search and delay.[10] Osterman feels that the 21st century demands of literacy, computer proficiency, and math and science capabilities compel the American educational system to focus on improving these basic skills. Accordingly, programs of job placement assistance should concentrate on identifying "the youths who are having difficulty making the transition from moratorium to settling down behavior"[11] rather than on the immediate placement of new high school graduates in the primary sector.

Undoubtedly, a high school's chief purpose should be the imparting of basic skills. PAYAP and the Con Ed program operate on this premise, PAYAP by integrating math, science, english, and history into a specially-tailored academic program and Con Ed by accepting only high school seniors who have a demonstrated proficiency in reading and math. As high school apprenticeship programs proliferate they can serve as a sort of "carrot," inspiring students to master the basics in order to gain early entry into the working world. (Recall page 33 where I noted that the high schoolers of the late 1980's appear more concerned with quickly securing stable employment than their predecessors.) Still, many students will not want to rush into that world and

---

[10]Ibid., 150.

[11]Ibid., 153.

something akin to the VEC's "equality of opportunity" program will also be needed. By creating a two-tiered system of job placement assistance that helps disadvantaged young people overcome informational obstacles when they are ready and willing to work in the primary sector, the age of perfect inter-sectoral mobility will be nearer.

Informational barriers aside, the greatest barrier to mobility may be the shortage of good jobs. On page 7, I discussed Osterman's conception of a three-tiered labor market where the respective segments roughly correspond to the lower class, the working class, and the middle class. Current labor research seems to show that few working class jobs were created during the 1980's. Indeed, the furor over the widening gap between rich and poor is rooted in the decline of good job opportunities for the working class. Any policy aimed at reducing labor market segmentation must combine a program of incentives for employers to create more good jobs with improved placement assistance. Otherwise, capable workers will continue to be frustrated in their search for a good job.

APPENDIX A

SURVEY OF LABOR MARKET OUTCOMES

1. **Race ___** **2. Year of graduation: ___**

3. **Address (City/State): _____**

4. **Do you live at home? Y/N**

5. **Marital status: _____** **6. Family size: ___**

7. **Upon graduation from high school where were you first employed?**
   Name of firm: _____

8. **How did you find that job?**
   - __ family member/ friend with that firm
   - __ family member/ friend previously with that firm
   - __ letter
   - __ phone call/ response to a want ad
   - __ walk-in
   - __ union hiring hall
   - __ job placement service
   - __ school placement service
   - __ other ( )

9. **How long were you with that firm? _____**

10. **Do/did you consider that job to be a "good" or "bad" job? _____ (If a "good" job go to #12) Tell me, in a sentence or less, why that job was a "bad" job?**

11. **Now, list your work experience since that first job, including the names of employers, how the jobs were obtained, how long you were at each job, and whether or not you consider them to have been good or bad jobs? (If a "good" job go to #12) Account for periods of unemployment and additional schooling as well.**

---

12. What is/was your position? _____

13. What is/was your approximate hourly wage rate? _____

14. Is/was that a "good" wage? Y/N

15. Do/did you receive "good" fringe benefits? Y/N

16. Do/did you have a sense of job security? Y/N

17. Do/did you feel you have/had an opportunity for promotion within the firm? Y/N

18. Do/did you have a good relationship with your superiors? Y/N

19. Have you received a significant amount of on-the-job training? Y/N If so, briefly describe.

20. Do/did you like the hours you have/had to work? Y/N

---

21. While in high school what type of classes did you take?
    - __ Vocational
    - __ Business
    - __ Standard
    - __ College Preparatory
    - __ Honors

22. Have these courses been <u>directly</u> applicable in the workplace? Y/N If so, with which firms?

APPENDIX B

LIST OF "GOOD" JOBS

*Automobile Salesman (New cars)

*Aviation Company Lineman

*Bank Accounting Clerk

*Barber's Apprentice

*Building Products Company, Installer

*Chemical Delivery Specialist

*City Ordinance Officer

*Electrician

*Electrician's Apprentice

*H/VAC Laborer

*Insulation Supervisor

*Maintenance Supervisor

*Office Products Company, Delivery/Shipping Supervisor

*OTR Driver

*Paint Store Sales Clerk

*Pianist in a Touring Band

*Printing Company, Camera Technician

*Psychiatric Center Orderly

*Recording Studio Technician

*Reservist, U.S. Marine Corps

*Serviceman, U.S. Air Force

*Serviceman, U.S. Army

*Serviceman, U.S. Marine Corps

*Serviceman, U.S. Navy

*Service Station Mechanic

*Sheriff's Deputy

*Supermarket Dept. Manager

*Waiter

*Welder

APPENDIX C

LIST OF "BAD" JOBS

*Automobile Dealership, Maintenance Worker

*Automobile Salesman (Used cars)

