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ORIGINAL: ENGLISH

EFFECTS OF RECENT AND POSSIBLE FUTURE MIGRATION ON THE POPULATION OF ARGENTINA, BRAZIL, PTALY, AND INDIA by Chia-lin Pan

This study has been undertaken to provide some concrete examples illustrating the extent to which international migration affects the size and sex-age-structure of the population and the numbers of births and deaths under the observed conditions of movements in either direction. The study does not show what would happen as a result of change in movements in one direction, because the movements in the opposite direction would then be affected to an incalculable extent.

The study covers four countries, two of which have been immigration countries and two, emigration countries. Argentina and Brazil are the immigration countries, and Italy and India, the emigration countries.

The study for the immigration countries covers (1) effects of actual migration which has taken place during a recent period, and (2) effects of projected migration to 1960.

For the two emigration countries, the study is aimed chiefly to determine how much emigration per annum would be needed to keep the total number of men in working ages constant for the 10 year period 1950-60. Furthermore, on the assumption that such an emigration should occur, an effort is made to estimate the effects on the sex-age-structure of the population of the country by 1960.

- A. Argentina
- 1. The postwar period, 1946-52

For the purpose of this study, we have examined the available migration statistics of Argentina from 1934 onward and found that there are five types of series: 2/ (1) Arrivals and departures of aliens and nationals by air, sea,

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The author of this paper is a member of the Secretariat of the United Nations.

The views presented are his own and not necessarily those of the Secretariat.

<sup>2/</sup> For statistics of net movements, by type of series, see Appendix A.

river and land. (2) Overseas arrivals and departures of aliens and nationals travelling by all classes. (3) Overseas arrivals and departures of aliens travelling by all classes. (4) Overseas arrivals and departures of aliens travelling second and third class. (5) Overseas arrivals and departures of aliens, who are permanent migrants, travelling by all classes. Of these five types, only series (4) gives information by age and sex, and that only for the period beginning with 1948.

The basic data on migrants by sex for Argentina are the totals of recorded arrivals and departures in series (1). As can be seen in Appendix A, no other series gives a good approximation to net migration. That is the reason why series (1) has been selected. These data were adjusted for the estimated numbers of transients and further adjusted for a yearly under-recording of arrivals by 20,000 persons and of departures by 10,000 persons. 3/ From data so adjusted,

Transients should be excluded from arrivals and departures in order to obtain the numbers of migrants to or from the country. For estimates of the number of transients, see Appendix B.

In order to estimate the yearly net immigration into Argentina we have cal-3/ culated for each year from 1935 through 1952 the difference between the estimated population at the beginning and the end of the year. (Revised official estimates of the population made since the 1947 census were used.) From this difference we have deducted the recorded number of births in excess of the recorded number of deaths. These annual differences should tend to correspond to the actual net immigration during the years 1935 through 1952, though they are influenced by the accuracy of the vital statistics. The differences were then compared with the recorded net immigration for each of the five series mentioned above. The result shows that the recorded net immigration according to series (1) is the closest, though still short of the annual differences by a sizable amount. This shortage in net immigration for series (1) is approximately 27,000 persons per year from 1935 to the census date (10 May) of 1947, and about 17,000 persons per year after the census date of 1947. These shortages reflect the corrections made by the Argentina government statistical agency for inadequate registration of births, deaths and migration combined. After some closer study of the figures, we estimated that of this 17,000, a correction of 10,000 might be ascribed to net migration not accounted for by the migration statistics. This might have resulted from about 20,000 unrecorded arrivals and 10,000 unrecorded departures, per year. These are the basic assumptions for our study.

we estimated that during the 7 years, 1946-52, there have been in Argentina altogether 1,915,000 arrivals and 1,145,000 departures, that is, on an average, 274,000 arrivals and 164,000 departures per year. A total of 1,089,000 males and 827,000 females arrived, while 677,000 males and 467,000 females departed. Thus, on an annual basis, there have been 156,000 male and 118,000 female immigrants, and 97,000 male and 67,000 female emigrants. We have assumed that that age-composition of these arrivals and departures has been the same as that, for each sex, of migrants in series (4). 4/ We have furthermore assumed that their fertility conformed to age-specific fertility rates of women in Portugal, 1946-51, and that their mortality was identical with age-specific death rates of the general population of Argentina during 1946-48.

#### 2. Assumptions for the period from 1 January 1953 to mid-year 1960

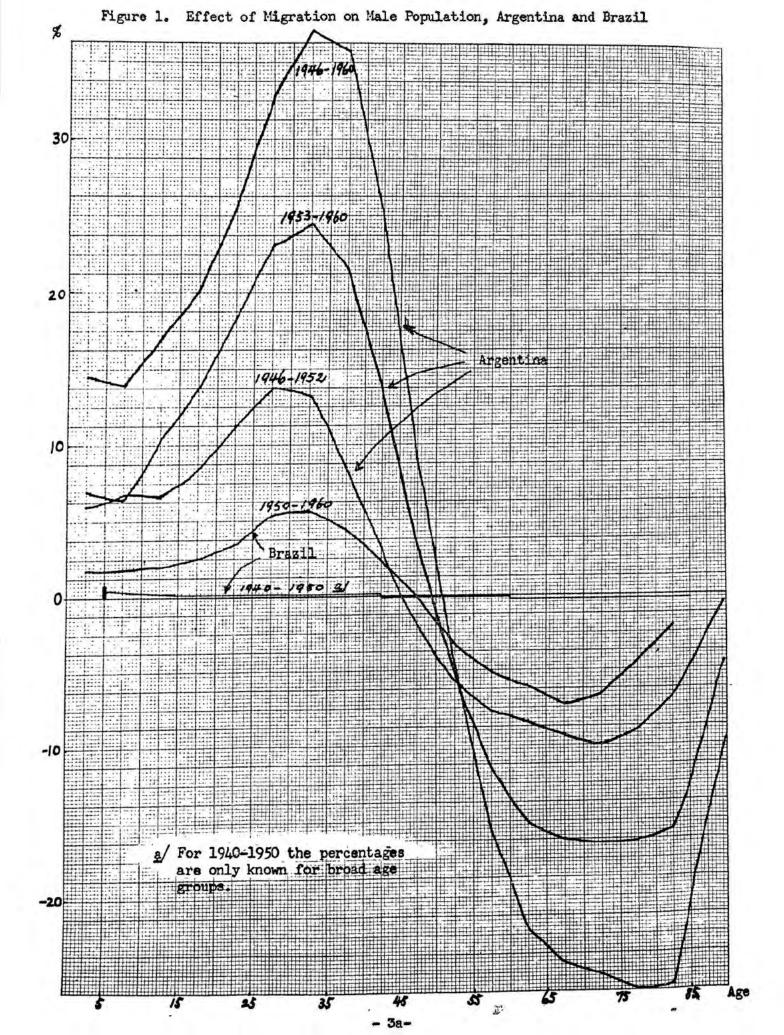
In order to isolate the effects of migration, a projection of the population of Argentina has been made, first of all, on the assumption that there will be no migration. 5/ It has then been assumed that there will be a yearly immigration of 250,000 persons, 150,000 male and 100,000 female, and a yearly emigration of 150,000 persons, 100,000 male and 50,000 female. The fertility and mortality of these migrants have been assumed to remain at the same levels as during the 1946-52 period.

