


THE EMPLOYMENT SITUATION IN PUERTO RICO AND MIGRATORY
MOVEMENTS BETWEEN PUERTO RICO AND THE UNITED STATES



A paper presented by H. C. Barton, Jr.,
Special Advisor for Economic Affairs, Legislature of Puerto Rico,
at a Workshop on the Employment Problems of Puerto Ricans
sponsored by the Center for Study of the Unemployed,
Graduate School of Social Work, New York University,
May 20 - 21, 1968.

Over 40 years ago, Randolph Burgess, then a vice-president of the New York Federal Reserve Bank, wrote a book, "The Reserve Banks and the Money Market", from which the following has been excerpted:

"The New York money market is the national market for liquid and surplus funds. . . . it is the center towards which idle money gravitates to find employment, pending the time when it is needed. Banks and large business concerns all over the country which have funds temporarily idle . . . send them to the New York money market. . . . Funds from these various sources are kept on deposit with banks; invested in short-term securities . . . or are lent in the stock exchange money market . . .

"The distinctive feature of this use of funds is that they are available when they are needed . . ."

Mr. Burgess certainly had more precise data available 40 years ago on the New York money market than we have today on the New York labor market for Puerto Rican workers. This suggests an invidious comparison between human and money values but the heart of the matter probably lies in the greater inherent difficulties in producing reliable labor market information for a highly mobile and difficult-to-identify segment of the total population.

Functionally, however, New York and Puerto Rico perform similar roles in these two markets. The New York money market employs otherwise idle funds at very low interest rates until they can be invested at higher rates

CALCULATED EMPLOYMENT DEFICIENCY IN PUERTO RICO
JUNE 1968

(In thousands)

	Puerto Rico Population	% in U. S. Labor Force	Calculated Labor Force	Reported Employment	Calculated Employment Deficiency Number	%
Both sexes						
16 - 19	233.8		146	51 ^{a/}	95	65
20 - 24	256.1		192	120	72	38
25 - 34	322.0		212	187	25	12
35 - 44	258.0		182	149	33	18
45 - 54	219.4		160	112	48	30
55 - 64	153.4		99	63	36	36
65 +	154.6		30	23	7	23
	<u>1,597.3</u>		<u>1,021</u>	<u>705</u>	<u>316</u>	<u>31</u>
Males						
16 - 19	119.0	73.1	87	36 ^{a/}	51	59
20 - 24	127.3	90.7	120	76	44	37
25 - 34	145.6	97.6	137	122	15	11
35 - 44	119.1	97.4	116	100	16	14
45 - 54	107.3	95.0	102	85	17	17
55 - 64	79.2	85.1	67	52	15	22
65 +	75.5	29.0	22	21	1	5
	<u>773.0</u>		<u>651</u>	<u>492</u>	<u>159</u>	<u>24</u>
Females						
16 - 19	114.8	51.0	59	15 ^{a/}	44	75
20 - 24	128.8	55.7	72	44	28	39
25 - 34	176.4	42.4	75	65	10	13
35 - 44	138.9	47.8	66	49	17	26
45 - 54	112.1	51.7	58	27	31	53
55 - 64	74.2	43.0	32	11	21	66
65 +	79.1	9.7	8	2	6	75
	<u>824.3</u>		<u>370</u>	<u>213</u>	<u>157</u>	<u>42</u>

a/ Includes reported employment 14 - 15 years.

in longer-term securities or projects. In the labor market, it has been the function of Puerto Rico to contain people at very low or zero wages until an effective demand for workers arises either at home or abroad. Puerto Rico is thus providing a service to the U.S. labor market analogous to the service provided by the New York money market to the nation's financial system.

