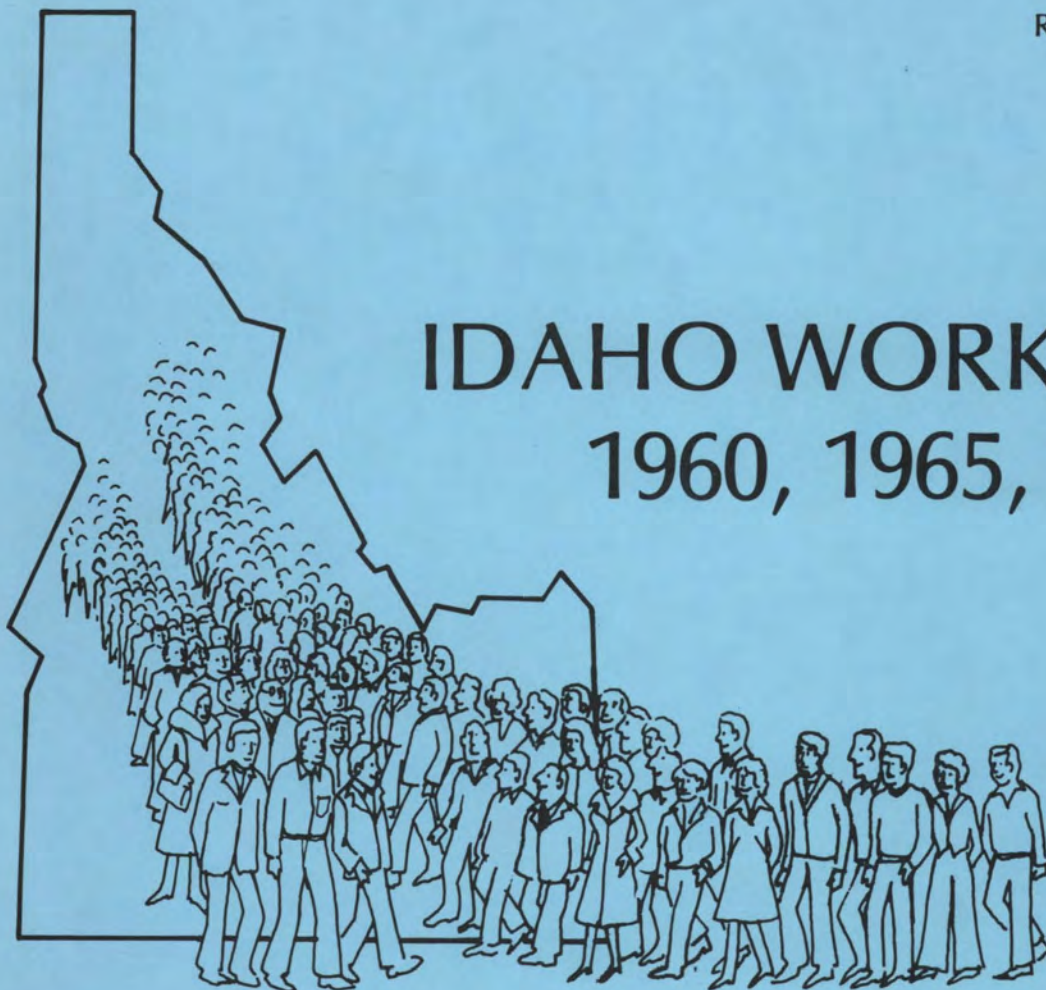


Research Bulletin No. 89  
January 1976

# IDAHO WORK FORCE 1960, 1965, 1970

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A Descriptive Comparison of the  
Resident and Migrant Components  
of the OASDI Covered Work Force



*Agricultural Experiment Station*

**UNIVERSITY OF IDAHO**

*College of Agriculture*



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Published and distributed by  
Idaho Agricultural Experiment Station  
R. J. Miller, Director

University of Idaho College of Agriculture  
Moscow 83843

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## Acknowledgements

Thanks are respectfully extended to Lloyd Bender, Economic Research Service, Bozeman, for arranging the purchase through ERS of the migration tape obtained from the Social Security Administration and Bureau of Economic Analysis. The Office of Research and Information Systems, State of Montana, provided considerable assistance in obtaining the data, including the development by Gary Rogers of the computer software used for data retrieval and generation of table output. The Montana State University Computer Center staff provided invaluable assistance in readying the data files and providing technical assistance whenever needed. Montana Vice President for Research Dr. Roy Huffman provided administrative assistance throughout the project. Idaho Extension economist Dr. James Nelson made a number of suggestions regarding the interpretation of the tables.

The Montana State University Agricultural Experiment Station and the Idaho Agricultural Experiment Station provided salary support and computer time.

The report is part of a larger project, W-118, Economic and Social Significance of Human Migration for the Western Region. W-118 is a Cooperative Regional Project supported by regional research funds, Hatch Act, as amended August 11, 1955.

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# IDAHO WORK FORCE: 1960, 1965, 1970

## Introduction

This report on the state of Idaho is one of a series to be produced by the western state Experiment stations in conjunction with regional project W-118, Economic and Social Significance of Human Migration in the Western Region. The series compares residents and migrants in the employed work force for each of the western region states.

The series is divided into state and regional sections. The regional section is an univariate breakdown of migrants for each state by each other state in the western region and by all other states in a combined category. Also included is general work force information for each state.

The state section, a more detailed statement of migration and comparison with residents, briefly describes the total work force, residents, and migrants by sex, age, industry, and wage level.<sup>1</sup> Several cross-classifications of these characteristics are provided as well as percent change in wage level and ranking of wage level comparing resident and migrant categories, and wage level and industry transition matrices for those working in each period.

This report is a description of only a subset of the employed work force--those persons covered by the social security system. Data for these reports are taken from a national sample of the social security system files with all identification removed.<sup>2</sup> The strengths of this data are described by Cartwright and Horowitz:

"The strength of this is its ability to trace persons from place to place and job to job. From this file one may examine selected characteristics of the social security covered work force of an area at a given point in time or as it changes over time. Estimates can be made for any grouping of counties for any 2 points in time: the number of covered work force at the beginning and end of the time period; inmigrants during that time period; outmigrants; nonmigrants; new entrants into the covered work force, and exits from the covered work force. The migrants can be cross-classified by sex, race, age, industry, or wage class."<sup>3</sup>

The file also contains some weaknesses and limitations. Because the file does not contain any self-employed persons the agricultural work force, for example, is vastly understated. **No attempt should be made by the reader to use the agricultural informa-**

**tion presented to infer any characteristics to the employed work force in agriculture.** Other groups which may lack adequate representation include government workers and railroad employees. In addition, all military personnel have been excluded from the tabled output.

Another restriction in the use of the data is sample size. The social security continuous work history sample is a 1% sample, thus identification of major groups by various characteristics is almost impossible at the county level, unless highly populated counties are involved. Point estimates derived from cross-classifying by several characteristics should be taken as crude at best for states with relatively small populations, such as Idaho.<sup>4</sup>

Use of the Old-Age, Survivors, and Disability Insurance (OASDI) data base allows presentation of comparable information for each of the western states. To assure comparability, similar tables will be printed in each of the state publications.

This paper is not intended to be a definitive analysis of the data presented herein--that would be beyond the purposes of this project and would require more research time than was available. The data are presented with the expectation that it will be useful to others. The analysis presented is cursory--describing what is in the data and calling attention to interesting relationships. Perhaps, for the research minded, this paper will suggest areas where further definitive research would be feasible and useful.

## Definitions

Several definitions are needed before one can adequately interpret the information presented in this report. With the exception of Table 10, the total

<sup>1</sup>States included in the state series are Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

<sup>2</sup>Social Security Continuous Work History Sample.

<sup>3</sup>Cartwright and Horowitz 1973. Migration Data Assembled by the Bureau of Economic Analysis, Regional Economic Analysis Division, from the Social Security Work History Sample. Working paper, Bureau of Economic Analysis, Regional Economic Analysis Division, U.S. Department of Commerce.

<sup>4</sup>For a more detailed presentation of technical limitations, see Cartwright and Horowitz, op. cit.



work force covered by a given 1960-1965 or 1965-1970 table includes only those persons employed both at the beginning and at the end of the period. An entrant to the work force in 1962 will not be included in the 1960-1964 table, nor will a person employed in 1960 but not in 1965. Table 10, Industry Work Force by Sex, Idaho 1960-1965-1970, does include for each period those persons employed who may not have been employed in any other period.

Definitions of the column headings for the Idaho migration tables are:

**WORKING:** Persons employed in both years indicated and employed in Idaho in at least one of the years indicated.

**RESIDENTS:** Persons employed in Idaho in both years indicated.

**INMIGRANTS:** Persons employed but not in Idaho in the first year indicated and employed in Idaho in the second.

**INMIGRANTS FROM CONTIGUOUS STATES:** Persons employed in Washington, Oregon, Nevada, Utah, Wyoming, or Montana in the first year indicated and employed in Idaho in the second.

**INMIGRANTS FROM OTHER STATES:** Persons employed in any state but Washington, Oregon, Nevada, Utah, Wyoming, Montana, and Idaho in the first year indicated and employed in Idaho in the second.

**OUTMIGRANTS:** Persons employed in Idaho in the first year indicated and employed but not in Idaho in the second.

#### **OUTMIGRANTS TO CONTIGUOUS STATES:**

Persons employed in Idaho in the first year indicated and employed in Washington, Oregon, Nevada, Utah, Wyoming, or Montana in the second.