## 3. Analysis of the effects of migration during the two periods, 1946-52, and 1953-60

During 1946-52, migration has had a considerable effect on the composition of the Argentinian population. This effect has been greater for the male than for the female population because male migrants, both into and out of the country, have been more numerous than female migrants. The detailed effects on particular age groups are shown in Figure 1 and Tables 1, 2 and 3. It will be noted that the percentage increment, due to migration, has been greatest among young

<sup>4/</sup> A study of age composition of male migrants for 14 countries at various periods of time has shown that very little change in age composition is to be expected.

This projection has been made in accordance with the scheme described in United Nations, Future Population Estimates by Sex and Age. Report I. The Population of Central America (including Mexico). 1950-1980. New York, 1954 (Population Studies, ST/SOA/Ser.A, No. 16). The scheme permits estimates at declining rates of mortality, each age-specific rate declining, from the moment of observation, in accordance with an assymmetric logistic curve, the rapidity of the decline having been estimated on the experience of ten countries. In the present instance, statistics of the Argentinian census of 1947 and death statistics for the period 1946-48 have been employed. It has also been assumed that fertility will remain constant at the 1945-50 level.



adults, reaching a maximum at age-groups 25-29 and 30-34. The percentage decrement, caused by migration, has been greatest among persons of advanced ages, notably in age groups 65-69, 70-74 and 75-79.

During 1953-60, migration will bring about similar changes in the age composition of the Argentinian population. Again, it will raise the numbers of persons in childhood and young adult ages while reducing those at advanced ages, so that the population, as a whole, will be younger than it would be in the absence of migration. If we regard ages 15 to 64 as the working ages, we note that this group will be increased more than the group aged under 15, while the group aged 65 and over will actually be diminished. As a result, the burden of youth and old-age dependency, especially the latter, decreases.

The effect of migration between 1947 and 1960 on the number of births in Argentina is presented in Table 5. It should be noted that the effect intensifies with time.

The effect of migration on the number of deaths in Argentina (see Table 6) is negligible. As a result of an annual inward balance of 100,000 migrants, the population of the country will be increased. This increase will, however, be greatest in young adult ages where risks of death are comparatively small, whereas a reduction will occur in the more advanced age-groups where the risk of dying is more considerable. Consequently approximately the same number of deaths will occur within the country whether migration occurs or not. Since, as a result of migration, the population of the country will be augmented, the almost unchanged absolute number of deaths implies that the crude death rate for the population will be lower with migration than it would be in the absence of migration.

The age structures of immigrants and emigrants of both sexes, and their descendants, on 1 January 1953, and those of female immigrants and emigrants with their female descendants in 1960, are shown in Table 7. If diagrams were drawn from these data, they would show spade-shaped age structures, with the base resulting from the natural increase of the migrants.

# Effect of Migration on Men in Working Ages 15-64 Years and on Burden of Dependency a/

1 January 1953

Age or burden of dependency	Distribution per l in working ages	.00 men	% change in number of men in working ages, with migration since 1946				
	Without migration since census date (10 May) 1947	With migra- tion since 1946					
15-64	100	100	<b>*</b> 5.64				
15-49 50-64	81 19	83 17	+ 8.63 - 7.07				
0-14/15-64 65+/15-64 Sum	93.32 13.98 107.30	93.85 12.32 106.17					

1 July 1960

		*			
Without migration	With migrat	ion	With migration		
since census date 1947	Since 1 Jan. 1953	Since 1 Jan. 1946	Since 1 Jan.1953	Since 1 Jan. 1946	
100	100	100	•11.65	<b>•18.55</b>	
79	83	85	+17.39	+26.92	
21	17	15	-10.10	-13.19	
95.28 17.34 112.62	91.74 13.72 105.46	92.29 11.93 104.22			
	1947 100 79 21 95.28 17.34	since census date 1947 1 Jan. 1953  100 100 79 83 21 17  95.28 17.34 91.74 13.72	since census date     Since     Since       1947     1 Jan. 1953     1 Jan. 1946       100     100     100       79     83     85       21     17     15       95.28     91.74     92.29       17.34     13.72     11.93	since census date     Since     Since     Since       1947     1 Jan. 1953     1 Jan. 1946     1 Jan. 1953       100     100     100     •11.65       79     83     85     •17.39       21     17     15     -10.10       95.28     91.74     92.29       17.34     13.72     11.93	

a/ The index of burden of youth dependency is the ratio (expressed in percentages) of boys and girls aged 0-14 to men aged 15-64 years; that of old-age dependency is the ratio of men and women aged 65 and over to men aged 15-64 years.