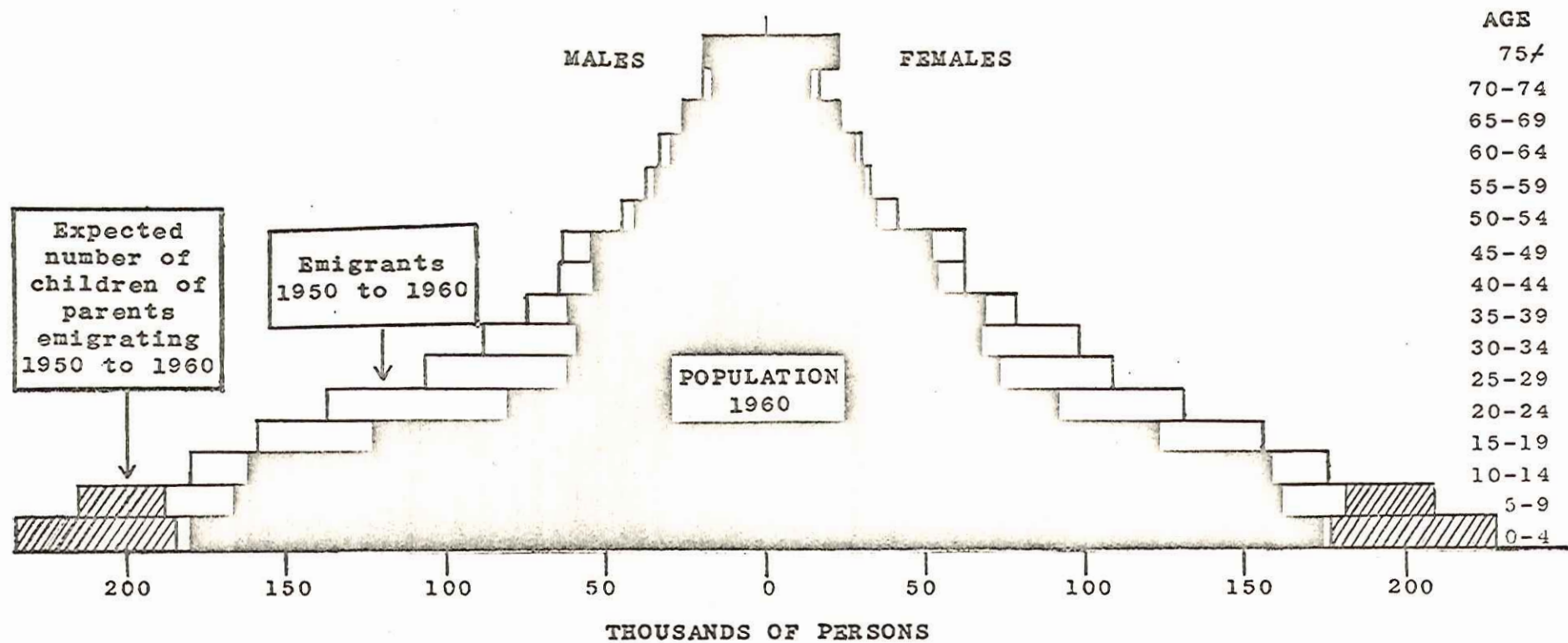
The size, age, and sex of Puerto Rico's labor reserve

The size of the reserve supply of labor in Puerto Rico is estimated in the facing table. The basic assumption underlying this estimate is that, if work were available, Puerto Ricans in each age and sex group would have labor force participation rates equal to the U.S. average. It is believed that this assumption is a conservative one. Japan and most European countries have higher participation rates. High school and college enrollment in Puerto Rico is considerably below the U.S. average, twice as many women are heads of families that must be provided for and fewer people can afford early retirement.

Even with widespread unemployment, the rate of employment among Puerto Rican men over 64 is above the corresponding U.S. rate for labor force participation. Thus the table shows a small negative job deficiency in this bracket.

According to the estimate shown in the table, the reserve labor supply in Puerto Rico amounts to over 300,000 people. It is about equally divided between men and women. More than half of them (55%) are under 25 years of age.

EFFECTS OF EMIGRATION ON THE AGE AND SEX OF THE PUERTO RICAN POPULATION



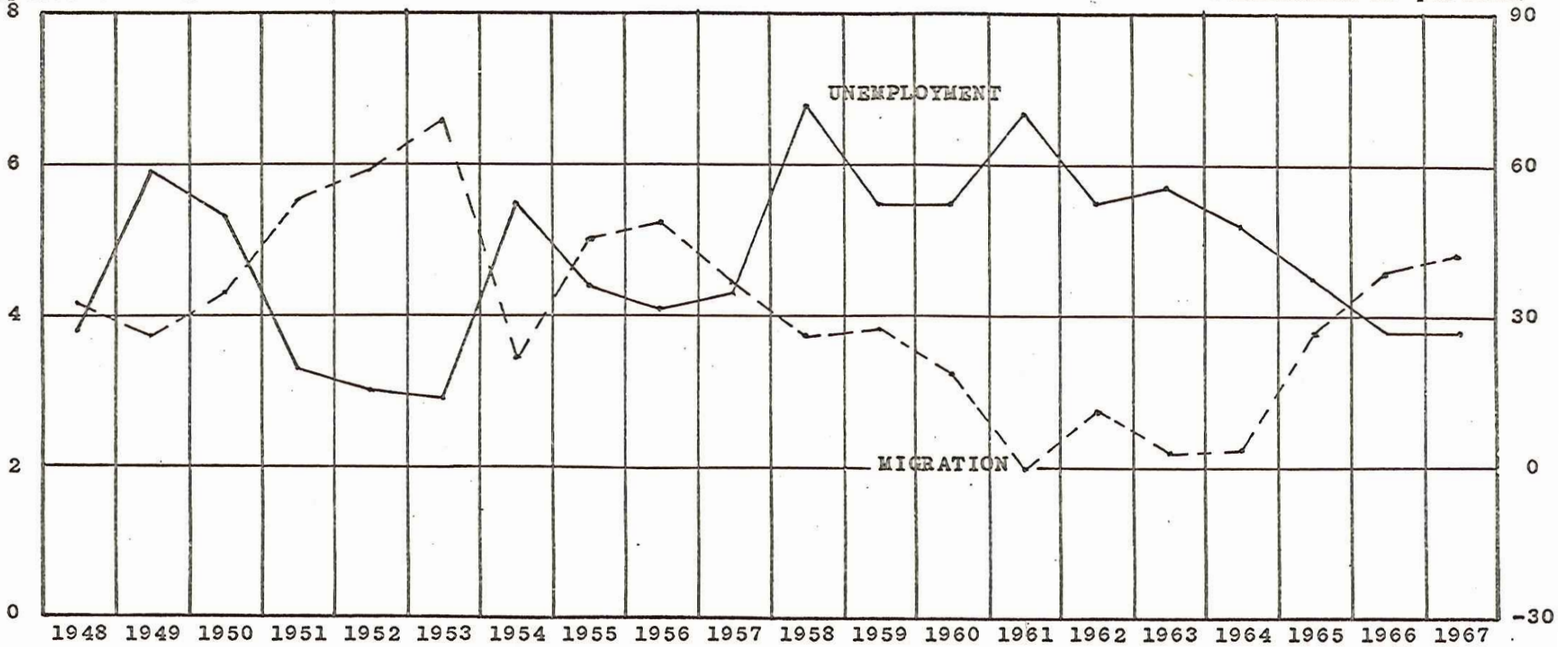
It should be noted that Puerto Rican population over 25 years of age, especially of men who are now 25-40, was greatly reduced by the heavy migration of the 1950's. As the opposite chart shows, the number of young children in the population was also sharply reduced by the migration of so many young adults. The age group that was 10-14 in 1950 (now 13-22) has remained unusually large and is now experiencing especially high rates of unemployment.

