Diagram 2

TIME UNEMPLOYED PROFILES OF
COLOMBIA'S FOUR LARGEST CITIES, 1967.

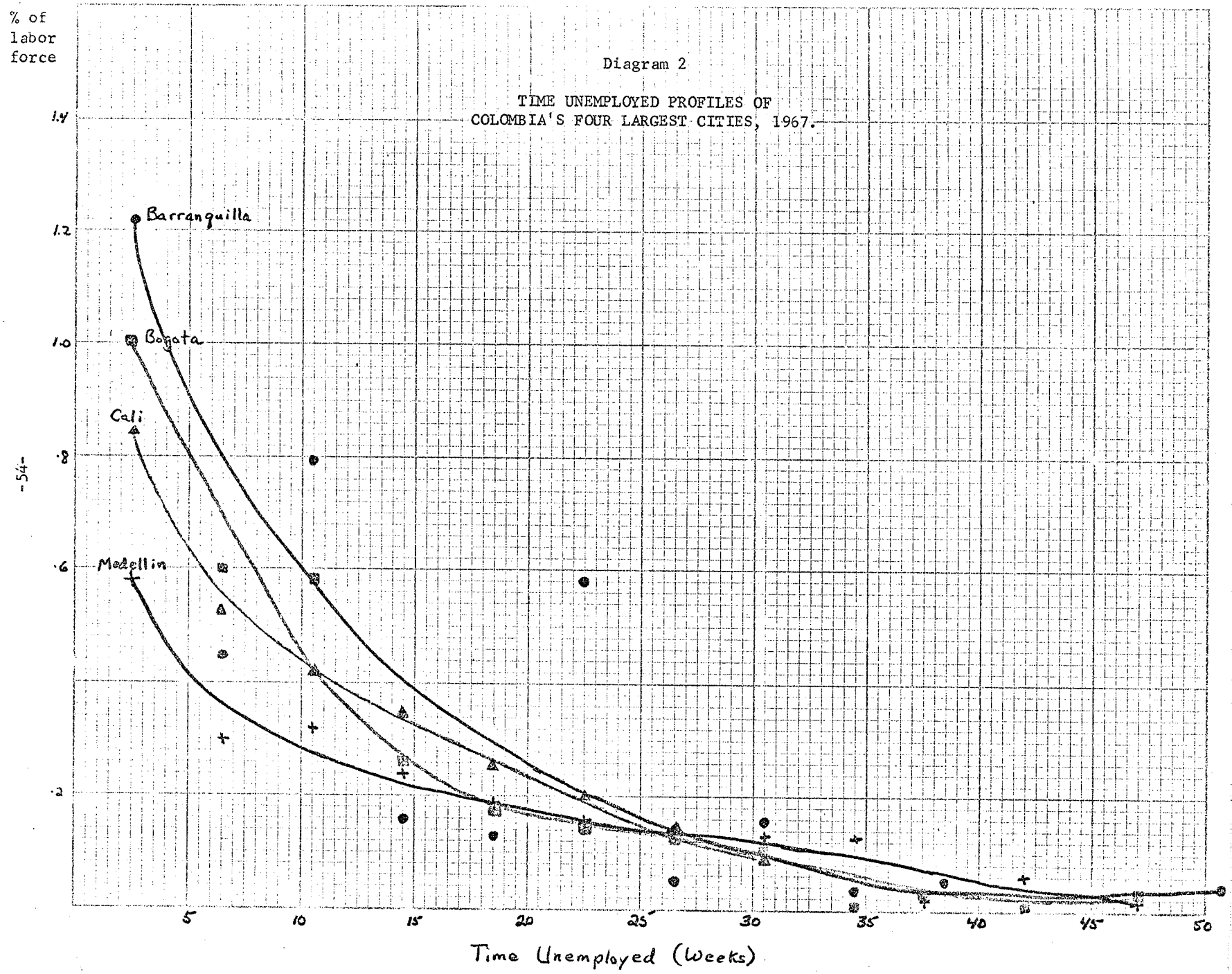

TABLE 15a

SHARE OF THE LABOR FORCE SEEKING EMPLOYMENT IN VARIOUS OCCUPATIONS WHICH IS UNEMPLOYED MORE THAN SPECIFIED NUMBERS OF WEEKS: PREVIOUS JOB HOLDERS AND NEW ASPIRANTS[1]

Weeks Unemployed	Professional	Executive	Clerical	Sales Staff	Transport Workers	Crafts-men	Laborers	Service Workers
0	8.38	5.17	26.38	13.96	12.78	17.02	17.44	18.14
$\geq$ 5	6.54	2.95	19.79	10.75	9.46	12.42	14.82	13.24
$\geq$ 13	4.44	2.22	13.19	7.40	5.24	8.17	11.68	9.25
> 52	1.93	-	6.86	3.63	1.79	3.91	8.02	4.90

	Domestic Servants	Others	Total*
0	2.51	59.79	15.5
$\geq$ 5	1.43	53.21	11.47
$\geq$ 13	.83	37.67	7.75
$\geq$ 52	.48	9.57	3.88

[1]An individual's occupational category is defined by the job sought.

*Total doesn't include miners, rural workers, and defence and police.

TABLE 15b

SHARE OF THE LABOR FORCE SEEKING EMPLOYMENT IN VARIOUS OCCUPATIONS WHICH IS UNEMPLOYED MORE THAN SPECIFIED NUMBERS OF WEEKS: PREVIOUS JOB HOLDERS AND NEW ASPIRANTS

Weeks Unemployed	Professionals	Executives	Clerical	Sales Staff	Transport Workers	Crafts-men	Laborers	Service Workers
0	4.25	3.94	13.52	7.18	11.38	13.33	10.14	12.44
$\geq$ 5	3.32	1.97	9.46	5.31	8.42	9.46	8.21	8.71
$\geq$ 13	2.21	1.97	6.35	3.52	4.78	6.00	6.79	5.97
> 52	1.11	-	3.11	1.58	1.36	2.67	5.27	2.99

	Domestic Servants	Others	Total
0	1.95	3.91	10.14
$\geq$ 5	.98	3.25	7.20
$\geq$ 13	.55	2.27	4.66
$\geq$ 52	.33	.66	2.33

TABLE 15c

SHARE OF THE LABOR FORCE SEEKING EMPLOYMENT IN VARIOUS OCCUPATIONS WHICH IS UNEMPLOYED MORE THAN SPECIFIED NUMBERS OF WEEKS: FIRST TIME JOB SEEKERS

Weeks Unemployed	Professional	Executives	Clerical	Sales Staff	Transport Workers	Crafts-men	Laborers	Service Workers
0	3.91	.89	12.66	6.75	.58	.41	6.93	5.55
$\geq$ 5	3.13	.89	10.25	5.33	.44	.33	6.38	4.38
$\geq$ 13	2.15	-	6.84	3.85	.22	.24	4.64	3.22
> 52	.78	-	3.67	2.03	.15	.13	2.29	1.83

	Domestic Servants	Others	Total
0	.43	22.22	5.36
$\geq$ 5	.43	22.22	4.34
$\geq$ 13	.29	15.78	3.00
> 52	.14	3.11	.16

for the first time job seekers is more that twenty times as high for clerical job seekers as for the average. For clerical workers the aspirantes unemployment rate is about equal to the cesantes one; for other occupations it is less than one-half (See Table A-9.)

Although it is perhaps dangerous to assume that if a person is not unemployed for more than one or two months the economics of his situation cannot be too drastic, length of time unemployed is obvously a determinant of the overall seriousness of the problem. Of the 2/3 of the unemployed whose economic situation may be worthy of special consideration (i.e. those not aspiring to high income jobs) 1/4 do not have to search for jobs more than five weeks (Table A-3). One might by this reasoning exclude a total of 50% from the "serious" category. Finally, it could be argued that a reasonable number of the first time job seekers not already excluded on one count or another are not in a particularly difficult situation because they live with their families; this could correspond to an additional 5 to 10% of total unemployment.

To summarize, one might conclude that with an overall urban unemployment rate of 10%, perhaps 3 to 5% of the labor force is unemployed and in bad straights.[1]

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[1] It has not been our main concern here to analyse the unemployment producing mechanics for the low skilled-low aspiration unemployed person--who undoubtedly does exist. Possibly the frequently proposed interpretations of unemployment (relating it to various forms of marginalism, etc.) are valid for this group; given the possible seriousness of this group's situation it does warrant attention despite its reduced numerical proportions.

This group is much smaller than the one which is employed and in bad economic straights.[1] In short, unemployment may as frequently be an indication of the price people are willing to pay to avoid undesired jobs as it is a direct measure of a generalized difficulty to become employed which creates an economically problematic situation.

Perhaps the most serious implications of unemployment are not the sufferings of the unemployed--there seems reasonable evidence that before a crisis is reached people become employed one way or another--but rather the direct social cost in terms of frustration, incentive to crime, and general alienation toward an economic system which must appear highly uninterested in them. Studies of these phenomena have not, to my knowledge, been undertaken, but they would be an important complement to the statistical information now available.

All of the above is not to say that open unemployment might not become a tremendous problem in Colombia within 10 or 15 years; but it would be misplaced emphasis to argue that it is a major direct cause of poverty at present.[2]

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[1] We do not imply, of course, that the unemployed person of higher skill, wealth, etc. does not suffer; his psychological problem may well be more severe than that of the low income unemployed, but this sociological or cultural problem is not cur immediate concern here.

[2] It may, however, bt useful from a political point of view for Colombian decision makers to focus on this issue because of its tangibility, and the general acceptance of the idea that there is something unfair about unemployment--a feeling which is not so prevalent with respect to low income levels in a country like Colombia. Since the policies which are likely to resolve the unemployment problem in the long run (policies making it more advantageous for firms to use more labor and less capital, and so on) are likely to improve income distribution and probably to raise the rate of economic growth, it may well be a happy chance if unemployment is defined as one of the country's major problems, even if it is not.

Direct Evidence on "Frictional" Factors and the "Voluntary" Aspect of Unemployment

Much of the evidence points to the fact that most urban unemployment in Colombia has an important frictional component--that is, the person has had or could get some jobs but is unwilling to accept them, preferring to remain unemployed.

What little Colombian evidence has been adduced to date on how unemployment is generated is consistent with this conclusion, suggesting that most people who leave their jobs do so by their own choice, rather than having lost the job through the action of their employer.[1] Most job leavers in a Bogota study did so for economic reasons;[2] the rate of turnover in relatively good jobs such

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[1] A Baranquilla study found that about two-fifths of the unemployed men and one-tenth of the women lost their jobs through action originating primarily on the side of the employer. If this result were general for the country, one might conclude that the "unemployment problem" has less to do with losing one's job, than with getting it in he first place. It is not clear, when there is standardization for age and occupation, whether first time job seekers or previously employed locate jobs more quickly.

[2] See Rafael Prieto D., "Causas del Desempleo y Movilidad de la Fuerza de Trabajo de Bogota," in Empleo y Desempleo en Colombia, op. cit. Prieto made a detailed study of 60 people who had been unemployed in Bogota. The group had had 129 departures from work, of which 73 were for economic reasons and of these 26 were involuntary. The main reason was too low a salary or some other similar sounding explanation. Economic motives (voluntary and involuntary) dominated much more in the case of men; voluntary economic withdrawal accounted both for about half of the withdrawals and involuntary economic for another quarter. Economic motives only accounted for one-half of the withdrawals of women, such things as family, marriage, and so on being relatively much more important.

It is interesting to note that a higher share of first withdrawals from work were voluntary and due to economic motives (one-half) than for subsequant withdrawals (about one-quarter).

as those in modern manufacturing is low.[1]

The clash of desires and possibilities hypothesized earlier is probably reflected to some extent in the differences between the distribution of the unemployed by the sector of occupation of previous employment (for those who have worked before) and the occupations now sought by the same group; this difference presumably reflects in part the mobility aspirations of the individuals, and in part the reality of the market place. It is not clear how singleminded a worker is in the choice of the sector or occupation in which he wishes to operate, and whether in the samples he reflects his first preference or his natural expectation. First time job seekers will naturally have a different distribution by occupation and sector related to the fact that their

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Footnote from previous page (continued)

Note also that the share of people who leave their jobs voluntarily is higher in Colombia than for example in the U.S., at least if Prieto's data is representative. There, average figures for 1967 and 1968 indicate that 72.3 percent of the people who left their jobs had lost them. (President's Manpower Report, op. cit., p. 235). It must be remembered however, that 1/3 of the job losers (at least in 1968) were laid-off rather than discharged. (See Hoyle, op. cit.) This phenomenon is not a common one in large scale plants in Colombia although it undoubtedly occurs in smaller establishments.

[1] See Miguel Urrutia, Historia del Sindicalismo en Colombia Bogota, Ediciones Universidad de Los Andes, 1969, p. 272.

education is higher, their ambitions are probably high and uneroded, and they are younger, therefore, ruling them out of certain fields and into others. The ILO in its study concluded that aspirations tend to be whittled down over time by failure to get desired jobs.[1] Data to test this hypothesis are not available.

In terms of the occupational categories used in the CEDE survey, the lowest income group (in the employed population) includes the lower quartile of all groups except professionals, executives, and office workers (this amounts to 19.1% of the employed population) and then, roughly speaking, perhaps the second quartile of domestic workers and most of the second quartile of craftsmen and laborers (for about another 10%). Unemployment rates classified by previous occupation (that is, percentage of people who previously worked in these categories over the employed labor force) are unavailable, but it appears that the unemployment rate is high for the category "craftsmen" which forms 1/3 of the labor force,

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[1] "In most cases, the occupations sought by new entrants to the labour market are of higher status and higher expected earnings than those sought by those previously employed. Part of this is explained by the high level of education of the new entrants, noted earlier. But part must also reflect a gradual downgrading of ambitions and expectations, as people grow older and have more experience of the labour market. A significant number of those who were formerly employed in professional and executive positions lower their sights and seek office jobs; many of those who had office jobs try for sales posts; and a fair proportion of those who were salesmen and transport workers seek jobs as artisans or service workers.

Some of this shift in job preferences is probably associated with the length of time people are unemployed. In most cities a quarter to a third of these unemployed have been without jobs for a year or more, one half of two thirds for more than three months."
(ILO, op. cit., p. 359)

and in which 40% of the previous job holder unemployed are looking for work. By sectors, unemployment rates are strikingly high in construction and low in domestic service. The ratios do not quite indicate the tendency of the sector to expell a person and not reemploy him, since he may be searching occupation elsewhere. (ILO, p. 366)

Slighton notes that for the short run the little evidence there is in the manufacturing sector is consistent with U.S. experience--a tendency for rates of growth of labor productivity and output to be positively related. (page 47) But which of the many causal mechanisms which could generate this relationship are actually at work is not at all clear.

Note that for the period 1951-64 there is a strong negative by sector relationship between increase in labor used and percent increase in output per wooker. In commerce, where labor rose the fastest output per person rose the slowest (actually fell) and where labor rose the slowest public utilities, output per person rose the fastest (apart from mining.)

Participation Rates

Changes in (age specific) participation rates over time are consistent with the combination of increasing difficulty for people in finding the job they want and sufficient financial background to remain outside the labor force. There appears to have been a decline in age specific participation rates between 1951 and 1964, and possibly a further decline since then in certain age categories; the declines have been concentrated in the

younger age groups for both men and women; for older people there is little change for men and an increase for women. (Note, however, that participation rates for women are stilllow by world or Latin American standards in Colombia). The ratio "total labor force/population aged 15-64" fell from 61.5% in 1951 to 53.6% in 1964 and rose again to 55.7 by 1970, while the ratio "labor force aged 15-64/population aged 15-64" fell from 56.8 to 49.5% between 1951 and 1964, and rose back to 52.0 in 1970.

In the rural areas there was not much change over 1951-64 --some decrease in participation of older and younger men and of all women--the latter being a decrease of two or three percent, possibly associated with the decrease in importance of rural artisanry.