**OUTMIGRANTS TO OTHER STATES:** Persons employed in Idaho in the first year indicated and employed in any state but Washington, Oregon, Nevada, Utah, Wyoming, Montana, and Idaho in the second.

Except in the transition matrices and Table 10, ages, industry of employment, and wage level are all figured from the latter year of any period. For instance, in a 1960-1965 table, a person classified as 35 years old would have been born in 1930, a person listed as employed in the mining industry would have been employed in that industry in 1965, and a person with a wage of \$5000 would have had that wage in 1965. In the transition matrices, persons are classified both at the beginning and at the end of a period, and in Table 10, persons are classified only in a single year.

The industry classifications used are those designated by Office of Statistical Standards, Standard Industrial Classification Manual, 1967. Employees unclassified in industry were omitted from the industry tables, except when a person was working but unclassified in the first year of a period and working and classified in the second, and in the transition matrices as indicated.

Zero entries in the tables occur when data is insufficient for that cell. In ranking tables, cells which have insufficient data are assigned the remaining rank values with the left-most unoccupied cell assigned the highest remaining rank.

## Interpretation of OASDI Data

### Migration Status by Sex

A net outmigration of people is a problem that has plagued Idaho for many years (Table 1). Of the approximately 128,600 workers covered by Social Security, employed somewhere in both 1960 and 1965, and employed in Idaho in at least one of those years, the 1% sample found that only 60.7% resided in Idaho in both 1960 and 1965. Of the 128,600 continuously employed covered workers, 18.4% were inmigrants, while a larger number, 20.8%, were outmigrants. This net outmigration of workers for the 1960-1965 period holds for both male and female workers.

The net outmigration of covered workers continued between 1965 and 1970. Of the 139,300 workers in this time period, 16.5% were inmigrants and 19.2% were outmigrants. The total covered work

force was larger in the latter period despite net outmigration because of population growth. The population turnaround, which some observers claim is occurring in Idaho, would be subsequent to the 1965-70 period.<sup>5</sup>

The male portion of Idaho's continuously employed work force is more mobile than the female portion (Table 1). Of the 94,200 male workers employed somewhere in both 1960 and 1965, and employed in Idaho in at least one of those years, the 1%

<sup>5</sup>The analysis in this report should be extended as soon as the 1975 OASDI 1% sample data becomes available. This new data will reveal much about the characteristics of the people now moving to Idaho. An extension of this research using 1975 OASDI data would provide such information years before similar data will be available from the 1980 population census.



sample indicates only 55.8% resided in the state on both dates. In contrast 74.1% of the 34,400 female workers were residents on both dates. This relatively greater male mobility is evident for both the 1960-65 and the 1965-70 time periods. Mobility of the continuously employed covered work force was a bit lower in the more recent period, immigration dropping from 18.4 to 16.5% and outmigration falling from 20.8 to 19.2%.

## Mean Wages and Wage Increase by Migration Status and Sex

The information in Table 2 supports the hypothesis that people move because of the opportunity to earn more money. Covered workers who were Idaho residents in both 1960 and 1965 managed a 27.5% increase in wages. Workers who moved into the state achieved a 1965 wage which was 40.4% above

**Table 1. Migration status by sex in Idaho, 1960-65 and 1965-70.**

Sex	Residents	Immigration			Outmigration			Working
		(1)	(2)	Total	(1)	(2)	Total	
<b>1960-65</b>								
Male	52600	8200	11200	19400	10900	11300	22200	94200
% of working	55.84	8.70	11.89	20.59	11.57	12.00	23.57	100.00
Female	25500	1800	2500	4300	2900	1700	4600	34400
% of working	74.13	5.23	7.27	12.50	8.43	4.94	13.37	100.00
TOTAL	78100	10000	13700	23700	13800	13000	26800	128600
% of working	60.73	7.78	10.65	18.43	10.73	10.11	20.84	100.00
<b>1965-70</b>								
Male	56700	7700	11200	18900	10800	11100	21900	97500
% of working	58.15	7.90	11.49	19.38	11.08	11.38	22.46	100.00
Female	32900	1400	2700	4100	3000	1800	4800	41800
% of working	78.71	3.35	6.46	9.81	7.18	4.31	11.48	100.00
TOTAL	89600	9100	13900	23000	13800	12900	26700	139300
% of working	64.32	6.53	9.98	16.51	9.91	9.26	19.17	100.00

(1) From and to contiguous states

(2) From and to other states

**Table 2. Mean wages and wage increase by migration status and sex in Idaho, 1960-65 and 1965-70.**

Sex	Residents	Immigration			Outmigration			Working
		(1)	(2)	Total	(1)	(2)	Total	
<b>Male</b>								
1960 mean wage	4559	4583	3625	4030	3847	3887	3867	4287
1965 mean wage	5783	5500	5797	5671	6142	5721	5928	5794
% change	26.84	20.00	59.92	40.73	59.66	47.19	53.28	35.15
<b>Female</b>								
1960 mean wage	2502	2117	1977	2035	2189	1767	2033	2381
1965 mean wage	3250	2554	2969	2795	3348	3351	3349	3206
% change	29.88	20.67	50.19	37.34	52.94	89.61	64.72	34.65
<b>TOTAL</b>								
1960 mean wage	3888	4139	3324	3668	3499	3610	3553	3777
1965 mean wage	4956	4970	5281	5150	5555	5411	5485	5102
% change	27.48	20.06	58.86	40.39	58.78	49.90	54.40	35.06
<b>Male</b>								
1965 mean wage	5450	5372	4566	4895	4656	5030	4846	5206
1970 mean wage	7743	8002	6871	7332	7806	8652	8235	7774
% change	42.08	48.95	50.47	49.79	67.64	72.01	69.94	49.31
<b>Female</b>								
1965 mean wage	2920	2740	2895	2842	2180	2681	2368	2849
1970 mean wage	4163	3364	3735	3608	4972	4739	4885	4192
% change	42.59	22.77	29.01	26.96	128.12	76.75	106.31	47.14
<b>TOTAL</b>								
1965 mean wage	4521	4967	4242	4529	4118	4702	4400	4499
1970 mean wage	6428	7289	6262	6668	7190	8106	7633	6699
% change	42.20	46.73	47.63	47.24	74.60	72.39	73.46	48.90

(1) From and to contiguous states

(2) From and to other states



their 1960 earnings at their old residence. Outmigrants from Idaho managed an even greater pay increase of 54.4% between 1960 and 1965.

The same situation is evident for the period 1965 to 1970. Continuous resident wage increases of 42.2% were exceeded by the 47.2% rise for inmigrants and the 73.5% jump for outmigrants. People who moved were able to improve themselves more than those who stayed in one place--and those who moved out of Idaho obtained greater pay increases than those who moved in.

Table 2 also shows a surprisingly similar pattern of mean wage levels. For the aggregate covered work force, those who move tend to reach higher average wage levels than those who don't move. The highest mean wage levels for both 1965 and 1970 were achieved by people who had worked in Idaho but were then working elsewhere.

This situation has several implications for regional development. During these 5-year periods, Idaho had a net outmigration of workers, drawn by better wages offered elsewhere. These non-competitive wage rates resulted, one supposes, because new jobs were being created in Idaho at a slower rate than the natural growth of the Idaho work force. These lower wage rates could, perhaps, be exploited as stimulant to regional development--attracting labor intensive industry to Idaho.

A similar pattern of wage changes held for both male and female workers--those who moved tended to get greater pay increases than those who stayed--except for one interesting difference. Female continuously employed inmigrants to Idaho tended to get smaller wage increases than males--37.3% vs. 40.7% for 1960-65 and 27.0% vs. 49.8% for 1965-70. In contrast, female outmigrants tended to get relatively larger increases--64.7% vs. 53.3% for 1960-65 and 106.3% vs. 69.9% for 1965-70. For 1965-70 relative pay increases, the female inmigrants actually fared worse than the female covered workers who did not move.

Although one is tempted to see this data as evidence of sex discrimination in the Idaho pay scales relative to the situation in other states, these numbers should be used with care. The numbers could result from voluntary differences in occupation mix and part vs. full time job mix for Idaho working women, rather than real discrimination.

The situation got more severe in the 1965-70 time period. If one accepts the hypothesis that discrimination is causing these patterns, then perhaps Idaho is lagging behind the efforts of other states to eliminate such discrimination.

When the subject of sex discrimination arises, the first inclination is to compare relative wage levels for males and for females. Resident female wages were 56.2% of male wages in 1960-65, declining to 53.8% in 1965-70. Mean wages for resident males

the 2 years were \$5783 in 1965 and \$7743 in 1970 and for resident females were \$3250 and \$4163.

Inmigrant female wages compared even worse with their male counterparts, while female outmigrant wages compared somewhat better. The female outmigrant got 56.5% as much as her male counterpart in 1960-65 and 59.3% as much in 1965-70. Wages were \$5671 and \$5928 for males in 1965 for inmigrants and outmigrants; they increased to mean levels of \$7332 and \$8235 in 1970 for inmigrants and outmigrants. Females, in comparison, had 1965 wages of \$2795 for inmigrants and \$3349 for outmigrants and in 1970 had mean incomes of \$3608 for inmigrants and \$4885 for outmigrants.

As has been pointed out before, this is not necessarily evidence of discrimination. Causes could be the different types of jobs performed, the different mix of part vs. full time work, and perhaps different levels of experience -- the female work force has been growing more rapidly, thus must contain fewer experienced workers. The question of whether or not this is discrimination will not be settled in this paper.