The chart also shows that the amount of emigration of people over 34 was comparatively small, even in the 1950's. Thus the heavy and age-selective migration of the 1950's, followed by a period of comparatively low migration in the first half of the 1960's have combined to concentrate Puerto Rico's labor reserve in the comparatively narrow 16-24 year age range. Since age cohorts below 16 years of age are successively larger, this concentration will tend to continue.

The age-sex composition of Puerto Rico's labor reserve has one other important difference from the norm for a labor force, a heavy concentration of women over 44 years of age. This is partly a reflection of a smaller migration during previous years of women in their late 20's and early 30's than of men of these same ages. But it is more largely the result of the virtual disappearance of the home needlework industry which employed about 50,000 women in the early 1950's. Most of them lived in rural areas where there are still few alternative employment opportunities. Their employment potential is low in Puerto Rico and negligible in the United States.

UNEMPLOYMENT
IN THE UNITED STATES
(percent of labor force)

NET MIGRATION
TO THE UNITED STATES
(thousands of persons)



From the standpoint of the U.S. labor market and, especially, the labor market of New York, the reserve supply of labor in Puerto Rico consists mainly of about 100,000 young men and 75,000 young women under 25 years of age. Children and some adults over 25 years of age will, of course be included among future migrants to the States, but, according to a sample survey covering the 1966 fiscal year, 65% of the migrants from Puerto Rico were 14-24 years of age.

Responsiveness of the Puerto Rico labor reserve to U.S. demand

The chart on the facing page compares net migration from Puerto Rico with the rate of unemployment in the United States. In every year, changes in the two series are in opposite directions and there is also a quite close correspondence in amplitude of change. In a background paper prepared for the United States-Puerto Rico Commission on the Status of Puerto Rico, Clarence Senior and Donald Watkins describe the "family intelligence service" that probably is largely responsible for the promptness of this migratory response to changes in U.S. labor market conditions. Nearly every Puerto Rican family has relatives living in the States who act as an informal but apparently highly efficient employment service for family members and friends.

As will be shown later, these net migration data reflect two migratory currents, an outflow from Puerto Rico and a return flow. The data themselves, however, are the differences between the total annual outbound and inbound passenger movements between Puerto Rico and the United States. The "average" passenger included in this annual net difference has been living in his place of

destination for six months. But some have been there for almost a year and others for only a few days. Nevertheless, except for seasonal fluctuations in travel toward the end of the 12-month period selected for the measurement of migration, these travel data are a fairly satisfactory indicator of net changes in annual migration.

Migration data and enumeration of Puerto Rican population in the United States

Over longer periods of time, the net passenger movement data appear to have a downward bias as a measure of net emigration. The net outward passenger movement between April 1950 and March 1960 was 439,098. Census counts, together with birth and death registries, yield a migration total of 407,393, as follows:

	<u>Population</u>		<u>1950 - 1960</u>
		Births	786,865
		Deaths	-130,126
1960	2,349,544	Nat. increase	656,739
1950	-2,210,703	Net migration	-467,393
		7 133,841 = Pop. Increase =	7138,841

However, practically all Census counts and registries of vital statistics are incomplete. As a very rough guess, the Census enumeration of 1960 was about 9,000 more nearly complete than the 1950 Census. If so, population increased by 130,000 during the decade.

It can also be demonstrated that a considerable number of births went unregistered during the decade.