#### Be Brezil

### The intermental period. 1 September 1940 - 1 July 1950

The migration statistics collected and published by Brazilian government agenclas covered primarily the arrivals of aliens, by sex, entering the various ports The country. For the postwar period, 1946-50, approximately 32 per cent of his recorded arrivals of aliens in Brazil were considered permanent new immigrants and were elegatified by age. No statistics on departures of aliens were available for the postwer years. Hence there is no direct way of gauging the magnitude of met immigration for the postwar period. However, the census reports of Brazil for 1940 and 1954 contained statistics of aliens and naturalized Brazilians by the and sex, On the basis of these statistics, and by using the mortality schedvia of Argentina, 1946-45, we have computed the effect of net migration of aliens, the a 10 page period between 1 September 1940 and 1 July 1950, on the population of Branch as of missear 1950. For this period, the effect of migration on the population of Breath was practically negligible. See Figure 1 and Table 8.

### 2. The decade of 1950-60

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Total.

The migratory balance for 1940-50, as already stated, was derived from census data. By subtracting this balance from the number of immigrants according to Brazilian statistics, we have estimated the number of emigrants. We then compared, for Brazil and Argentina, the ratios of surviving emigrants to immigrants, by sex and ago, for specified periods of time. The result shows that the ratios for the two countries are, on the whole, comparable.

Argentina, 1946-52 Brazil, 19/0-50 Age Female Male Female Male .199 .130 0 .255 0-9 . 253 .257 10-19 -356 1232 .384 .401 20-39 1.013 1.183 1,118 1..131 40-59 1.688 2,677 60. 1.957 2-455 .560 .606

Rabia of Emigrants to Immigrants

For details, see Table 9.

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Furthermore, we compared the age structures of recorded male and female immigrants to Brazil with those of Argentina and observed that the pattern of age distribution for the immigrants of both countries were similar.

Percentage Age Distribution by Sex of Recorded Permanent Alien Immigrants

	7-6 10.7 10.9 7-11 6.0 6.1 7-2 7.2 8-59 72.2 71.8	Argentina,	1948-1952	
Age	Male	Female	Male	Female
0-6 7-11 12-17 18-59 60+	6.0 7.2	6.1 7.2	8.5 5.4 9.5 73.6 3.0	11.0 6.9 9.9 67.0 5.2
Total	100.0	100.0	100.0	100.0

For details, see Table 10.

On the basis of these comparisons, it was decided that the same migration assumptions could legitimately be made for Brazil as those which we have made in the case of Argentina. We have assumed, accordingly, that during the decade from 1950 to 1960 Brazil will experience an annual immigration of 250,000 persons (150,000 male and 100,000 female) and an annual emigration of 150,000 persons (100,000 male and 50,000 female), and that migrants to and from Brazil would have the same fertility and mortality as migrants into and out of Argentina. A population projection for Brazil, on the assumption of no migration, has also been made according to the same scheme as in the case of Argentina. 6/

By the year 1960, the effect of migration on the population of Brazil will be considerable. The young adult population will be augmented, the maximum increment, 6 per cent, accruing to males aged 30-34. Aged persons will be diminished, the decrease amounting to 6 per cent for males aged 65-69, 70-74 and

The initial age-specific mortality rates of Brazil were the survivor rates established on the basis of the 1940 and 1950 native born Brazilian population by age and sex. Fertility was estimated on the basis of age group 5-9 in the 1950 census, by estimating the number of births from which these individuals have survived and the female population of reproductive ages at the time when the individuals were born. The fertility has been assumed to remain constant till 1960. It should be noted that the fertility and mortality rates used for projecting the population of Brazil are not the same as those used for projecting migrants for that country.

and 75-79. The detailed effects are shown in Figure 1 and Table 11.

Migration will slightly change the distribution of men in working ages and the burden of dependency of the population of Brazil between 1950 and 1960.

Effect of Migration on Men in Working Ages of 15-64 Years and on Burden of Dependency a/, Brazil, 1 July 1960

Age or dependency burden	Distribution po in working a	% change in number of men in working	
	Without migra- tion since 1950	With migra- tion since 1950	ages, with migration
15-64	100	100	<b>+2.42</b>
15-49	86	87	<b>•</b> 3.57
50-64	14	13	-4. 62
0-14/15-64 65 <b>+</b> /15-64	155.91	154.96	
	10.01	9.35	
65 <b>+/1</b> 5-64 Sum	165.92	9.35 164.31	

a/ The index of burden of youth dependency is the ratio (expressed in percentages) of boys and girls aged 0-14 to men aged 15-64 years; that of old-age dependency is the ratio of men and women aged 65 and over to men aged 15-64 years.

Italy has contributed a large proportion of the migrants to Argentina and Brazil during recent decades. It is therefore of practical interest to examine the effect of the same migratory movement both on the sending and the receiving countries.

It has been calculated, on the basis of registered births and deaths, that official population estimates for Italy during the period 1946-52 implied an annual net emigration of about 140,000 persons. Not all of this migration, however, could have been of the type of Italian migration to countries in South America since recorded net transoceanic migration during 1946-51 averaged only about 85,000 persons per year. Nevertheless, an annual transoceanic emigration