Participation rates are lower for women in the rural areas although there is a definitional problem here--women who put in a good deal of work on their husband's farm are probably usually excluded.[1] Presumably the lack of suitable paid work for women in the country is one major difference; much of the work in the service sector in the city is carried out by women; in fact, the majority of women in the urban labor force are usually found in the service sector. In industrialized countries, too, a relatively high female participation has been achieved as the service sector has increased in importance.

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[1] Whereas theoretically they should be in the "family helper" category of the employed.

In urban areas, where data are both better and easier to interpret, age specific rates for men dropped dramatically in the 15-19 age group and less so in the 20-24 age group during 1951-64 and during 1964-70 (see Table 16). Some but not all of the decrease in age specific participation rates for young males was due to the increased schooling opportunities. For the period 1951-1964, 16.5 points of the total decline of 24 for the group 15-19 can be accounted for in that way and 4.3 of the 8.3 points for the group 20.24.[1] Among men over 55, the rates also fell substantially, and apparently continuously. The decreases for people 65 and over are presumably in part a reflection of improvements in the standard of living (though possibly also of forced retirements) and are quite substantial, reaching 13% for the age group 70-74.[2] But the decrease for the age group 55-64 may well be in part or even largely due to increased difficulties in the job market. This is suggested by the fact that this rate is now lower in Colombia than in the U.S.; the "need" to continue working is presumably higher in Colombia. Another factor may be physical condition; by the time they reach this age many Colombians have unsatisfactory health. These Colombian rates, when contrasted with U.S. ones, suggest difficulties of entering the labor force for the

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[1] Note, however, that the decrease in participation rates was probably overstated due to the failure of the 1964 census to pick up first time job seekers as members of the labor force. See page 67, footnote 2.

[2] Roberto Jungito, Alvaro Lopez, Alvaro Reyes and Diego Salazar, Analysis de la Estructura y Evolucion de la Fuerza de Trabajo Colombiana: 1938, 1951, and 1964 y Proyecciones de la Poblacion Economicamente Activa, 1964-1965, CEDE, Universidad de Los Andes, Bogota, 1970, p. 21.

TABLE 16

URBAN (MUNICIPAL SEAT) LABOR FORCE PARTICIPATION BY AGE AND SEX

(percent)

Age	Cabeceras		
	Total	Male	Female
1951			
10-14	11.2	12.8	9.8
15-19	50.2	71.6	34.8
20-24	60.1	91.8	34.9
25-34	58.6	96.6	27.7
35-44	57.6	97.2	25.1
45-54	54.5	95.0	21.1
55-64	47.0	88.5	16.3
65+	29.4	63.2	9.6
15-64			
1964			
10-14	6.1	6.4	5.6
15-19	37.0*	47.6*	28.9*
20-24	57.0*	83.5*	36.2*
25-34	58.3	94.7	27.9
35-44	58.4	96.5	25.7
45-54	55.4	94.3	22.5
55-64	46.6	84.6	16.3
65+	24.8	48.7	8.4
15-64			
1970			
12-19	22.8	25.9	20.3
15-19(estimated)	33.3	40.5	28.0
20-24	58.7	76.9	44.8
25-34	64.9	95.9	39.3
35-44	64.4	96.5	35.2
45-54	60.6	93.9	30.2
55-64	47.7	77.2	20.3
65+	22.1	42.7	8.3

*It seems probable that these figures are downward biased in absolute terms.

(continued on next page)

with respect to those of 1970, and probably also those of 1951. The failure to include 'aspirantes' in any appreciable numbers is one source of the bias; in 1970 2.3% of the age group 12-19 would fall in this category (i.e. say 12% of the labor force).

A second and possibly related incomparability (see text for a discussion) between the 1951 and 1964 censuses also tends to make it difficult to draw firm conclusions, especially for age groups where the indicated participation rates are only slightly different in the two years. There was a higher share of individuals about whom incomplete information was gathered in 1951 than in 1964, and there is a possibility that some were classified as being in the active labor force in 1951 when in 1964 they would have been classified in "other conditions of inactivity." (For a discussion of this point see Jungito et al.. op. cit., p. 18.)

Since the possible range of difference made by people with either incomplete information recorded or listed under "other conditions of inactivity" seems to be 5 or 6%, this could account for most but not quite all of the difference in global average participation rates. That different treatment of "other conditions" may be related to the decrease in age specific participation rates for the younger age cohorts is consistent with the fact that the category refers primarily to younger people, especially in rural areas, but also in urban zones. (See DANE, XIII Censo Nacional de Poblacion, Julio 15, 1964, Resumen General, pp. 144-145). Meanwhile, in 1951 the much smaller category of "other conditions" was not heavily concentrated on the younger age groups. If this asymmetry of treatment existed, as between the two censuses, it seems probable that the 1964 census was more accurate in describing people as not in the labor force and that the participation rates for these age groups of 1951 were therefore overestimated relative to the reality. There is a possibility that this factor, coupled with changes in inactivity due to education in 1964, earlier retirements through preference, and greater understatement of aspirantes in 1951 than in 1964, explain all of the observed decrease between these two years due to difficulty of finding a job; this seems unlikely, however.

Sources and Methodology: For 1951 and 1964, Robert Slighton, Urban Unemployment...., op. cit., p. 51; coming originally from DANE, Censo de Poblacion de Colombia 1951, Resumen, and unpublished 1964 census data. For 1970, calculations based on DANE, Encuesta de Hogares. The male and female rates were presented in DANE, Boletin Mensual de Estadistica #238 pp. 76-7. The totals were deduced from the sex specific rates and the economically active population figures of DANE's Encuesta tabulados. For the category 15-19, which DANE did not present separately, it was assumed that the participation rate fell by a little less than for the category 12-19 (for which it was possible to calculate the participation rates in both years). The 12-19 participation rates of 1964 were: men 31.44, women 21.24 and total 25.95. (We assumed that all the employed persons in the age range 10-14 were 12 or more, as the census defined people as employed only if they were 12 or more years of age).

age groups 15-24 and 55-64 for men.[1] (See Table 17) Comparisons are more difficult to make for women since the assumption of similar preferences to work is probably less valid. Around 1950, the Colombian participation rates for males 15-19 were above those in the U.S., and for males 55-64 they were roughly equal. By about 1970, these Colombian rates were well below the U.S. ones, (See Table 17). For women during 1951-64 rates decreased for girls under 20 but rose for most other age groups, usually by one or two percent. During 1964-70 more dramatic increases occurred, so that for the age groups 20-54 a consistent increase in the participation rate of 8-10% occurred.[2,3]

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[1] The male participation rates in the age group 20-24 decreased from 91.8 to 83.5 and that for the group 15-19 from 71.6 to 47.6.

[2] Part of the increase is associated with higher female participation rates in the relatively large cities. Table A-13 presents data on age specific rates for selected cities.

[3] This increase is so dramatic as to warrent scrutiny as to whether differences between the two methodologies (1964 census and 1970 sample) would tend to introduce an upwared bias in 1970 relative to 1964. As noted earlier, the formally stated methodologies would appear to lead to quite similar figures; the main uncertainty revolves around what was actually done in the 1964 census. It seems highly probable that the "aspirantes" category was severly underestimated ; this presumably implies an underestimate of the participation rate in 1964. Age specific "aspirante" rates are not available in the 1964, census, but the overall rate was only 0.26, so given the relative youth of the urban female labor force in general (about 60% less than 30 years of age and 45% less than 25 years) this reported rate could hardly have reached one percent for any age group. In 1970(DANE, Boletin Mensual #238, p. 62), it ranged from about 4.4% to 11.6% in the three youngest categories, and probably averaged 8-10% for the group 15-30. Given the participation rates for women in these categories in 1970, this corresponds to close to four percent of the 20-24 population and 1-2% of the 12-19 and 25-29 groups. Presumably correctly measured rates would have been lower in 1964, but it seems possible that up to 1-2 points of the increaae could have been illusory; more than that would be unlikely. Hence this incomparability could not significantly alter the general conclusion reached.

Table 17

Colombian Urban and U.S. Total Participation Rates, Compared, Selected Years[1]

	Male					Female					Colombia		U.S.	
	Colombia		U.S.		(Non-white)	Colombia		U.S.		(Non-white)				
	1951	1970	1947	1969	1969	1951	1970	1947	1969	1969	1951	1970	1947	1969
15-19	71.6	40.5	66.6*	58.3*	48.6+	34.8	28.0	41.1*	43.3*	34.6+	50.3	33.3	46.3	67.97
20-24	91.8	76.9	84.9	86.6	84.4	34.9	44.8	44.9	56.8	58.6	60.1	58.7	64.8	80.64
25-34	96.6	95.9	95.8	96.9	94.4	27.7	39.3	32.0	43.8	57.8	58.6	64.9	63.0	70.08
35-44	97.2	96.5	98.0	97.0	92.7	25.1	35.2	36.3	49.9	59.5	57.6	64.4	66.4	72.89
45-54	95.0	93.9	95.5	94.6	89.5	21.1	30.2	32.7	53.8	60.8	54.5	60.6	63.9	73.45
55-64	88.5	77.2	89.6	83.4	77.9	16.3	20.3	24.3	43.1	47.5	47.0	47.7	64.3	62.14
65+	63.2	42.7	47.8	27.2	26.1	9.6	8.3	8.1	9.9	11.9	29.4	22.1	24.0	17.30

*16-19 years. The rate for the age group 15-19 would be somewhat lower.

+Approximate figures.

[1]Since almost all of the U.S. labor force would correspond to the Colombian definition of urban (centers of 1,500 and up), this would seem to be the appropriate comparison. Rural participation rates in Colombia are, of course, higher than urban ones.

Sources: Table 14; U.S. President's Manpower Reports, op. cit., pp. 216-217.

When total (male and female together) participation rates are considered, an increase is seen to have occurred over 1951-1970 for the age groups between 25 and 65; only the youngest two categories wit nessed decreases. When one focuses on changes in the degree of utilization of the human resources available, these total rates are the most relevant ones; it is probably true that perceived difficulties in aquiring the desired job have risen for a number of groups but at the same time the degree of human resource utilization has risen.[1]

What part of the decreases in participation rates which characterized certain age categories (especially young urban males) is a result of greater difficulty as in finding acceptable jobs.[2,3]

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[1] The overall participation rate for people 15-65 has risen since 1964. And since most of the decrease for the younger categories is associated with extended education, it cannot be treated as representing misuse of resources--rather the contrary. If one measures the joint "participation or education" rates for the three years, the figures are 59.4, 55.1 and 62.1 respectively.

[2] A relevant comparison in trying to gauge the effect of obstacles to job acquisition coupled with the feasibility of non-participation is that between blacks and whites in the U.S. From the age group 20-24 through the group 55-64 participation rates tend to be higher for white than black males; this gap appears to have been widening for the age groups 25-64; (recently the black participation rate in the age group 20-24 has been above the white one but this is presumably due to increasing university education on the part of the whites). At the start of the period the typical differential within the 25-64 age groups was about 1 percent; in 1969 it was as high as 6 percent for some age groups. Meanwhile participation rates for females show entirely different patterns; for the age group 16-19 whites have substantially higher rates, for 20-24 there is not a great deal of difference though blacks have slightly higher rates and for all of the older age groups blacks have substantially higher rates. These differentials have fallen in some cases over the years, however; black female participation rates in the age group 25-64 have risen, according to the age group, from 6 to 10 percent between 1948 and 1969, whereas participation rates for white females have risen between 10 to 20 percent (group 45-54) in this period.

(footnote continued on page 71)

One factor in judging whether job acquisition became more difficult or not over the period in question is the status of the persons not in the labor force. Table 19 presents a categorization of the non-participants in each age group. As noted earlier, not all of the P.R. decreases for males 15-19 and 20-24 were accounted for by increases in people stating that their "condition of inactivity" was "student." The remaining part of the increase in non participation rates was picked up by the not very helpful category "other conditions." How this category should be interpreted is open to question; one plausible hypothesis is that an important component of it corresponds to first time job seekers. If, as seems probable, they were to account for about one-half of all unemployment in the 15-24 age range, they would explain almost all of the difference between the decrease in participation rate and the increase on the "student rate." The high "aspirants" rate reflects directly job seeking difficulties; but under this explanation the decrease in the P.R. is not an additional symptom.

(footnote 2 and 3 continued)

Over the period 1967-69, of the total unemployed pool 36 to 41 percent had lost their last job, 14 to 15.5 percent had left it, 31 to 34 percent were reentering the labor force and the remainder, 13-15 percent, had never worked before. These percent distributions were not significantly different as between whites and negroes. For the quite significant group of males 20 years and over, 55 to 60 percent were unemployed because of having lost their last job whereas around 17 percent had left their last job, a very few had never worked before, and the remainder were reentering.

[3]There is presumably a "natural" rate of change in labor force participation, a function of the rate of rural-urban migration, the increased capacity of school systems, the rate of change of formal education prerequisites for employment, the rate of growth of unemployment, the rate of growth of income per capita, as well as perhaps some rate of change in the social family structure.

TABLE 18a

STATUS OF NON-PARTICIPANTS IN THE URBAN MALE AND FEMALE LABOR FORCE WITH RESPECT TO THE TOTAL POPULATION

1951

Age, Sex	At Home	Study	Minor	Aged and Invalid	Institutionalized	Other
10-14 Total	4.47	57.55	26.02	0.19	0.39	0.11
Male	-	59.62	26.73	0.25	0.31	0.11
Female	8.56	55.65	25.38	0.13	0.46	0.09
15-19 Total	27.97	20.52		0.44	0.27	0.05
Male	-	26.63		0.69	0.10	0.77
Female	48.05	16.13		0.26	0.40	0.38
20-24 Total	34.76	3.64		0.43	0.16	0.91
Male	-	6.24		0.59	0.09	1.68
Female	62.66	1.55		0.29	0.21	0.65
25-34 Total	39.01	0.65		0,56	0.17	1.01
Male	-	0.82		0.97	0.11	1.78
Female	71.12	0.34		0.39	0.22	0.37
35-44 Total	40.02	0.10		0.89	0.21	1.05
Male	-	0.05		1.26	0.14	1.62
Female	73.22	0.13		0.59	0.27	0.58
45-54 Total	41.67			1.71	0.36	1.60
Male	-			2.22	0.24	2.25
Female	76.04			0.13	0.46	0.11
55-64 Total	43.78			5.66	0.63	2.60
Male	-			1.84	0.44	4.01
Female	76.53			4.77	0.76	0.15
65-up Total	38.83			26.24	1.55	3.82
Male	-			29.31	1.31	6.59
Female	62.47			0.24	0.16	0.21

Source: DANE, Censo de Poblacion de Colombia, 1951, Resumen, op. cit.

TABLE 18b

1964

Age, Sex	At Home	Study	Minor	Old	Institutionalized or Invalid	Pensioned or Rentier	Other
10-14 Total	6.45	73.36	9.49		0.16		4.61
Male	9.38	76.16	9.45		0.20		7.98
Female	12.51	70.74	9.52		0.13		1.46
15-19 Total	21.99	36.51			0.39	0.03	4.07
Male	-	43.14			0.59	0.03	8.50
Female	38.63	31.49			0.26	0.02	0.73
20-24 Total	33.04	6.68			0.47	0.07	2.74
Male	-	10.56			0.70	0.10	5.33
Female	59.16	3.62			0.29	0.05	0.68
25-34 Total	38.29	0.95			0.50	0.18	1.73
Male	-	1.22			0.67	0.23	3.10
Female	70.33	0.74			0.35	0.14	0.58
35-44 Total	39.22	0.01			0.72	0.45	1.27
Male	-				0.94	0.54	2.00
Female	72.72	0.01			0.52	0.37	0.64
45-54 Total	40.42	0.004			1.39	1.32	1.43
Male	-				1.91	1.64	2.16
Female	74.64	0.01			0.95	1.05	0.81
55-64 Total	42.48	0.01		1.90	2.86	3.47	2.33
Male	-			1.47	4.25	5.40	4.36
Female	76.38	0.02		2.24	1.75	1.93	1.23
65-up Total	20.12	0.03		44.56	4.30	4.65	1.70
Male	-	0.3		35.95	5.98	7.94	1.58
Female	48.99	0.06		72.70	4.51	3.41	2.55

Source: DANE, XIII Censo de Nacional de Poblacion Julio 15, 1964 Resumen General, op. cit.