Birth registered April 1959 to April 1960	75,573
70% of infant deaths registered April 1959 to April 1960	-2,814
Estimated immigration of infants April 1959 to April 1960	<u>7300</u>
Expected population of infants under 1 year, April 1960	73,039
Infants under 1 year enumerated April 1960	<u>75,881</u>
Apparent under-registry of births	2,822
Apparent under-registration as % of infants enumerated	3.7%

In the above calculation the estimate for immigration of infants less than one year of age may be substantially in error, but it is believed that the principal source of error is undercounting of outgoing infant passengers. To the extent that this is the source of error, there is understatement of the resulting figures for under-registration of births. There was also some degree of under-enumeration of infants in the 1960 Census. It was estimated at 16% in 1950 but was probably much less in 1960. Assuming that under-enumeration of infants in 1960 was about 4%, then under-registration of births from April 1959 to April 1960 was not 3.7%, as indicated in the table above, but about 8%. Over the decade, an 8% under-registration would add some 60,000 births to the number officially registered.

Because of such errors in registry and in Census data, it is likely that the following approximate figures are closer to representing the true components of Puerto Rican population change between 1950 and 1960 than are the officially recorded numbers.

Births	7330,000
Deaths	-131,000
Migration	<u>-519,000</u>
Population change	7130,000

If total migration during the 1950's did amount to about 519,000, the passenger movement figure (439,092) represents 85% of the total. Some of the difference may be accounted for by net outward movements of military personnel in non-reporting military carriers and also of merchant ship crew members.

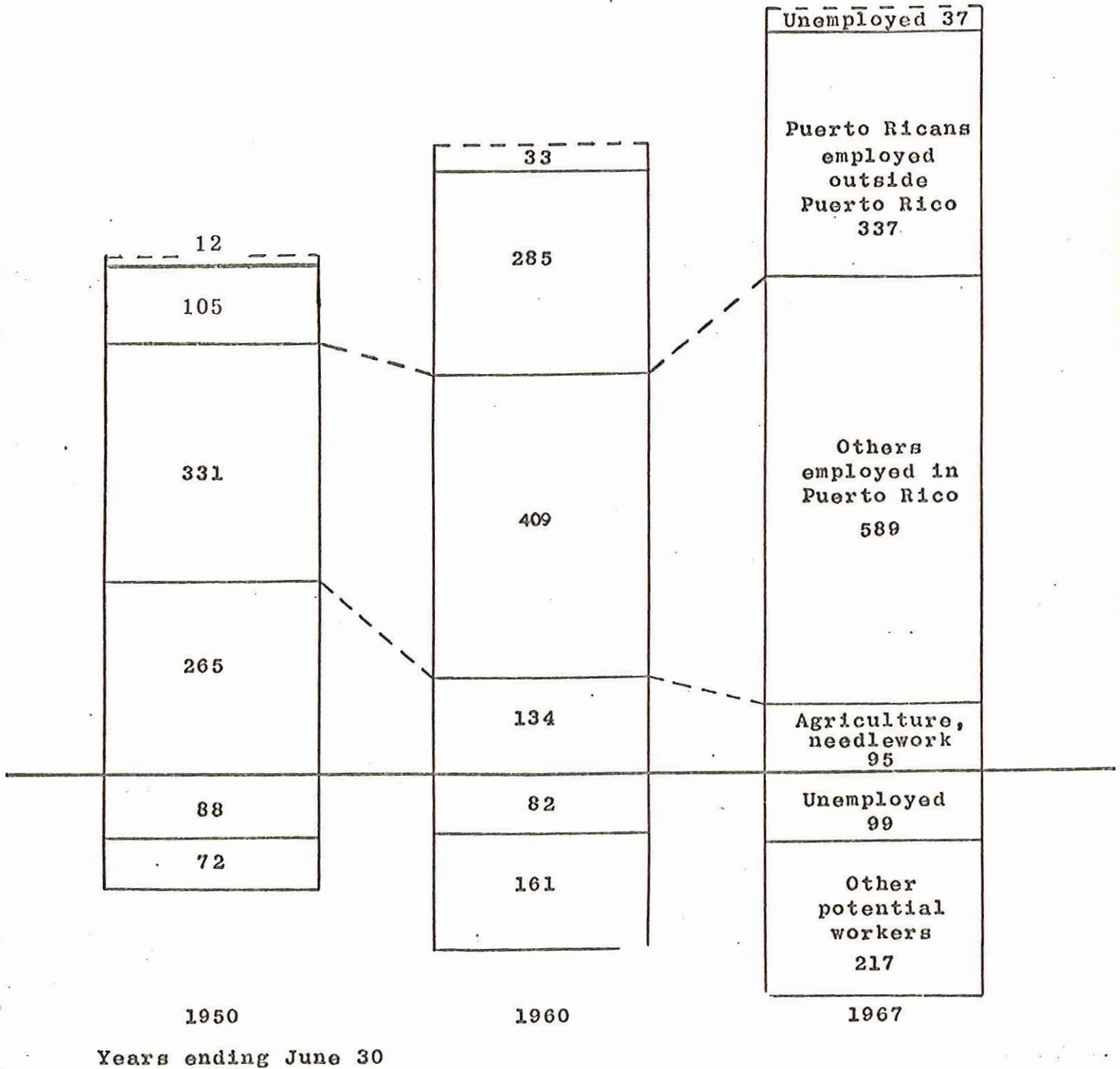
The above calculation also implies a considerable Census under-enumeration in the United States of the Puerto Rican born. In 1950, 229,110 were enumerated. Assuming a high (10% for the decade) death rate, this population would have been reduced to 204,500 in 1960. Assuming 5% deaths and 5% non Puerto Ricans among the 519,000 net immigrants of the 1950's 467,000 would have been added for a 1960 total of 671,500. This compares with a total of 617,050 actually enumerated and does not allow for probable under-enumeration in 1950.