## Migration Status by Age and Sex

The migration literature also suggests that both age and sex may be important determinants of who migrates. Tables 3, 4, and 5 show the percent of those covered employees, by age and sex, working somewhere in both 1960 and 1965 or 1965 and 1970, who were Idaho residents in both periods, who were inmigrants, or who were outmigrants.

The young to early middle-aged worker and the male worker have greater mobility. Migrants on the average are much younger than the residents. By studying Tables 3, 4, and 5, one can also observe some sex differences in the worker age profiles. For example, the female resident category is deficient in child bearing age workers when compared to the age profile of resident male workers. Also noted is a slight excess of middle aged and older women in the inmigrant group and slight deficiency for this age group in the outmigrant category, relative to the male profiles -- in 1960-65, 24.7% of male inmigrants were over 44 compared to 34.9% of female inmigrants, and 32.9% of male outmigrants exceeded 44 compared to 23.9% of female outmigrants.

Tables 3, 4, and 5 also allow analysis of the affects of sex and age on patterns in net migration. Since the sample size was small, usefulness of the data is limited. The largest net migration case was for males aged 30 to 34 for 1965 to 1970, for which 19 more people outmigrated than inmigrated -- inflated to 1900 because of the 1 in 100 sampling percentage. Questions of accuracy are raised in cases where sample net migration is less than 10.

Recognizing these problems, the first surge of migration is outmigration for the young age 20 to 24 continuously employed worker--perhaps leaving to



**Table 3. Migration status by age and sex in Idaho, 1960-65.**

Age	Residents	Immigration			Outmigration			Working	Total Net Migration
		(1)	(2)	Total	(1)	(2)	Total		
<b>20-21</b>									
Male	300	0	200	200	0	200	200	700	0
% of working	42.86	.00	28.57	28.57	.00	28.57	28.57	100.00	.00
Female	0	0	0	0	0	0	0	0	0
% of working	.00	.00	.00	.00	.00	.00	.00	.00	.00
<b>22-24</b>									
Male	1700	200	700	900	700	1400	2100	4700	-1200
% of working	36.17	4.26	14.89	19.15	14.89	29.79	44.68	100.00	-25.53
Female	1000	100	100	200	200	100	300	1500	-100
% of working	66.67	6.67	6.67	13.33	13.33	6.67	20.00	100.00	-6.67
<b>25-29</b>									
Male	4600	1500	3400	4900	2000	2900	4900	14400	0
% of working	31.94	10.42	23.61	34.03	13.89	20.14	34.03	100.00	.00
Female	1700	500	600	1100	800	200	1000	3800	100
% of working	44.74	13.16	15.79	28.95	21.05	5.26	26.32	100.00	2.63
<b>30-34</b>									
Male	6700	1200	2000	3200	1500	1400	2900	12800	300
% of working	52.34	9.38	15.62	25.00	11.72	10.94	22.66	100.00	2.34
Female	1400	300	200	500	200	400	600	2500	-100
% of working	56.00	12.00	8.00	20.00	8.00	16.00	24.00	100.00	-4.00
<b>35-39</b>									
Male	6300	1200	1400	2600	1600	1600	3200	12100	-600
% of working	52.07	9.92	11.57	21.49	13.22	13.22	26.45	100.00	-4.96
Female	1900	0	500	500	600	300	900	3300	-400
% of working	57.58	.00	15.15	15.15	18.18	9.09	27.27	100.00	-12.12
<b>40-44</b>									
Male	5800	1500	1300	2800	900	700	1600	10200	1200
% of working	56.86	14.71	12.75	27.45	8.82	6.86	15.69	100.00	11.76
Female	3700	300	200	500	600	100	700	4900	-200
% of working	75.51	6.12	4.08	10.20	12.24	2.04	14.29	100.00	-4.08
<b>45-49</b>									
Male	7800	600	1200	1800	1500	1400	2900	12500	-1100
% of working	62.40	4.80	9.60	14.40	12.00	11.20	23.20	100.00	8.80
Female	3300	200	200	400	200	300	500	4200	-100
% of working	78.57	4.76	4.76	9.52	4.76	7.14	11.90	100.00	-2.38
<b>50-54</b>									
Male	7300	1100	300	1400	1500	1000	2500	11200	-1200
% of working	65.18	9.82	2.68	12.50	13.39	8.93	22.32	100.00	-9.82
Female	4200	100	100	200	100	0	100	4500	100
% of working	93.33	2.22	2.22	4.44	2.22	.00	2.22	100.00	2.22
<b>55-59</b>									
Male	5500	600	500	1100	400	200	600	7200	500
% of working	76.39	8.33	6.94	15.28	5.56	2.78	8.33	100.00	6.94
Female	4500	100	400	500	200	200	400	5400	100
% of working	83.33	1.85	7.41	9.26	3.70	3.70	7.41	100.00	1.85
<b>60-64</b>									
Male	3500	200	200	400	500	300	800	4700	-400
% of working	74.47	4.26	4.26	8.51	10.64	6.38	17.02	100.00	-8.51
Female	2800	100	200	300	0	0	0	3100	300
% of working	90.32	3.23	6.45	9.68	.00	.00	.00	100.00	9.68
<b>65 and over</b>									
Male	2900	100	0	100	300	100	400	3400	-300
% of working	85.29	2.94	.00	2.94	8.82	2.94	11.76	100.00	-8.82
Female	1000	100	0	100	0	100	100	1200	0
% of working	83.33	8.33	.00	8.33	.00	8.33	8.33	100.00	.00
<b>TOTAL</b>									
Male	52600	8200	11200	19400	10900	11300	22200	94200	-2800
% of working	55.84	8.70	11.89	20.59	11.57	12.00	23.57	100.00	-2.97
Female	25500	1800	2500	4300	2900	1700	4600	34400	-300
% of working	74.13	5.23	7.27	12.50	8.43	4.94	13.37	100.00	-.87

(1) From and to contiguous states

(2) From and to other states



**Table 4. Migration status by age and sex in Idaho, 1965-70.**

Age	Residents	Immigration			Outmigration			Working	Total Net Migration
		(1)	(2)	Total	(1)	(2)	Total		
<b>20-21</b>									
Male	200	0	0	0	100	200	300	500	-300
% of working	40.00	.00	.00	.00	20.00	40.00	60.00	100.00	-60.00
Female	200	0	0	0	0	0	0	200	0
% of working	100.00	.00	.00	.00	.00	.00	.00	100.00	.00
<b>22-24</b>									
Male	2600	400	1400	1800	600	1200	1800	6200	0
% of working	41.94	6.45	22.58	29.03	9.68	19.35	29.03	100.00	.00
Female	1000	100	0	100	600	400	1000	2100	-900
% of working	47.62	4.76	.00	4.76	28.57	19.05	47.62	100.00	-42.86
<b>25-29</b>									
Male	6900	1800	3600	5400	2000	2600	4600	16900	800
% of working	40.83	10.65	21.30	31.95	11.83	15.38	27.22	100.00	4.73
Female	2600	600	800	1400	400	400	800	4800	600
% of working	54.17	12.50	16.67	29.17	8.33	8.33	16.67	100.00	12.50
<b>30-34</b>									
Male	5800	700	1200	1900	2300	1500	3800	11500	-1900
% of working	50.43	6.09	10.43	16.52	20.00	13.04	33.04	100.00	-16.52
Female	2500	200	500	700	200	100	300	3500	400
% of working	71.43	5.71	14.29	20.00	5.71	2.86	8.57	100.00	11.43
<b>35-39</b>									
Male	6800	1700	1300	3000	1600	1200	2800	12600	200
% of working	53.97	13.49	10.32	23.81	12.70	9.52	22.22	100.00	1.59
Female	3400	100	200	300	300	300	600	4300	-300
% of working	79.07	2.33	4.65	6.98	6.98	6.98	13.95	100.00	-6.98
<b>40-44</b>									
Male	6200	1000	1800	2800	1000	1100	2100	11100	700
% of working	55.86	9.01	16.22	25.23	9.01	9.91	18.92	100.00	6.31
Female	3300	200	100	300	400	200	600	4200	-300
% of working	78.57	4.76	2.38	7.14	9.52	4.76	14.29	100.00	-7.14
<b>45-49</b>									
Male	6200	600	800	1400	1600	1000	2600	10200	-1200
% of working	60.78	5.88	7.84	13.73	15.69	9.80	25.49	100.00	-11.76
Female	5400	100	400	500	600	200	800	6700	-300
% of working	80.60	1.49	5.97	7.46	8.96	2.99	11.94	100.00	-4.48
<b>50-54</b>									
Male	7000	700	300	1000	500	1000	1500	9500	-500
% of working	73.68	7.37	3.16	10.53	5.26	10.53	15.79	100.00	-5.26
Female	3800	0	100	100	300	200	500	4400	-400
% of working	86.36	.00	2.27	2.27	6.82	4.55	11.36	100.00	-9.09
<b>55-59</b>									
Male	7600	400	400	800	900	600	1500	9900	-700
% of working	76.77	4.04	4.04	8.08	9.09	6.06	15.15	100.00	-7.07
Female	4600	100	200	300	200	0	200	5100	100
% of working	90.20	1.96	3.92	5.88	3.92	.00	3.92	100.00	1.96
<b>60-64</b>									
Male	5300	300	400	700	100	500	600	6600	100
% of working	80.30	4.55	6.06	10.61	1.52	7.58	9.09	100.00	1.52
Female	3900	0	300	300	0	0	0	4200	300
% of working	92.86	.00	7.14	7.14	.00	.00	.00	100.00	7.14
<b>65 and over</b>									
Male	2100	100	0	100	100	200	300	2500	-200
% of working	84.00	4.00	.00	4.00	4.00	8.00	12.00	100.00	-8.00
Female	2200	0	100	100	0	0	0	2300	100
% of working	95.65	.00	4.35	4.35	.00	.00	.00	100.00	4.35
<b>TOTAL</b>									
Male	56700	7700	11200	18900	10800	11100	21900	97500	-3000
% of working	58.15	7.90	11.49	19.38	11.08	11.38	22.46	100.00	-3.08
Female	32900	1400	2700	4100	3000	1800	4800	41800	-700
% of working	78.71	3.35	6.46	9.81	7.18	4.31	11.48	100.00	-1.67

(1) From and to contiguous states

(2) From and to other states



take a first full time job after earlier part time employment in Idaho or even college students employed part time in another state after earlier part time work in Idaho. After that the situation gets erratic.