C. Italy

<sup>1.</sup> The period covered by projected migration, 1951-60

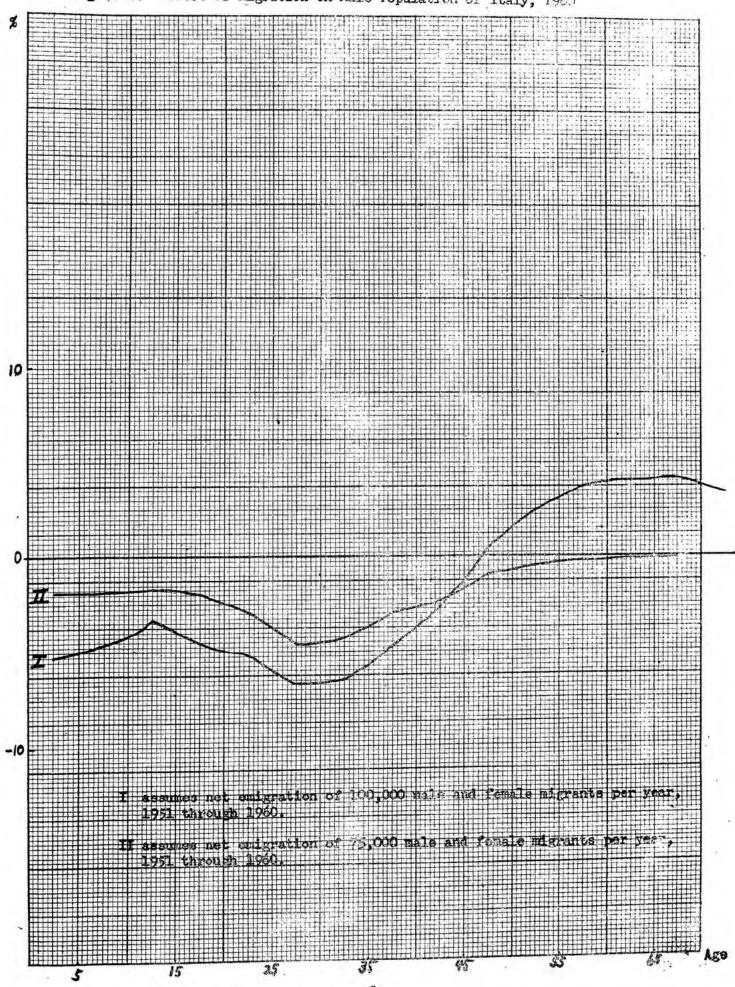
from Italy of the order of 100,000 persons per year during the period from 1950 to 1960 is well within the realm of possibility. This is the same net migration as has been assumed by us in our projected figures for Argentina and Brazil. Hence, we shall regard this same migratory volume as "migration assumption I" in the case of Italy, except that in this instance migration will take place in the opposite direction. The age structure, fertility and mortality rates used for migrants in the case of Argentina and Brazil should reflect fairly well those of Italy. Under these conditions, we can readily apply to Italy the results of our projections of migration for Argentina and Brazil.

Apart from our estimate of emigration from Italy, the Organisation Europeenee de Cooperation Economique has made population projections for Italy for various dates. One series of its projections was made on the assumption of a yearly net emigration of 75,000 persons. For short, we call this "migration assumption II". The results of assumptions I and II are similar in that the effect of migration on the population of Italy for 1960 will not be inconsiderable. In the male population of Italy, decrements due to emigration on assumption I would be as great as 7 per cent of the population in the case of males aged 25-29 and 30-34; increments, owing to return migration, will reach the maximum of 4 per cent in the case of age-groups 60-64 and 65-69. On assumption II, the effect of net emigration reaches a maximum of nearly 5 per cent of the population aged 25-29. In the female population, the effect of net emigration will be appreciably smaller than that in the male population. See Figure 2 and Table 12.

Between 1950 and 1960, Italy would have a decreasing proportion of young adult and early middle-aged men and an increasing proportion of older men in the working ages. With migration, this trend will be accentuated. The burden of youth dependency will decrease, that of old-age dependency increase in the population of Italy between 1950 and 1960 with or without migration. However, the total burden of dependency will decrease and this mainly due to the decrease in the youth dependency.

2. Migration required to maintain a constant number of men in working ages
Owing to possible difficulties in finding employment for additional numbers
of men in working ages in Italy, it is of some theoretical interest to determine
what volume of migration would be necessary in order to maintain the numbers of
males aged between 15 and 64 constant. On the basis of our assumption I, it would
appear that this effect will be reached with an annual net emigration of 170,000

Figure 2. Effect of Migration on Mals Population of Italy, 1960



Distribution per 100 Men in Working Ages, Italy

	Estimated popu-	Estimated p	Estimated population, 31 Dec.1960			
Age	lation, 31 Dec. 1950	Without migra- tion since 1951	With mi- gration (Assumption I)	With mi- gration (Assump- tion II)	tion 31 Dec. 1960. With emigration of 170,000 men per year since 1951	
15-64	100	100	100	100	100	
15-49 50-64	81 19	78 22	76 . 24	77 23	73 27	
		Depe	ndency Burden			
0-14/15-64 65•/15-64 Sum	82.74 25.71 108.45	75.10 26.79 101.89	73.93 28.08 102.01	75.21 27.99 103.20	70.84 31.52 102.36	
		For detail	s, see Tables	12 and 13.		

males for the years from 1951 to 1960. 7/ If the postwar immigration experience of Argentina can be taken to reflect emigration from Italy, then a yearly net emigration of 170,000 males would be accompanied by a net emigration of an equal number of females. Migration of this magnitude is still within the current and expected receiving capacity of Argentina and Brazil.

While it is possible that such an emigration from Italy may lift the existing pressure on the employment market, it remains to be considered that the concomitant shifts in age-structure would bring about a considerable aging of the labor force, as well as a sharp increase in old-age dependency; youth dependency would, however, be decreased.

### D. India

Our study of India is purely hypothetical. In order to keep the number of men in working ages constant for a decade at the 1950 level of 104 million, India would need a net emigration of 2.56 million persons per year, 1.72 million males

That is, according to the estimated sex-age structure of "net migrants" in postwar Argentina. Results of the premise for migration assumption II can not be worked out for want of details of sex-age structures of migrants involved therein.

and 0.84 million females. 8/ This magnitude of net emigration would be more than forty times the estimated net emigration of 60,000 persons per year from prepartition India during 1921-37 when restrictive measures in the major receiving countries of Indian migrants were either non-existent or much less severe than they are today. Evidently net emigration of this magnitude would have little chance of realization.

However, with or without migration of this magnitude, India will continue to have a young population between 1950 and 1960, 9/ as Table 14 indicates. No great change will occur in the composition of the group of working ages, whether or not large-scale migration takes place. In the absence of migration, there will be a tendency for both youth dependency and old-age dependency to rise slightly. A very great further increase in youth dependency would result if migration of the magnitude suggested were to occur.

Distribution per 100 Men in Working Ages, India

Age	Estimated	Estimated population 1960				
	Population 1950	Without migration	With emigration of 1.72 million men per year since 1951			
15-49	100	100	100			
15-29 30-45 45-49	46 33 21	47 32 21	49 30 21			
	D	ependency Burden				
0-14/15-49 60+/15-59 Sum	133.9 18.8 152.7	141.5 21.0 162.5	171.6 23.4 195.0			
	See	also Table 14.				

