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Introduction

In a dynamic economy, optimal allocation of resources depends upon the mobility of the factors of production. With respect to labor, this means that workers must be willing to move among jobs in response to perceived differentials in "net economic advantage." For example, if the economy were purely competitive, wage differentials for a given type of work would signify differences in contribution to social product. With perfect mobility, workers would respond to such differentials by moving from where their productivity is low (low-wage firms) to where it is higher (high-wage firms), and this flow would cause the wage to rise in the firms that are losing labor and to fall in those which are adding labor. When wage equalization occurred, labor of the given type would be optimally distributed among firms, and there would be no further stimulus to movement. Thus, in the theory of a competitive labor market, the processes of wage determination and labor allocation are intimately linked. 1/

The crucial role of labor mobility in imparting this kind of flexibility to the economy has stimulated a considerable amount of research on the subject, an important objective of which has been to ascertain the extent to which actual labor markets resemble the competitive model. For example, students of the labor market have attempted to ascertain how mobile the labor force is, who the mobile and immobile workers are, how much knowledge about alternative jobs workers have, the factors they take into account in making job decisions, and whether movement is actually in the direction of higher-wage jobs. 2/ In virtually all of this research, mobility has been measured by the frequency of job changes or by the length of service in a given job assignment.

While data on actual job changes are important for some purposes, they leave something to be desired as measures of mobility in the context of labor market theory. In that context mobility refers to the propensity of workers to make job changes in response to a perceived "net economic advantage" in doing so.

The actual moves that workers make may or may not be reflections of such propensities. Job changes occasioned by layoff or discharge are clearly irrelevant to mobility in the above sense. Even if attention is confined to voluntary job changes, differentials in movement may reflect differences in opportunities rather than in propensities to move. In this paper, we discuss a method of measuring mobility as a propensity to change jobs in response to economic incentives and present the results of such measurement for national samples of employed men in the age groups 16-24 and 45-59.

Source of data

As the first stage of a longitudinal analysis of labor market experience and behavior, interviews were conducted with national probability samples of about 5,000 men 45 to 59 years of age and of the same number of male youth 14 to 24 years of age in the summer and autumn, respectively, of 1966. 3/ In addition to the kinds of attitudinal variables reported in this paper, detailed information was collected on current labor force and employment status, previous employment experience, characteristics of current job or most recent job for those with work experience, education and training, health, assets, income, and labor market status of other family members. Also, questions on retirement expectations were asked of the older group of men and questions on educational plans and occupational aspirations were asked of the youth. Five annual follow-up surveys of the two samples are planned, two of which have already been conducted. 4/ The five-year record of the work experience of the two samples that will ultimately be available will permit the predictive value of our mobility measures to be tested.