Seasonal migration

Beyond these questions regarding the amount of total annual or decennial migration there is a seasonal migration cycle of Puerto Rican agricultural workers that takes place within the year. This seasonal migration is almost entirely cancelled out in the annual net balance of travel.

Under a joint program of the U. S. and Puerto Rican Departments of Labor started 20 years ago, agricultural workers and, occasionally, other occupational groups are referred under contract to employers in the States. They leave in substantial numbers every month from April through September or October but most of them return by the end of December. About 22,000 of these contract workers were referred to the States during 1957.

AGGREGATE DEMANDS FOR PUERTO RICAN WORKERS
(in thousands)



In addition, other seasonal farm workers go, without contracts, to farms where they may previously have found satisfactory working and living conditions. The number of seasonal workers going without contract is not known. In 1960, a sample survey then being conducted at the airport showed 19,400 arrivals of resident farm laborers. In that year, 13,000 had been referred under contract. The 6,400 additional returnees had presumably left without contracts. The proportion going without contracts may now be higher, since more workers have had time to establish satisfactory relations with individual farmers. A guess would place the total number of seasonal farm workers, with and without contracts, at about 35,000 in 1967 and a bit higher this year.

These seasonal workers are an important part of the agricultural labor supply of the Northeastern states, especially New Jersey, but their number is not reflected in the net annual travel data used to measure migration. Also, since they only begin to move north in sizable numbers in April, few of them (1,209) were enumerated on U.S. farms in the 1960 Census.

Aggregate demand for Puerto Rican workers

As the opposite Chart shows, all of the net increase in demand for Puerto Rican workers during the 1950's was in the United States. During the decade, about 180,000 Puerto Ricans found U.S. jobs, while total employment declined somewhat in Puerto Rico. Since 1960, the increase in employment opportunities has been greater in Puerto Rico (141,000) than in the States (52,000). Neither in the 1950's nor so far in the 1960's, however, has the total

demand for Puerto Rican labor equalled the increase in supply. The unutilized supply today (316,000) is double what it was in 1950 (160,000).

Statistical note

The figures for employment and unemployment of Puerto Ricans in the United States during 1960 are Census data for April. They include Puerto Ricans by both birth and parentage, but, as previously indicated, they include very few of the seasonal agricultural workers. The corresponding figures for 1950 and 1967 are rough estimates based on the assumption that employment and labor force rates within the total Puerto Rican population were the same as reported in the 1960 Census.

The figures for employment and unemployment in Puerto Rico are from the household labor force survey of the Puerto Rico Department of Labor. As already implied in the discussion of data uncertainties with regard to migration, there are uncertainties regarding both total population and its distribution by age and sex that raise questions regarding the accuracy of the inflation factors used in this survey. These questions will be touched on below but they do not affect the reliability of the data for 1950 or 1960 and the figures for 1967 are probably not greatly in error. The figures for "other potential workers" are derived by subtracting "unemployment" from the employment deficiency estimates shown in the table facing page 2.

The shift in the internal demand for labor in Puerto Rico shown by this chart is of basic significance for the U.S. labor market. Agriculture and home needlework are both rural occupations. The latter has virtually disappeared. The decline in agricultural employment will continue but the total is already comparatively small and further declines will necessarily have less effect on total employment than they have in the past.

But still the Puerto Ricans migrating to the States are mainly of rural origin. The 1966 sample survey referred to earlier puts the percentage at 64 and the absolute number at about 50,000. They are mainly from rural, non-farm families since the total number of economically viable farms in

NET BALANCE BY OCCUPATION OF PASSENGERS WHO TRAVELLED BETWEEN
 PUERTO RICO AND THE UNITED STATES
 (In thousands)

	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>Total</u>
Professionals and semi-professionals	-0.7	-0.3	-5.3	-0.3	-6.6
Owners and administrators	-0.9	-2.0	-7.6	-1.9	-12.4
Clerical in sales or service	-2.9	-0.5	-6.3	-5.1	-14.8
Artisans, operators and laborers, except on farms	-3.5	-6.3	-7.4	-0.1	-17.3
Farm laborers and foremen	-15.4	-14.8	-15.0	-12.0	-57.8
Others ^{1/}	<u>-19.6</u>	<u>-2.5</u>	<u>14.2</u>	<u>-0.4</u>	<u>-8.3</u>
TOTAL	-43.0	-26.4	-27.4	-20.4	-117.2

^{1/} Mostly minors and housewives and, among the non-residents, passengers in transit.

Note: Summary of statistics compiled by the Department of Labor.

Puerto Rico is probably now well below 20,000. (Census data for Puerto Rico have no "farm" and "non farm" breakdown of rural population data.) Being young adults (mainly under 25) they are in large degree children of the "subsistence farmers" and farm laborers of a generation ago when (1950) farm employment totalled 214,000. Less than 19% of them have a high school education or more, so they are competitors mainly for "blue collar" jobs, whether in Puerto Rico or the States.