Female continuously covered workers tended toward immigration from 25 to 35 then outmigration in middle ages 35 to 55 and immigration in later years. The male pattern differed in its strong outmigration for the 30 to 34 age group in 1965-70 and in the immigration showing up at 40 to 45. Although male outmigration diminished for the older worker, tendency toward net immigration was not apparent.

## Percent Wage Increase by Migration Status, Age, and Sex

Many of the individual age-sex groupings in Table 6 show wage changes consistent with the previous result--that those who move are rewarded more than those who stay put, and that outmigrants are rewarded more than immigrants. Many exceptions to this pattern can be found, but most of these can be ignored because of the extremely small sample size used in computing the wage changes.

These figures clearly show that age is an important factor in determining the size of wage increases--although small sample sizes make these numbers behave erratically. Young people tended to get larger increases, gradually trailing off to smaller increases

for the older workers. This is consistent with the greater mobility of the young and the principle that those who move get higher pay. The pattern is also consistent with a rapid job status change by young people--the extreme case being the 22-24 age group which held low paying and part time work--at age 17-19--at the start of the time periods and graduated to higher paying permanent jobs by the end of the periods.

Percent of wage increase for both male and female workers averaged 35% in the study period 1960-65 and 49% for males and 47% for females in the 1965-70 period (Table 6). Males averaged greater wage increases than females in the young ages 20 to 29, but females had greater overall wage increases in the middle years 40 to 59. Wage boosts were similar for 30 to 39 and 60 and over.

A further study reveals that outmigrants for both time periods had better wage increases than either immigrants or resident workers of Idaho. Contrary to this overview was the younger age group again, with both male and female workers ages 20 to 24 coming into the state having better wage increases than those already in state or those who sought work out of state.

Outmigrants fared best in ages 25 to 59 but resident workers had better wage increases in the age span 60-64 for the study periods.

Table 5. Age profile by sex and migration status, 1960-65 and 1965-70.

	20-21	22-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65 and over
Percent Who are of Indicated Age											
<b>Working</b>											
1960-65											
Male	.7	5.0	15.3	13.6	12.9	10.8	13.3	11.9	7.6	5.0	3.6
Female	.0	4.4	11.1	7.3	9.6	14.2	12.2	13.1	15.7	9.0	3.5
1965-70											
Male	.5	6.4	17.3	11.8	12.9	11.4	10.5	9.7	10.2	6.8	2.6
Female	.5	5.0	11.5	8.4	10.3	10.1	16.0	10.5	12.2	10.1	5.1
<b>Resident</b>											
1960-65											
Male	.6	3.2	8.8	12.7	12.0	11.0	14.8	13.9	10.5	6.7	5.5
Female	.0	3.9	6.7	5.5	7.5	14.5	12.9	16.5	17.7	11.0	3.9
1965-70											
Male	.4	4.6	12.2	10.2	12.0	10.9	10.9	12.3	13.4	9.3	3.7
Female	.6	3.0	7.9	7.6	10.3	10.0	16.4	11.6	14.0	11.9	6.7
<b>Inmigrant</b>											
1960-65											
Male	1.0	4.6	25.3	16.5	13.4	14.4	9.3	7.2	5.7	2.1	.5
Female	.0	4.7	25.6	11.6	11.6	11.6	9.3	4.7	11.6	7.0	2.3
1965-70											
Male	.0	9.5	28.6	10.1	15.9	14.8	7.4	5.3	4.2	3.7	.5
Female	.0	2.4	34.1	17.1	7.3	7.3	12.2	2.4	7.3	7.3	2.4
<b>Outmigrant</b>											
1960-65											
Male	.9	9.5	22.1	13.1	14.4	7.2	13.1	11.3	2.7	3.6	1.8
Female	.0	6.5	21.7	13.0	19.6	15.2	10.9	2.2	8.7	.0	2.2
1965-70											
Male	1.4	8.2	21.0	17.4	12.8	9.6	11.9	6.8	6.8	2.7	1.4
Female	.0	20.8	16.7	6.3	12.5	12.5	16.7	10.4	4.2	.0	.0



Note that this table contains several examples where women immigrants obtain higher percentage pay increases than does the corresponding outmigrant group. These few cases are contrary to evidence contained elsewhere in this report. These aberrations are most likely caused by small sample problems and wide variability in individual wage history.

## Employment and Migration Status by Industry

Table 7 indicates the number and percentage of workers who were continuously employed covered residents and migrants, classified according to the industry which employed the workers at the end of the period. In study period 1960-65, the trades, manufacturing, and services employed the most workers, with agricultural related, mining, and financial related fields having the fewest employees. The percentages of those workers employed in the various professions were: trade 25.1, manufacturing 21.7, services 20.0, contract construction 10.9, transportation and public utilities 7.2, government 6.2, finance, insurance, and real estate 4.8, mining 3.7, and agriculture, forestry, and fisheries .4.

The percentage of those workers employed in the various professions in the more recent period were: manufacturing 24.9, trade 23.6, services 23.6, contract construction 8.4, transportation and public utilities 6.4, government 6.4, finance, insurance, and real estate 4.7, mining 1.0, and agriculture, forestry and fisheries .9.

The figures confirm the a-priori expectation that contract construction workers would be the more mobile group. The percent of construction workers classed as residents ranged from 41 in 1960-65 to 56 in 1965-70. Workers employed by government proved to be among the least mobile, with 76% in 1960-65 and 77% in 1965-70 classed as residents.

The more recent time period indicated a shrinking proportion of construction workers in the migrant streams and a large and growing proportion of manufacturing and service employees. The trade segment also loomed large in the migrant stream, although the proportion of immigrants who find work in the trades is shrinking, while the fraction of outmigrants who do is growing.

## Mean Wages and Wage Increase by Migration Status, Sex, and Industry

Table 8 shows percentage wage increases for each class of workers and indicates whether the larger percent increase went to residents, immigrants, or outmigrants. Again, placing too much faith in these numbers is dangerous because of the small sample sizes involved. However, the hypothesis that people move in response to wage differentials is not seriously challenged by anything in this table.

Table 6. Percent wage increase by migration status, age, and sex in Idaho, 1960-65 and 1965-70.

Age		Resi- dents	Immigration			Outmigration			Work- ing
			(1)	(2)	(3)	(1)	(2)	(3)	
<b>20-21</b>									
Male	(1960-65)	242	0	1884	1884	0	765	765	561
Female		0	0	0	0	0	0	0	0
Male	(1965-70)	259	0	0	0	2243	699	1079	385
Female		34	0	0	0	0	0	0	34
<b>22-24</b>									
Male	(1960-65)	168	806	216	271	489	172	263	224
Female		103	3273	1636	2581	1190	769	967	162
Male	(1965-70)	336	570	489	508	246	627	449	409
Female		132	1020	0	1020	499	390	438	256
<b>25-29</b>									
Male	(1960-65)	57	55	121	94	108	121	114	87
Female		37	-35	48	7	31	327	53	33
Male	(1965-70)	81	75	123	103	171	124	145	103
Female		88	-7	87	39	194	67	124	78
<b>30-34</b>									
Male	(1960-65)	42	8	71	45	53	29	40	42
Female		59	28	108	60	-23	102	62	59
Male	(1965-70)	55	53	98	77	67	125	92	70
Female		36	-2	44	32	194	185	191	46
<b>35-39</b>									
Male	(1960-65)	30	22	47	36	43	80	61	39
Female		33	0	150	150	66	-25	37	49
Male	(1965-70)	41	43	65	53	80	56	69	50
Female		53	-7	-22	-17	88	11	48	46
<b>40-44</b>									
Male	(1960-65)	24	12	42	22	24	41	32	25
Female		36	94	-44	12	91	258	111	42
Male	(1965-70)	27	16	2	7	36	42	39	25
Female		54	58	192	85	129	24	80	60
<b>45-49</b>									
Male	(1960-65)	22	27	21	23	47	7	25	23
Female		35	-26	5	-11	17	23	20	29
Male	(1965-70)	45	73	5	34	25	27	25	39
Female		34	87	-13	0	60	132	77	34
<b>50-54</b>									
Male	(1960-65)	15	12	33	17	46	9	28	18
Female		20	23	-26	1	42	0	42	19
Male	(1965-70)	34	17	-10	7	23	26	25	30
Female		59	0	43	43	163	21	85	61
<b>55-59</b>									
Male	(1960-65)	14	-17	27	7	35	36	36	14
Female		33	92	35	50	48	535	89	38
Male	(1965-70)	26	25	4	13	86	56	72	30
Female		32	165	100	128	39	0	39	36
<b>60-64</b>									
Male	(1960-65)	18	57	-4	7	75	-68	-14	13
Female		12	14	44	40	0	0	0	13
Male	(1965-70)	41	46	-26	2	-95	71	29	33
Female		26	0	-26	-26	0	0	0	22
<b>65 and over</b>									
Male	(1960-65)	18	8	0	8	33	17	30	20
Female		-2	-96	0	-96	0	-65	-65	-8
Male	(1965-70)	-29	329	0	329	223	4	28	-14
Female		19	0	45	45	0	0	0	19
<b>TOTAL</b>									
Male	(1960-65)	27	20	60	41	60	47	53	35
Female		30	21	50	37	53	90	65	35
Male	(1965-70)	42	49	50	50	68	72	70	49
Female		43	23	29	27	128	77	106	47