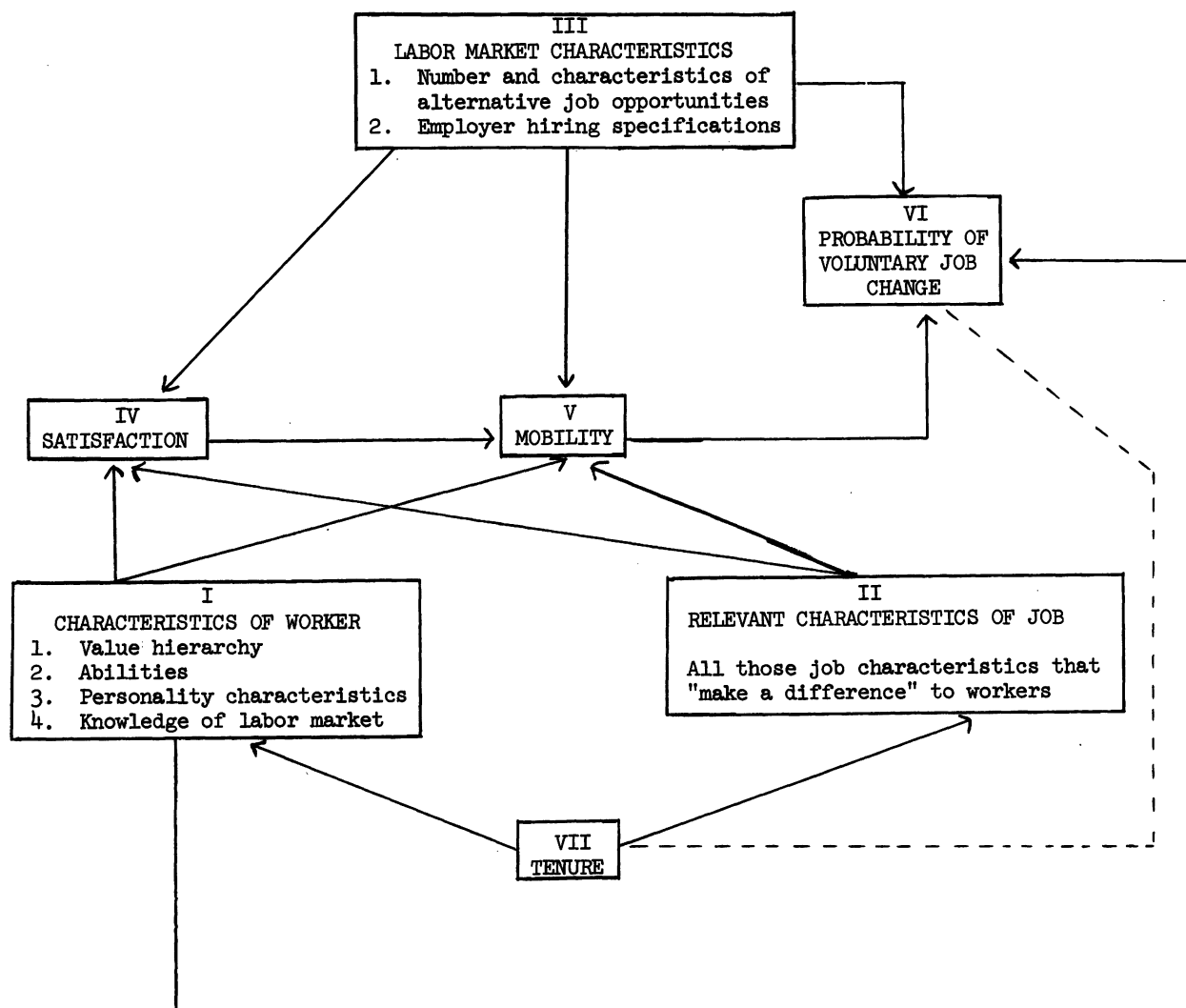
A Conceptual Framework for Studying Mobility

The relationships that we hypothesize among a worker's satisfaction with his job, 5/ his propensity to leave it for a more attractive alternative (mobility), and the probability of his actually making a voluntary job change may be represented schematically as shown in Figure 1, where the arrows are intended to indicate the

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\* The research reported here is part of an ongoing longitudinal study being conducted under contract with the Manpower Administration, U. S. Department of Labor under the authority of the Manpower Development and Training Act. A substantial portion of the paper is an adaptation of materials presented in the first report on that study: Herbert S. Parnes, et al., The Pre-Retirement Years (Columbus: The Ohio State University Center for Human Resource Research, October, 1968). Researchers undertaking such projects under Government sponsorship are encouraged to express their own judgments. Interpretations or viewpoints stated in this paper do not necessarily represent the official position or policy of the Department of Labor.

Figure 1

A CONCEPTUAL FRAMEWORK FOR STUDYING MOBILITY

direction of influence. A worker's satisfaction or dissatisfaction with his job is conceived to be produced by the interaction of three sets of variables: the characteristics of the worker (Box I), the characteristics of the job (Box II), and the characteristics of the labor market (Box III). For example, workers who differ in the relative values they attach to high income versus congenial personal relations would be expected, other things being equal, to register different degrees of satisfaction with a job in a small, low-wage firm. The characteristics of the labor market are also relevant, because they condition the worker's expectations. That is, the degree of satisfaction that a worker feels in a particular job depends in part upon the characteristics of other jobs he happens to know about. 6/

