Retirement, Re-entry, and Part-Time Work

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I. INTRODUCTION

Recent work on partial retirement has dispelled the notion that retirement is a simple proposition of either working full-time or not at all. Analysis of a sample from the Retirement History Survey of men aged 58 to 73, for example, shows that '37 percent spent some time in partial retirement (as defined below), while only 35 percent followed the "classic" path of moving from full employment to full retirement in one step. Reductions in work effort, moreover, were often followed by increases in activity. Many who partially retired returned to full-time employment and many others, who had left the labor force completely, re-entered later, most often into part-time work. Among the 2542 men in the sample, 710 new jobs were begun in the ten years after the start of the survey. On a month-to-month basis, there was one transition involving an increase in work effort for every four involving a decrease.

The question, whether older persons can work to meet financial needs after leaving their career jobs, is an important policy issue. Declines in real Social Security benefits, beginning in the year 2000 for those retiring before age 67, assume replacement financing by increased pension income, private savings, and, especially, by earnings. As pension vesting becomes widespread, an increasing fraction of the older work force will face incentives for early retirement for their career jobs which, with greater longevity, will increase the span of the "retirement years" to two or three decades. The ability of older persons to smooth consumption of both goods and leisure over this extended period, and in particular, their ability to respond to unforeseen changes in income or needs by increasing their earnings, is of concern to policy makers. For those with minimal pension or asset income, re-entry is likely to provide the only means of maintaining living standards above poverty levels.

Despite considerable research on retirement behavior, the exact path and timing of retirement from career jobs and of post-retirement market activity is still not well understood. In a larger project we are examining the retirement process in a continuous-time, multiple-state life-cycle model of labor supply under uncertainty. This paper first discusses some basic conceptual issues that arise in examining the dynamics of individual retirement behavior. It then explores the patterns of observed transitions among the discrete retirement states of full retirement, partial retirement, and non-retirement, including transitions to states of greater activity. Finally, it analyzes the relationship between transition type and factors such as age, health, pension eligibility, occupation, industry, and past earnings. The data are drawn from the Retirement History Survey (RHS), a sample of married males aged 58–63 in 1969 who were interviewed biennially through 1979.

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earnings over his/her working life; partial retirement is defined as positive current earnings less than 80 percent of the lifetime maximum; see fuller discussion below.) Thirty-two percent of those who report that they are not retired are, by an earnings measure, partially or fully retired; and 36 percent of those who report that they are partially retired are, we observe, not currently working. Nearly two thirds of the latter had not worked in the past year (Honig and Reimers

Moreover, these distributions change with age. The proportion of individuals having the same objective labor force status who claim to be fully retired increases significantly with age. Among those fully retired (as defined by having zero earnings), for example, only 70% of those aged 58-61 say they are fully retired, while 84% of those aged 62-64, and 94% of those 65-70 do so (Honig and Reimers 1987, Table 2). What is clearly true of the subjective measure, if nothing else, is that it is age-dependent and likely to be socially conditioned. This raises the obvious question of how useful self-reports are as an analytical tool, except in attitudinal studies.

Self-reported retirement status may serve as an indicator of intentions (i.e., future labor force status) or persistence in a state over time, and may thereby provide more information than a measure of current labor supply. However, among those with zero earnings at the time of one interview, only a slightly higher (and still very small) proportion (2.8 percent) of those who reported that they were partially or not retired were working in the next interview, compared with 2.2 percent of those who had said they were fully retired. Self-reported status, in other words, either correlates poorly with intentions or else intentions are rarely fulfilled. In neither case would the subjective definition of retirement provide more information about future behavior than a measure of current labor supply.

The self-reported measure is often claimed to be better than a labor supply measure for capturing exit from the career job and pension acceptance. While many older individuals no doubt subjectively define their retirement status relative to their career job, a more direct measure of career job exit—acceptance of pension benefits—is available and would be the preferred definition of retirement in studies focusing specifically on retirement from career jobs.

Earnings and Hours as Measures of Retirement

1987, Table 3).