The case of construction workers is an interesting one. During 1960-65, a period of great mobility for such workers, the immigrant received the larger percent pay increase. During 1965-70, with less mobility in the industry, both residents and outmigrants got higher percent wage increases than the immigrants. Manufacturing is also an interesting case. During 1960-65 the manufacturing employed outmigrant did well relative to others in that industry. In the 1965-70 period, however, a greater part of migration activity involved the manufacturing sector, and the immigrant secured the greater increases.

A similar pattern is observed for employees of the finance, insurance, and real estate sector. In the earlier period the outmigrant employees of this section received the greater wage increases, but for the 1965 to 1970 period, the immigrant employees obtained by far the greatest increases.

Table 9 further decomposes the wage change by industry into male and female components. Some interesting observations emerge, although the small sample problem is even more severe. In several instances the continuously employed covered male immigrant manages a larger pay boost than his outmigrant counterpart. This is true for agriculture, forestry, and fisheries (1960-65 and 1965-70), for mining, for construction, and for government (1960-65 only), and for manufacturing and for finance, insurance, and real estate (1965-70 only). A look at the female wage change data reveals no industry or year where the continuously employed female immigrant gets a larger increase than her outmigrant counterpart.

When the 1965 mean wages for the 1960-65 study period and the 1970 mean wages for the 1965-70 study period are viewed, employees who have out-

**Table 7. Migration status by industry in Idaho, 1960-65 and 1965-70.**

Industry	Residents	Immigration			Outmigration			Working
		(1)	(2)	Total	(1)	(2)	Total	
Agriculture, 1960-65	300	100	0	100	0	100	100	500
Forestry, and % of working	60	20	00	20	00	20	20	100
Fisheries 1965-70	900	100	0	100	100	100	200	1200
% of working	75	8	00	8	8	8	17	100
Mining 1960-65	2700	400	800	1200	300	400	700	4600
% of working	59	9	17	26	7	9	15	100
1965-70	1100	100	200	300	0	0	0	1400
% of working	79	7	14	21	00	00	00	100
Contract 1960-65	5700	1400	2500	3900	1500	2700	4200	13800
Construction % of working	41	10	18	28	11	20	30	100
1965-70	6400	1000	1700	2700	1100	1200	2300	11400
% of working	56	9	15	24	10	11	20	100
Manufacturing 1960-65	16700	2300	3000	5300	3700	1700	5400	27400
% of working	61	8	11	19	14	6	20	100
1965-70	21200	2300	3900	6200	3100	3400	6500	33900
% of working	63	7	12	18	9	10	19	100
Transportation 1960-65	6000	700	800	1500	900	700	1600	9100
and Public % of working	66	8	9	16	10	8	18	100
Utilities 1965-70	6200	200	700	900	800	800	1600	8700
% of working	71	2	8	10	9	9	18	100
Trade 1960-65	20100	3000	3200	6200	3100	2400	5500	31800
% of working	63	9	10	19	10	8	17	100
1965-70	20300	2300	2700	5000	4500	2500	7000	32300
% of working	63	7	8	15	14	8	22	100
Finance, Insur- 1960-65	3800	800	400	1200	500	600	1100	6100
ance, and Real % of working	62	13	7	20	8	10	18	100
Estate 1965-70	4900	500	400	900	200	400	600	6400
% of working	77	8	6	14	3	6	9	100
Services and 1960-65	16800	1200	2600	3800	3100	1700	4800	25400
Miscellaneous % of working	66	5	10	15	12	7	19	100
1965-70	21800	1600	3200	4800	3700	1900	5600	32200
% of working	68	5	10	15	11	6	17	100
Government 1960-65	5900	100	300	400	700	800	1500	7800
% of working	76	1	4	5	9	10	19	100
1965-70	6700	700	900	1600	300	100	400	8700
% of working	77	8	10	18	3	1	5	100
TOTAL 1960-65	78000	10000	13600	23600	13800	11100	24900	126500
% of working	62	8	11	19	11	9	20	100
1965-70	89500	8800	13700	22500	13800	10400	24200	136200
% of working	66	6	10	17	10	8	18	100

(1) From and to contiguous states

(2) From and to other states



Table 8. Mean wages and wage increase by migration status and industry in Idaho, 1960-65 and 1965-70.

Industry		Residents	Immigration			Outmigration			Working
			(1)	(2)	Total	(1)	(2)	Total	
Agriculture, Forestry, and Fisheries	1960 mean wage	2028	3896	0	3896	0	6000	6000	3196
	1965 mean wage	7797	7140	0	7140	0	9600	9600	8026
	% of change	284.5	83.3	00	83.3	00	60.0	60.0	151.1
	1965 mean wage	6114	1820	0	1820	3828	3960	3894	5386
	1970 mean wage	4678	3708	0	3708	4264	7420	5842	4791
	% of change	-23.5	103.7	00	103.7	11.4	87.4	50.0	-11.1
Mining	1960 mean wage	6038	2366	2916	2733	6081	4709	5297	5063
	1965 mean wage	6651	3587	5146	4627	9105	5675	7145	6198
	% of change	10.2	51.6	76.5	69.3	49.7	20.5	34.9	22.4
	1965 mean wage	5933	10240	1448	4379	0	0	0	5600
	1970 mean wage	8120	3624	4392	4136	0	0	0	7266
	% of change	36.8	-64.6	203.3	-5.5	00	00	00	29.7
Contract Construction	1960 mean wage	4422	4667	3235	3749	3796	6254	5376	4522
	1965 mean wage	5151	4473	5936	5411	5692	7827	7065	5807
	% of change	16.5	-4.2	83.5	44.3	49.9	25.2	31.4	28.4
	1965 mean wage	4831	7058	5293	5947	4258	5198	4749	5079
	1970 mean wage	7882	9542	6967	7921	7395	7051	7215	7757
	% of change	63.2	35.2	31.6	33.2	73.7	35.7	52.0	52.7
Manufacturing	1960 mean wage	4152	3987	2931	3389	3596	4195	3784	3932
	1965 mean wage	5339	4284	5029	4705	5891	8721	6782	5501
	% of change	28.6	7.4	71.6	38.8	63.8	107.9	79.2	39.9
	1965 mean wage	5142	4774	4783	4780	5184	5798	5505	5145
	1970 mean wage	7106	6642	7975	7480	7270	9323	8344	7412
	% of change	38.2	39.1	66.7	56.5	40.2	60.8	51.6	44.1
Transportation and Public Utilities	1960 mean wage	4431	5282	3132	4135	4536	2681	3724	4258
	1965 mean wage	6108	6271	4640	5401	7453	3704	5813	5940
	% of change	37.8	18.7	48.1	30.6	64.3	38.2	56.1	39.5
	1965 mean wage	5576	7482	2814	3851	5392	2563	3264	4972
	1970 mean wage	7612	10276	5022	6190	7573	7066	7166	7383
	% of change	36.5	37.3	78.5	60.7	40.5	175.8	119.6	48.5
Trade	1960 mean wage	3489	4331	2679	3478	3685	2180	3028	3407
	1965 mean wage	4418	5422	4061	4720	5647	3947	4905	4561
	% of change	26.6	25.2	51.6	35.7	53.3	81.0	62.0	33.9
	1965 mean wage	3962	4826	4471	4634	3973	4905	4337	4147
	1970 mean wage	5539	7003	5681	6289	5830	8314	7561	6093
	% of change	39.8	45.1	27.1	35.7	46.8	69.5	74.4	46.9
Finance, Insurance, and Real Estate	1960 mean wage	3732	2775	3180	2910	2826	2373	2579	3362
	1965 mean wage	5323	4644	3347	4212	4070	4951	4551	4965
	% of change	42.6	67.3	5.3	44.7	44.0	108.7	76.5	47.7
	1965 mean wage	4504	1905	3281	2516	4343	6680	4583	4232
	1970 mean wage	6634	6239	8513	7250	6412	13474	9309	6971
	% of change	47.3	227.6	159.5	188.1	47.7	101.7	103.1	64.7
Services and Miscellaneous	1960 mean wage	3422	4215	5091	4814	2945	3335	3083	3566
	1965 mean wage	4440	5609	7299	6765	4630	4603	4621	4822
	% of change	29.8	33.1	43.4	40.5	57.2	38.0	49.9	35.2
	1965 mean wage	4124	3650	3531	3571	4052	6254	4519	4110
	1970 mean wage	6044	5407	4774	4985	6261	11553	8902	6383
	% of change	46.6	48.1	35.2	39.6	54.5	84.7	97.0	55.3
Government	1960 mean wage	3919	3820	2001	2456	2014	3517	2816	3632
	1965 mean wage	4628	3300	3643	3557	4275	4263	4269	4504
	% of change	18.1	-13.6	82.0	44.8	112.3	21.2	51.6	24.0
	1965 mean wage	3845	5731	4451	5011	3811	100	2323	3989
	1970 mean wage	5579	8882	5660	7069	5636	3196	5979	5872
	% of change	45.1	55.0	27.2	41.1	47.9	3096.0	157.4	47.2
TOTAL	1960 mean wage	3884	4139	3338	3678	3499	3921	3687	3807
	1965 mean wage	4954	4970	5306	5163	5555	5897	5708	5141
	% of change	27.5	20.1	59.0	40.4	58.8	50.4	54.8	35.1
	1965 mean wage	4522	4846	4278	4500	4468	5310	4630	4537
	1970 mean wage	6430	7012	6311	6585	6532	9135	8026	6739
	% of change	42.2	44.7	47.5	46.3	46.2	72.0	73.3	48.5