Mobility (Box V), like satisfaction, is conceived to be purely an attitude on the part of the worker. While it is related to satisfaction (note the arrow between IV and V), it is not exclusively a product of it, since the characteristics of the worker, the job, and the labor market may combine to produce a high propensity to change jobs even when satisfaction is high or a low propensity even in the face of dissatisfaction. For example, a worker who places a high premium on security may be unwilling to sacrifice his seniority in his present job despite dissatisfaction with it on other grounds, while an equally dissatisfied worker to whom security is not as important would have fewer reservations about leaving. Or a worker with low satisfaction may nevertheless be reluctant to leave his job because of a

personality structure that makes him fearful of entering a new and unknown environment. 7/ Since mobility refers to a worker's willingness to take another job that is presumably available, it might appear that the character of the labor market is irrelevant. But this is not the case. Since there is no assurance that any proffered job will be permanent, a worker's reaction to exchanging his present job for another will be influenced by his appraisal of the availability of other opportunities should he experience a layoff or should the new job for some other reason not meet his expectations.

The probability that a worker will actually make a voluntary job change (Box VI) depends not only on his propensity to respond to more rewarding opportunities (mobility), but also on the opportunities for movement provided by the labor market (Box III) and those personal characteristics that determine (a) the extent of his knowledge of alternative jobs, (b) his initiative and vigor in pursuing them, and (c) his attractiveness to other employers (Box I). Thus, high mobility does not result in movement unless there are more attractive jobs that the individual knows about and unless he is acceptable to other employers. Labor market characteristics, it should be noted, play a dual role in affecting the probability of a job change: they condition the worker's attitude toward his present job and possible alternatives (satisfaction and mobility) and, at the same time, determine the possibilities for actual movement.

The broken line between Boxes VI and VII is intended to signify that tenure is the retrospective or historical reflection of the probability of movement. The arrows between Box VII and Boxes I and II indicate that length of service in a job operates indirectly to affect satisfaction and mobility through its direct effect on the characteristics of the job and the worker, particularly the former. A job in which a worker has served for ten years differs from the same job when he first entered it both because his tenure creates important equities (e.g., protection against layoff, vacation and pension rights) and because psychological and sociological bonds tend to be stronger. The characteristics of the worker also are affected by tenure. For instance, his relative attractiveness to his employer as compared with his attractiveness to other employers may be expected to increase as the result of the development of skills that are more or less specific to the particular firm.

#### Measures of Satisfaction and Mobility

Satisfaction It is difficult to define job satisfaction operationally, 8/ unless one uses the approach suggested by Hoppock in his early work on the subject: job satisfaction is "any combination of psychological, physiological, and environmental circumstances that

causes a person truthfully to say 'I am satisfied with my job.'" 9/ Our measure of satisfaction is just this simple. Respondents were asked "How do you feel about the job you have now? Do you like it very much, like it fairly well, dislike it somewhat, or dislike it very much?" From the standpoint of our present interest, this measure leaves something to be desired because it is not clear to what extent a respondent is reacting to the intrinsic nature of the work he does and to what extent his response reflects his attitude toward such extrinsic factors as rate of pay, hours of work, nature of supervision, etc. Since there are questions in the interview schedule on the factors liked best and factors liked least about the job, we shall eventually be able to do some experimentation to see whether differentiating between the two sources of satisfaction and dissatisfaction makes a difference so far as interfirm mobility is concerned.

As in virtually all previous surveys that have used a similar question, the vast majority of employed men -- about nine-tenths of the younger sample and a slightly larger proportion of the older group -- express positive attitudes toward their jobs, and negligible numbers -- only about 2 percent -- express strongly unfavorable attitudes (Table 1). 10/ If those who report only moderately favorable attitudes are grouped with the two categories expressing some degree of dislike of their jobs, we have two nearly equal groups -- those who like their jobs very much and all others.