TABLE 18c

RATES OF NON-PARTICIPATION IN THE URBAN MALE LABOR FORCE: 1970

Age, Sex	Participation Rate	Non-Participation Rate	At Home	Student	Incapacitated	Other
12-19	25.9	74.1	---	65.4	1.1	7.6
20-24	76.9	23.1	---	18.6	2.0	2.5
Estimated:						
12-19 for 1964	31.44	68.56	---	55.81	0.44	8.31[a]

[a]This number would be higher if in fact the "other" category in 1964 had as an important component first-time job seekers; the method of calculation used here did not take this possibility into account. The figure could be as high as 9.5 or 10.0.

Source: DANE, Boletin Mensual de Estadistica, #238, p. 69.

The "other" category became equally important in 1964 for the age group 10-14 as for the group 15-19, which confuses somewhat its interpretation, there are significant numbers of aspirants at this age but not enough to explain the full increase in "other". In any case, it is not obvious that the category in some way reflects an increased difficulty in job acquisition. The "other" category remained insignificant for girls, possibly because "household" is the obvious response as to why a girl is not in the labor force. Whatever the source of this phenomenon, the further decrease in male P.R.s for the 15-19 and 20-24 age groups between 1964 and 1970 were fully matched by increases in the "student" category. It is interesting that the substantial decrease in participation for men over 55 (a 4 percent decrease for the age group 55-64 and a 15 percent decrease for the group 65 and over) in the urban areas is a conglomerate result of defining more people as invalids, an increasing ratio of people who live off wealth, and a positive change in the "other contitions" category. Possibly jobs were harder to get for older people at this time.

It is an interesting question the extent to which the decreasing participation rates and high unemployment rates for males of certain age groups (15-24 and 55-64 in particular) have been associated with the increase in female participation rates. Table 16 suggests that the female participation rates rose only marginally during 1951-64 but sharply during 1964-1970, while the male rates in the affected ages fell faster in the former

period for the younger group--and at similar rates for the older group; this would suggest a lack of relationship. In general it may be assumed that a large part of the female labor force is non-competitive with men; thus even a rapid rise in the female participation rate might not impinge directly on too high a share of the male labor force. More detailed research will be required to throw some light on this question.

Hints as to the factors determining PR's may be provided by the nature of their short run fluctuations; some tentative information is available along these lines. Urrutia's observations from a study in Bogota provide a useful background. He found that fluctuations in participation rates (like the rates themselves) differed substantially by age and sex.

The rates continuously approached 100% for men between 30 and 50; the lowest participation rate found for any trimester between March 1963 and March 1966 was about 96%; usually the average was 98% or higher. Participation was also quite high for the 25 to 29 age group with the average being around 94%; during one trimester it dropped below 90%. The rate was much lower usually below 80%, in the 20 to 24 age group, and below 50% in the 15 to 19 age group. Fluctuation was, as expected, more marked in these two low age groups; the range was 74% to 86% for the 20 to 24 age group and 39

to 52% for the 15 to 19 group. For the 55-9 age group the participation rate fell below 80% in some trimesters and fluctuated rather widely between 78 and 95%. Unfortunately the smaller sample size for the categories including the youngest (i.e. 15-19) and the oldest workers would itself explain a part of the greater fluctuations, i.e. the standard error of estimate is greater for these categories. But the sample sizes are not so different as to suggest this as the major factor in the observed differences. Female participation fluctuates more than that of men for all age groups except the youngest two categories. Urrutia explains the fluctuations in the younger age females as a result of the fact that the girls do not have family responsibilities and can work in their own homes. When there is high supply of labor, entrepreneurs prefer men to women.

Experience from other Countries is useful in interpreting the overall participation rates of Colombia and in suggesting hypotheses as to their relationship with unemployment rates and other variables.

In a number of countries relationships have been observed between the rate of open unemployment and the participation rate; as seems plausible, for some subsets of the population a high unemployment rate tends to go with a low participation rate, presumably through a disincentive effect; for other subsets the opposite relationship holds, presumably because the high unemployment rate increases the incentive effect.

In the U.S, for example, Dernberg and Strand claimed to find

> that a fall in employment as the economy begins a downward cycle is intially accompanied by a fall in the participation rate but later an increase occurs as secondary workers begin to enter the labor force. (Presumably some of these find jobs and some do not, but at any rate they enter the labor force).[2]

Clarence Long, in a study of five countries,[1] found that the participation rate was inversely related to overtime changes in average income per adult male, while that of single and separated women had no noticeable relation to changes in women's salaries; for mothers with or without children the participation rate was negatively related to husband's income. Long concluded overall that no strong relationship between income levels and participation rates could be expected. For the United States (and with respect to the period 1940-50) he found that, regardless of age, locality or race, female participation increased slowly for women who did not have more than secondary school, but very rapidly for those who had attained the university level. The impact of education on male participation was quite different, with the achievement of a primary education being the key factor and further levels relatively unimportant. The decision as to whether a women will enter the

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[1]Clarence Long, The Labor Force Under Changing Income and Employment, New York: Princeton University Press, 1958, p. 29.

[2]Thomas Dernberg and K. Strand, "Hidden Unemployment 1953-62; A Quantitative Analysis by Age and Sex." The American Economic Review, LVI, No. 1, March 1966.

labor force is, of course, much less a foregone conclusion and depends much more on the quality of the job she can get. Male participation fell substantially for the older people (over 55) if they did not have a university education.

Theory contributes little to the discussion since the "income" and "price" effects--so to speak--go in opposite directions, the income effect tending to cause a negative correlation, and something parallel to a price effect (the generally greater difficulty in finding a job when the unemployment rate is high) tending to create a positive correlation. But intra-group relationships (i.e. relation of one person's participation with another's income) and the two way causation involved in cycles (high income and high participation may be joint effects of other factors) complicate the situation and make any number of relationships theoretically consistent.

The literature on the participation rate-unemployment relationship refers most frequently to the "discouraged worker" hypothesis, whereby high unemployment rates would be expected to dissuade workers, and to the "secondary worker" hypothesis, whereby unemployment, say for the family head, increases the need for other family members to earn income, so their participation rates rise. The discouraged worker hypothesis presumably applies most readily for those groups for whom earning income is not an absolute necessity, perhaps especially the young looking for their first job, older people who are on the verge of retirement, members of a family whose head is working, and so on. The secondary worker hypothesis is usually phrased primarily in terms of the wife and children of an unemployed family head. The discouraged worker hypothesis implies a negative relationship between unemployment rates and participation rates, for the group concerned; the secondary worker hypothesis implies a positive one between the unemployment

rate of family heads and the participation rate of this secondary group--it would normally be expected to work toward a positive relation between the two overall rates; taking into account the two hypotheses, the overall relationship is therefore unpredictable, and the verification of the two subhypotheses requires consideration of different groups--different usually by age, sex, and marital status. Within the basic family income earning groups (especially males between ages 25-55) probably not much relationship between the unemployment rate and the participation rate could be predicted, but the most logical prediction would seem to be a negative one.

Statistical analysis of these relationships in Colombia are complicated by a fairly clearcut negative trend in the participation rate of males (associated with increasing school attendance) and a positive trend for females, the short time period and uncertain quality of the data, and the fact that it is usually not presented on as disaggregated a basis as would be convenient for testing the specific hypotheses in question. The unemployment rate tended to bear quadratic relation to time, moving up towards the middle of the period and then moving down.

The data do suggest that there are relationships between participation rates and unemployment rates, though the causal mechanisms are not clear. Most of the statistical analyses have been based on the data for Bogota, which now covers a period March 1963 to June 1970. (See Table 20.)

Linear relations between the participation rate and unemployment over the period naturally do not explain much, given the quadratic behavior of unemployment and the lack of trend in the participation rate.

A simple linear regression fo the participation rate on unemployment and time

trend indicates a slight negative relationship (with unemployment the independent variable) for both total and males only.[3] (See Table A-18, equations 1 and 14.) Since these equations had little explanatory power, and the residuals were distinctly auto correlated, the negative relationship cannot be taken as meaningful. It is mentioned here, however, since Urrutia[1] found a significant negative relationship using the same equation (though the figures at that time only covered the period March 1963-March 1966) for men and women 15-54, and for women 15-54. His conclusion (along with his findings of a positive relationship for women 45-59, women 15-19 and men 45-49 suggests that aggregate analysis (i.e. where age groups are not separated) is inadequate and may lead to invalid conclusions.[2] The rest of our discussion should be read with this severe limitation in mind.

Since other factors (e.g. educational enrollment) are clearly having long run impact on participation rates, unemployment rates, or both, it might be expected that the relationship would be stronger in the short run; one

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[1]Miguel Urrutia, "El Desempleo Disfrazado en Bogota", in CEDE Empleo y Desempleo en Colombia, op. cit., pages 47-48. He presented (see Table A-19 where his results are shown) only equations with significant fits, so the relationship for males in this age group was not presented; but since the coefficient was higher for the males and females together than for females alone, the relationship presumably was negative for men (who predominate in the total.

[2]Urrutia's time span is shorter than that employed in the regressions presented here, and it must be admitted that age specific regressions have sometimes very small sample sizes so that the possible errors of estimate are substantial. Another explanation of the different behavior is that Urrutia's period covered one involving a positive linear trend in unemployment; that trend subsequently reversed itself during the remainder of the total period considered here, and the best fits obtained in my regressions involve a quadratic term for time trend. In short, Urrutia's results should not be interpreted as a proof that a negative relation holds over the longer run for the age groups he specifies; but they raise the possibility that it does, in spite of the positive relation generally found here when all ages are treated together.

[3]When a T^2 (time squared) term is added the sign of the coefficient becomes positive.

way to express such an interaction between the two is via deviations from trends, or moving averages. The best fits obtained here systematically involved one variable expressed in absolute terms and the other as deviations from its three period moving average; the relationship was invariably positive and strong (with "t" values ranging from 5 to 10 and up). This would suggest, then, that while a number of factors determine trends and cycles in the P. R.'s, one factor bearing on them in the short run is the absolute level of unemployment. Perhaps a more plausible short run relationship would be between the deviations from trend for each variable. In most of the equations tested no such relationship was found, although when the unemployed were divided into "previously employed" and "first time seekers" a strong positive relation was found between the P. R. and the deviations from unemployment trend in the latter group. (Equation 13) but not in the former.

If in fact it can be concluded that there is a positive association between the two variables, a number of interpretations might be put forward. Credence might be given to the secondary worker hypothesis; inasmuch as some of the secondary workers were women, one might expect a positive association between the two variables to be stronger for men and women together than for men alone but this is not in general true; there is no significant difference between the "t" values of the coefficient as between one case and the other. If, then, the secondary hypothesis is at work, it should be locatable in males in terms of age groups and here unfortunately, the only study done to date--that by Urrutia--only includes the three-year period 1963-66; the fact that he finds a negative relationship for men and women together over the whole age group 15-54 (i.e. almost everyone, in quantatitive terms) is suggestive of

TABLE 20

UNEMPLOYMENT AND PARTICIPATION RATES OVER TIME

Bogota

	Unemployment Rates			Participation Rates		Males		Females	
	Have Previously Worked	First-time Job Seekers	Total			Unemp. Rate	Partic. Rate	Unemp. Rate	Partic. Rate
March 63	5.4	3.0	8.4	33.7		7.6	44.5	9.5	24.6
June	5.6	3.0	8.7	34.4		7.9	45.6	9.8	25.2
Sept	4.8	2.7	7.4	33.7		6.4	45.3	9.1	24.0
Dec.	4.6	2.5	7.1	35.5		6.8	48.0	7.6	25.4
March 64	4.0	2.7	6.7	35.5		6.1	46.2	7.6	26.6
June	4.8	2.5	7.2	33.8		6.6	45.7	8.3	23.8
Sept.	5.7	1.7	7.4	33.8		8.4	45.7	5.9	23.9
March 65	5.7	3.5	9.2	31.9		8.3	44.3	10.8	21.3
June	6.1	2.7	8.8	33.2		8.0	45.1	10.2	22.9
Sept	6.7	3.1	9.7	31.9		9.5	44.0	10.1	20.8
Dec.	5.5	2.6	8.0	33.9		7.4	46.9	9.3	22.2
March 66	7.1	3.0	10.1	32.2		9.0	43.5	12.0	22.4
June	6.9	4.6	11.6	33.3		10.9	44.1	12.4	24.4
Sept	5.9	3.8	9.6	32.9		9.7	44.5	9.7	23.6
Dec.	4.6	4.5	9.2	32.8		7.4	44.9	12.3	23.1
March 67	9.8	6.3	16.1	33.8		14.9	45.9	17.9	24.0
June	8.3	4.4	12.7	33.1		10.6	43.7	15.9	24.5
Sept	6.4	4.3	10.6	33.6		9.9	44.7	11.8	24.8
Dec.	5.5	4.0	9.5	32.8		8.3	43.9	11.3	23.3
March 68	7.2	6.3	13.5	34.6	(34.4)	10.3	45.1	18.6	25.2
June	6.3	5.3	11.6	34.9		9.2	45.3	15.1	26.1
Sept	6.7	4.5	11.2	34.6		9.3	45.2	14.2	25.2
Dec.	5.4	4.4	9.8	36.7		7.0	46.8	14.0	27.8
March 69	6.3	4.8	11.0	34.6		8.6	45.0	14.9	25.3
June	6.6	5.0	11.6	34.6		9.2	44.3	15.6	25.5
Sept. 69	6.0	2.9	8.9	34.0		7.6	44.2	11.0	25.1
Dec. 69	3.3	3.5	6.9	33.5		6.1	43.8	8.1	24.3
Mar. 70	5.6	3.2	8.8	35.2		6.4	45.3	12.6	26.1
June 70	4.1	3.8	7.9	34.8		6.3	45.0	10.4	25.8

Sources: Rafael Isasa, "Ocupacion y Desocufacion en Bogota" in CEDE Empleo y Desimpleo en Colombia, op, cit., p. 115, and Revista del Banco de la Republica, Mayo 1971, p. 790. Note that no corrections have been made for any years. Slighton (op. cit.) indicated that there was a downward bias in the unemployment figures over 1963-early 1966. No comparable evaluations are available for the more recent period. As noted elsewhere, the CEDE figure for June 1970 (7.9) is far below DANE's estimate (apparently corresponding to July (?)) of 13.0%.

a basic difference in his results and mine.[2] In any case, further analysis taking age groups into account is clearly called for.

Probably the most plausible interpretation of the relationship observed would involve joint causation; with the urban economy so related via migration to the rural one, the implicit "closed economy" assumption of much of the developed country literature on this question is clearly invalid. It might be hypothesized that a speedup of migration (which typically brings a disproportionate number of working age people to the city, would both increase participation rates because of the age structure of the immigrants and their need to work)[1] and push up the unemployment rate, as the competition of the immigrants registers itself. Or if the causal sequence works in the opposite direction, i.e., if the flow of migration is determined by urban conditions one might interpret a high unemployment-participation rate link as resulting from a relation between high unemployment and relatively good times in which a fair share of people are willing to wait to get a job rather than to take whatever comes along.[3] Finally it is quite plausible to argue that an important part of the positive association involves a causal relation from P. R.'s to unemployment. Much of the unemployment is of young people and the participation rate for men is still below 80% for the 20-24 age group. If the participation rate rises, this group, characterized by unemployment as they search for the first or

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[1] Average participation rates tend to be much higher for immigrants than for natives, and this is probably not entirely due to the age structure; typically the ratio is two to one. See Isaza and Ortega, op. cit., p. 111.

[2] Although it is true that the ages above 54 determine fluctuations in the average P. R.'s out of proportion to their numbers.

[3] Very conceivably a better and more complete specification would alter the results; it is possible, for example, that there is an important seasonal effect not taken into account.

the desired job, would help to generate the observed relation.