(1) From and to contiguous states

(2) From and to other states



migrated to states other than contiguous states received better mean incomes. The 1965 mean was \$5897 and the 1970 mean was \$9135. Out of the 9 industries studied, outmigrants to contiguous states had 3 highest mean wages and outmigrants to other states had 3 highest mean wages at the end of study period 1960-65. Resident wages were best in 2 in-

dustries, and wages for immigrants from other states were the highest in just 1 industry.

Out of the 9 industries studied in period 1965-70, 5 industries gave best wages to outmigrants to other states, 3 of the top mean wages went to immigrants from contiguous states, and only 1 industry had residents receiving the highest mean incomes.

Table 9. Percent wage increase by migration status, industry, and sex in Idaho, 1960-65 and 1965-70.

Industry		Residents	Immigration			Outmigration			Working
			(1)	(2)	Total	(1)	(2)	Total	
Agriculture, Forestry, and Fisheries	1960-65 male	334	83	0	83	0	60	60	154
	1960-65 female	118	0	0	0	0	0	0	118
	1965-70 male	-25	104	0	104	-22	87	50	-10
	1965-70 female	-18	0	0	0	-18	0	0	-18
Mining	1960-65 male	10	52	76	69	50	21	35	22
	1960-65 female	0	0	0	0	0	0	0	0
	1965-70 male	37	-65	3250	-19	37	0	0	29
	1965-70 female	0	0	44	44	0	0	0	44
Contract Construction	1960-65 male	16	-4	84	44	50	25	31	28
	1960-65 female	42	0	56	56	0	0	0	42
	1965-70 male	64	35	35	35	65	36	52	54
	1965-70 female	42	0	-30	-30	42	0	0	23
Manufacturing	1960-65 male	29	11	80	43	62	108	79	41
	1960-65 female	24	-50	19	-4	77	0	77	27
	1965-70 male	38	41	65	56	38	60	51	44
	1965-70 female	37	-1	94	64	38	68	69	43
Transportation and Public Utilities	1960-65 male	38	17	30	22	64	24	52	37
	1960-65 female	39	38	634	151	0	769	769	53
	1965-70 male	38	37	136	78	41	179	116	50
	1965-70 female	29	0	11	11	39	154	133	40
Trade	1960-65 male	27	27	52	36	57	85	66	35
	1960-65 female	23	9	49	33	25	60	38	27
	1965-70 male	42	46	36	41	47	69	69	48
	1965-70 female	33	30	-36	-10	45	73	119	41
Finance, Insurance, and Real Estate	1960-65 male	54	73	-1	44	73	78	76	55
	1960-65 female	26	54	32	48	17	297	77	35
	1965-70 male	47	524	124	219	48	76	79	69
	1965-70 female	47	7	4329	94	47	632	632	57
Services and Miscellaneous	1960-65 male	27	26	42	38	54	17	39	32
	1960-65 female	33	65	50	56	66	109	80	40
	1965-70 male	46	56	35	42	56	96	99	59
	1965-70 female	47	31	37	34	53	-1	87	50
Government	1960-65 male	15	0	84	84	115	30	64	24
	1960-65 female	30	-14	54	-8	23	-6	-4	23
	1965-70 male	37	55	32	44	42	0	125	43
	1965-70 female	61	0	-6	-6	61	3096	3096	61
TOTAL	1960-65 male	27	20	60	41	60	48	54	35
	1960-65 female	30	21	51	37	53	90	65	35
	1965-70 male	42	47	50	49	46	72	70	49
	1965-70 female	43	23	29	27	48	76	107	47

(1) From and to contiguous states

(2) From and to other states



## Industry Work Force by Sex

All tables presented so far have used only data from continuously employed workers -- those reporting OASDI covered earnings in both 1960 and 1965 or 1965 and 1970. This, of course, excludes any workers who were not covered by OASDI at the beginning of each time period because they were working a job which does not utilize OASDI, because they were too young to work, or simply because for some reason they happened not to work during that particular year.

Table 10 is derived from a 1% sample of all OASDI covered workers. The sample does include those entrants and re-entrants to the OASDI covered labor force. Table 10 shows the percentage of the male work force, or the female work force, with jobs in each industry. For both sexes, manufacturing, trade, and services comprise the bulk of the jobs. Manufacturing is growing in relative importance as a source of jobs for both men and women, while service industries are growing in importance for men and sustaining their very high level of importance for women. Jobs in trades are absorbing a slowly shrinking percent of the labor force for both sexes.

Table 10 also demonstrates that the overall male component of the Idaho OASDI (non-self-employed) work force dropped from 66% in 1960 to 59% in

1970 as female labor force participation increased. Mining, construction, and manufacturing are considerably more male than the aggregate work force--the agriculture sector must be ignored because of the self-employment noncoverage problem. Finance, insurance, and real estate and services are sectors encompassing a disproportionate number of the female covered workers. The female percentage increased for all sectors between 1965 and 1970 except for services which showed a very slight decline.

This data allows an analysis of the extent of non-continuous employment. At any given time the work force must consist of residents, immigrants, and labor market entrants. The portion of the work force made up of residents and immigrants should then give an indication of the extent of non-continuous employment.

Of a labor force of 164,600 workers in 1965 (Table 10), 78,000 were classed as residents and 23,600 were classed as immigrants (Table 7). Residents plus immigrants totaled 61.7% of the work force--implying that the remaining 38.3% must be labor market entrants. The proportion of entrants in the labor force increased to 39.4% in 1970.

The prevalence of labor market entrants was considerably higher for women--49.7 and 51.5%--than for men--31.6 and 30.4% (Tables 1 and 10).

**Table 10. Industry work force by sex in Idaho, 1960-1965-1970.**

Industry	Year	Male		Female		Total		% of Total who are entrants
		No.	%	No.	%	No.	%	
Agriculture Forestry, and Fisheries	1960	1400	78	400	22	1800	100	
	1965	800	89	100	11	900	100	55.6
	1970	1300	65	700	35	2000	100	50.0
Mining	1960	4500	100	0	00	4500	100	
	1965	4500	100	0	00	4500	100	13.3
	1970	1600	94	100	6	1700	100	17.6
Contract Construction	1960	10400	94	700	6	11100	100	
	1965	11700	95	600	5	12300	100	22.0
	1970	10300	91	1000	9	11300	100	19.5
Manufacturing	1960	22000	83	4500	17	26500	100	
	1965	27600	83	5700	17	33300	100	33.9
	1970	29600	73	11100	27	40700	100	32.7
Transportation	1960	7000	69	3100	31	10100	100	
	1965	8200	76	2600	24	10800	100	30.6
	1970	6400	70	2800	30	9200	100	22.8
Trade	1960	28400	63	16800	37	45200	100	
	1965	28000	59	19100	41	47100	100	44.2
	1970	28700	59	20300	41	49000	100	48.4
Finance, Insurance and Real Estate	1960	2800	50	2800	50	5600	100	
	1965	3100	39	4900	61	8000	100	37.5
	1970	2800	32	6000	68	8800	100	34.1
Services and Miscellaneous	1960	13600	41	19200	59	32800	100	
	1965	14800	39	22700	61	37500	100	45.1
	1970	19600	40	29400	60	49000	100	45.3
Government	1960	7400	76	2300	24	9700	100	
	1965	6400	66	3300	34	9700	100	35.1
	1970	7800	62	4800	38	12600	100	38.1
TOTAL	1960	97800	66	49800	34	147600	100	
	1965	105300	64	59300	36	164600	100	38.3
	1970	102600	59	76300	41	184900	100	39.4



The percentages of labor market entrants were quite high for agriculture, but because of small sample problems this should be ignored. Other sectors showing high entrance rates were trade, finance, insurance, and real estate, and services. The lowest rates of entrance were in mining and construction.

High rates of entrance of workers into an industry are not necessarily evidence of a growing industry--it is more likely evidence of an unstable work force characterized by high rates of both entry and exit. The surprisingly high percentages for both male and female workers may result indirectly from the large numbers of workers who are self-employed or in noncovered occupations. If a large number of workers are shifting between the covered and noncovered categories, this would tend to lower the calculated percentage. The differences between the figures for males and females must be attributable to:

1. A greater proportion of females are entering for the first time into the OASDI covered work force.
2. A more erratic part time pattern of female employment results in more cases where a worker was temporarily not working--or at least not covered--in one year but re-entered the work force in a later year.