For most other analyses of retirement behavior, and certainly for those involving income maintenance policy, the critical issue is labor force status. We use two alternative measures, earnings and hours of work, to illuminate two different aspects of the retirement process. While working part-time is commonly used as a definition of partial retirement, it misses what we have found to be an important dimension of the retirement process—wage reductions.

There is by now considerable evidence that older workers do not face parametric wage rates; i.e., do not choose hours of work subject to a linear budget constraint. Reduced hours of work appear to be available only at reduced wages (Moffitt 1984, Gordon and Blinder 1980, and Gustman and Steinmeier 1982, 1983). Retirement from the career job, moreover, may involve loss of seniority rents and firm-specific human capital. In addition, easier working conditions may involve a compensating wage differential which, at given hours of work, would not be detected in an hours of work definition.

From Table 2 we see that the retirement process involves wage changes to a much greater extent than previously believed. Only 10 percent of all downward transitions from non-retirement to partial retirement (defined by earnings; see full discussion below) among males in

Two findings are of particular interest, since they contradict some common perceptions regarding retirement. Self-reported measures of retirement, which frequently have been used to define retirement status, are only weakly related to labor force status, either recent, current, or future. Moreover, transitions from non-retirement into partial retirement (as defined by an earnings measure) more often involve a change in wages and less often, a change in hours per week. Our evidence shows that gradual retirement does not usually entail a transition to part-time employment, as is commonly believed. Instead, it more often takes the form of a move to a less demanding (lower wage) full-time job, or to part-year, full-time employment.

II. DEFINING AND MEASURING RETIREMENT

Self-Reported vs. Labor Supply Measures

Retirement may be defined by at least three criteria: self-reported status, hours of work, and earnings. The latter two are preferable since they are based on measurable behavior in the labor market. Many analysts, however, have used self-reported status, and even among those using a labor supply measure, there has been concern that an hours or earnings measure may miss an important dimension of retirement behavior that is best captured by a subjective report. We discuss briefly, therefore, what the self-reported measure does and does not convey about retirement behavior. Table 1 shows retirement status as measured by self-reported status and an earnings measure (current monthly earnings relative to the individual's maximum monthly

TABLE 1

Retirement Status at Time of Interview, 1969–1979:

Comparison of Status Defined by Relative Earnings and by Self-Report (Males Aged 58–73)

Status by Relative Earnings	Fully Retired	Partially Retired	Not Retired	Total	
Fully Retired	91.6%	5.6%	2.8%	100.0% (N = 6078)	
Partially Retired	4.6	27.0	68.4	100.0 (N = 2041)	
Not Retired	0.7	1.8	97.6	100.0 (N = 3346)	
Total	49.6	8.3	42.1	100.0 (N = 11465)	
	Star	tus by Relative Earni	ngs;		
Self-Reported Status	Fully Retired	Partially Retired	Not Retired	Total	
Fully Retired	98.0%	1.6%	0.4%	100.0% (N = 5683)	
Partially Retired	35.8	57.9	6.2	100.0 (N = 950)	
Not Retired	3.5	28.9	67.6	100.0 (N = 4832)	
Гotal	53.0	17.8	29.2	100.0 (N = 11465)	

TABLE 2
Sources of Change Causing Transitions between Non-Retirement and Partial Retirement
(Males, by Age)*

			Number Attributed to:					
Age	Transition	Total	Change in Wage**	Change in Hours**	Change in Both**			
58-61	NR to PR	162	79	9	74			
36-01	PR to NR	85	39	2	44			
62–64	NR to PR	245	69	29	147			
02-04	PR to NR	98	41	4	53			
65.70	NR to PR	94	19	15	60			
65–70	PR to NR	39	20	4	15			

*NR = Non Retirement

PR = Partial Retirement

FR = Full Retirement

**See text for definition

the RHS were due primarily (i.e, at least 75 percent of the total change in earnings) to a drop in weekly hours. An even smaller proportion, 5 percent, of the upward transitions from partial to non-retirement were due primarily to changes in hours. Surprisingly, part-time work appears to play a less important role than analysts of retirement behavior have assumed. Only 9 percent of the male workers aged 62–64 in the RHS were employed less than 35 hours per week. Even among those aged 65–67, employment at less than 35 hours per week never accounted for more than 40 percent of total employment. (These proportions are consistent with those in the Current Population Survey for comparable years.) In light of these findings, a measure of retirement which focuses solely on hours of work obviously would not capture a major component of retirement behavior.