In summary, it would appear that at present the data give some tentative refutation of an important "discouraged worker" effect, but it will remain quite tentative until more age specific analysis is undertaken.[1]

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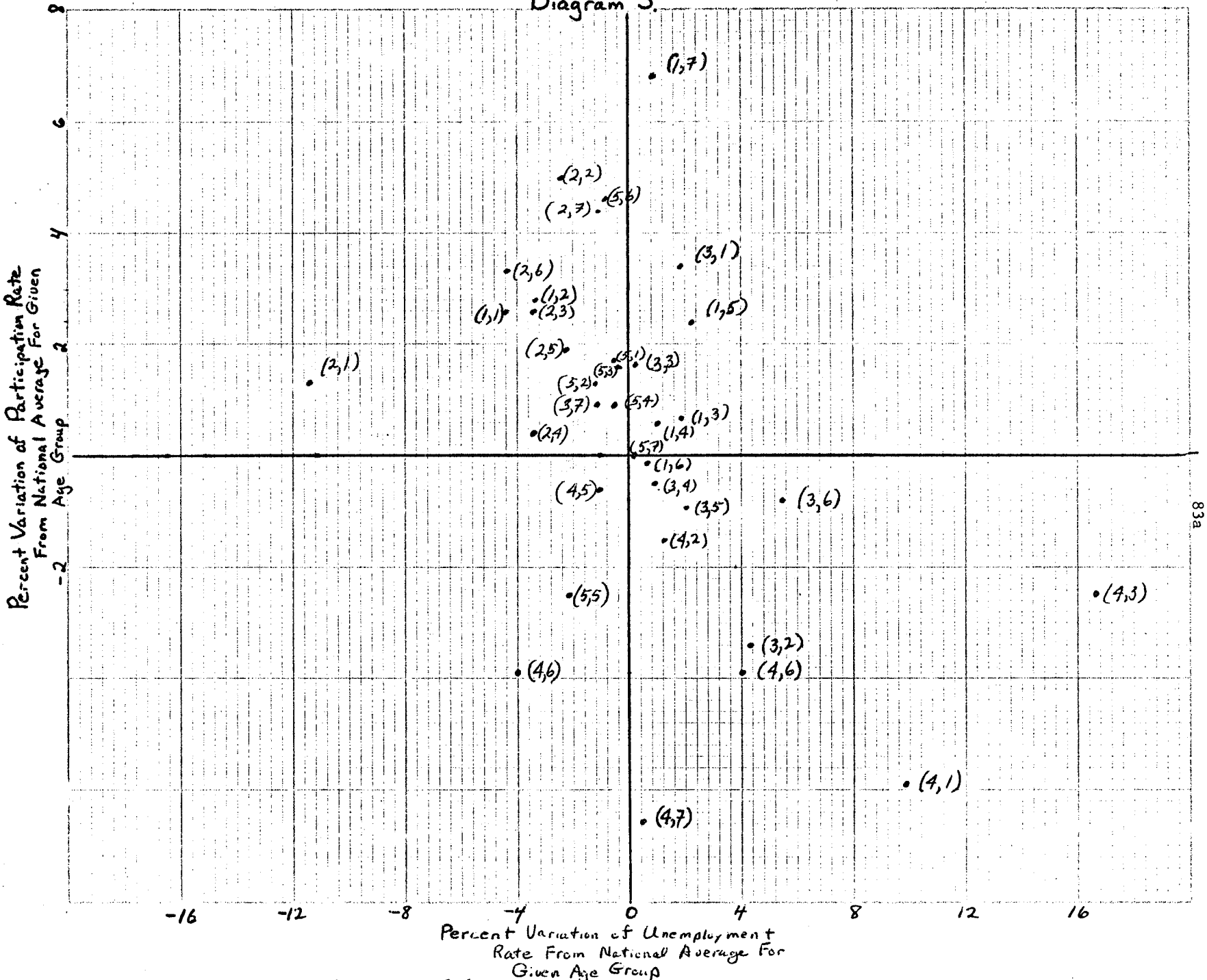
[1] Nohra Rey, Caracteristicas y Determinantes de la Participacion de la Poblacion en el Mercado Laboral de Bogota," Revista de Planeacion y Desarrollo, Volumem 1, # 3, Octobre 1969, p. 89 presents the interesting hypothesis that a relationship exists between the unemployment rate and the participation rate when the former is below 10%, but that when it surpasses that level other factors come into play so that no relationship is found. For the three year period she treats, the hypothesis holds, although variations in both participation rate and unemployment rate appear to be too small to provide much of a test of this hypothesis. There was a slight upward trend in the unweighted average of age specific participation rates for men ages 25-54 and the unemployment rate was a trifle lower for 1965 than the two surrounding years. It is of interest that unemployment rates were noticeably higher for men 10-24 in 1965 and 1966 than in 1964, were a little higher for the age group 25-29 and were fairly significantly lower for three of the four age groups included in 30-39. Some of this may be random error. But the participation rates for people over 55 were also substantially higher so this overall pattern is consistent with the "secondary worker" hypothesis. The figures for women are somewhat confusing since the hypothesis takes on particular persuasiveness for men when 1965-66 are treated as a unit; for women 1965 is quite atypical of the other two years but they are not far apart; if 1965-66 is treated as a unit it is in general true that the age groups 15-29 had lower participation in 1965-66 suggesting that another possible aspect of the situation, the greater freedom of choice of these women as to whether to enter the labor force, may have been playing a role. An alternative interpretation would be that the drop in 1965 corresponded to the initial shock and the increase in 1966 to secondary workers entering the force. The female unemployment rates were substantially higher in '65 and '66 for people below 30 suggesting the secondary worker hypothesis; there appears to be substantial standard error in these figures, however, so interpretations are difficult. For men, the higher 1965 and 1966 figures were almost entirely due to more people looking for jobs in the age group under 25.

For such a short set of years, figures are difficult to interpret also because of the problem of lags. A plausible interpretation would be that the increasing difficulty of acquiring jobs in 1965 for men, related to an increase in the unemployment rate from 6.9 to 8.4 and increases in the participation rate for people under 30, while not associated with increases in female participation in 1965 (though there were increases in the unemployment rate) was partly responsible for the return in 1966 to the high female participation rates at least for certain age groups.

The only cross-sectional test to date of the relation between unemployment and participation rates was undertaken by DANE, on the basis of its 1970 Encuesta de Hogares.[1] If each of the five regions into which the country was divided for purposes of the survey is considered as an observation, a rather clear negative relation appears for urban males (See Diagram 3). Dividing the males by age groups, Salazar notes that for 24 of the 34 observations the difference from the respective national mean for the two variables (op. cit., p. 66). Perhaps more significant is the fact that this negative relation is strongest in the younger age groups (12-24) where the participation rate is lower (and has been falling in the last couple of decades). For the youngest group (12-19) the result might be doubted due to the presence of education as an important independent variable. But, if instead of comparing the participate rate with the unemployment rate, the share of boys "not attending school and in the labor force" were used to measure participation, the relation remains fairly convincingly negative. (It could be argued, of course, that remaining in school is a reaction to poor occupational possibilities.) Overall, this study lends some support to the argument that employment

[1] DANE, Boletin Mensual de Estadistica, #237.

Diagram 3.



Source: DANE, Boletin Mensual de Estadistica #238 ,p.68.

difficulties do play a role in holding down participation rates for young males.

The participation rate--unemployment rate relation is weak--almost absent--for males 25-54 where the participation rates are generally quite high; it reappears fairly strongly for men of 55 and over (See Diagram 3.)[1] Since immigration to urban areas (or from one to another) is linked closely to job opportunities and is a phenomenon of youth, it would not be surprising if movement to lower unemployment cities raised their participation rates, with outmigration having the opposite effects for high unemployment areas.[2] People still in school presumably do not have the same incentive to migrate to low unemployment areas. For age groups of lower mobility, the relation could generally be expected to be weaker.[3]

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[1]Although, for reasons discussed above, unemployment figures in the rural areas are difficult to interpret, it is interesting to note that the impact of age on the participation rate/unemployment rate relation is the opposite for rural areas as for the urban economy. The negative relation is strong for ages 25-54 and weaker or absent for the younger and older groups. Possibly this difference is related to the nature of the rural-urban migration process.

[2]The large size of the DANE "regions" implies less across boundary migration than if the unit was, for example, the department, though in some cases it is substantial. The intra-regional, rural-urban migration could produce the effect, discussed, however.

[3]For reasonable certainty as to the causal mechanism leading to the observed negative relation, it would be necessary to normalize for average income and city size; both unemployment rates and average income levels tend to be higher for larger cities and participation rates tend to be lower. There is a serious identification problem here.

The results for urban women are interesting, showing some positive correlation between the two rates, in particular in the age group 45-54. Evidence for the frequent hypothesis that the female participation rate be positively correlated with male unemployment rates does not show up.[1]

Marital Status and Participation

Participation rates are normally much more affected by marital state for women than for men;[2] this is borne out by 1951 census data--information from the 1964 and 1970 sources is not available. But even for men, participation (rural and urban together) was uniformly lower for single than for married men, with a minimum difference of 3 percent in the 20-24 age groups, widening to 14% for the 65 and up group. Widowers, free union, and separated persons generally had rates between those two categories. For

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[1]Such a theory would not necessarily be expected to hold in a cross-regional study such as this; it would be more natural to expect such a relation on an over time basis.

[2]The effect of marital status on participation rates in the U.S. is especially clear and interesting for young males; for example, in the age group 20-24 single males have recently had participation rates of less than 70 percent, while married males have systematically been 95 percent or above. A very substantial difference characterized the 25-44 age group also. Rates for widowed, divorced, or separated men are closer to the single rates than the married ones. For women, the rates vary in the opposite direction and quite strongly (See Presidents Manpower Report, op. cit., p. 246). Since Colombian males tend to marry later than american males, this might account for part of thellow participation rates for younger men.

women the major determinant of low participation is being married or in union libre; the single state was most conducive to high participation--for no age group in 1951 did the participation rate raach 10% for the former groups, while it was as high as 43% for the unmarried women in the 25 to 34 age group.[1] (This figure is unfortunately, hard to interpret due to the impossibility of making the urban-rural division.) Widows and separated women were closer to the single pattern, and women in free union close to married women but having somewhat higher participation.[2] For free union and married women the lowest participation rates were for the age group 15-24, presumably when children are coming fastest. Participation rates for married women are generally slightly higher in industrialized countries than in non-industrialized ones, but the Colombian levels (before their recent increases) tended for the age groups 15-44 to be only about one quarter of those typical of non-industrialized countries (a little over 20%). A special characteristic of the single girl is her late entrance into the labor force in Colombia. Although both these phenomena are no doubt less prominent now than in 1951, it does seem clear that they continue to be present.

Evidence on the Extent of Disguised Unemployment and Underemployment

Open unemployment and low participation rates which are due to the difficulties of job acquisition do not exhaust the forms of underutilization of human resources. In a country like Colombia it might well be argued that they are less important than the more pervasive disguised unemployment associated with a dualistic economic structure. If the interpretation of open

[1] Roberto Jungito, Alvaro Lopez, Alvaro Reyes, Diego Salazar, Analyses de la Estructura y Evolucion de la Fuerza de Trabjo Colombiana 1938-51 y 1964, y Projection de la Poblacion Economica mente Activa 1965-85, CEDE, Universidad de los Andes, Bogota, 1970, p. XVI. The authors indicate that the category "hogar" is a very imprecise one, and is probably used in many cases of doubt, since in any case the women in question will tend to be in the "household."

unemployment presented at the beginning of this paper is reasonably accurate, it could certainly be argued that in terms of welfare cost that form of underutilization is less important than disguised forms.[1] Low participation rates also necessarily reflect an alternative and a not too marginal economic situation.

In any case, it is useful to distinguish the following forms of labor underutilization:

1. open unemployment;

2. open underemployment, where the individual openly seeks more hours of work than he presently executes;

3. disguised unemployment, where the individual is not in the labor force although he would be if attractive employment were more easily available;

4. disguised underemployment, where the individual seeks less hours work than he would if more attractive employment were available.

5. inefficient employment, where although the individual is employed in terms of the above criteria he has lower productivity than would be possible under some other labor market arrangement. It is important to emphasize here that simple low productivity is not the defining characteristic of this form of human resource loss; even with perfect allocation, productivity of labor is necessarily low in a poor economy. The reference is to a situation like that frequently described in the labor surplus literature, where marginal productivity of labor is low or zero in the traditional

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[1] It might seem, on the other hand, that if much of the open unemployment is "white collar" type, that the opportunity cost of its non-use in terms of output foregone could be particularly high. This issue is not clear, however. An alternative interpretation would be that the marginal productivity of this labor is low. More information is needed to clear the air.

sector but much higher in the modern sector, permitting the conclusion that some of the former labor would have much higher productivity if transferred to the latter sector. Over-allocation of labor to a monopolistically competitive sector where its marginal social productivity is zero though the marginal private productivity may be substantially positive would also fit this category.

The Bogota evidence over the 1963-66 period indicates that in tight situations it is not only new entrants who are worse off; over this period the percent of unemployed without previous job experience fell; since there was not a violent fluctuation in the unemployment rate over this period, it is difficult to speculate on trend vs. non-trend movements.

Over time indicators of part-time work and other forms of underemployment are unfortunately unavailable, though pieces of information are available for some recent years. A CEDE study of 1963 including Bogota and some towns nearby found rates of unemployment as defined by percent of total available (see definition in footnote) hours not being worked, ranging up to 16.5% whereas the traditionally defined open unemployment rate ranged only up to 9.0%. But the

definition used to derive the former figure may have implied an upward bias.[1] The 1964 population census included a question (for people in the labor force) on the number of months worked during the previous year (including time not worked due to paid vacation, sickness, strikes, etc.). For both the active population as a whole and the non-agricultural population, the average number was about 9-1/4 to 9-1/2 months. This figure is, however, difficult to interpret.[2] The ILO report presents guesstimates of the relative importance of three forms of underemployment (items

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[1]Miguel Urrutia, "Metodos Para Medir Los Diferente Tipos de Subempleo y Desempleo en Colombia," Empleo y Desempleo en Colombia, CEDE, Universidad de Los Andes, Bogota, January 1968, p. 35. The definition which led to the cited estimates of unworked hours involved treating anyone who worked less than 32 hours a week as unemployed during the hours necessary to make up 48 per week (people on vacation, strikes, sickness and so on were not included). This would be an underestimate of total hours necessary to make up 48 for everyone, since people working more than 32 hours were not considered. But when only people who were working less than 32 hours and who said they wished to work more were included, the rates tended to be not much above the open unemployment rate (in the two places where this measure was also taken).

[2]The statistic included some proportion of underemployment, since in the case of persons working less than 6 days during the week of the census the enumerators were instructed to record the time they were employed in terms of the annual equivalent of months at work; it is not clear how this part of the answer was combined with the other part on unemployment so the measure is difficult to interpret. (See ILO, op. cit., p. 354.) Since a number of modern sector workers (almost all) work less than six full days, this would seem to imply that those working five days would be recorded as having an underemployment rate of 16%; and the data for them would be based on the censal week rather than the year. For those fully employed (6 days), the annual underemployment figure would appear. The process would lead to an upward biased estimate of underemployment.

2,3, and 4 mentioned above) based largely on data of the 1964 population census, it concludes that about 25% of the potential labor force goes unused because of open unemployment or one of these forms of underemployment. (See Table A-4).[1]

Dane's 1970 survey is easier to interpret than the earlier sources. It estimated open underemployment (defined there as people working less than 32 hours in the censal week[2] and wanting to work more) as 2.7 of the labor force (the same as the ILO estimate). This rate was quite different for men (1.7 urban, 0.9 rural and 1.3 overall) and for women (3.8 urban, 4.8 rural and 4.0 overall).[3] The percentage of persons affected by open underemployment is greater than the full person equivalent rates as calculated (see Table 22).[4] The greater difficulty of attaining employment experienced by women, especially in rural areas, comes through once again.

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[4]It is interesting to note that this is also true of open unemployment. In the U.S. (and probably in Colombia), the number of people suffering some unemployment in a given year is usually over three times the unemployment rate itself. (See Table A-11). The number suffering unemployment more than once during the year is about equal to the unemployment rate.

[2]DANE, Boletin Mensual #238, p. 60.