## Wage Level Transition Matrix

Table 11 shows how OASDI covered workers move from one pay level to another after 5 years time. One would expect average pay rates of continuously employed individuals to increase over time because of inflation and general improvement in skills and experience which contribute to individual productivity. The wage table shows that this is true on the average. For both 1960-65 and 1965-70 the tendency was to get wage increases of at least one wage level. For example, covered workers receiving \$2,000 to \$2,999 in 1960 got a modal increase-- 22.8% of them-- to \$3,000 to \$3,999 in 1965. Of the remaining workers, 38.9% got 1965 wages below this level and 38.3% exceeded \$3,999 in 1965. Between 50.0 and 77.8% of the workers at a given pay level in 1960 managed to move up one or more pay levels by 1965. For the 1965-70 period, a time of somewhat more rapid wage increases, this portion ranged from 70.0 to 81.5%.

Note that not all continuously covered workers received increases in wages. For example, of those workers getting over \$10,000 per year in 1960, 15.4% had fallen to between \$8,000 to \$10,000 per year by 1965. Some of the wage declines may be real, some of them may be just figments of an erratic wage pattern--a construction worker who had a good year with

Table 11. Wage level transition matrix for persons employed in Idaho in 1960 or 1965 and in 1965 or 1970.

	\$1 to \$999	\$1000 to \$1999	\$2000 to \$2999	\$3000 to \$3999	\$4000 to \$4999	\$5000 to \$5999	\$6000 to \$6999	\$7000 to \$7999	\$8000 to \$8999	\$9000 to \$9999	\$10000 and Over	Total Number
<b>Wages in 1960</b>												
<b>Percent Achieving Given Wage Level in 1965</b>												
\$1 to \$999	22.70	19.46	11.35	14.59	9.73	13.51	3.24	2.70	1.08	.54	1.08	18500
\$1000 to \$1999	13.87	17.92	17.92	13.29	13.29	9.25	5.78	5.20	1.16	1.73	.58	17300
\$2000 to \$2999	10.78	11.38	16.77	22.75	14.97	9.58	7.19	1.80	4.19	.00	.60	16700
\$3000 to \$3999	6.38	5.32	7.45	21.81	29.26	13.83	5.85	4.79	.53	1.06	3.72	18800
\$4000 to \$4999	3.25	3.66	2.85	8.13	19.11	31.71	17.07	6.91	3.25	1.63	2.44	24600
\$5000 to \$5999	5.04	4.20	2.52	1.68	6.72	15.13	27.73	21.01	6.72	4.20	5.04	11900
\$6000 to \$6999	4.94	1.23	2.47	2.47	4.94	8.64	18.52	22.22	14.81	12.35	7.41	8100
\$7000 to \$7999	.00	1.96	1.96	.00	1.96	1.96	7.84	15.69	29.41	21.57	17.65	5100
\$8000 to \$8999	.00	3.13	.00	.00	3.13	6.25	6.25	15.62	6.25	12.50	46.87	3200
\$9000 to \$9999	5.56	.00	5.56	.00	.00	.00	.00	.00	11.11	27.78	50.00	1800
\$10000 and over	.00	.00	.00	.00	.00	.00	.00	.00	7.69	7.69	84.62	2600
Total Number	11500	11300	10800	15300	18200	18900	13500	9900	6.00	4700	8400	128600
% of total	8.94	8.79	8.40	11.90	14.15	14.70	10.50	7.70	4.74	3.65	6.53	100.00
<b>Wages in 1965</b>												
<b>Percent Achieving Given Wage Level in 1970</b>												
\$1 to \$999	20.41	13.78	11.73	13.78	11.73	9.18	6.12	3.57	4.08	2.55	3.06	19600
\$1000 to \$1999	11.28	12.03	14.29	11.28	14.29	9.77	10.53	6.02	2.26	.75	7.52	13300
\$2000 to \$2999	10.62	7.50	11.87	21.87	18.75	6.87	6.25	5.62	5.00	2.50	3.13	16000
\$3000 to \$3999	6.78	3.95	4.52	15.82	27.68	15.25	10.73	6.21	2.82	2.82	3.39	17700
\$4000 to \$4999	5.08	1.69	2.26	5.65	6.21	23.73	20.90	12.99	10.73	4.52	6.21	17700
\$5000 to \$5999	2.60	1.30	1.95	1.30	6.49	6.49	21.43	26.62	11.69	7.79	12.34	15400
\$6000 to \$6999	3.05	2.29	3.82	.76	.76	4.58	13.74	12.21	23.66	7.63	27.48	13100
\$7000 to \$7999	2.13	1.06	2.13	2.13	4.26	1.06	7.45	8.51	14.89	18.09	38.30	9400
\$8000 to \$8999	1.85	.00	1.85	1.85	1.85	1.85	7.41	.00	1.85	18.52	62.96	5400
\$9000 to \$9999	4.44	2.22	.00	.00	8.89	.00	2.22	6.67	.00	2.22	73.33	4500
\$10000 and over	1.39	.00	.00	4.17	.00	1.39	1.39	2.78	1.39	6.94	80.56	7200
Total Number	10700	7200	8400	12400	15200	13000	15600	12800	10800	7800	25400	139300
% of total	7.68	5.17	6.03	8.90	10.91	9.33	11.20	9.19	7.75	5.60	18.23	100.00



a lot of work in 1960, but who got laid off after completion of a project in 1965--and some of these apparent wage drops may reflect the part-retirement of a worker. This latter argument is the likely factor which caused 11.1% of those earning \$9,000 to \$9,999 in 1960 to fall to between \$1 and \$1,999 by 1965.

## Industry Transition Matrix

Table 12 traces workers from industry to industry over time. Because of the similarities of skills involved, certain industries would be expected to carry on a lively interchange of workers, while other industries might exchange very few workers. For example,

Table 12. Industry transition matrix for persons employed in Idaho in 1960 or 1965 and in 1965 or 1970.

	Agriculture, Forestry, Fisheries	Mining	Contract Construction	Manufacturing	Transportation, Public Utilities	Trade	Finance, Insurance, and Real Estate	Service and Miscellaneous	Government	Total Number
<b>Industry in 1960</b>	<b>Percent Employed in Given Industry in 1965</b>									
Agriculture, Forestry, and Fisheries	14.29	.00	.00	.00	14.29	57.14	14.29	.00	.00	700
Mining	.00	61.36	6.82	9.09	4.55	9.09	.00	9.09	.00	4400
Contract Construction	.98	2.94	62.75	8.82	3.92	9.80	.00	5.88	4.90	10200
Manufacturing	.38	2.65	7.20	66.67	2.27	8.71	1.14	8.33	2.65	26400
Transportation and Public Utilities	1.14	1.14	6.82	6.82	67.05	6.82	4.55	3.41	2.27	8800
Trade	.28	.83	4.71	12.19	3.88	64.27	2.22	9.42	2.22	36100
Finance, Insurance, and Real Estate	.00	.00	5.77	7.69	.00	9.62	65.38	5.77	5.77	5200
Services and Manufacturing	.00	.42	2.11	6.75	1.27	8.86	2.95	72.57	5.06	23700
Government	.00	.00	21.62	8.11	.00	6.76	4.05	6.76	52.70	7400
Unclassified	.00	11.11	13.89	25.00	5.56	22.22	2.78	13.89	5.56	3600
<b>TOTAL</b>	<b>500</b>	<b>4600</b>	<b>13800</b>	<b>27400</b>	<b>9100</b>	<b>31800</b>	<b>6100</b>	<b>25400</b>	<b>7800</b>	<b>126500</b>
% of total	.40	3.64	10.91	21.66	7.19	25.14	4.82	20.08	6.17	100.00
<b>Industry in 1965</b>	<b>Percent Employed in Given Industry in 1970</b>									
Agriculture, Forestry, and Fisheries	36.36	.00	9.09	27.27	9.09	.00	9.09	9.09	.00	1100
Mining	.00	28.95	2.63	57.89	.00	5.26	.00	5.26	.00	3800
Contract Construction	.00	.93	63.55	11.21	2.80	6.54	2.80	10.28	1.87	10700
Manufacturing	1.00	.33	6.02	69.23	1.34	11.04	1.00	7.36	2.68	29900
Transportation and Public Utilities	1.09	.00	1.09	13.04	65.22	8.70	1.09	6.52	3.26	9200
Trade	.83	.00	3.60	11.08	2.49	63.71	3.05	12.47	2.77	36100
Finance, Insurance, and Real Estate	.00	.00	5.97	8.96	4.48	4.48	61.19	8.96	5.97	6700
Services and Manufacturing	.36	.00	.36	6.52	.72	10.14	.72	77.17	3.99	27600
Government	.00	.00	4.41	8.82	.00	5.88	.00	11.76	69.12	6800
Unclassified	.00	2.33	9.30	30.23	11.63	18.60	4.65	18.60	4.65	4300
<b>TOTAL</b>	<b>1200</b>	<b>1400</b>	<b>11400</b>	<b>33900</b>	<b>8700</b>	<b>32300</b>	<b>6400</b>	<b>32200</b>	<b>8700</b>	<b>136200</b>
% of total	.88	1.03	8.37	24.89	6.39	23.72	4.70	23.64	6.39	100.00



between 1965 and 1970, 4,000 workers moved from trades to manufacturing and 3,300 reversed direction, from manufacturing to trades. In contrast, the movement between manufacturing and government was very small. Note that the population is the same continuously employed covered group--consisting of immigrants, outmigrants, and residents. Also since the exhibits refer only to continuously employed workers, it excludes those new workers who enter the labor force and old workers who retire during the time period covered. The exhibits should not be used to assess the status of the various industries in Idaho. They are useful for examining the interindustry job mobility of workers.