Occupational characteristics of the migrants

Current occupational data on Puerto Rican emigrants to the United States are not available. Their occupational characteristics, however, are largely dictated by their rural origin, their comparative lack of education, and by their youth and consequently limited work experience. The employment market for a population that is two-thirds of rural origin, with less than a high school education and mostly under 25 years of age is fairly obvious.

Sample data compiled between 1957 and 1960 on airport passengers between Puerto Rico and the United States are shown on the facing page. They tend to confirm the "obvious".

Statistical note

It is believed that the sample for incoming passengers was representative of the total number of people arriving because those to be interviewed were selected according to the random order in which they descend the ramp from the plane. The inherent difficulty of controlling the sample of outgoing passengers, however, led to an error in the data on departures which appears, on the basis of Census data, to arise from a considerable under-representation of outgoing female passengers. Because of the very large gross movements involved, a comparatively small

error in measuring the size of one of the total movements results in a comparatively large error in the much smaller net figure. The survey was continued after 1960 but the error appeared to be increasing and it has since been discontinued to be replaced by sample household surveys conducted for immigrants by the Department of Labor and for emigrants by the Department of Health.

The table summarizes net migration by occupation, as shown by these sample data. Since the sample showed a net outward movement of 102,000 men as compared with only 14,200 women during this four-year period, it is evident that it reflects for the most part the occupations reported by male travelers. Read as occupational data on male migrants, it is possible that it is approximately accurate.

The predominance of agricultural laborers among the various occupational groups is consistent with information from other sources. It is consistent with the movement of seasonal agricultural workers under contract, for whom reliable departure data are available and also with the decline in agricultural employment. The migration of 58,000 agricultural workers in four years is consistent with a smaller decline in agricultural employment (40,000) because there were new entrants into the agricultural labor force during the period. Roughly 10,000 rural males enter the labor force each year. The foregoing suggests that during this four-year period, perhaps half of the 40,000 new entrants went into agriculture with the other half going into other rural occupations, commuting to city jobs (mainly in construction) or migrating.

The large net movement of farm laborers shown in the table may even be an understatement of their true number. The majority of labor force migrants go with a job awaiting them in the States. Since most of the farm laborers, apart from the seasonal workers, go into non-agricultural jobs, some of those departing may have reported their future rather than past occupations.

OCCUPATION OF THE PASSENGERS WHO TRAVELLED BETWEEN PUERTO RICO
AND THE UNITED STATES IN 1960
(In thousands)

	Residents			Non-Residents			Net Balance (000)
	Departures (000)	Arrivals (000)	Balance (000)	Departures (000)	Arrivals (000)	Balance (000)	
Professionals and semi- professionals	12.7	10.0	-2.7	34.2	36.6	+2.4	-0.3
Owners and administrators	13.0	11.0	-2.0	36.2	36.3	+0.1	-1.9
Clerical in sales or service	17.4	8.4	-9.0	38.7	42.6	+3.9	-5.1
Artisans operators and laborers, except on farms	23.5	10.4	-13.1	50.2	63.2	+13.0	-0.1
Farm laborers and foremen	33.4	19.4	-14.0	1.2	2.6	+1.4	-12.6
Others ^{1/}	<u>102.6</u>	<u>47.0</u>	<u>-55.6</u>	<u>142.7</u>	<u>197.9</u>	<u>+55.2</u>	<u>-0.4</u>
 TOTAL	 202.6	 106.2	 -96.4	 303.2	 379.2	 +76.0	 -20.4

^{1/} Mostly minors and housewives and, among the non-residents, passengers in transit.

Note: Summary of statistics compiled by the Department of Labor.

If this was the case, the offsetting overstatement would be largely in the number of factory operatives and service workers shown in the table, since these are the occupations to which most Puerto Ricans go in the States.

Departures, arrivals, and the net balances for both resident and non-resident passengers during 1960 are shown here in another tabulation of data from this same airport survey. In order to understand the implications of this table it is important to realize that the bulk of the net inflow of non-residents (776,000) consisted of people of Puerto Rican birth or parentage. Data from elsewhere in the airport survey indicate that between 56,200 and 63,500 of the immigrant non-residents were either themselves born in Puerto Rico or had at least one Puerto Rican parent. Thus, while the gross movements reflected in the departure and arrival figures include many visitors of non-Puerto Rican origin, the net movements of both residents and non-residents are made up largely of people of Puerto Rican birth or origin. The gross movements are travel while the net movements are migration -- net outward, net inward, and net balance.

From this table it would appear that the nature of the migratory movement of people in occupational groups outside agriculture is basically different from that of farm workers. The offset to the departure of resident farm laborers (-33,400) is almost entirely to be found in the return of resident farm laborers (719,400). These are mostly seasonal workers who go and return during the same year. The net inflow of non-resident farm workers is very small. In the other occupational groups, however, the net inflow of non-residents (largely of

Puerto Rican birth or parentage) provides an important offset to the net outflow of residents. This tendency is especially marked in the group of "artisans", operators, and non-farm laborers" (mainly factory workers) and in the small group of professionals.