<sup>8/</sup> Estimated on a sex-age structure worked out on the basis of recorded sex ratio of Indian emigrants 1928-39, and modified sex ratio by age, and percentage age distribution of Indian female population of Malaya 1921.

The population projection for India has been made by using the same general scheme as in the case of Argentina and Brazil. The level of fertility, assumed to remain constant, has been estimated on the basis of numbers enumerated at ages 5-9 in 1951, following the same procedure as in the case of Brazil. Mortality has been assumed to decline gradually, from the level estimated by Kingsley Davis for the 1931-41 period.

TABLE 1.

# EFFECT OF MIGRATION ON POPULATION OF ARGENTINA BY SEX AND AGE, 1 JANUARY 1953

	Male Popu			ion		Female Population					
Age	Without m since cen (10 May	sus date	(	et migratincl. nat rease of grant 1946-195	tural in- mi- ts)	Without m since cen (10 May	igration sus date		Net migra (incl. na crease of gran	tu:	ral in- i-
	Number	<u>%</u>		Number	$\frac{(3)/(1)}{\sin 8}$	Number	<u>8</u>		Number	_	7)/(5) in %
	(1)	(2)		(3)	(4)	(5)	(6)		(7)		(8)
0-4	1,002,058	11.27	+	61,155	+ 6.10	965,882	11.32	+	59,906	+	6.20
5-9	905,360	10.18	+	61,529	+ 6.80	880,830	10.32	+	51,874	+	5.89
10-14	818,924	9.21	+	53,738	+ 6.56	801,532	9.40	+	46,807	+	5.84
15-19	779,508	8.77	+	65,345	+ 8.38	764,198	8.96	+	42,585	+	5.57
20-24	769,766	8.66	+	86,916	+11.29	759,485	8.90	+	58,959	+	7.76
25-29	732,298	8.24	+	101,490	+13.86	727,660	8.53	+	68,246	+	9.38
30-34	660,630	7.43	+	87,473	+13.24	659,328	7.73	+	62,128	+	9.42
35-39	610,344	6.87	+	52,302	+ 8.57	602,634	. 7.06	+	38,769	+	6.43
40-44	580,132	6.53	+	18,433	+ 3.18	549,729	6.44	+	16,637	+	3.03
45-49	528,701	5.95	-	9,528	- 1.80	474,986	5.57	+	819	+	.02
50-54	450,779	5.07	-	25,494	- 5.66	391,833	4.59	-	8,243	-	2.10
55-59	365,278	4.11	-	28,462	- 7.79	311,429	3.65	-	11,580	-	3.72
60-64	281,646	3.17	-	23,630	- 8.39	241,282	2.83	-	11,927		4.94
65-69	194,231	2.18	-	17,936	- 9.23	175,632	2.06	-	9,071		5.17
70-74	114,676	1.29	-	11,404	- 9.95	112,794	1.32	-	5,777		5.12
75-79	58,086	.65	-	5,221	- 8.99	63,091	.74		2,838		4.50
80-84	24,544	.28	٠ –	1,662	- 6.77	30,104	-35	-	1,119	*	3.72
85 +	12,310	.14	-	342	- 2.78	19,592	.23	-	327	-	1.67
Total:	8,889,271	100.00	+	464,702	+ 5.23	8,532,021	100.00	+	395,848	+	4.64
0-44	6,859,020	-	+	588,381	+ 8.58	7,186,264	(aged 0-49)	+	446,730	+	6.22
45 and	2,030,251		-	123,679	- 6.09	1,345,757	(aged 50 and over)	-	50,882	-	3.78

a/ The recorded net immigration into Argentina between 1 Jan. 1946 and 10 May 1947 amounted to 18,000 men and women.

TABLE 2.

EFFECT OF MIGRATION ON POPULATION OF ARGENTINA, BY SEX AND AGE,

1 JULY 1960

1		- 1 or 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	a. Efter de antique en antique antique antique de la proper de la proper de la proper de la proper de la prope	State and administration and approximate the state of the second
7.000		ale Pop	ulation :	Fenale Population
A COMPANY A MARINIMA MATERIAL COMPANY	Without mig since censu (10 May)	s date	Net migration (incl. natural in crease of migrant 1 Jan. 1953-1 Jul 1960	(10 May) 1947   crease of migration
, S	Kumber	do.	Number (3)/(	Number 5 Number (1)/(5)
* ************************************	(1)	(2)	(3) (1)	(5) (5) (7. (8)
0-4	1,083,026	10.95	4 75,232 = 6.95	1,040,500 10.84 72,236 + 6.94
5-9	1,015,688	10.27	÷ 64,558 ÷ 6.37	977,686 10.19 4 54,294 + 5.55
2.0-2.4	950,365	9.61	\$ 99,214 -10.44	921,100 9.60 + 83,478 + 9.06
15-19	844,000	8.53	* 115,638 A15.82	£76,980 8.68 + 93,046 +11.25
20-2:	774,599	7.83	* 141,781 1.8.32	757,478 7.39 + 100,735 +13.30
25-29	758,481	7.67	· 175,541 -33,15	135,285 7.77 + 117,754 +15,80
3243.	7127,550	7.57	A 151	142,457 7.74 - NY 602 4.6.93
3: 1	. 5 -3:	6,86	# 1, 141, 491.06	,
141	.00,925	6.00	o an,086 413.60	605,005 6.31 + 71,256 +11.76
25-45	5.5,173	5.73	» 15,106 ÷ 3.27	
50-54	520,273	5.26	- 28,284 - 5.44	
55-59	444,528	4.49	- 51,707 -11.63	
60-64	347,064	3.51	- 52,513 -15.13	
65-69	255,033	2.58	- 41,566 -16.30	
70-74	166,149	1.68	- 27,451 -16.55	156,972 1.64 - 11,803 - 7.52
75-79	85,381	, 86	- 13,996 -16.39	
11 -64		*31.	- 5,252 -15.68	
85 +	15,402	1 .	- 1,412 - 9.17	22,415 .23 - 1,059 - 4.72
Total:	9,889,502	100.00	+ 881,620 + 8.91	9,596,630 100.00 + 793,468 + 8.27
0-49	8,021,992		+1,103,831 +13.70	0-047
50 and	1,867,510		- 222,211 -11.90	1,246,659(aged 55 - 64,387 - 5.16 and over)

TABLE 3.