*Auto Parts Store, Sales Clerk

*Car Wash Laborer

*Construction Company Laborer

*Department Store Sales Clerk

*Discount Store Cashier

*Discount Store Sales Clerk

*Electrician's Apprentice

*Excavation Company Laborer

*Fast Food Restaurant Cashier

*Landscaping Laborer

*Local Delivery Truck Driver

*Newspaper Mailroom Clerk

*Packing-house Laborer

*Supermarket Stock Clerk

*Telecatalog Operator

*Temporary Services Worker

*Video Arcade Clerk

*Waiter

*Warehouse Laborer

*Welder's Apprentice

BIBLIOGRAPHY

Anderson, David A., Dennis J. Sweeney, and Thomas A. Williams. Statistics for Business and Economics, 4th Edition. St. Paul, Minnesota: West Publishing Company, 1990.

Boston, Thomas D. "Segmented Labor Markets: New Evidence from a Study of Four Race-Gender Groups." Industrial and Labor Relations Review 44 (October 1990): 99-114.

Bulow, Jeremy I. and Lawrence H. Summers. "A Theory of Dual Labor Markets with Application to Industrial Policy, Discrimination, and Keynesian Unemployment." Journal of Labor Economics 4 (1986): 376-413.

Cain, Glen G. "The Challenge of Segmented Labor Market Theories to Orthodox Theory: A Survey." Journal of Economic Literature 14 (1976): 1215-57.

Dickens, William T. and Kevin Lang. "A Test of Dual Labor Market Theory." American Economic Review (September 1985): 792-805.

Dickens, William T. and Kevin Lang. "The Reemergence of Segmented Labor Market Theory." AEA Papers and Proceedings (May 1988): 129-34.

Doeringer, Peter B., Editor. Turbulence in the American Workplace. New York: Oxford University Press, 1991.

Doeringer, Peter and Michael J. Piore. Internal Labor Markets and Manpower Analysis. Lexington, Massachusetts: Heath, Lexington Books, 1971.

Gordon, David M. Theories of Poverty and Underemployment. Lexington, Massachusetts: Heath, Lexington Books, 1972.

Gordon, David M., Richard Edwards, and Michael Reich. Segmented Work, Divided Workers. New York: Cambridge University Press, 1982.

Hall, Robert E. "Why is the Unemployment Rate So High at Full Employment?" Brookings Papers on Economic Activity 3 (1970): 393-4.

Holusa, John. "The Apprentice's Youthful Trade." New York Times (1 November 1992): 4(A).

Kaufman, Bruce E. The Economics of Labor Markets, 3rd Edition. Orlando, Florida: Dryden Press, 1991.

Maddala, G.S. Introduction to Econometrics. New York: MacMillan Publishing Company, 1988.

McDonald, Ian M. and Robert M. Solow. "Wages and Employment in a Segmented Labor Market." The Quarterly Journal of Economics (November 1985): 1115-1137.

Mendenhall, William and Terry Sincich, A Second Course in Business Statistics: Regression Analysis, 4th Edition. New York: Dellen Publishing Company, 1993.

Osterman, Paul. "An Empirical Study of Labor Market Segmentation." Industrial and Labor Relations Review 28 (1975): 508-23.

Osterman, Paul. Getting Started. Cambridge, Massachusetts: MIT Press, 1980.

Reynolds, Lloyd G. The Structure of Labor Markets. New York: Harper & Brothers, 1951.

Rosenfeld, Carl. "Job Search of the Unemployed. May 1976." Monthly Labor Review (November 1977): 39-43.

Sheppard, C. Stewart and Donald C. Carroll. Working in the 21st Century. New York: John Wiley & Sons, 1980.

Solow, Robert M. The Labor Market as a Social Institution. Cambridge, Massachusetts: Basil Blackwell, Inc., 1990.

Stigler, George. "Information in the Labor Market." Journal of Political Economy 70 (October 1962): 94-105.

Wachtel, Howard M. "Capitalism and Poverty in America: Paradox or Contradiction?" American Economic Review 62 (May 1972): 193-4.

Wachter, Michael. "Primary and Secondary Labor Markets: A Critique of the Dual Approach." Brookings Papers on Economic Activity 3 (1974): 638-651.

Waddell, Robert. "Con Ed's Early Line on Workers." New York Times (1 November 1992): 4(A), 7.

Wial, Howard. "Getting a Good Job: Mobility in a Segmented Labor Market." Industrial Relations 30 (Fall 1991): 396-416.