Because some people have low earnings throughout their lives, an absolute earnings criterion would be inappropriate for defining partial retirement, however. This is particularly true of women, many of whom work part time throughout their careers. In the tables below, a relative earnings measure is used, in which partial retirement is defined as positive current monthly earnings less than 80 percent (in real terms) of maximum lifetime earnings (and, if the person was classified as non-retired in the previous month, a decline in nominal earnings of at least 20 percent from the previous month). A ratio of current to peak real earnings of 0.8 is used to conform to the usual definition of part-time work as less than 35 hours per week, which is a little over 80 percent of average full-time hours. Even if a person is still working full-time hours, a decline in real earnings of 20 percent from the lifetime peak would reflect a major change in job or work activity. A month-to-month decline in nominal earnings of at least 20 percent is used to avoid generating spurious transitions from non-retirement to partial retirement due to changes in the price index or to minor fluctuations in reported earnings. A person is defined as non-retired if his/her current real monthly earnings are at least 80 percent of his/her maximum lifetime earnings; and, for one classified as partially retired in the previous month, if his/her real earnings rose by at least 20 percent from month to month. This prevents an ordinary wage increase on a continuing job from appearing to be a transition to a state of higher labor force activity.

Discrete vs. Continuous Changes in Labor Supply

In the simple life-cycle theory of labor supply, the earnings profile is smoothly concave, with the decline being generated by wage reductions related to declining productivity. Observed earnings, however, often do not decline continuously. For example, Burtless and Moffitt (1984) report sudden and discontinuous drops below 30 hours per week in their sample from the RHS. Moreover, these observed discrete drops in earnings may be associated with a change of job, occupation, and/or residence, entry into self-employment, or with changes in the work contract (e.g., to part-time or consulting status).

Since the retirement process appears to involve changes in job and occupation as well as discrete jumps in earnings, it is most naturally characterized by a model that examines transitions among states, rather than one that treats labor supply as a continuous variable. The notion of partial retirement as a behaviorally distinct retirement state has been confirmed empirically for both men and women (Honig and Hanoch 1985, and Honig 1985). These discrete changes in behavior suggest the possibility that response functions may shift with retirement status, and that the underlying labor supply function may involve important discontinuities in level and slope. These can be investigated most conveniently within a framework of discrete retirement states.

Re-entry

Simple life-cycle models that assume perfect certainty, and in which changes in labor supply reflect changes in productivity, cannot account for re-entry or transitions stepping up the level of market activity. Such transitions would be predicted, however, by a model that allowed for uncertainty and adjustment to surprises. In fact, older individuals experience considerable uncertainty about key aspects of their lives, such as their own and their spouses' health, market opportunities, productivity, and even tastes. This study assumes, therefore, that retirement plans are continuously re-evaluated in the light of unanticipated fluctuations in the value of non-market time (due to changes in health or marital status, for example) or market wage offers, which may lead to increased market activity.

Re-entry may also be planned in advance, of course, as part of an optimal intertemporal path of labor supply. Foreseen changes in the net wage due to the Social Security earnings test or to cycles in aggregate economic activity, for example, may induce planned fluctuations in labor supply. Market constraints that do not permit a continuous variation in hours, or preferences regarding the configuration of leisure time, may generate movements in and out of retirement as well. Alternatively, if increasing tastes for leisure focus on the "lumpier" aspects of non-market time such as extended vacations, desires may be realized only by labor force exit and re-entry. For example, a person who wants to work one quarter of the total time in two years may plan to work not at all one year and half-time the next, either because quarter-time jobs are unavailable or because a consecutive year of leisure is desired for some project such as travel.