A safe assumption is that many of the interindustry job shifts occur at the same time as migration. A worker might shift from a mining job in Montana to a manufacturing job in Idaho. He would be classed as an immigrant, as well as an entrant into the manufacturing sector. In contrast a non-employed Montana high school student who took a manufacturing job in Idaho would not appear in the table, either as an immigrant or as an industry entrant.

While this particular data is not adequate to document the hypothesis, a reasonable assumption is that certain industries might serve as training grounds for new workers--accepting large numbers of labor market entrants but giving up large numbers of experienced workers to other sectors while receiving few experienced workers from other sectors.

Despite these deficiencies, the gross pattern of entry and exit from the various industries is quite revealing (Table 13). As usual, agriculture should be ignored because of the non-coverage and small sample problems. Taking construction as an example, for each 100 people employed somewhere by the construction industry in both 1960 and 1965, an additional 116 workers entered the construction industry from some other covered occupation and another 59 workers left the construction industry to work in some other sector. During the 1960-65

period construction jobs were apparently absorbing experienced workers at the expense of other industries--although we can't tell from this table whether such growth was occurring in Idaho or in other states drawing workers out of Idaho. For the 1960-65 period, the main loser in this interindustry shuffle of experienced workers was the trade sector. Associated with each 100 workers who were continuously employed in trades, were an additional 35.7 who made exits from the industry, compared to only 27.0 who entered the trades.

Between 1965 and 1970, several other industries started to lose experienced workers to other industries. mining is an obvious case with 245 exits to only 27 entries. However, transportation and public utilities, and finance, insurance, and real estate also joined trade as donors of experienced workers to other sectors.

**Table 13. Ratio of work force entries and exits to continuously employed workers, by industry, 1960 to 1965 and 1965 to 1970.**

Industry	1960-65		1965-70	
	Exits	Entries	Exits	Entries
Agriculture, Forestry, and Fisheries	6.00	4.00	1.75	2.00
Mining	63	.70	2.45	.27
Contract Construction	.59	1.16	.57	.68
Manufacturing	.50	.56	.44	.64
Transportation and Public Utilities	.49	.54	.53	.45
Trade	.56	.37	.57	.40
Finance, Insurance, and Real Estate	.53	.79	.63	.56
Services and Miscellaneous	.38	.48	.30	.51
Government	90	1.00	.45	.85



# Indications for Further Work

The point was made at the beginning that this paper was not intended to be a definitive analysis of the OASDI data. The intent has been to present data which may itself be useful, and to call attention to some interesting relationships that might deserve further study. In summary, at least 3 issues can be addressed:

1. A better understanding of the characteristics of migrant streams is interesting general knowledge and provides information useful in planning for the future. Information about age, income, and sex of migrants would be useful in planning future Idaho school programs, medical services programs, etc. This information is presented in this paper for the Idaho Social Security covered work force and for the migrant streams of covered workers into and out of Idaho.

Many of the conclusions are hardly surprising--that migrants tend to be young, that males tend to be more mobile, and that workers who move get higher percentage wage increases than those who don't move. Of more interest, perhaps, is the observation that people who migrate out of Idaho get greater percentage wage increases than those who migrate into the state. One possible cause for this is an excess of labor in Idaho relative to demand--resulting in lower Idaho pay scales. Workers respond to wage incentive and migrate out of Idaho. An alternative hypothesis--not necessarily in conflict with the weak labor demand hypothesis--is that living in Idaho has so many amenities that workers are willing to accept lower pay for the privilege of living in the state. If a continuation of this project allows for analysis of 1975 OASDI data, then some very valuable additional information would be made available years before similar information could be obtained from the 1980 population census.

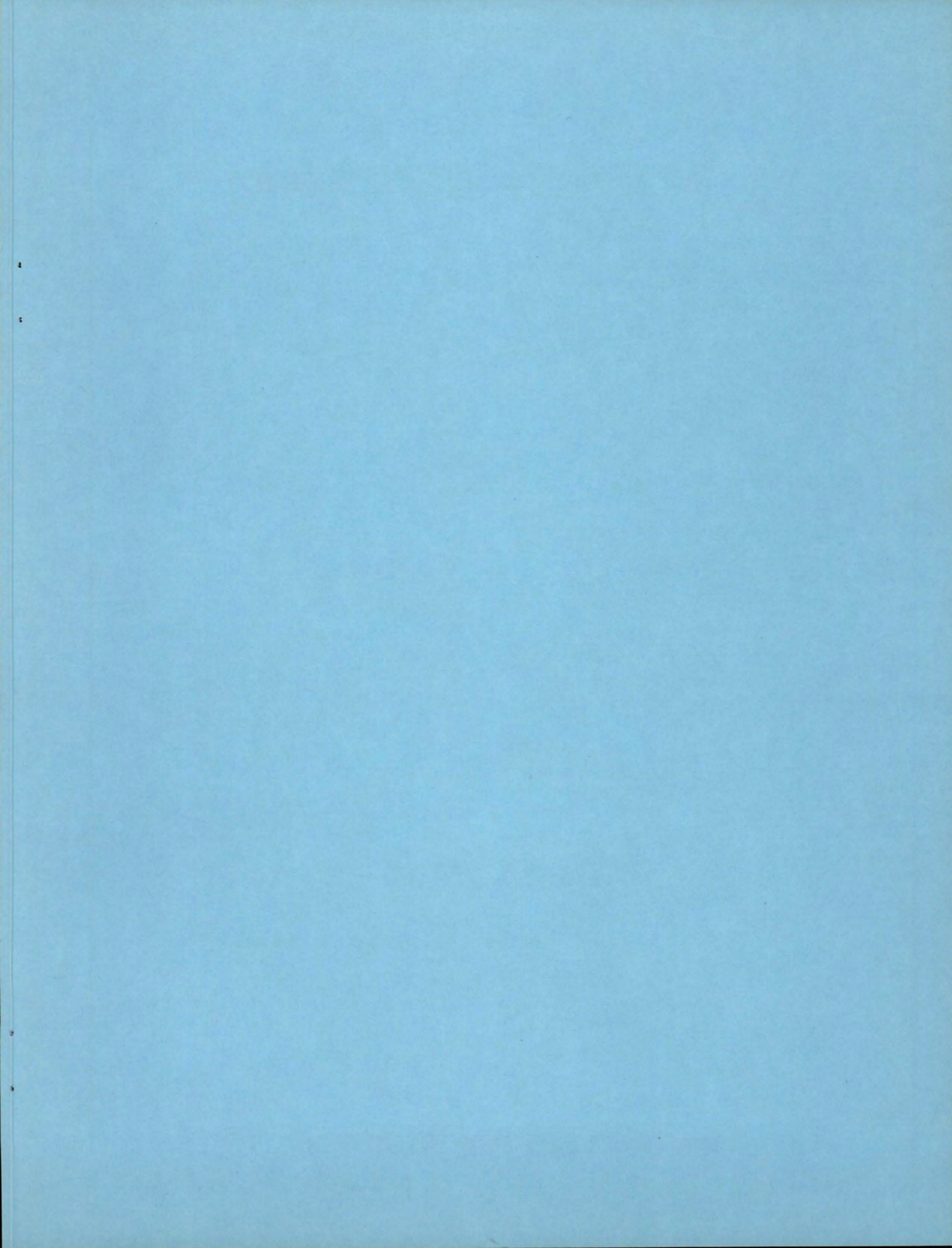
2. Closely related to the theme is the indication of apparent reversal of the direction of historic migration flows. Some demographers<sup>6</sup> are suggesting that the historic flow of people from rural to urban areas is now over and that substantial flows in the reverse direction have shown up in recent years. Casual observation in Idaho seems to confirm at least some aspects of this reversal. The data used in this report can not shed much light on this question since the migration reversal is supposed to have occurred in the late 1960's and early 1970's. Most of the 1965-1970 period data were gathered before the reversal occurred. Access to 1975 OASDI data would allow a study of this return flow phenomenon, and possibly suggest whether the phenomenon is real, and isolate the characteristics of these migrants. The question of whether this return flow phenomenon is a short run break from trend, or whether it represents the pattern of the long term future, is of crucial importance to the development of Idaho.

3. On the question of sex discrimination, information in this report is inconclusive but suggestive. Female outmigrants tend to obtain greater percentage wage increases than their male counterparts, and female inmigrants get smaller percentage wage increases than do male inmigrants. The evidence is inconclusive because several possible explanations for this pattern can not be refuted by the Social Security data--sex differences in work tasks and sex differences in part time work patterns. The differences shown in this report are large enough to justify further study. Analysis of 1975 OASDI data, supplemented by other data sources, could perhaps give some more definitive answers to this sensitive question.

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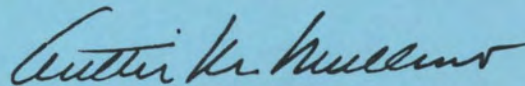
<sup>6</sup>Beale, C.L., 1974. Rural Development: Population and Settlement Prospects. *J. of Soil and Water Conservation* 29(1): 23-27.







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Auttis M. Mullins  
Dean, College of Agriculture  
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