Mobility In view of the definition of mobility as a propensity to respond to perceived economic differentials, we wished to devise a simple measure that would abstract from the respondent's knowledge of the job market and from the number of opportunities that might exist for him, given his characteristics and those of the local labor market area. Moreover, we wanted our measure to relate exclusively to propensity to change employers -- either within or outside the local labor market area. We therefore asked each respondent employed as a wage or salary worker the following question: "Suppose someone in this area offered you a job in the same line of work you're in now. How much would the new job have to pay for you to be willing to take it?" An identical question was asked relating to a hypothetical job somewhere outside the local area. In both cases, responses were coded in relation to current wage rates. Thus, employed males are classified in terms of the percentage increase in rate of pay that they report would be necessary to induce them to make (1) an interfirm shift in the same labor market area, and (2) a geographic shift to some other area of the country. The distributions for both the younger and older men are shown in Table 2.

As anticipated, there are substantial differences in this measure of mobility between the two age groups and, within each group, depending upon whether the reference is to a job

Table 1

Satisfaction with Current Job: Employed Men 16-24 (a) and 45-59 Years of Age, 1966  
(Percentage distribution)

Degree of satisfaction	16-24 years of age	45-59 years of age
Like it very much	49	57
Like it fairly well	40	35
Dislike it somewhat	7	5
Dislike it very much	2	2
Not ascertained	1	1
Total percent	100	100
Total number (thousands)	5,828	13,895

NOTE: In this and all subsequent tables, absolute figures are population estimates based on the number of sample cases. Percentages may not add to 100 because of rounding.

(a) Excludes those enrolled in school.

Source: National Longitudinal Survey

Table 2

Reaction to Hypothetical Job Offer In and Outside of Local Area: Employed Male Wage and Salary Workers 16-24 (a) and 45-59 Years of Age, 1966  
(Percentage distribution)

Reaction to hypothetical job offer	Job offer in local area		Job offer outside local area	
	16-24 years of age	45-59 years of age	16-24 years of age	45-59 years of age
Would accept at same or lower wage	20	13	9	8
Would accept for wage increase of less than 10 percent	8	4	3	1
Would accept for wage increase of 10-50 percent	40	28	24	14
Would accept for wage increase of more than 50 percent	9	9	22	14
Would not accept at any conceivable wage	15	35	29	50
Not ascertained	8	11	13	13
Total percent	100	100	100	100
Total number (thousands)	5,566	11,011	5,566	11,011

NOTE: See note, Table 1

(a) Excludes those enrolled in school.

Source: National Longitudinal Survey

change in the locality or to one that would require a change of residence. <sup>11/</sup> A fifth of the young men but only an eighth of the older group report a willingness to accept a job at the same -- or even a lower -- wage rate. At the other extreme, 35 percent of the older men but only 15 percent of the youth indicate complete immobility -- an unwillingness to take another job in the area at any wage rate. In reacting to a job outside the local area, the proportions of completely immobile workers become one-half and about three-tenths for the older and younger age groups, respectively.

We are aware of the limitations of hypothetical questions as predictors of actual behavior. <sup>12/</sup> For one thing, irrespective of the subject matter, it is virtually impossible to specify all of the hypothetical conditions that might affect an actual decision. In the present case, for example, what exactly is meant by the qualification that the hypothetical job is "in the same line of work?" How large is the firm and how stable are its operations? How conveniently is it located to the respondent's residence? These and many other factors would doubtless be considered by an individual in a "real life" situation. Moreover, it has also been observed that responses to hypothetical questions may simply reflect the respondent's view of how he ought to behave rather than indicate how he would behave. This objection seems less relevant to the present application, since it is doubtful that there are strong moral or ethical considerations involved in most labor market decisions of this kind.

In any case, it is not our intention to interpret any of these responses literally. It is not necessary to debate whether the substantial minority of older men who say they would not change jobs for any conceivable wage increase would really turn down a job paying a million dollars a year. Our only purpose is to categorize individuals according to their relative mobility, i.e., their propensity to respond to economic incentives in the labor market. We therefore assume only that workers who say that they would change jobs for a small (or no) wage increase are more mobile than those who would require a larger increase, and that the least mobile of all are those who assert that they can conceive of no wage increase that would induce them to change. In the analysis that follows, which is confined to a consideration of mobility within the local labor market, we designate as "mobile" those workers who report a willingness to take another job at any specified wage and as "immobile" those who report that they would not take another job at any conceivable wage.