[3]DANE, op. cit., p. 72.

[1]This figure, however, includes a high 14% open unemployment--a figure based premarily on CEDE's eight city unemployment survey of 1967. That year appears to have had one of the highest unemployment rates on record; DANE's 1970 figure was 10%.

In absolute terms, the important open underemployment is found for men in urban services and in agriculture, and for women in services and manufacturing, both rural and urban. (See Table 21) Since the 1964 population census information did not distinguish open underemployment from other forms, no over time comparisons can be made at the national level. Urrutia's 1967 figures[1] also apparently indicated two percent, a little lower than DANE's 1970 national urban figure (2.4).

A more difficult form of underutilization of human resources to estimate is hidden unemployment and underemployment (persons not in the labor force but who would seek work if employment problems were less)[2] and persons in the labor force and not seeking more work but who would do so if the chances of success were better.

Although open to much doubt, it may be of interest to try to deduce something about disguised unemployment by considering the evidence on the participation rate/unemployment rate relation. How much "disguised unemployment" takes the form of low participation rates?

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[1] Miguel Urrutia, "El Desempleo Disfrazado en Bogota," CEDE, Empleo y Desempleo en Colombia, 1968.

[2] The concept should probably be conceived of in net terms, i.e. exclusive of people now in the labor force who would leave it if the unemployment situation were less difficult, e.g. if their husbands could find work.

Table 21a

OPEN UNDEREMPLOYMENT, MEN-URBAN AND RURAL

	Field of Activity	Distribution of Underemployment	Supply of Jobs	Rate of Open Underemployment
URBAN:	Services	0.6	22.3	2.5
	Commerce	0.3	19.4	1.7
	Agriculture	0.3	14.0	2.0
	Manufacturing	0.2	22.2	0.9
	Construction	0.2	8.9	1.9
	Other	0.1	13.2	---
	Total	1.7	100.0	1.7
Rural:	Agriculture	0.7	85.7	0.8
	Other	0.2	14.3	[illegible]
	Total	0.9	100.0	0.9

Source: DANE, Boletin Mensual de Estadistica, #238, p. 73.

Table 21b

OPEN UNDEREMPLOYMENT - FEMALES - RURAL AND URBAN

Field of Activity	Distribution of Underemployment	Supply of Jobs	Rate of Underemployment
Services	1.7	50.1	3.3
Manufacturing	1.4	20.8	6.6
Commerce, Restaurants & Hotels	0.6	23.1	2.4
Other	0.1	6.0	---
Total	3.8	100.0	3.8

Table 21c

OPEN UNDEREMPLOYMENT-RURAL FEMALES

Fields of Activity	Distribution Underemployment	Supply of Jobs	Rate of Underemployment
Manufacturing	2.4	25.3	9.2
Services	1.3	35.3	3.7
Commerce Restaurants & Hotels	0.7	11.4	6.3
Agriculture	0.4	26.7	1.5
Other	---	1.3	---
Total	4.8	100.0	4.8

Source: DANE, Boletin Mensual #238.

The most recent attempt to estimate these phenomena was by DANE;[1] the results are summarized in Table 22, and cross region data for urban men presented in Diagram 3. Salazar concluded that hidden unemployment was virtually non-existent in the case of rural men but might reach 6%[2] for urban men, with the rate concentrated in the younger (15-24) and older (55 and up) age groups. No attempt was made to estimate a figure for women since their rapid increase in the labor force makes any calculation highly speculative. This does not mean, of course, that the figure could not be significant.[3]

The nature of the DANE calculation suggests that it provides an upper limit estimate (barring serious data problems).[3.5] The meaning of peoples' being outside the labor force (especially during a given week--as opposed to a given year) is hard to interpret,[4] so it is worth while comparing the Colombia results with those of other countries. U.S. data suggest that the Colombian picture may not be an atypical one, (See Table 23), i.e. that about

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[2] Note that this rate is calculated on the base of total population 12-64 rather than on the labor force as in the case of the unemployment rate.

[1] (See DANE Boletin Mensual de Estadistica #238, p. 75).

[3] On the other hand, some women would presumably leave the labor force if their husbands could get jobs.

[4] The extent of hidden unemployment and underemployment, assumed to be reflected in low participation rates may also be ascertained in some measure by consideration of the status of non-participants, but, as discussed earlier, the Colombian breakdown is not adequate to permit any very interesting conclusions on this issue.

[3.5] Urrutia's results for Bogota in 1965 (Urrutia, "El Empleo Disfrazado...", op. cit.) would suggest that the disguised unemployment in Bogota was not too great, and similar calculations for June 1969 led to the same conclusion; (specifically that if this unemployment were zero this would increase the rate of employment by only 0.6%, see Rafal Isaza B., El Desempleo en Bogota Durante el Periodo 1963-1970, Trabajo no publicado; reported in Rafael Prieto, op. cit., cerca p. 200.)

80% of theoretically possible labor force hours is what can be anticipated, and about 60-70% of all possible hours of people above about 15 years of age.

The disguised underemployment rate is estimated as 3.2% (see definition DANE, op. cit., p. 60; like open underemployment, it is measured in person-equivalents). Since the methodology is not presented, it is not clear how large a percent of the population would be affected; nor is it clear how accurate the calculations are. Again the rate is much higher for women than for men, and dramatically high for rural women. Participation rates for married women are generally slightly higher in industrialized countries than in non-industrialized ones, but the Colombian levels (before their recent increases) to be only about one quarter tended for the age groups 15 to 44 those typical of non-industrialized countries (a little over 20%). A special characteristic of the single girl is her late entrance into the labor force in Colombia. (a little over 20%). A special characteristic of the single girl is her late entrance into the labor force in Colombia. Although both these phenomen are no doubt less prominent now then in 1951, it is especially clear that they continue to be present.

Table 22

HIDDEN UNDEREMPLOYMENT - MEN AND WOMEN, URBAN AND RURAL

Field of Activity	Participation in Underemployment	Share of Labor Force	Rate of Hidden Underemployment
Rural Women:			
Manufacturing	5.8	25.3	22.8
Agriculture	2.6	26.7	9.8
Services	2.3	35.3	6.6
Other	0.9	12.7	---
Total	11.6	100.0	11.6
Urban Women:			
Services	2.1	50.1	4.3
Manufacturing	1.4	20.8	7.0
Commerce, Restaurants & Hotels	0.8	23.1	3.7
Other	---	6.0	---
Total	4.3	100.0	4.3
Rural Men:			
Agriculture	2.4	85.7	2.8
Other	0.3	14.3	---
Total	2.7	100.0	2.7
Urban Men:			
Agriculture	0.5	14.0	3.5
Services	0.5	22.3	2.2
Commerce, Restaurants & Hotels	0.3	19.4	1.5
Other	0.5	44.3	---
Total	10.8	100.0	1.8

Source: DANE, Boletin Mensual de Estadistica #238, pp. 74-76.

Evidence on the Alternatives to Unemployment

Unless a person moves from involuntary to voluntary unemployment status, he must eventually either leave the region (in which case he drops out of the figures entirely) or accept some job; it is of interest to distinguish (a) the person who gets (roughly at least) the job he wanted, (b) the person who accepts a less attractive job than he had hoped for[1], (c) the person who starts up his own business, frequently in a monopolistically competitive type of industry as a result of failing to get the job he wanted, and (d) the person who goes elsewhere.

Data are not available over a sufficient length of time to give clues on the extent to which aspirants to particular jobs are eventually satisfied after a certain wait, and the extent to which they must accept jobs relatively unattractive to them. The 1967 data indicate that a higher share of the population were hoping to enter certain occupations than were in them; a comparison of these percentages with the distribution of the marginal increase of the labor force over the intercensal period is of interest, suggest tentatively that some aspirations are not met, in the sense that the unemployed eventually have to accept jobs with characteristics they did not want. This conclusion is very tentative however. (See Table A-15.)

Some evidence has been cited to the effect that outmigration from cities is significant. While the net rates of inmigration even to

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[1]Alternatives (a) and (b) could better be expanded into a spectrum of possibilities.

Colombia's largest cities have been very high in the last couple of decades, there appears also to have been substantial outmigration.[1] This suggests the interpretation of it as a safety valve tending to control unemployment rates. Unfortunately the evidence is still rather conflicting on this issue; Simmon's study located substantial return flow from Bogota to other localities in Cundinamarca and Boyaca[2]; although no direct evidence was sought with respect to the cause of the return outflow, the surrounding conditions did not suggest that it reflected employment difficulties in Bogota. Udall, while estimating high gross outmigration rates,[3] did not find any obvious relation to unemployment rates. Possibly the outmigrants had been looking for white collar jobs, did have difficulties finding them, and having fairly good prospects in smaller places, returned to them. This would take into account Simmon's observation that their education level was relatively high and their background relatively more affluent than

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[1]The most detailed study of this process, Alan Udall's Yale dissertation on the Bogota labor market, suggests quite high rates of gross outmigration from Bogota.

[2]Note that the ratio of people living in Bogota but born elsewhere to people living elsewhere and born in Bogota was quite high in 1964; this figure represents an accumulation over a long period of time and is not necessarily representative of the relative flows in recent years, but it does suggest that relatively few people born in Bogota emigrate. Udall's conclusion that gross outmigration has been large, and Simmon's evidence that return migration has bean important would partly suggest that much of the outmigration is of non-natives.

[3]The indirect methodology used implies, unfortunately, substantial uncertainty for these estimates.

other immigrants to Bogota.[1]

Outmigration from small and intermediate cities is heavy, and is presumably directly primarily at larger cities. Again it is not clear how much of it is due to unemployment problems nor the extent to which it relieves such problems. McGreevey hypothesized that "fill-in" migration was prevalent in Colombia; i.e. natives of smaller cities would move to larger ones while natives of rural areas "filled their places," migrating into the smaller towns.[2] Garcia[3] questioned this hypothesis, and found very considerable indirect step migration by immigrants to the large cities. Neither study analyses out-migration as an accomodation to specific unemployment problems.

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[1]One might, nevertheless, expect some outmigration by the lower income immigrants. It was argued above that the lower unemployment rates of immigrants compared to the native born could be related to the danger the low income migrants would be in if they moved without having a job fairly secure; since their wealth levels are likely to be lower also, it might be argued that they should migrate out more rapidly if employment did not appear. Unfortunately evidence is not available to test this hypothesis, and it is not an obvious one since there may be no good alternatives in sight for this group elsewhere either.

[2]See William P. McGreevey, "Causas de la Migracion Interna en Colombia" in Empleo y Desempleo En Colombia, op. cit., p. 211.

[3]Garcia, op. cit.

Changing Occupational Structure as a Measure of and Accomodation to Employment Difficulties.

If it is true, in some measure, that unemployment over any length of time is a luxury available only to those with considerable financial backing, then it would seem to follow that a result of the phenomenon of "too little capital (and other non-labor resources) to match the available labor at the capital/labor ratio characterizing the modern sub-sector of the economy" will be a subsector with a very low ratio of capital to labor; an increasing "employment problem" should be reflected in an increasing disparity of capital/labor ratios in different sub-sectors of the system, an increasing widening of differences between average and marginal labor productivities of these sub-sectors, and continued very low or even decreasing income per capita for some low income groups. The two categories most frequently suggested as lending themselves to very low capital/labor ratios are small scale commerce and certain types of personal services (gardeners, possibly maids, and others), a number of these being "own account" type occupations.[1] Some pieces of evidence point to such a phenomenon in Colombia, but overall the picture is mixed and confusing at this point.

Most economies under successful development show an increasing share of the population being employed by someone else.[2] When employment

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[1] A second condition likely to be relevant is easy entry, i.e. the possibility of low capital/labor ratios may not be enough if, for example, there are severe imperfections in the product market (e.g. licensing requirements).

[2] This is an inevitable concomitent of increasing size of firm (in number of workers).

prospects are very dim one might expect an increasing share of the labor force to be pushed into own-account activities. Overall proletarization seems to have increased fairly continuously since 1938; the sum of white collar and blue collar workers was, for men, 49.7% in 1938, 52.5% in 1951, 54.5% in 1964 and 59.1% in 1970. (See Table 23.) For women it was 50.0% in 1938, 67.6% in 1951, 72.3% in 1964, and 72.1% in 1970, indicating that here there was a rather marked shift over the 30 year period. Overall (men and women) the increase was from 49.8% in 1938 to about 60% in 1970. Part of the overall proletarization over this period was due to a decreasing share of the labor force found in the relatively non-proletarized agricultural sector (the labor force share in the primary sector[1] was 65.0%, 55.5%, 48.9% and a little over 40% in the four years) and in part to an increasing proletarization ratio in non-agriculture--from 57.4% in 1938 to 70.0% in 1970.[2] Overall, a fairly clear picture seems to emerge overall from the table; for both the urban and non-agricultural populations the proletarization ratio rose rapidly between 1938 and 1951, eased up in the next 13 year period and fell a little in the 1964-1970 period as a result of a fall in the ratio for women; that for men, at least for non-agriculture, seems to have kept moving up a little.

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[1] The ratio is about the same in agriculture and in the total primary sector.

[2] Problems of comparison are introduced by the lack of "independent workers" category for secondary and tertiary sectors in 1938. (Among other problems - see Table 23.)

Table 23

Proletarization Rates*
Censal and Sample Years; Rural, Urban & Total

	Rural			Urban			Total			Agriculture			Non-Agriculture		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
1938[a]							49.72	50.02	49.79	46.15	39.55	45.47	59.70	54.53	57.44
51[a]	46.49	49.92	46.91	63.77	78.33	68.10	52.52	67.62	55.41	44.03	31.87	43.47	68.03	22.98	69.85
64[a]							54.48	72.29	58.06	42.75	31.48	42.21	70.00	77.52	72.57
70			47.39	67.89	73.82	70.00	59.14	72.14[b]	59.92-60.83	46.39	46.00	46.37	71.85	74.08	70.03

*Empleados and Obreros as share of Labor Force Indicating Occupational Position.

[a]Excludes "sin informacion"

[b]Deduced from total and male figures.

Sources and Methodology: The major possible source of incomparability among the sources relates to agriculture in 1938, where the category "servants" appeared without indication as to whether these where paid individuals or not. The majority were women. For present purposes 60,000 were assumed to be family helpers, based on a comparison with the "family helper/field worker" ratio for women in 1951 (about 0.60); assuming the same ratio in 1938 there would be 30,000 such people, or 1/3 of the total number of servants. In the case of men the category "domestic activities" is difficult to appraise, but 1/3 of these were assumed to be paid workers and the rest in effect family helpers; all of the "servants" were assumed to be family helpers although this may be a misinterpretation; if so, the proletarization is underestimated by up to 5 percentage points. But there must have been helpers in 1938 and unless the "peones y obreros" category included these people, the 35,000 listed here is lower than what would have been expected (there where 262.5 thousand in 1951); in fact this great difference does suggest that unless "peones y obreros" did include some family helpers, then the proletarization rate is overestimated at this time. But more detailed research would have to be undertaken to judge this, probably on a department by department basis. I have found no reference giving leads on whether the category "domestic activities" could include paid workers nor whether male servants, to be included in the labor force, must necessarily be paid.

Sources and Methodology for Table 23, continued:

The 1970 figures also present non-comparabilities due to the incompleteness of the results of the sample survey published to date. The tables published in Boletin Mensual de Estadistica, #238, from which it is possible to deduce something about the occupational position breakdown, referred to occupied people rather than the total labor force; for the previous years, although first time job seekers where excluded, unemployed persons who had been previously employed were included as far as could be seen. The figures presented here for 1970 are somewhat above those directly deduced from the tables referring to occupied persons, as seems plausible given the logical interpretation that of the unemployed a higher share would be in the paid worker catagories. The total proletarization ratio in which we place greatest confidence here, 60.8, was above the 59.1 estimated from the table which included only the occupied population, and 59.5, estimated from a table which appeared to include occupied population working more than 15 hours. An attempt was made to adjust all other calculations on the assumption that the 60.8 figure was correct; this may have led to problems since equal upward adjustment to the rural and urban ratios on the one hand and the agriculture and nonagriculture ratios on the other hand may not have been a valid procedure. As a result it is possible that the urban and nonagriculture figures are downward biased and the rural and agricultural are upward biased; but it seems unlikely that these biases could exceed say 1%. Another possible source of error in the nonagricultural figures results from the fact that they w ere deduced indirectly from the total and agricultural figures, using the weights applied for agriculture. The indirectness of the methodology implies that any interpretational errors could have led to mistakes in the final figures.