EFFECT OF MIGRATION ON POPULATION OF ARGENTINA BY SEX AND AGE

1 JULY 1960

		Male Population				Female Population				
Age	Without m since cen (10 May	sus date	CI		ural in- migrants) 6-1 July	Without mi since cens (10 May)	sus date	CI	Net mig ncl. natu rease of Jan. 194 196	ral in- migrants) 6-1 July
	Number	<u>\$</u>		Number	(3)/(1) in %	<u>Number</u>	<u>%</u>		<u>Number</u>	(7)/(5) in %
	(1)	(2)		(3)	(4)	(5)	(6)		(7)	(8)
0-4	1,083,026	10.95	+	157,367	+14.53	1,040,500	10.84	+	155,118	+14.91
5-9	1,015,688	10.27	+	141,248	+13.91	977,686	10.19	+	131,881	+13.49
10-14	950,385	9.61	+	161,412	+16.98	921,100	9.60	4	140,506	+15.25
15-19	844,000	8.53		169,454	+20.08	826,980	8.62	+	139,979	+16.93
20-24	744,099	7.83	+	198,239	+25.61	757,478	7.89	+	147,529	+19.48
25-29	758,481	7.67	+	249,133	+32.85	745,285	7.77	+	170,429	+22.87
30-34	748,559	7.57	+	277,886	+37.12	742,855	7.74		188,418	+25.36
35-39	680,666	6.88	+	243,549	+35.78	680,526	7.09	+	175,987	+25.86
40-44	600,915	6.08	+	149,424	+24.87	605,803	6.31	+	120,663	+19.92
45-49	566,173	5.73	+	50,937	+ 9.00	561,353	5.85	+	48,750	+ 8.68
50-54	520,273	5.26	_	25,281	- 4.86	490,405	5.11	+	6,657	+ 1.36
55-59	444,528	4.49	-	70,281	-15.81	400,204	4.17	-	14,494	- 3.62
60-64	347,064	3.51	-	77,440	-22.31	312,058	3.25	-	25,094	- 8.04
65-69	255,033	2.58	-	62,441	-24.48	227,097	2.37	-	26,115	-11.50
70-74	166,149	1.68	-	41,732	-25.12	156,972	1.64		19,668	-12.53
75-79	85,381	.86	-	22,420	-26.26	88,419	.92	-	10,708	
80-84	33,680	34	-	8,758	-26.00	39,494	.41	-	4,653	
85 +	15,402	.16	-	2,564	-16.65	22,415	.23	-	1,911	- 8.53
Total:	9,889,502	100.00	+1	,487,732	+15.04	9,596,630	100.00		,323,274	
0-49	8,021,992	-	+1	,798,649	+22.42	8,349,971	(aged 0-54)	+1	,425,917	+17.08
50 +	1,867,510	-	-	310,917	-16.65	1,246,659( 8	aged 55 nd over	-	102,643	- 8.23

TABLE 4.

# EFFECT OF MIGRATION ON MEN IN WORKING AGES, ARGENTINA, 1 JANUARY 1953 AND 1 JULY 1960

Description	Line	Men	Men in working ages				
200011p0101	No.	15-64	15-49	50-64			
January 1953							
Without migration since census date 1947		1					
number	(1)	5,759,082	4,661,379	1,097,703			
Distribution per 100 men in working ages	(2)	100	81	19.			
With migration since 1946							
number .	(3)	6,083,927	5,063,810	1,020,11			
Distribution per 100 men in working ages	(4)	100	83	17			
Difference	(5)	+ 324,845	+ 402,431	- 77,586			
Difference as % of (1)	(6)	+ 5.64	+ 8.63	- 7.07			
number	(7)	6,284,758	4,972,893	1,311,86			
Without migration since census date 1947	(7)	6,284,758	4,972,893	1,311,86			
Distribution per 100 men in working ages	(8)	100	79	21			
With migration since 1 January 1953							
number	(9)	7,017,082	5,837,721	1,179,361			
Distribution per 100 men in	(10)	100	83	17			
working ages	(11)		+ 864,828				
Difference as % of (7)	(12)	+ 11.65					
	(12)		7 201751				
With migration since 1946	(13)	7,450,378	6,311,515	1,138,86			
Distribution per 100 men in	2,						
working ages	(14).	100	85	15			
and the second s	(15)	+1,165,620	+1,338,622	- 173,00			
Difference (line 13 minus line 7)	1-21		+ 26.92				

TABLE 5. Effect of Migration on number of Births, Argentina, 1947-1960

	Estimated nu	umber of births	Difference	Difference as % of estimated
Year	without migration	with migration since 1946		births without migration
1947	399,591	401,829	2,238	.56
1948	405,518	411,611	6,093	1.50
1949	411,444	422,851	11,407	2.77
1950	417,370	434,764	17,394	4.17
1951	422,355	444,924	22,569	5.34
1952	426,400	456,997	30,597	7.18
1953	430,444	466,435	35,991	8.36
1954	434,489	474,642	40,153	9.24
1955	438,533	484,096	45,563	10.39
1956	442,021	491,391	49,370	11.17
1957	444,952	499,994	55,042	12.37
1958	447,884	506,673	58,789	13.13
1959	450,815	515,012	64,197	14.24
1960	453,746	523,205	69,459	15.31

TABLE 6.