#### Some Correlates of Mobility

Tenure and type of occupation The hypothesized relationship between length of service and mobility as measured by the hypothetical job offer question is strong in the case of the

older group of workers (Table 3). While 64 percent of these workers with less than 10 years of service are mobile, only 43 percent of those with 20 or more years are. In the case of the younger group, there is virtually no such relationship (Table 4), probably because of the very limited variability in tenure among this group whose oldest members are only 24 years of age.

Among the younger group of workers there is no perceptible difference in mobility between white collar and blue collar workers -- about three-fourths of each are mobile. In the case of the older men, however, there is an interesting interaction between type of occupation and length of service. Among those with fewer than 20 years of service, blue collar workers manifest a consistently greater willingness to change employers for more money than do white collar workers. The interoccupation difference in the proportion of mobile workers is 7 percentage points both among those with less than 10 years and those with 10-19 years of service. However, the difference is reversed for those with over 20 years of service, among whom 45 percent of the white collar and 41 percent of the blue collar workers are mobile. Stating this another way, long tenure appears to have a more substantial influence in reducing the mobility of blue collar than of white collar workers, doubtless because of the greater relative importance of seniority in providing job security for the blue collar group.

Degree of job satisfaction Among the 45-59 year age group, degree of job satisfaction and mobility are related in the expected manner: men who say they like their jobs very much are less likely to be mobile than those who express lesser degrees of satisfaction (Table 5). The difference virtually disappears, however, for men with 20 or more years of service. In other words, degree of satisfaction and length of service exert independent influence on mobility only through part of the total range of length of service. Once a worker has accumulated enough service, the degree of satisfaction he feels in his job is almost irrelevant to his willingness to make a change. It is worth noting that the longest service workers who express some reservations about their jobs are nevertheless less mobile even than short service workers who express the highest degree of satisfaction.

The inverse relationship between degree of job satisfaction and mobility is also evident in the case of youth (Table 6). Among both white collar and blue collar employees between the ages of 16 and 24, less than three-fourths of those who are highly satisfied are classified as mobile, as compared with four-fifths of those who express lesser degrees of satisfaction with their jobs.

Table 3

Mobility, (a) by Length of Service in Current Job and Type of Occupation:  
Employed Male Wage and Salary Workers 45-59 Years of Age, 1966

Length of service and type of occupation	Total number (thousands)	Percentage distribution			
		Mobile	Immobile	Not ascertained	Total
Less than 10 years:					
White collar	1,536	59	27	14	100
Blue collar	2,479	66	23	10	100
Total (b)	4,630	64	25	11	100
10-19 years:					
White collar	1,016	48	38	14	100
Blue collar	1,664	55	38	8	100
Total (b)	2,916	52	38	10	100
20 or more years:					
White collar	1,360	45	43	12	100
Blue collar	1,850	41	49	10	100
Total (b)	3,397	43	46	11	100
Total employed: (c)					
White collar	3,932	52	35	13	100
Blue collar	6,030	55	35	9	100
Total (b)	11,011	54	35	11	100

NOTE: See note, Table 1.

- (a) Based on response to hypothetical job offer. Respondents who specified a wage at which they would accept proffered job are classified as mobile. Those who said they would not accept the job at any conceivable wage are classified as immobile.
- (b) Totals include 746 thousand service workers, 281 thousand farm workers, and 23 thousand individuals for whom occupation was not ascertained.
- (c) Includes 68 thousand for whom length of service was not ascertained.

Source: National Longitudinal Survey

Table 4

Mobility, (a) by Length of Service and Type of Occupation: Employed Male Wage and Salary Workers 16-24 Years of Age, Not Enrolled in School, 1966

Length of service and type of occupation	Total number (thousands)	Percentage distribution			
		Mobile	Immobile	Not ascertained	Total
Less than 1 year:					
White collar	616	75	12	13	100
Blue collar	1,972	78	15	7	100
Total (b)	2,937	77	14	9	100
1-2 years:					
White collar	528	76	15	9	100
Blue collar	1,049	78	16	7	100
Total (b)	1,724	77	16	7	100
3 or more years:					
White collar	215	77	17	6	100
Blue collar	576	76	15	8	100
Total (b)	895	76	16	8	100
Total employed: (c)					
White collar	1,359	76	14	10	100
Blue collar	3,598	78	15	7	100
Total (b)	5,566	77	15	8	100

NOTE: See note, Table 1.