Note also that the application of wrong regional weights for males and females separately in the agricultural sector has led to some error in those estimates, and since the non-agricultural male and female estimates were based on the agricultural ones and the total, there must be errors there too. These figures must be thought of as preliminary ones.

An additional source of possible error in the over time comparisons relates to error in the handling of people who did not report occupational position. They were not presented as a separate category in 1970 so it was clear how much information had to be discarded on this account; presumably it was small. The same was true in 1964 but in 1938 and in 1951 the number was large enough so that if it was not fairly proportional to the other categories disregarding it (as we have done) could have led to some error.

In view of our present concern-unemployment-and given that it has frequently been argued that the increased share of own-account women in the urban labor force is a reflection of difficulties in the labor market, it is useful to disaggregate this apparent increase in the proletarianization ratio according to whether the increase is in family helpers, employers, or independent workers. Note that the increase in unpaid categories over 1964-70 appears to have occurred in all three categories, i.e. employers, independent workers and family helpers. (See Table A-17.) The sources of this deproletarization are not clear; it is related, certainly, to the increasing share of the labor force in commerce, restaurants, etc., the paid worker ratio is low in these sectors. The expansion of small scale manufacturing in this period may have played a similar role. (Sectoral changes are discussed below.)

Accompanying the proletarization (increasing share of paid workers as opposed to employers or independent workers) over time, is an increasing share of paid workers found in large establishments; the large establishment sector might, in some respects, be dubbed "modern." Table 24 presents a rough estimate suggesting that between 1951 and 1964 the share of the labor force in establishments of 5 or more workers (or, in the case of agriculture, having more than a certain amount of land) rose from 33% to 37%; when only non-agriculture is considered, the share rose from 43.6% to 46.1%; these trends have al-

Table 24

Preliminary Estimates
of a Modern-Traditional Breakdown of the
Colombian Labor Force - by Sectors*

	1951				1964			
	Modern	Traditional	Total	% Modern	Modern	Traditional	Total	% Modern
Agriculture, etc.[a]	570.0	1646.0	2215.0	25.7	702.0	1798.0	2500.0	28.1
Mining	34.7	26.6	61.2	82.6	45.0	36.3	81.3	55.4
Manufacturing	185.5	289.2	474.2	39.1	310.0	359.1	669.1	46.3
Commerce	35.0	148.0	183.0	19.1	108.0	274.3	382.3	28.3
Construction	112.9	20.0	132.9	84.9	150.7	70.0	220.7	68.3
Transportation, etc.[b]	118.3	10.3	128.3	92.2	181.8	10.0	191.8	94.8
Personal Services (excluding domestic & government)	67.7	68.0	135.7	49.9	135.1	100.0	235.1	57.5
Government & Public Utilities,	139.2		139.2	100.0	215.7		215.7	100.0
Domestic Service	0	333.7	333.7	0	0	488.5	488.5	0
Total Classified	1263.2	2541.5	3804.7	33.20	1848.3	3136.2	4984.5	37.08
Non-Agriculture	693.2	895.5	1588.7	43.63	1146.3	1338.2	2484.5	46.14

[a]Includes fishing and forestry.

[b]Includes storage and communications

*NOTE: No allowance is taken here of unemployed, non-classified or otherwise confusing cases. For some sectors, figures are adjusted upward for census underenumeration and in other cases this is not done, so some incomparability results. But these weaknesses are small compared to the problems in estimating the modern-traditional breakdown within the sectors themselves.

most certainly continued in subsequent years.[1]

The frequently hypothesized process whereby the lack of job opportunities elsewhere forces people into the relatively free entry and monopolistically competitive commerce (and in particular into retail commerce of certain types of goods--especially food) and personal service sectors, would be expected to lead to an increase in the share of the active population found in those sectors and (if strong enough) to a decrease in the average incomes in these (with the decrease mitigated somewhat if the increasing number of competing units leads to a decrease in the elasticity of the "representative" demand curve for the services so that their prices could rise during the process).[2]

The commerce sector is of particular interest with respect to this question. Its share of active population has indeed increased over time. But the hypothesized decrease in incomes--the element more directly relevant to the question of whether such a large group of people has filtered into this sector that it must be interpreted as a safety valve income and employment sharing device--does not seem to receive statistical support, although it may be true that average

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[1] As indicated in Table 23, the 1964-70 period probably saw a rise in the share of people employed by others of about 1-2 percentage points; impressionistic evidence suggests that the share of paid workers in large establishments also rose.

[2] The national accounts imply that there has been an increase over time in the price of the commerce "service", but since this sector is so hard to work with statistically (see below), the conclusion is open to question; it seems about as likely that the opposite has happened.

wages and incomes in this sector have risen more slowly than in most other sectors.

The share of the active population engaged in commerce has risen substantially--from about 5% in 1951[1] (also the 1938 figure) to 7.71% in 1964 and to perhaps 9.4% in 1970.[2] But it is difficult, without more detailed data than available at present, to interpret this adequately. It seems reasonable to anticipate some increase in this share to be a response to the development of the economy, and in particular to the increasing degree of commercialization and trade as

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[1]The 1951 census did not permit an easy distinction of commerce, within the broader category of "commerce and finance." The former was almost 90% of the total in 1964 and we assumed it to be a little over 91% in 1951. In each case the ratio presented gives the relation to the active population who reported sector of activity.

[2]Assuming that commerce was the same share of commerce, restaurants and hotels (67.6%) as in 1964 (and assuming that the restaurants and hotels category of 1970 corresponds to the "servicios prestados al publico" category in 1964). Something of a cross-check is provided by the data on "salesmen" which should be fairly closely related to commerce. In 1964 this category included about 7.1% of the population which declared an occupation (after inclusion of a category listed in 1964 as "managers in commerce," which was so included in 1970 but which the 1964 census listed in a different category); in 1970 (see Encuesta de Hogares, p. 10) "commerciantes y vendedores" accounted for 10.3% of those reporting incomes, and perhaps about 9.6% of the labor force (the share of employed who are family helpers is less in commerce than on average). It seems possible that the 1970 category referred to here is broader than that of 1964, so the increase may be overestimated.

a higher share of goods produced enters commercial channels.[1] The goods whose commercialization is in some sense the most complex are agricultural items; as of 1954 almost one half of the people occupied in the commercial sector were involved with these; with the increasing urbanization of the population it might be argued that it is not necessarily inefficient for an increasing share of the total population to be engaged, for example, in this type of commerce.

It is of more interest to consider changes in the share of commerce in the urban labor force than in the total labor force. A best guess would be that commerce rose from 10.1 to 12.7% of the urban labor force between 1951 and 1964.[2] For the broader category commerce, restaurants and hotels, an increase from 18-19% to 20.3 between 1964 and 1970 seems

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[1] Eventually, of course, an increasing share of output is in the form of services which may not go through commercial channels; but the stage has probably not yet been reached in Colombia where this factor outweighs the other (increasing commercialization of goods). The percent of the active population engaged in commerce in rural areas (or, in terms of the Colombian censuses, "other localities") is usually very small--1 to 2% or even less. In cities and towns the share appears to range from 8 or 9% up. While this does not necessarily mean that one should mechanically project an increase in the share of active population in commerce as urbanization proceeds, such a phenomenon does appear to occur in countries where the prevalence of surplus labor is much less obvious than in Colombia.

[2] There is uncertainty due to the failure of the census of 1964 to break this information down on a rural/urban basis.

probable.[1] If these figures are reasonably accurate, increases have undoubtedly occurred, though rather gradual ones.

Over time, an increasing share of workers has been found in large commerce establishments[2] (see Table 24).

Table 25 brings together most of the available information of direct help in the estimation of changes in wages and incomes in this sector over time. While the data is inconclusive (see the discussion under "methodology")it seems unlikely that, on average, wage earners in commerce have suffered a decrease in real wages[3] over any extended

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[1] Looking at the problem this way, it is interesting to notice the generally positive relationship between the share of the population engaged in commerce and the size of the city. It would be useful to compare cities of a given size in 1951 and their commerce ratios with cities of the same size in 1964 and vice versa; such an exercise has not yet, to my knowledge, been performed.

The 1970 Encuesta de Hogares indicates that 20.31% of occupied persons stating occupational positions were in this category. The share of the labor force would probably be about the same if, as new figures suggest for that year, unemployment was at about the same level in this sector as for the economy as a whole.

[2] This phenomenon, documented much more fully in the manufacturing sector, led there to a substantial increase in the paid labor share between 1950 and 1967--the national accounts estimates are 27.5 for 1950 and 38.9 percent for 1967. In commerce, an increase from 18.3 (assuming that national accounts figure for 1950 was correct) to about 23.3 percent is plausible (the figure implicit if one uses the commerce census estimate of paid labor income and the national accounts estimate of value added).

[3] It is frequently pointed out, based on the national accounts statistics, that average income per person involved in commerce has fallen over time. This conclusion is unwarranted; the methodology underlying the calculation of value added in the commerce sector is, inevitably, one of the weakest in the national accounts procedure; other evidence (see text) suggests an increase in average wages.

Table 25

Annual Earnings of People Engaged in Commerce
(Data in 1958 Pesos)

Year	National Accounts: Implicit Wage (1)	National Accounts: Implicit Average Income (2)	Commerce Censuses: Annual Wage: Establishments, (3)	Establishments with <5 workers (4)	Food Beverage Stores with Sales of <100,000 Year 1967 pesos) (5)	CEDE Unemployment Survey: Average Income (8 Cities) Unadjusted (6)	Increased 20% (7)	Average Wage: Food and Beverage Retailing Cali-Valle[1] Retail (8)	Wholesale (9)
1951	4928	9020							
1954	4598	9126	4463	1900-2,700	1070				
1964	4446	9226						2394 (all Valle)	5043
1967	4173	9166	(adjusted) 5100[1]	2,900	1680	5930	7116		
1969								5826 (Nov. 1969) (Cali)	

	Wage Bill Data: National Accounts	Census of Commerce
1954	266.1	253.0
1967	1985.6	2527.5[2]

[1]The figure implicit in the census itself is 5324, but since a number of small establishments were missed in the census, a downward adjustment was effected to allow for this. Only about 6% of paid workers were probably missed.

[2]Implies a paid labor share of 23.3% in 1967, assuming the commerce census was complete; but in fact the wage bill figure should probably be about 2590 so if the value added figure was accurate, the paid wage share could be a little higher. Accuracy of the value added figure is, of course, open to doubt. A cross check with the 1967 commerce census suggests, however, that it is about right. Gross value added before subtraction of purchases other than goods to be sold would be about 11,032 million if the value added per person missed in the commerce census were one half that of the smallest size category of establishments reported. The national accounts figure of 10,840.6 would be consistent with this assuming small purchases of "other inputs." Since sales were probably downward biased somewhat in the commerce census, it seems plausible that a reasonable level of other purchases would be consistent with the national accounts figures.

Table 25, continued

Methodology: Columns 1 and 2 are based on national accounts estimates of value added at factor cost and remuneration of labor in the commerce sector in the selected years, together with population census estimates for 1951 and 1964 and the commerce census estimate for 1954 of the number of people engaged in commerce. The national accounts estimates of both value added and payments to labor are, as indicated elsewhere, somewhat arbitrary and elements of the methodology suggest a possible downward bias in the post 1954 period; (the national accounts estimate of paid labor income for 1954 is that of the commerce census). Slighton, referring to the question of change in income (value added) per worker in commerce over time refers to an "observed 20% decrease in real income per paid employee between 1951 and 1964" but doubts that the phenomenon really occurred, hypothesizing that the initial wage level (1951) may have been overestimated. I would agree with Slighton (op. cit) that the 1951 national accounts figure may be overestimated, although there is independent evidence (from Udall) that a decrease in average commerce incomes may have occurred between 1951 and 1954. In any case, the chan e that an average wage decrease occurred between 1954 and 1967 are almost nil, and between 1951 and 1967 quite small.[1] The only possible methodological error, it seems to me, which could reverse this conclusion would be if the 1967 sample procedure had an upward bias in terms of the unrepresentativeness of the municipios chosen. I have not been able to study the methodology in sufficient detail to deduce the extent to which this might be the case, but I doubt it could account for a very large percentage error.

The data of columns (3)-(5) are from the commerce censuses, for 1954, DANE, Censo Nacional de Comercio y Servicios - 1954, Bogota, 1957; and for 1967, DANE, Muestra de Comercio Interior, 1967, Bogota, November 1970. An Adjustment was made to the 1967 average wage figure, as indicated in footnote 1.

Columns (6) and (7) are based on the data in CEDE, Encuestas Urbanas de Empleo y Desempleo, Apendice Estadistica, July 1968.

For Columns (8) and (9), the 1954 data again comes from the commerce census, and the 1969 data is derived from tables in Harold Riley, et al, Market Coordination in the Development of the Cauca Valley Region - Colombia, Latin American Studies Center, Michigan State University, Research Report #5, East Lansing, 1970.

The 1954 data refers to all of the department of Valle and the 1969 data only to Cali, suggesting an upward bias in the latter relative to the former. Here, however, the increase indicated is so substantial as to suggest strongly that a real increase occurred.

period;[1] while there is somewhat less information, it seems almost as doubtful that self-employed workers have lost; a best guess would be that they have gained about as much as paid workers.[2]

It would be possible, of course, for an increasing "labor surplus" to be funneled into small scale commerce without average earnings or wages in the sector as a whole falling, provided that a modern sector had rapidly increasing average earnings. (A pattern rather similar to this has been occurring in agriculture.) A comparison of the 1954 and 1967 commerce census information permits some evaluation of this hypothesis; it suggests that for some sizes of establishments real wages may have fallen between these years and that part of the increase in average wages was due to the shift of the size structure towards larger firms. Preliminary calculations suggest that average wages were lower in 1967 than in 1954 for medium sized estab-

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[1] The conclusion is lent further support by a series of real wages in commerce in Bogota developed by Alan Udall for his Yale Ph.D. thesis on the Bogota labor market. Udall has concluded that employees in larger commerce establishments had a substantial increase in average wages over the 1954-64 period; this conclusion was based on wages offered in classified ads. The movement of the series he developed was much like that of the DANE series for large firms; there was little change in the early 50s, but in the late 50s the increase began. Udall has also concluded that tienda operators had a large increase in real income between 1936 and 1954.

[2] The national accounts figures suggest no change in the average income of people in commerce (see Table 25). But since the national accounts estimating technique comes from the output side (basically assuming constant commerce margins for various categories of traded goods), this is weak information.

The CEDE unemployment survey indicated a 1967 average income in commerce of only about 6,000 pesos, but commerce is a sector in which understatement of incomes is notorious, and the same surveys usually imply understatement in all sectors.

lishments of perhaps 5 to 30 or 40 workers; but they suggest an increase in wages in the smallest establishments (although the apparently lower completeness of the 1967 census may have biased the 1967 wage up substantially in this category). For the interesting "food and beverages" category, where it might be hypothesized that the excess labor has increasingly concentrated, there appears to have been a striking increase in average wages since 1954. Considering establishments whose sales were under 100,000 1967 pesos, average wage in 1954 was perhaps 2,800 1967 pesos and in 1967 perhaps 4,400 pesos, i.e. 55-60% higher in the latter year.[1] It is interesting to observe that this increase is substantially above that for all paid workers in commerce and is also in the neighborhood of the real wage increase achieved by another low-skilled urban group over this period--the unskilled construction worker. It would suggest a decreasing dispersion of labor incomes in commerce over the period in question. As of 1967 the CEDE survey of unemployment in eight cities suggested a substantial

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[1] The average wage in the bottom two categories of the 1954 census was 2,560 pesos (of 1967) but the upper limit for sales was 92,000 1967 pesos rather than 100,000, so an upward adjustment to the average wage is appropriate; 2,800 is clearly an upward biased "limit" figure. In 1967 the recorded wage for establishments with sales up to 100,000 pesos was 4,950 pesos. If one assumed that a full 40,000 of the about 85,000 commerce workers which the 1967 census missed were in this category and that 3% of them were paid (the figure for the reporting establishments in this category was 4.2%) and that their salary was only one-half that of the reporting firms--probably downward biased--the corrected average wage is about 4,400 pesos.