EFFECT OF MIGRATION ON NUMBER OF DEATHS,

ARGENTINA, 1947-1959

	Estimated num	ber of deaths		Difference as
	Without migration	With mi- gration since 1946	Difference	% of estimated deaths without migration
1947	141,833	140,858	975	.69
1948	147,761	147,592	169	.11
1949	153,686	154,664	978	.64
1950	153,241	154,406	1,165	.76
1951	151,855	153,078	1,223	.81
1952	155,900	157,203	1,303	.84
1953	159,945	159,961	16	.01
1954	163,989	164,041	- 52	.03
1955	164,424	164,538	114	.07
1956	164,304	164,439	135	.08
1957	167,234	167,431	197	.12
1958	170,166	170,405	239	.14
1959	173,098	173,386	288	.17

Age	Estimated increase af	migrants 1946 ter migration)	-1952 (incl. na) living on 1 Ja	atural anuary 1953	1946-1960 (in increase afte	Estimated female migrants 1946-1960 (incl. natural increase after migration)		
	Male <u>immigrants</u>	Male emigrants	Female immigrants	Female emigrants	living on 1 J	uly 1960 Emigrants		
0-4 5-9 10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65-69 70-74 75-79 80-84 85-89 90-94 95-99	94,400 72,751 63,622 79,356 114,283 152,266 156,735 128,333 98,026 70,929 47,604 29,322 17,481 10,051 5,362 2,338 632 22	33,245 11,022 9,884 14,011 27,367 50,776 69,262 76,031 79,593 80,457 73,098 57,784 41,111 27,987 16,766 7,559 2,294 351 13	95, 180 69, 528 60, 430 59, 264 82, 320 101, 481 102, 984 83, 326 64, 382 50, 592 38, 785 28, 259 19, 400 12, 759 7, 731 3, 864 1, 291 98 2	35,274 17,654 13,623 16,679 23,361 33,235 40,856 44,557 47,745 49,773 47,028 39,839 31,327 21,830 13,508 6,702 2,410 411 16	231, 131 190, 486 137, 422 118, 658 133, 113 162, 701 185, 783 181, 427 150, 729 112, 163 86, 737 67, 293 47, 629 31, 231 18, 805 9, 952 3, 914 956 130 2	76,013 63,138 36,977 25,612 32,378 44,947 59,981 72,253 79,473 84,369 84,451 77,507 63,909 47,338 30,608 16,231 6,559 1,810 310 27		

a/ The corresponding series for male migrants are not available due to the fact that the number of male migrants living on 1 July 1960 was worked out on the basis of net migration.

a/ These are census data adjusted by the number of persons whose age was reported unknown.

b/ Figures are based on a comparative study of the number of aliens and naturalized Brazilians returned in the 1950 census with the number of estimated survivors (including natural increase) of same for mid-year 1950 from the 1940 census data.

Figures signify the lower and upper limits. Since children of alien parentage born in Brazil are considered as natives rather than aliens, the enumerated number of children as aliens or naturalized Brazilians in the 1950 census would be the lower limit of the actual number of children of alien immigrants who arrived in Brazil during 1940-1950. The estimated number of children born in Brazil during 1940-1950 to immigrant parents who came to Brazil prior to mid-year 1950 was added to the number of alien children under 10 years old returned in the 1950 census, and the sum used as the higher limit.

# COMPARISON OF RATIO OF EMIGRANTS TO INMIGRANTS, BY SEX AND AGE, FOR BRAZIL AND ARGENTINA, SPECIFIED PERIODS.

	-			BRAZ	IL .						ARGENTI	NA .		
Age .	I. Impli migrationatural crease) 1950. a/	n (excl) in- 1940-	II. Est no. of grants on 1 Ju 1950.	immi- living uly	III. In effect emigrat	of ion,	IV. Ra of emi grants immign III/	t- s to rants	Estimated immigrants on 1 Jan. who arrive ing 1946-(excl. naincrease)	s living 1953, ed dur- 1952'	grants on 1 J who em during 1952 (	ted emi- living an. 1953 igrated 1946- excl. crease)	Ratio emigr to im grant livin 1 Jan 1953.	ants mi- s g on
	м.	F.	м.	F.	М.	F.	M.	F.	M.	F.	М.	F.	M.	F
0-9	• 9,313	• 9,165	12,503	9,083	3,190	0	.255	0	89,521	86,611	11,646		.130	.19
10-19	+ 8,733	+ 7,915	54,977	10,656)	12,756	2,741)	.232	.257	142,978	119,694	23,895	30,302)	111	.25
20-39	+33,488	<b>•</b> 16,791)	249711	28,023)		11,232)		.401	551,617	370,111	223,436	142,009)	.356	.38
40-59	- 5,406	- 3,361	41,234	28,511	46,640	31,872	1.131	1.118	245,881	182,018	290,932	184,385	1.183	1.01
60 +	-13,394	- 6,292	9,203	6,573	22,597	12,865	2.455	1.957	35,886	45,145	96,081	76,204	2.677	1.68
Total			117,917	82,846	85,183	58,710	.722	.709	1,065,883	803,579	645,990	450,097	.606	.56

A Figures were based on a comparative study of 1940 and 1950 census returns of aliens and naturalized Brazilians, by sex and age.

b/ Figures were estimated out of the recorded immigrants who arrived in Brazil between 1 Sept. 1940 and 1 July 1950.

c/ This figure is evidently too low, due to under-recording of immigrant children.

TABLE 10. Comparison of sex-age structures of recorded permanent alien immigrants

for Brazil and Argentina, specified periods

	Brazil	, 1 Septemb	oer 1940–1. Ju	ly 1950		Argentina,	1948-1952	
	Mal	е	Fem	ale	Ma	le	Fer	male
	Number	98	Number	*	Number	%	Number	
0-6	13,003	10.7	9,228	10.9	29,843	8.5	27,234	11.0
7-11	7,319	6.0	5,192	6.1	18,866	5.4	17,152	6.9
12-17	8,750	7.2	6,129	7.2	33,418	9.5	24,434	9.9
18-59	87,884	72.2	60,843	71.8	257,830	73.6	165,883	67.0
60+	4,750	3.9	3,381	4.0	10,577	3.0	12,740	5.2

TABLE 11. Effect of net migration (incl. natural increase of migrants), 1950-1960, on the population of Brazil, 1 July 1960, by sex and age