(a) See footnote (a), Table 3.

(b) Totals include 355 thousand service workers, 199 thousand farm workers and 53 thousand individuals for whom occupation was not ascertained.

(c) Totals include 8 thousand workers for whom length of service was not ascertained.

Source: National Longitudinal Survey

Table 5

Mobility, (a) by Length of Service in Current Job and Degree of Job Satisfaction: Employed Male Wage and Salary Workers 45-59 Years of Age, 1966  
(Percentage distribution)

Length of service and degree of satisfaction	Total number (thousands)				
		Mobile	Immobile	Not ascertained	Total
Less than 10 years:					
Like job very much	2,446	58	32	11	100
All other	2,143	71	18	11	100
Total (b)	4,630	64	25	11	100
10-19 years:					
Like job very much	1,670	47	42	11	100
All other	1,222	60	32	8	100
Total (b)	2,916	52	38	10	100
20 or more years:					
Like job very much	1,990	42	48	10	100
All other	1,377	44	44	11	100
Total (b)	3,397	43	46	11	100
Total employed: (c)					
Like job very much	6,141	50	40	11	100
All other	4,776	60	29	10	100
Total (b)	11,011	54	35	11	100

NOTE: See note, Table 1.

(a) See footnote (a), Table 3.

(b) Totals include 94 thousand workers for whom degree of job satisfaction was not ascertained.

(c) Total includes 68 thousand workers for whom length of service was not ascertained.

Source: National Longitudinal Survey

Table 6

Mobility, (a) by Type of Occupation and Degree of Job Satisfaction: Employed Male Wage and Salary Workers 16-24 Years of Age, Not Enrolled in School, 1966  
(Percentage distribution)

Type of occupation and degree of satisfaction	Total number (thousands)				
		Mobile	Immobile	Not ascertained	Total
White collar:					
Like job very much	755	72	17	11	100
All other	605	81	11	9	100
Total	1,359	76	14	10	100
Blue collar:					
Like job very much	1,639	74	20	6	100
All other	1,960	81	11	8	100
Total	3,598	78	15	7	100
Total employed: (b)					
Like job very much	2,666	73	19	8	100
All other	2,898	81	11	8	100
Total	5,566	77	15	8	100

NOTE: See note, Table 1.

(a) See footnote (a), Table 3.

(b) Totals include 355 thousand service workers, 199 thousand farm workers and 53 thousand workers for whom occupation was not ascertained.

Source: National Longitudinal Survey

### Relation Between Mobility Measure and Actual Job Movement

The pronounced relationships that have been found to exist between our measure of mobility and age, tenure, and degree of job satisfaction are precisely what one would expect of a variable that did, indeed, represent the propensity of a worker to change jobs. Nevertheless, the real test of the validity of the measure lies in its ability to discriminate, in the context of our conceptual framework, between those who do and those who do not make voluntary job changes. More specifically among the hypotheses that we shall wish to test as the work experience of our samples unfolds are the following: (1) workers whom we have classified as mobile are more likely than those designated as immobile to make voluntary job changes over the five years of the study; (2) among mobile workers, those in "tight" labor markets (low unemployment) are more likely to change jobs voluntarily than those in "loose" labor market areas; (3) controlling for occupation, the probability that a mobile worker will make a voluntary job change is positively related to (a) his education and training and (b) the extent of his knowledge about the labor market.

The only relevant tabulations of follow-up data that are yet available to us relate the mobility characteristics of the older group of men to whether they had changed employers between the 1966 and 1967 surveys. Table 7 shows the proportions of wage and salary workers in 1966 who made voluntary job changes between the two survey dates, classified according to length of service in their 1966 jobs and according to the degree of mobility they evidenced in the 1966 survey. <sup>13/</sup> Men who had been classified as mobile on the basis of their responses in 1966 to the hypothetical job offer question were more than twice as likely as those classified as immobile to have made voluntary job changes between the 1966 and 1967 surveys. This overall difference of about 4 percentage points is statistically significant.