This study considers two types of leisure: non-market time of the normal kind and on-the-job "leisure." The latter may be thought of in terms of ease of working conditions: pleasant surroundings, absence of job pressure, minimal responsibility. Increased demand for this type of leisure ("burn-out" applies to assembly-line workers as well as executives) may not be satisfied on the career job due to wage rigidity or other institutional constraints. Foreseeing this, a worker might plan re-entry following termination of the career job.

It is of course difficult to distinguish between planned and unanticipated re-entry since some new information available to the individual is not available to the analyst. Observable events such as death of spouse, worsening of health, substantial out-of-pocket medical expenses, changes in the rate of inflation, and involuntary unemployment may be included, however, to capture the influence of "surprises" on the decision to re-enter.

The Period of Analysis

Most previous analyses of dynamic retirement behavior, especially those using the RHS, have used two-year discrete time models. These models understate the amount of movement among states, and especially the amount of re-entry and increases in labor force activity. Month-to-month transitions show a higher ratio of upward to downward transitions than are apparent over a two year period (Honig and Reimers 1987, Tables 5 and 6). The two-year time period smooths the fluctuations in labor supply behavior and allows the long-term trend toward full retirement to dominate the observed pattern. Much of the detail of retirement behavior is thus obscured. In this study a monthly work history has been constructed for each individual, using the Social Security records and the information in the RHS about the dates jobs began and ended, wages, and hours worked.³ From this, the timing of transitions among the three states—non-retirement, partial, and full retirement—and durations of spells in each state, are determined to the nearest month.4 (For example, a transition from full-time work in May to full retirement in June is classified as such, not as a partial retirement during the entire year.) Use of a month as the time unit reveals more detail of the different patterns of work activity by older people. For example, it will be possible to see whether the Social Security benefit reduction based on a monthly earnings test (in effect during most of the survey period) led to "cycling" between periods of full-time and no work.

Monthly data also allow use of a continuous-time duration model to estimate the parameters of the conditional transition probability, or hazard, functions for multiple spells and multiple states. The continuous-time duration model has many theoretical advantages over the regression models of spell duration or the discrete-time logit models that have commonly been used to analyze retirement behavior. Sample attrition bias does not arise in continuous-time models, for example. Time-varying values of exogenous variables are easily accommodated, and findings may be used to predict transition probabilities for time periods of any length (See Honig and Reimers 1987, Appendix, for a fuller discussion).

The next section discusses some preliminary findings drawn from the monthly work histories of males in the RHS aged 58-73.

III. PATTERNS OF RETIREMENT TRANSITIONS

Table 3 presents the distribution of month-to-month transitions among retirement states by age. The majority of transitions are downward at all ages, but there is a relative increase in upward moves by those aged 65–70. Only 16 percent of the transitions by 62–64 years olds are upward, as compared with 22 percent of the transitions by 65–70 years olds.

Not surprisingly, 63 percent of the transitions by 58-61 year olds involve downward moves out of non-retirement, while 72 percent of the transitions by 65-70 year olds are moves into full retirement. What is somewhat surprising is that the percentage of non-retirees moving to full retirement increases so dramatically between ages 58-61 and 62-64. Twice as many of the transitions by 62-64 year olds are from non-retirement to full retirement (42 percent) as are

TABLE 3
Distribution of Transition Types 1969–79: Males, by Age*

		Ε	Oown Transition	18				
Age		NR to PR	R to PR NR to FR		PR to NR	FR to PR	FR to NR	Total
58-61	N	185	147	54	88	33	22	529
	%	35.0	27.8	10.2	16.6	6.2	4.2	. 100%
62–64	N	254	536	268	97	87	21	1263
	%	20.1	42.4	21.2	7.7	6.9	1.7	100%
65-70	N	101	512	528	40	258	16	1455
	%	6.9	35.2	36.3	2.7	17.7	1.1	100%

*NR - Non Retirement

PR - Partial Retirement

FR = Full Retirement

from non-retirement to partial retirement (20 percent). While this might be attributed to Social Security eligibility at age 62, receipt of benefits does not require a complete stoppage of work.