This difference means that very few of the farm laborers or students who stay in the United States for a year or more (and are thus reflected in the net annual figures) return to Puerto Rico as farm laborers or students. They return in most cases as factory or service workers and as professional or semi-professional people.

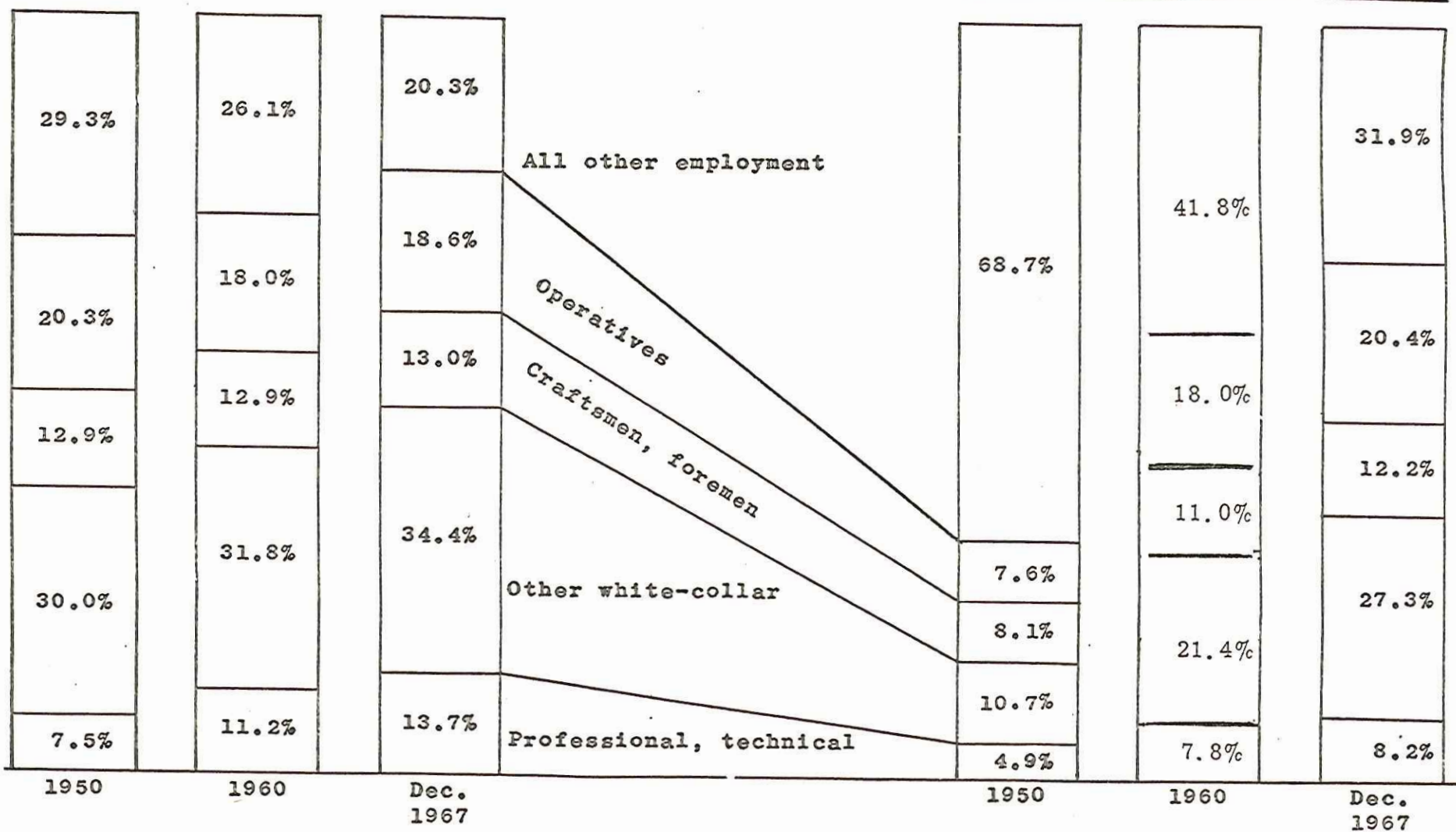
The net outflow of 3,600 professional and semi-professional people from 1957 through 1960 shown in the previous table suggests a "brain drain" of concern to Puerto Rico. But the net balance is small in comparison with the gross movement of resident and non-resident professionals. In 1960, for example, 46,000 professionals arrived in Puerto Rico and 46,900 departed. This implies a volume of professional interchange that was clearly beneficial to both Puerto Rico and the United States. The net movements were an outflow of 2,700 residents and an inflow of 2,400 non-residents. It may well be, however, that the average level of skill among the non-residents (mostly returning Puerto Ricans) was sufficiently above that of the outgoing resident professionals to offset the small difference in their numbers.