Some confidence in the fact that the two sets of firms are of similar characteristics is provided by the fact that the bottom two categories in 1954 had a paid worker/all worker ratio of 4.24, almost identical to that of the bottom category in 1967 (4.2%). The number of establishments in the categories of interest in 1954 was 56,395 and in 1967 it was 87,402.

dispersion of incomes in commerce (incomes of all earners, not just paid workers) but one which was not in general any more severe than that in the other sectors.[1]

There is a small possibility that, even though the post-War period as a whole has seen increases in average incomes in commerce, and especially in the lower deciles of the income distribution generated in commerce, a worsening has been occurring in the last few years; some figures suggest higher shares of the urban population involved in commerce and as sales staff in the last 4 or 5 years.[2] My best

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[1]Thus in Bogota in 1967 the mean income from commerce was about equal to that of the other sectors, but a smaller percentage of earners (36.5) had an income less than one-half the mean than for all sectors (48.9%); about the same percent (25) had incomes below half the respective medians. Barranquilla, with a higher share of the occupied labor force in commerce (22.6 to Bogota's 18.6) had quite similar distributions (in the above respects) for commerce and non-commerce.

[2]Seven cities for which data were aggregated by DANE (see DANE, Subempleo en Siete Principales Ciudades del Pais, Bogota, 1969) i.e., Bogota, Medellin, Cali, Barranquilla, Manizales, Cartagena, and Bucaramanga, indicated that in 1964 15.74% of the labor force were in commerce, while the CEDE 8-city study of 1967 (the cities were Bogota, Medellin, Cali, Barranquilla, Manizales, Bucaramanga, Ibague and Popayan) indicated that 19.8% of the labor force were in this sector. The sets of cities are almost identical (the differences being only with respect to small cities) so if the sample frames were similar, it would strongly suggest some increase in the share of people involved in commerce. In Bogota (Distrito Especial, of which over 90% of the active population are in the cabacera of Bogota) 9.15% of the labor force were sales staff in 1964; the CEDE study indicated 13.75% in 1967 and DANE's latest survey indicated about 14.5% in 1970 (though a definitional ambiguity makes it unclear whether the category is comparable to that of the earlier years).

The 1970 household survey of DANE, while it does not present separate data for commerce and thus makes it necessary to some extent to guess what the commerce share of the labor force was, could hardly be consistent with a figure above 15%. This suggests in turn either that the CEDE methodology was somehow different from that of the 1964 census, so that the above comparison of the 1964 and 1967 figures is biased, or that the share of commerce did expand during that three year period--during which unemployment rates were quite high--and then fell again subsequently.

estimates of the share of the urban labor force in commerce, based on attempts to make the various sources consistent are: 1951, 10.1%; 1964, 12.7%; 1970, 14.2%. The data undoubtedly suggest an increase, but not so dramatic a one as to lead to the hypothesis that incomes or wages in the sector would have been falling. Parallel estimates of income and wage changes over the last 3-4 years are not available at present.

The percent of the active population engaged in commerce was hardly overwhelming in 1964;[1] in particular in retail commerce it was only perhaps 6.4% even after substantial increases in the preceding years; even if it has increased to say 8% since then, the possibility that perhaps one-third of these people are redundant is not an earth-shaking one. The same is true, in general, for those personal services about which it might be claimed that they simply represent surplus labor. Among the categories of interest are: individuals engaged in protection (mostly protecting private houses)--about 1.4% of the total active population, and over 2% of the urban active population; porters, elevator operators, and so on--less than 1/3 of 1%; military, a little less than 1%; and between 2 and 3% who did not declare any occupation

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[1] All commerce provided about 7.7% of employment (more precisely of the labor force) and if the share of retail commerce--82.5% in 1954--had not changed much over time, thus would imply about 6.4% there. By 1967, the retail/total ratio had probably risen to about 86% (the official figures indicated 84.2% but the share of missed persons in commerce was probably greater than this), implying that persons in retail might have accounted for say 6.5% of the total labor force in 1964.

or whose occupations were not identifiable; if the census caught them at all, this would presumably include thieves, prostitutes, etc. It is clear, in the light of these figures, that if one is to argue that there is a great deal of excess labor in the system, or has been a significant increase over the last couple of decades, he must also argue that it is relatively widespread in terms of the sectors and occupations affected. This possibility must be taken seriously and deserves much more analysis.

Career Employment Patterns

Information on the extent to which people switch sectors at various times in their occupational careers would be relevant to various interpretations of the nature of employment problems. Certainly there are some sectors of relatively free entry, in particular certain types of services; there are probably substantial immobilities into and out of others. The fact that unemployment tends to be relatively low in commerce and services, and was in transportation for at least part of the period 1963-66[1] would be consistent with the hypothesis that the possibility of the switch to independent worker status keeps the unemployment rate down in those sectors.

A different check on the nature and extent of the adjustment to employment difficulties could be effected with information on the changing occupational structure of a given cohort over time. Unfortunately the information available is too gross to yield much fruit

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[1] Slighton, op.cit, p. 27.

along these lines; net shifts over time can be calculated, but it is impossible to deduce the gross number who are moving "up" the occupational ladder or the number moving down, or moving from unemployment into a lower occupation than they had anticipated. Nevertheless a quick review is warranted; in diagrams 4 and 5 the occupational and sectoral distributions of the active population are presented for 1951 and 1964, according to age in 1951 (the data are presented in Tables A-5a and A-5b). Among occupations, it appears that, for males, the percent of a cohort who are employers increases until the age of perhaps 40[1] (see Diagram 4a); in this (and in several other cases) there is a complexity of interpretation related to the fact that over time the share of agriculture, where a large percent are employers, has been falling; it is possible that intra-sectorally the "employer share" would continue to rise longer than this or would have a different pattern than the one which emerges here. The share of males who are independent workers appears to rise continuously from only around 10 percent in the age group 15-25 to 35-40 percent in the group 55-64; over the 1951-64 period the share was growing for

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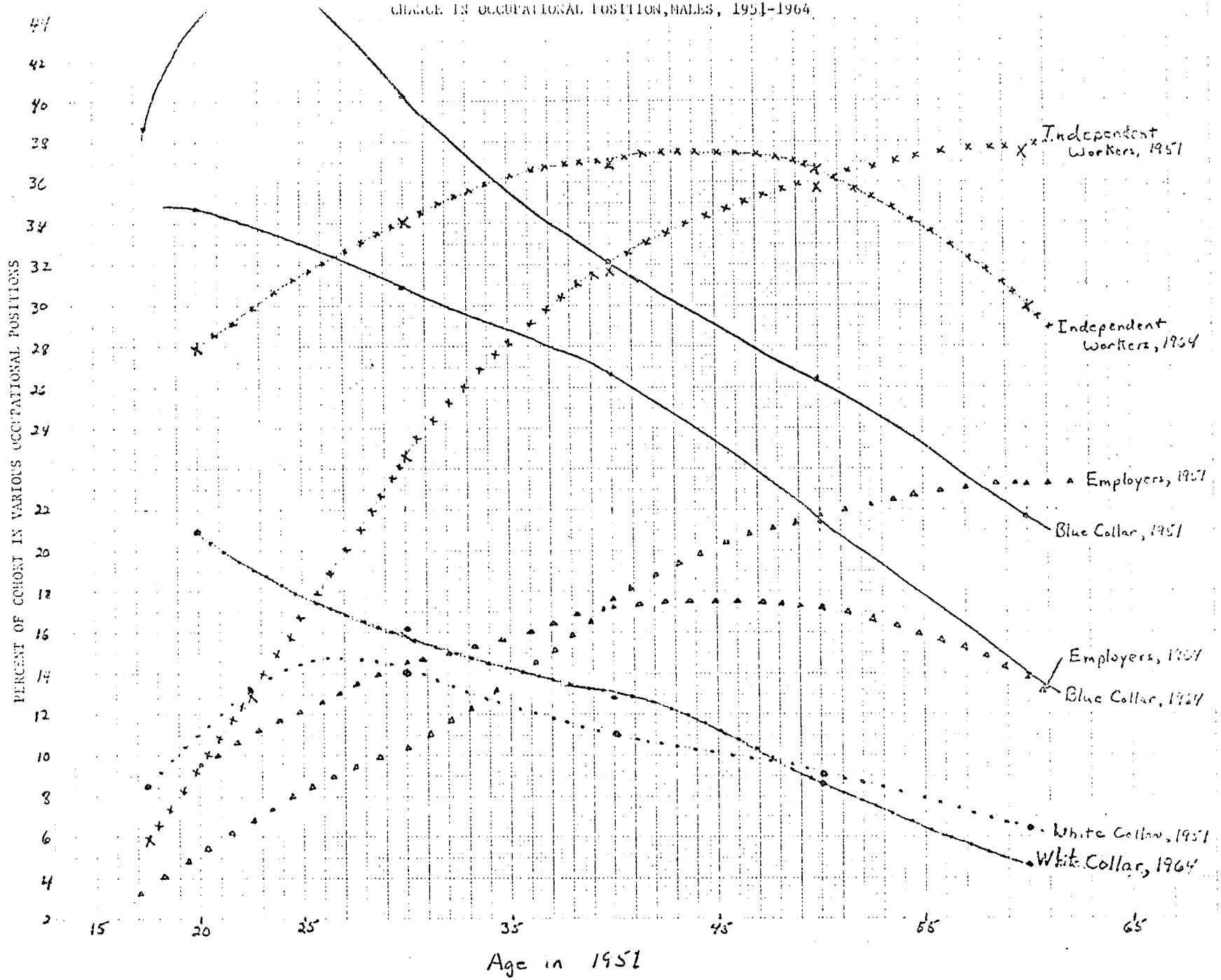
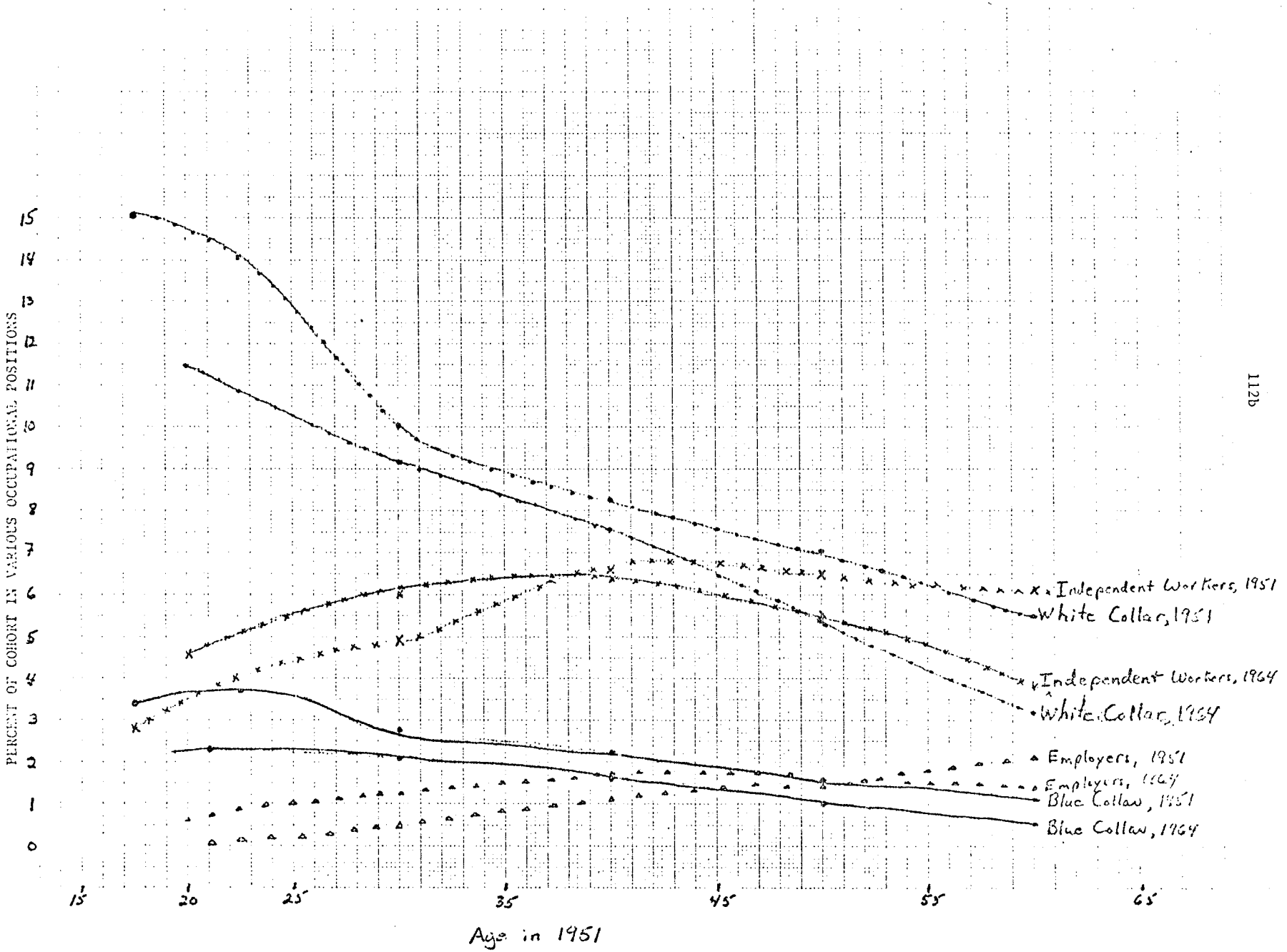
[1] The analysis is carried out in terms of percent distribution of the population in the various categories. Since people enter and leave the labor force over time, a changing percent for a given category does not necessarily imply that anyone has shifted--it could theoretically (at least in some cases) be accounted for by the movements into and out of the labor force. This problem is of importance for young and old cohorts--less so for middle aged ones, especially for men. Information does not permit more precise analysis than that done here, so this qualification should be borne in mind in reading the text.

CHANGE IN OCCUPATIONAL POSITION, MALES, 1951-1964



CHANGE IN OCCUPATIONAL POSITION, FEMALES, 1951-1964



people up to about age 50. The percent who are family helpers decreases quickly so that by the cohort 25-34 it is unimportant. The figures suggest an increase in the percent of people in the white collar category, though heavily concentrated in the first 10 or 15 years of job experience; further increase after this appears to be quite limited; a similar but reverse phenomenon holds in the case of blue collar workers, where a substantial percent shift out of the category occurs over perhaps 20 or 25 years of working life; afterwards the percent remains quite stable. The increase in white collar share for young cohorts is not significant enough to imply inequivocally that people moved from other categories to this one--the alternative explanation is that mortality of people in this category was less than for others (taken as a whole). The decrease in the blue collar category is large enough so that it could not be due to this phenomenon. In short, despite difficulties of interpretation it is clear that over time people move out of family helper and blue collar status into employer, independent worker and possibly white collar occupations. Over the 13 year intercensal period discussed here, for people 25-35 years in 1951 12-14% of the population made such shifts (net of any movements in the opposite direction). For people 35-45 in 1951 the shift was around 7 percent. Unfortunately the inability to treat agriculture separately leaves us almost without hypotheses for the non-agricultural sector, since these shifts are sure to happen in family farm agriculture. Low mobility into white collar pursuits is indicated clearly; it will require more detailed information to draw out

the meaning of the shifts among the other categories.

Over time patterns are similar for women except for the general tendency to leave the labor force at all ages; net departures from both white and blue collar categories occur throughout, the former involving maids, personal service, etc. With the retirement phenomenon so prominent it is not possible to deduce much about transfers between categories.