We see the expected age-related shifts in destination of transition, given the original state. Of 58-61 year old non-retirees who appreciably reduce their earnings rate, the majority (56 percent) move into a partial retirement job; while 68 percent of 62-64 year old (and 84 percent of 65-70 year old) non-retirees who move "down" fully retire (i.e., stop work entirely for at least one month). Partial retirees who change states are much more likely to move up, the younger they are. Of moves out of partial retirement, 62 percent are to non-retirement of age 58-61; whereas 27 percent are to non-retirement at age 62-64, and only 7 percent are to non-retirement at age 65-70. Similarly, men who go back to work after a period of full retirement are much less likely to move into non-retirement (i.e., earn over 80 percent of their lifetime peak monthly earnings), the older they are.

The vast majority of transitions between non-retirement and partial retirement occur within the same firm. This is not surprising when we recall that these men are moving directly between the two states within a month, without an intervening spell out of a job. Eighty-seven percent of those who make the transition directly from non-retirement to partial retirement do so within the same firm they had been working for. Of those who move directly from partial retirement to non-retirement, 95 percent do so while continuing with the same employer. Of a total of 710 jobs with new employers obtained by the 2542 men in our sample, only 12 percent involved transitions between non-retirement and partial retirement. Sixty-three percent represented moves out of full retirement, while the remaining 25 percent involved a change of employer without a change in retirement status. Of the moves out of full retirement, 88 percent were into partial retirement. This suggests that, even if these "fully retired" men were out of work for only a month or two, their behavior was part of a retirement process rather than typical of prime-age job changers.

Table 4 shows the proportion of those making each transition who report that a health limitation affects their ability to work, for each age group. Health is strongly associated with retirement state and transition type. In the total sample, half the men who remain fully retired from one month to the next have a health problem; while only 27 percent of those who stay in partial retirement, and only 20 percent of those who stay in non-retirement, report poor health. For each age group, those moving between non-retirement and partial retirement, or up from

TABLE 4
Proportion with Health Limitation, by Age and Type of Transition (Males)*

	Do	own Transitio	ons	Late	eral "Transit	ions"	Up Transitions			
Age	NR to PR	NR to FR	PR to FR	PR to PR	NR to NR	FR to FR	PR to NR	FR to PR	FR to NR	
58-61	.19	.35	.26	.26	.19	.70	.20	.36	.23	
62-64	.20	.35	.43	.28	.20	.57	.21	.33	.14	
65-70 All	.18	.26	.36	.28	.18	.48	.17	.38	.19	
ages:	.19	.31	.31	,27	.20	.51	.20	.36	.18	

*NR = Non Retirement

PR = Partial Retirement

FR = Full Retirement

full retirement to non-retirement, are also the least likely (about 20 percent) to be in poor health; while about 35 percent of those moving from full retirement to partial retirement have a health problem.

Over all ages combined, about 30 percent of those moving down from non-retirement or partial retirement to full retirement report a health limitation, but this proportion varies by age. Health limits are much more common among those moving from partial retirement to full retirement after age 61 than at younger ages. On the other hand, the association of poor health with the transition from non-retirement to full retirement diminishes after age 64; and, among those remaining in a state, the influence of health on full retirement also diminishes with age: 70 percent of the 58–61 years olds who remain fully retired report a health limitation, while only 48 percent of the 65–70 year olds do. This strong interaction of health with age is not observed for those who stay in partial retirement or non-retirement, or for upward transitions, nor for downward moves from non-retirement to partial retirement.

Table 5 shows the relation between pension eligibility and transitions among retirement states, for different age groups. For each age group, those moving from non-retirement directly to full retirement are most likely to have a pension. In the youngest group, those least likely to have a pension are those moving from full retirement up to non-retirement. Among 62–64 year olds, those least likely to have a pension are those remaining in partial retirement; whereas among 65–70 year olds, it is those who move from partial retirement to non-retirement.