Much of the relationship between our measure of mobility and the probability of actual movement is a reflection of the inverse relationship already described between the mobility measure and length of service in 1966 job, since it is well known that the probability of voluntary job separation is inversely related to length of service. It is important to inquire, therefore, whether the mobility measure discriminates between voluntary job changers and non-changers within length of service categories. The answer to this question appears to be affirmative. Although the differences in the voluntary separation rates of mobile and immobile workers are not large enough to be statistically significant at the 5 percent level, their consistency allows some confidence that they are real rather than simply reflecting sampling variation. As the number of persons who leave their 1966 jobs increases during the 5 years of

the study, we shall probably be able to arrive at a more positive conclusion on this matter.

If one accepts the figures in Table 7 at their face value, the mobility measure shows a stronger relationship to voluntary job changing among long-service than among short-service workers. Among those with less than 10 years of service, men classified as mobile are only slightly more likely than those classified as immobile to have changed jobs (11.6 versus 8.6 percent); among men with 10-19 years of service, the mobile are three times as likely as the immobile to have changed jobs (3.4 percent versus 1.1 percent) and among those with 20 or more years of service, eight times as likely (2.4 percent versus 0.3 percent).

Stated another way, length of service appears to have an effect on the probability of a voluntary separation that is independent of the worker's propensity to move as measured by the hypothetical job offer question. This may mean that there are dimensions of mobility that the question does not measure. Alternatively, or additionally, it may reflect the fact that tenure is associated with characteristics of the worker that interact with the characteristics of the labor market in such a way as to cause opportunities for movement to be different for workers with different periods of service in their current jobs. The positive association between length of service and age is an obvious example. It is also clear that long service in a job makes a worker more valuable to the current employer, who is therefore more likely than he would be in the case of a shorter service employee to match an offer from a competing employer, and thus prevent the job change.

### Conclusion

From a methodological point of view, our findings to date suggest that a question posing a hypothetical job offer can be used as a measure of the mobility of workers, defined as their propensity to change employers in response to a perceived economic advantage in doing so. Additional analysis of the data over a longer period of time and in relation to additional variables will be necessary before we can be confident that the measure provides a substantially better basis for predicting actual job changes than length of service alone would provide.

From a substantive point of view, perhaps the most important conclusion to be drawn from our findings thus far is that labor mobility is a much more complex phenomenon than would be imagined on the basis of conventional labor market theory, which tends to conceive of labor as a more or less homogeneous and fluid factor continuously flowing -- or at least oozing -- in the direction of net economic advantage. While this conception is doubtless valid and adequate for many purposes, it neglects the rich variety of behavior that actually exists in the labor market. A full understanding of how the labor market operates requires knowledge of who the mobile and immobile



Table 7

Number of Wage and Salary Workers Employed in 1966 and Proportions Making Voluntary Job Changes (a) between 1966 and 1967, by Length of Service and Mobility (b) in 1966 Job: Men 45-59 Years of Age in 1966

Length of service in 1966 job	Mobile workers, 1966		Immobile workers, 1966		Total (d)	
	Number (thousands)	Percent voluntary changers	Number (thousands)	Percent voluntary changers	Number (thousands)	Percent voluntary changers
Under 10 years	2,953	11.6	1,154	8.6	4,630	10.6
10-19 years	1,520	3.4	1,105	1.1	2,916	2.2
20 or more years	1,449	2.4	1,573	0.3	3,397	1.3
Total (c)	5,967	7.1	3,848	3.0	11,011	5.4

NOTE: See note, Table 1.

(a) The data probably understate slightly the number of job changers for two reasons. First, 5.8 percent of the 1966 sample were not re-interviewed in 1967, 1.7 percent because they could not be located. The latter group probably includes a disproportionately large number of job changers. Second, as the result of a tabulation error, persons who shifted from a wage or salary job in 1966 to self-employment in 1967 are not included among the job changers.

(b) See footnote (a), Table 3.

(c) Totals include 68 thousand workers for whom length of service was not ascertained.

(d) Totals include 1,196 thousand workers for whom mobility was not ascertained.