Intersectoral movements are somewhat harder to identify, being less marked; this suggests that much of the change over time in occupational categories occurs within sectors. But the evidence does show some interesting shifts (see Diagram 5). The important losing sector for men is agriculture - especially for people under 25, although some noticeable shifting out appeared still to go on at all ages;[1] for several sectors there is a tendency for younger people to transfer in and older people to transfer out, e.g. manufacturing with a net shift in for men up to about 35 or so and out after that age, and construction with a dividing age of about 45. Commerce, consistent with considerable impressionistic evidence is a sector to which people of almost all ages move; over the thirteen year intercensal period, 2-5% of the various cohorts up to age 50 made this shift-more for the younger cohorts. Services presented a similar tendency though focussed on certain age ranges, the 15-25 group (in 1951, i.e. a group which shifted when in the age range of, say, 20-30) and the 30-45 group.

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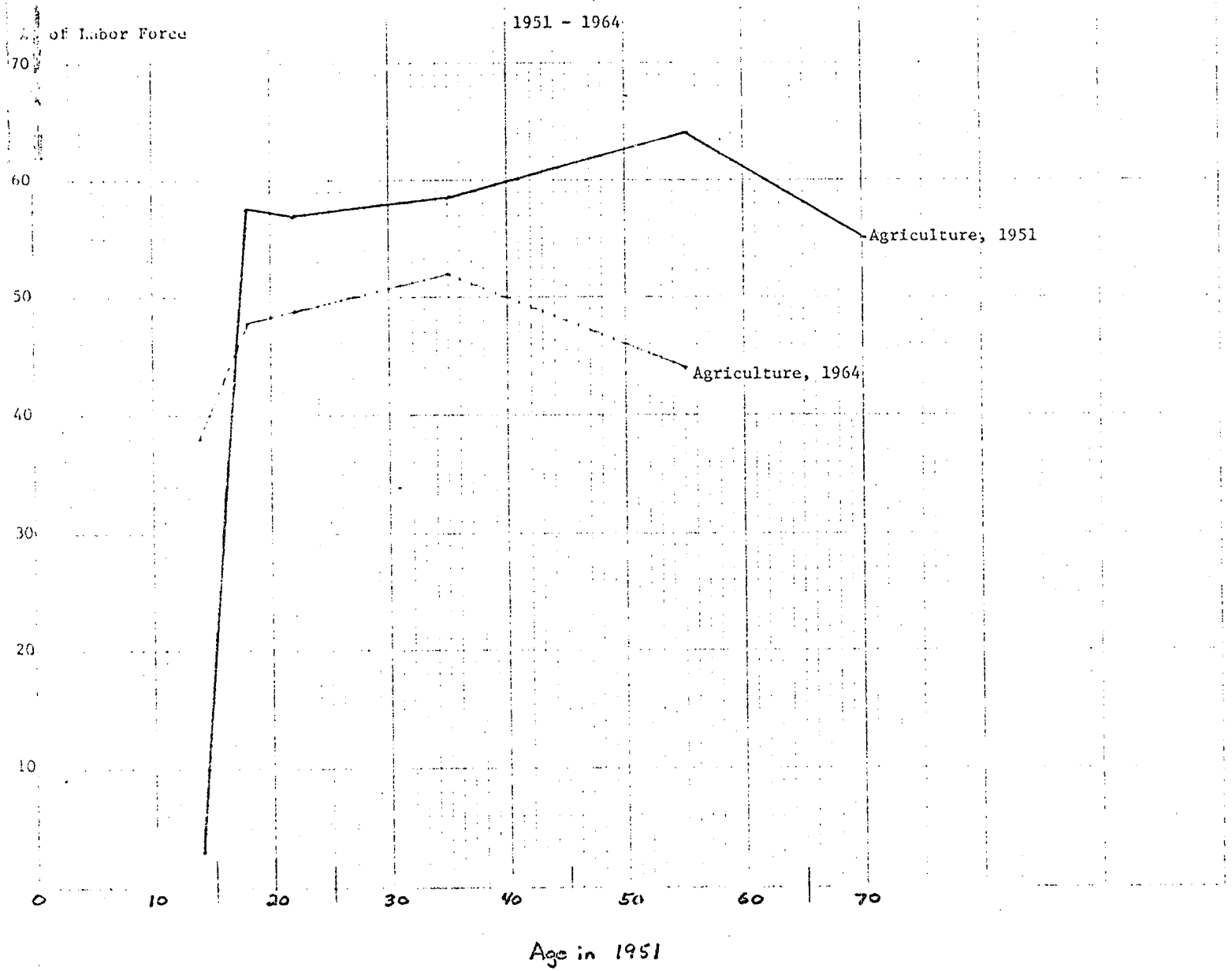
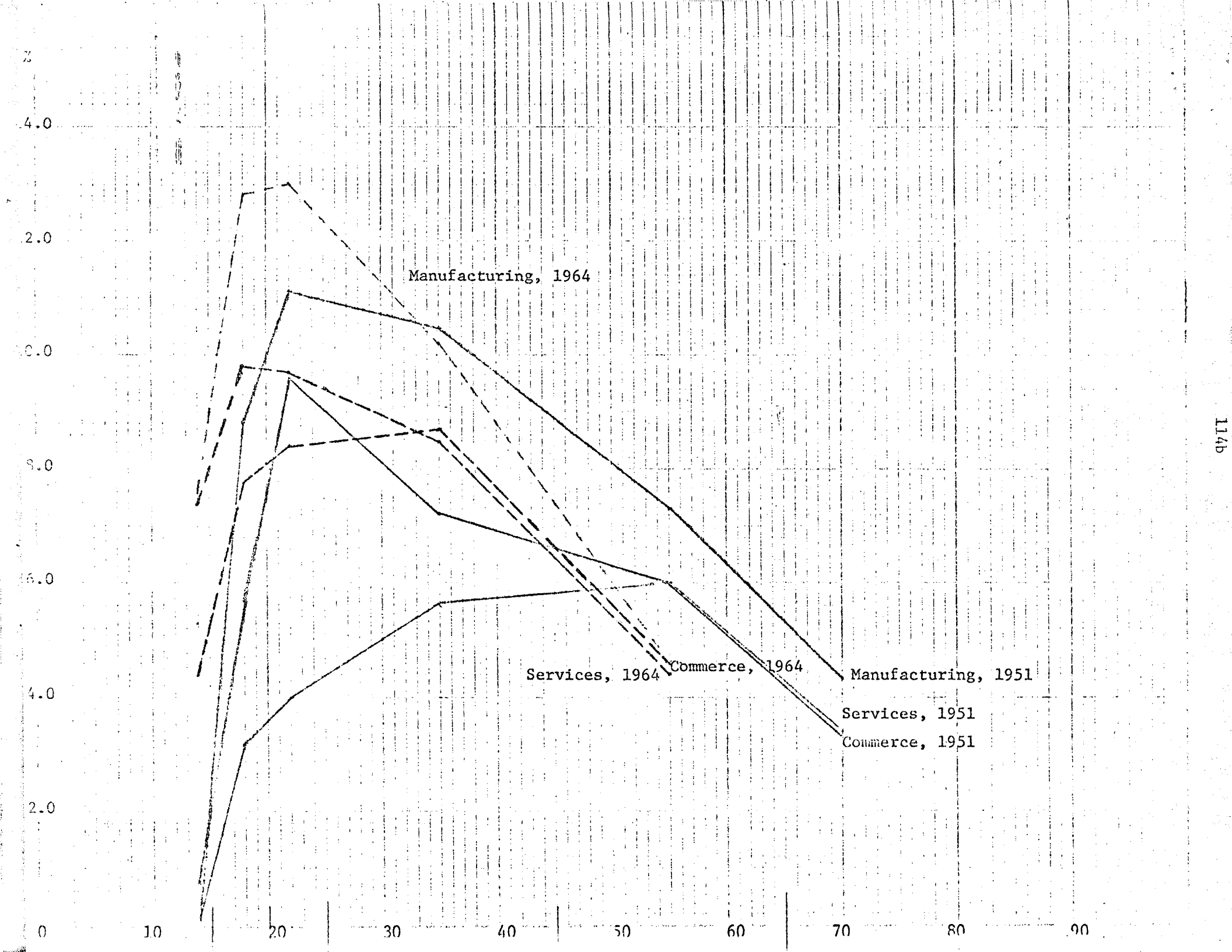
[1]Though at the highest categories retirement and death were playing a role.

Over Time Sectional Shifts of Specific Cohorts: Male Labor Force

1951 - 1964




%
4.0
2.0
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10
20
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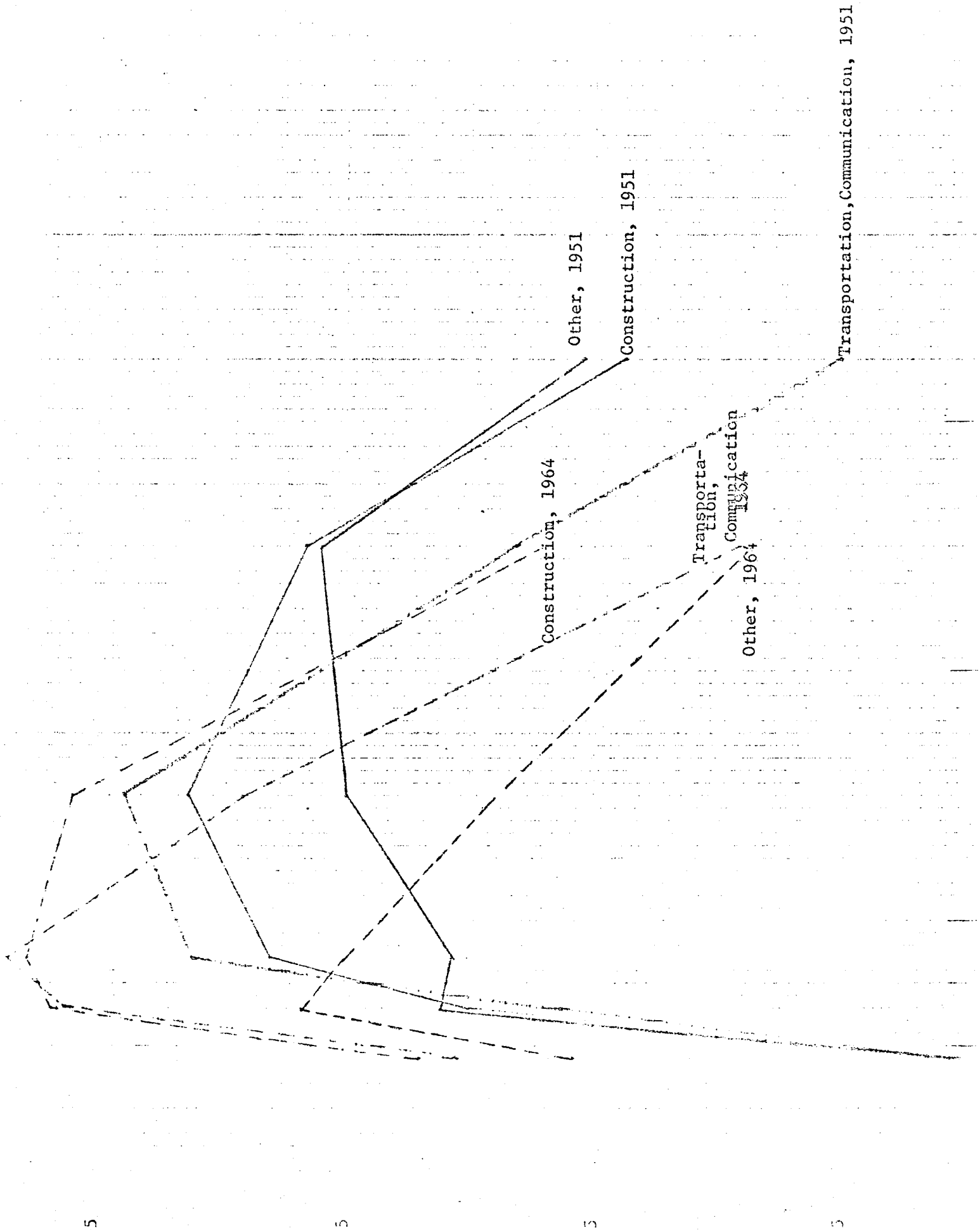
50
60
70
80
90
Manufacturing, 1964
Services, 1964
Commerce, 1964
Manufacturing, 1951
Services, 1951
Commerce, 1951


Transportation, Communication, 1951
Construction, 1951
Other, 1951
Transportation, Communication 1964
Construction, 1964
Other, 1964

For women, it is harder to draw conclusions since a much smaller share are in the labor force, so no attempt is made here to isolate patterns of shifting.

Direct evidence on mobility patterns over time is very limited; it would be a useful cross check on the meaning of stated aspirations of people in the unemployed pool. The only study avaibable on this to my knowledge is that of Carlos Garcia.[1]

This study suggested (see Table A-16) a tendency for people's occupational category - and presumably income - to increase between first job held and last one held before the sample. Despite the broadness of category and overlap of income range for the different categories which prevent firm conclusions on the relative upward and downward tendencies, given original occupation, the evidence is much more consistent with rather substantial net upward occupational mobility over the career than the opposite; it is clear that people who started as agricultural workers or unspecialized manufacturing workers tended to improve their situation over time . One difficulty related to how the category"salesmen, etc." should be interpreted; people move into this category from most others and out of it to most others. Some observers have argued that income levels in this category are below those, for example, of successful manufacturing workers; there is no empirical evidence to support this hypothesis or the idea that people move "downward" into commerce. But it does remain a possibility and, as such, weakens the guesses as to the share of workers beginning in a given occupational category who move up (Table A-16). If (a) movements between low level office workers, own account businessmen, salesmen and skilled blue collar workers are neglected on the

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[1]Carlos Garcia, Mobilidad Ocupacional, CEDE, Universidad de Los Andes, Bogota, Septiembre, 1968.

grounds that it is not meaningful to rank these categories by probable income (and correspondingly, by probable direction of change of income with the move from one to another), that (b) (at a lower level) unspecialized blue collar and rural workers cannot be distinguished, nor can rural workers and own businessmen-salesmen, and that (c) the case of directors, etc. moving to own business can also not be taken as a worsening; then it is clear that the great majority of the fairly clear cut directional changes are upward, 118 such shifts being encountered here as opposed to only 17 fairly clear downward shifts. A little over one quarter of the active labor force had had fairly definite upward shifts. Again, this is very circumstantial evidence because of the large presumed overlaps in the income ranges of the different categories; but it does seem clear that the evidence cannot support the argument that there is substantial downward mobility. It would seem much more consistent with substantial upward movement.[1]

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[1]Garcia noted that about the same share of people who started as manual workers were non-manual (17%) at the time of the sample as the percent which started in non-manual categories and moved to manual ones (15%); the uncertainty of the meaning of switching from manual to the selling category (defined by him as non-manual) and vice versa throws much doubt on the meaning of the comparison.

IV. Summary Comments on the Social Cost of Unemployment and Low Participation Rates

While a theme emphasized above is that many of the unemployed are relatively well off compared to many employed people, this is not, of course, to say that all unemployment falls in this category. Of previous job holders, a high share are looking for work in the "craftsman" area and possibly up to 50% are looking for blue collar or domestic service jobs. (See Table A-2). The nature of this component of unemployment may be quite different from the first type in its relation to various economic and other factors, its cyclical and secular movements, and so on. Some people, presumably, are on the margin between the two areas -- they look for white collar jobs, but if unsuccessful long enough, accept blue collar jobs and may subsequently remain in that pool. Some time series information on unemployment rates by sector and by occupation is presented in Tables 27 and 28; (unfortunately, we do not have complete information by cell, i.e. cross-classifying for occupation and sector). These figures refer only to the unemployment rate of people who have previously had jobs. In most categories, they tend to be dominated by the male rates. It is interesting to observe that the unemployment rate for office workers seems consistently to be the highest of the white collar categories, while "manual workers" is the highest of all; but this latter category is a very small and ill defined one (in 1967 it accounted for only 2.7 % of the labor force). Unfortunately, the category artisans/operators probably spans a wide range of skill levels and therefore does not permit a zeroing in on the unemployment rates of particular low skill and low income groups.