TABLE 5
Proportion Eligible to Receive Pension, by Age and Type of Transition (Males)*

	Do	wn Transitio	ons	Late	eral "Transiti	ons"	Up Transitions			
Age	NR to PR	NR to FR	PR to FR	PR to PR	NR to NR	FR to FR	PR to NR	FR to PR	FR to NR	
58-61	.18	.38	.20	.16	.28	.30	.26	.21	.09	
62-64	.45	.66	.43	.34	.54	.52	.39	.40	.43	
65–70 All	.57	.75	.59	.50	.59	.65	.40	.59	.56	
ages:	.38	.67	.52	.36	.44	.60	.34	.51	.35	

*NR = Non Retirement.

PR = Partial Retirement.

FR = Full Retirement.

TABLE 6
Proportions of Down Transitions in Each Industry and Occupation Group by Age and Type of Transition (Males)*

	Proportion of those making given transition who were in:												
Age	Manufacturing			Services			Trade			Blue Collar Occ.			
	NR to PR	NR to FR	PR to FR	NR to PR	NR to FR	PR to FR	NR to PR	NR to PR	PR to FR	NR to PR	NR to PR	PR to FR	
58-61	.58	.73	.52	.25	.17	.28	.14	.09	.15	.71	.70	.80	
62-64	.59	.68	.51	.26	.21	.27	.13	.09	.16	.65	.67	.74	
65-70	.43	.67	.44	.29	.24	.32	.24	.07	.17	.45	.62	.69	

*NR = Non Retirement.

PR = Partial Retirement.

FR = Full Retirement.

Non-retirees of all ages who move to full retirement are much more likely to have a pension than those who remain non-retired. For non-retirees under age 65, those who move to partial retirement are *less* likely to have a pension than those who remain non-retired. However, after age 65 pension is not associated with the choice between partial and continued non-retirement, for non-retirees. The association of pension with full retirement is borne out by the fact that full retirees who go back to work are less likely to have a pension than those who remain fully retired, at all ages. For full retirees, after age 62 there is little association between pension availability and the choice between partial retirement and non-retirement. At ages 58–61, however, those who move from full retirement to non-retirement are much less likely to have a pension than those who move from full retirement to partial retirement.

Table 6 indicates the distribution of downward transitions among the major industry groups and by a blue collar/white collar occupational breakdown. Comparing transitions from non-retirement, we see that men employed in manufacturing tend to move proportionately more into full retirement, while those in services and trade move into partial retirement. These distinctions become even sharper for those retiring at age 65 and above. On a broad occupational breakdown, blue-collar workers tend to move equally into partial and full retirement at younger ages but predominantly into full retirement if they retire at age 65 or above.

In Table 7 we see further evidence that partial retirement may be concentrated among particular groups of workers. In transitions down from non-retirement, for example, lifetime peak earnings (monthly) are higher for those moving into partial retirement as opposed to full retirement. This pattern is consistent across age groups, the dollar differential increasing with

TABLE 7

Mean of Lifetime Peak Monthly Earnings, by Age and Type of Transition*

Age	Down Transitions			I	ateral Transitio	ns	Up Transitions		
	NR to PR	NR to FR	PR to FR	PR to PR	NR to NR	FR to FR	PR to NR	FR to PR	FR to NR
58-61	\$856	\$795	\$673	\$829	\$ 753	\$654	\$689	\$782	\$675
62-64	847	756	812	844	769	693	657	922	771
65-70	871	774	840	850	861	752	827	814	755
All ages:	852	769	816	841	772	735	699	827	724

*NR = Non Retirement

PR = Partial Retirement.

FR = Full Retirement.

age. Similarly, among those re-entering the labor force, peak lifetime earnings are higher for men moving into partial retirement. This is true as well for those remaining in a given retirement state (the lateral "transitions"): lifetime peak earnings are higher for those in partial retirement than in either full or non-retirement. To summarize Tables 6 and 7, partial retirement appears to be more prevalent among higher paid, white collar workers in services and trade. This pattern may, of course, reflect differential preferences for leisure or, on the demand side, differential employment opportunities.