The skill and knowlegde differential between resident and non-resident proprietors and administrators also seems likely to be quite substantial. Most of the net outward movement of residents was probably of owners of very small

CHANGES IN OCCUPATIONAL COMPOSITION
OF EMPLOYED WORKERS

United States

Puerto Rico



farms and retail establishments. About 12,000 "farms" less than three acres in size disappeared between 1950 and 1960 and the 1963 Census of Business counted 10,542 retail stores with annual sales of less than \$5,000. The small net inward movement of non-residents includes owners and managers of factories and of other larger and more complex kinds of business enterprises.

Occupational "fit" of the migrants

Clearly Puerto Rico's very large labor reserve does not fit the occupational demands of either Puerto Rico or the United States. If it did, it would have disappeared long since.

As the accompanying chart shows, the demand for labor in both Puerto Rico and the United States has been shifting toward the more highly skilled occupations. Starting with much lower skill requirements in 1950, the upward shift in Puerto Rico has been extremely rapid. While collar and craft job requirements have jumped from about a quarter to half the total in less than a generation and are now about the same as they were in the States 17 years ago. In the States, demand for professional and other white collar workers continues to expand while it is a stable or contracting part of the total for all other major occupational groups.

Very few individuals in Puerto Rico's labor reserve fit this general demand pattern. Most of them lack the minimum educational requirements for white collar jobs and the training and experience needed in the crafts.

Nevertheless, as shown by the chart facing page 8, some 232,000 Puerto Ricans have found jobs in the States since 1950 and 258,000 more have found

urban type employment in Puerto Rico. Another 35,000 or so commute between Puerto Rico and the States according to the different patterns of seasonal demand in agriculture.

Many of these new jobs have been filled by qualified Puerto Ricans who went directly from school to work without ever entering the limbo of unemployment that we are euphemistically calling a "labor reserve". High school graduates now number about 20,000 a year and about the same number get as far as eighth grade. But the median unemployed member of the Puerto Rican labor force has completed less than seven years of school and among other potential workers the amount of education is probably even less.

The nature of the migratory process through which so many educationally deficient people have found jobs is suggested in the following table.

Occupational Composition of Puerto Rican Migrants, April 1960

	Employment in the United States:		Employment in Puerto Rico	
	Total	Puerto Ricans	Total	Immigrants
Professional, technical	11.2%	3.0%	7.8%	18.5%
Other white collar	31.3%	14.3%	21.4%	31.9%
Craftsmen, foremen	12.9%	7.8%	11.0%	10.7%
Operatives	18.0%	46.2%	18.0%	18.7%
All other	26.1%	28.7%	41.8%	20.2%

As might be expected, most of the Puerto Ricans employed in the States have jobs as machine operators or service workers that require little education and comparatively short periods of training. In 1960, 148,000 worked in

manufacturing industries. This was almost double the number (81,000) then employed in all Puerto Rican factories.

Puerto Ricans migrate to the States in very large numbers only when the U.S. labor market is very tight and when practically no trained workers are unemployed. Even so, they are a comparatively small part of the total increment to employment that occurs under such conditions.

In contrast, immigrants to Puerto Rico, mostly returning Puerto Ricans, have a higher skill composition than even the U.S. average. The 18.5% figure for professional and technical workers is biased upward by the inclusion of returning students but, even so, a substantial part of Puerto Rico's need for workers of higher educational and skill levels is filled by immigrants. This leavening of the total employment mix makes it possible, in turn, to employ within Puerto Rico many more people of lesser education and skill.

The two migratory flows

During the big migratory outflow from Puerto Rico from 1947 through 1953, there was probably comparatively little return movement. The Puerto Rican population in the States was only about 100,000 at the beginning of the period and it had been comparatively stable since 1930. The return movement probably became significant about the time of the 1954 recession.

It has since become so large, however, that no analysis of migration is meaningful that does not examine separately the characteristics of the people composing both movements -- the inflow and the outflow to and from Puerto Rico. The net figure is statistically important, especially for population

estimates, for sample studies dependent thereon and for birth, death, enrollment and other rate calculations that require a reasonably accurate current base of estimated population by age and sex. But for labor recruiting and placement, educational planning and many other purposes the two gross movements must be measured and studied separately.

The following table is a mixture of guesses (1951-55) Census data on residence (1956-1960) and sample survey results (1964-1967) put together as a rough indicator of what may have been the past order of magnitude of the two migratory flows and their net balance. Gross movements of this size having the differences already noted in the ages and occupations of the people involved can clearly affect the entire composition of a population like that of Puerto Rico. But without knowledge of the total population, at least by age and sex, the sample approach to measurement of the flows lacks the necessary base. Without knowledge of the migratory flows, on the other hand, current population estimates may be in substantial error.

Migratory flows from and to Puerto Rico
(Years ending in March)

	<u>Annual Averages</u>						
	<u>1951-55</u>	<u>1956-60</u>	<u>1961-63</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>
Emigration	60,000	55,400	38,000	43,000	66,000	79,600	76,700
Immigration	10,000	15,400	29,000	51,000	50,000	49,600	42,700
	-50,000	-40,000	-9,000	73,000	-16,000	-30,000	-34,000

The 1970 Census will provide the data necessary for estimating the intercensal flows and for establishing a base for subsequent current estimates of population and population movement. What is most needed at present is the development of an adequate current estimating system that has been pretested and is ready for application as of April 1970.