Source: National Longitudinal Survey

workers are and of the various characteristics of individuals and of the environment that condition their responses. The framework for analysis presented in this paper offers some hope of shedding additional light on questions of these kinds.

#### FOOTNOTES

1 For a fuller treatment of conventional labor market theory and a critical evaluation of it, see Lloyd G. Reynolds, The Structure of Labor Markets (New York: Harper and Brothers, 1951).

2 For a review of the literature, see Herbert S. Parnes, "Labor Force: Markets and Mobility," International Encyclopedia of the Social Sciences (New York: The Macmillan Company and The Free Press, 1968), Vol. 8, pp. 481-487.

3 The samples were designed by the U.S. Bureau of the Census, and interviewing was done by the same Census enumerators who are responsible for the Current Population Survey. For a description of the sampling, interviewing, and estimating procedures, see Herbert S. Parnes, Belton M. Fleisher, Robert C. Miljus, Ruth S. Spitz and Associates, The Pre-Retirement Years: A Longitudinal Study of the Labor Market Experience of the Cohort of Men 45-59 Years of Age (Columbus: The Ohio State University Center

for Human Resource Research, October, 1968) Volume 1, Appendix B, and Herbert S. Parnes, Robert C. Miljus, Ruth S. Spitz and Associates, Career Thresholds: A Longitudinal Study of the Educational and Labor Market Experience of Male Youth 14-24 Years of Age (Columbus: The Ohio State University Center for Human Resource Research, February, 1969) Volume 1, Appendix B.

4 Comparable studies are being made of two age groups of women: 14 to 24 and 30 to 44 years old. No tabulations for either of these are as yet available.

5 We use "job" in this paper to refer to an affiliation with a particular employer rather than to service in a particular occupation, although we believe that the conceptual framework is equally relevant to occupational mobility.

6 One study has found that among workers with equal starting salaries, those whose previous jobs had paid more had higher quit rates than those who had come from lower-paying jobs. Reported in Frederick Herzberg et. al., Job Attitudes: Review of Research and Opinion (Pittsburgh: Psychological Service of Pittsburgh, 1957), p. 106.

7 See Nancy Morse, Satisfactions in the White Collar Job (Ann Arbor: University of Michigan Press, 1953), p. 53.

8 For a recent review of the literature on job satisfaction which stresses the difficulties of definition, see Bonnie Carroll, Job Satisfaction, Key Issues Series - No. 3, (Ithaca: New York State School of Labor and Industrial Relations, February, 1969), pp. 2-3.

9 Robert Hoppock, Job Satisfaction (New York: Harper and Brothers, 1935), p. 47.

10 It seems doubtful that many workers can psychologically afford to admit (even to themselves) dissatisfaction with a situation in which they apparently "choose" to remain. "Well, I guess I'm satisfied or else I wouldn't have stayed here, would I?" is not an atypical response by manual workers to a question on job satisfaction.

11 Because the samples are not purely random, conventional tests of statistical significance cannot be used. Using a formula suggested by Bureau of the Census statisticians, we have constructed charts which indicate roughly, for different ranges of bases and different magnitudes of the percentages themselves, whether a measured difference between two percentages may be considered to be signifi-

cant at the 5 percent level. (See The Pre-Retirement Years, op. cit., Appendix C, pp. 258-266; Career Thresholds, op. cit., Appendix C, pp. 213-221). In this paper, we attach appropriate qualifications to any findings that do not meet this test of significance.

12 See, for example, Claire Selltiz, Marie Jahoda, Morton Deutsch, and Stuart W. Cook, Research Methods in Social Relations (New York: Holt and Company, 1960), p. 250; John Dollar, "Under What Conditions Do Opinions Predict Behavior?", Public Opinion Quarterly, Winter, 1948, pp. 628-632; S. L. Payne, The Art of Asking Questions (Princeton: Princeton University Press, 1951), p. 236.

13 These data probably slightly understate the proportions of wage and salary workers in 1966 who made job changes. For one thing, 5.8 percent of the 1966 sample were not re-interviewed in 1967, including 1.7 percent who could not be located, among whom there were probably a disproportionate number of job changers. Secondly, men who shifted from wage and salary jobs to self-employment have inadvertently been excluded from the job changers.