IV. CONCLUSION

This paper has discussed some of the conceptual issues involved in examining the dynamics of individual retirement behavior, and has presented some preliminary evidence about certain factors related to retirement transitions. A number of important findings emerge. First, much of the mobility among retirement states, as defined above, is obscured if time periods as long as two years are used as the unit of analysis. Secondly, the self-reported measures of retirement status used in many studies bear only a weak relationship to labor force status, either current, past, or future. Third, wage declines play a far more important role in the retirement process than is commonly believed. Finally, partial retirement appears to be more prevalent among higher paid, white collar workers in trade and services.

The degree to which older persons can work as needed to maintain income after leaving their career job is a policy issue of growing importance. These findings are the first results from an ongoing study; work in progress will attempt to quantify the factors facilitating and inhibiting the labor market mobility of the elderly.

FOOTNOTES

1. For a description of these data, see Irelan (1976).

2. The monthly earnings test in Social Security, in which full monthly benefits were payable for monthly earnings below the maximum regardless of annual earnings, was eliminated in 1978 to reduce such planned movements. Annual earnings may still be reduced by part-year employment, however.

- 3. Wages and hours are used as reported at the time of the interview, or are calculated from reported annual earnings, months worked, and quarters of Social Security earnings. By combining all of the information in the RHS and the Social Security earnings record, we were able to determine dates and earnings for all jobs except in those cases where a man was (i) employed at two different jobs at consecutive interviews, (ii) a third job began and ended between the two interviews, and (iii) there were no quarters without reported SS earnings. Among the 2887 total jobs held by the 2542 men in our sample, there were 119 such jobs (4 percent of the total) to which we could not assign dates. In these cases, we defined the period between the two jobs held at the successive interviews as a spell of partial retirement. Because such spells may in fact consist of one or more periods of full retirement interspersed with periods of employment, this procedure downwardly biases the number of transitions while avoiding the generation of spurious transitions.
- 4. We assume that individuals move from being out of the labor force to an employed state without ever reporting themselves unemployed, as is in fact observed in the data (see Flinn and Heckman 1982). Our tabulations of the RHS reveal extremely low unemployment rates (two percent or less) for males and females: we therefore ignore unemployment as a separate state.
- 5. Due to the aging of the RHS panel and the uneven size of the age brackets, the numbers of men in the sample vary across age groups. Therefore Table 3 cannot tell us about the age distribution of a particular transition (i.e., percentages of column totals are meaningless). However, we can compare the distributions of transition types across age groups.

REFERENCES

- Burtless, Gary and Robert Moffitt, "The Effect of Social Security Benefits on the Labor Supply of the Aged," in *Retirement and Economic Behjavior*, Henry J. Aaron and Gary Burless (eds.), The Brookings Institution, Washington, DC, 1984.
- Flinn, Christopher J. and James J. Heckman, "New Methods for Analyzing Structural Models of Labor Force Dynamics," *Journal of Econometrics* 18(1982):115–168.
- Gustman, Alan L. and Thomas L. Steinmeier, "Partial Retirement and Wage Profiles of Older Workers," NBER Working Paper 1000, 1982.
 - , "A Structural Retirement Model," NBER Working Paper, 1983.
- Gordon, Roger H. and Alan S. Blinder, "Market Wages, Reservation Wages and Retirement Decisions,"

 Journal of Public Economics, 14(1980):227-308.
- Honig, Marjorie, "Partial Retirement Among Women," Journal of Human Resources 20(1985):613-621.
- Honig, Majorie and Giora Hanoch, "Partial Retirement as a Separate Mode of Retirment Behavior." Paper prepared for Brookings Institution Study on Aging and Retirement, 1982; Journal of Human Resources 20(1985):21-46.
- Honig, Marjorie and Cordelia Reimers, "The Labor Market Mobility of Older Workers," Hunter College Economics Department Working Paper, March 1987.
- Irelan, Lola M., "Retirement History Study: Introduction," in Almost 65: Baseline Data from the Retirment History Study, Office of Research and Statistics, Department of Health, Education, and Welfare, GPO, 1976.
- Moffitt, Robert, "The Estimation of a Joint Wage-Hours Labor Supply Model," Journal of Labor Economics 2(1984):550-566.