	Assumpti	ons: Annual immigra		Males: 150,00 Males: 100,00		,000
		MALE			FEMALE	
Age	Net migration	Projected popu- lation, Brazil, 1 July 1960	Effect on population of Brazil	Net migration	Projected population, Brazil, 1 July 1960	Effect on population of Brazil
	(I)	(II)	I/II in % (III)	(IV)	(V)	IV/V in % (VI)
0-4	+ 108,761	6,035,748	+ 1.80	+ 104,808	5,881,235	+ 1.78
5-9	+ 90,900	4,867,297	+ 1.87	+ 79,585	4,755,545	+ 1.67
10-14	+ 77,760	3,836,500	+ 2.03	+ 62,588	3,743,590	+ 1.67
15-19	+ 84,525	3,436,014	+ 2.47	+ 63,078	3,325,090	+ 1.90
20-24	+ 109,692	3,055,040	+ 3.59	+ 71,937	3,042,135	• 2.36
25-29	+ 135,164	2,520,485	+ 5.36	+ 85,850	2,739,455	+ 2.36
30-34	+ 129,668	2,261,431	+ 5.73	+ 88,931	2,483,437	+ 3.58
35-39	+ 87,530	1,914,086	+ 4.57	+ 68,302	1,986,578	+ 3.44
40-44	+ 35,147	1,496,441	+ 2.35	+ 38,793	1,506,214	+ 2.58
45-49	- 7,978	1,378,982	06	+ 15,491	1,392,283	+ 1.11
50-54	- 36,656	1,088,413	- 3.37	+ 857	1,057,854	4 .08
55-59	- 44,774	872,977	- 5.13	- 6,735	854,422	79
60-64	- 39,492	653,547	- 6.04	- 9,579	659,465	- 1.45
65-69	- 29,856	400, 255	- 7.46	- 8,773	404,053	- 2.17
70-74	- 19,441	293,846	- 6.62	- 5,918	315,219	- 1.88
75 et plus	- 12,765	201,756	- 6.33	- 4,400	254,399	- 1.73
Total:	+ 668,185	34,312,818	+ 1.95	+ 644,815	34,401,574	+ 1.87

a/ The population is projected on the assumption of constant fertility and no migration between 1950 and 1960.

EFFECT OF MIGRATION ON POPULATION OF ITALY, 1960
Male (In thousands)

Age	Estimate pulation Dec. 196 Without gration 1951. a/	n, 31 60. mi- since	Estimate pulation Dec. 196 Vith mig (Assumpt I) b/	n, 31 50. Tration	Effect of migration .  Emigration Return	on *)	Estimat pulation Jan. 19 Without gration 1951. c	on, î 961. mi- o since	pulation Jan. 19	61. Igration	mi grat:	
	Number		Number	1/2	Migration		Number	%	Number	<u>%</u>	Emigra- tion -	XI/VII in %
	(1)	(II)	(III)	(IV)	(V)	(VI) .	(VII)	(VIII)	(IX)	(X)	(XI)	(XII)
0-4 5-9 10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65-69 70-74	2,078 1,983 2,180 1,853 2,084 2,000 1,984 1,839 1,247 1,629 1,471 1,196 962 727 550 593	8.52 8.14 8.94 7.60 8.55 8.21 8.14 7.55 5.12 6.67 6.03 4.91 3.95 2.98 2.26 2.43	1,969 1,892 2,102 1,768 1,974 1,865 1,854 1,751 1,212 1,637 1,508 1,241 1,001 757 569 606	8.31 7.98 8.87 7.46 8.33 7.87 7.82 7.39 5.11 6.90 6.36 5.23 4.22 3.19 2.40 2.56	- 109 - 91 - 78 - 85 - 110 - 135 - 130 - 88 - 35 + 8 + 37 + 45 + 39 + 30 + 19 + 13	- 5.25 - 4.59 - 3.58 - 4.59 - 6.75 - 6.75 - 4.79 - 2.52 + 4.05 + 4.13 + 3.45 + 3.45 + 2.19	2,051 1,999 2,187 1,856 2,089 2,006 1,991 1,845 1,252 1,638 1,482 1,206 970 735 564 629	8.37 8.16 8.93 7.57 8.52 8.19 8.13 7.53 5.11 6.69 6.05 4.92 3.96 3.90 2.57	2,012 1,961 2,149 1,819 2,026 1,913 1,905 1,788 1,222 1,622 1,474 1,203 969 734 564 626	8.39 8.18 8.96 7.58 8.45 7.94 7.45 6.14 5.09 6.14 2.61	- 39 - 38 - 38 - 37 - 63 - 93 - 86 - 57 - 30 - 16 - 8 - 3 - 1	- 1.90 - 1.74 - 1.99 - 3.02 - 4.64 - 4.32 - 3.0998542510148
0-14 15-64 65 +	6,241 16,265 1,870	25.60 66.73 7.67	5,963 15,811 1,932	25.16 66.69 8.15	- 278 - 454 + 62	- 4.45 - 2.79 + 3.32	6,237 16,335 1,928	25.46 66.67 7.87	6,122 15,941 1,924	25.53 66.45 8.02	- 115 - 394 - 4	- 1.84 - 2.41 21
Total	24,376	100.00	23,706	100.00	- 670	- 2.75	24,500	100.00	23,987	100.00	- 513	- 2.09
	15-64 e/ 15-64 e/	75.10 26:79 101.89		73.93 28.08 102.01				74.75 27.42 102.17		75.21 27.99 103.20	(Conti	nued)

EFFECT OF MIGRATION ON POPULATION OF ITALY, 1960

Female (In thousands)

Age	Estimate pulation Dec. 196 Without gration 1951. a	n, 31 50. mi- since	Estimate pulation Dec. 196 With mig (Assumpt I) b/	n, 31 50. gration	Effect o migration	n *)	Estimate pulation Jan. 196 Without gration 1951. c	n, 1 61. mi- since	Estimat pulatio Jan. 19 With mi (Assump II) d/	n, 1 61. gration	Effect migrat	of net ion *)
	Number (I)	<u>%</u> (II)	Number (III)	<u>%</u> (IV)	Return Migration (V)	V/I • <u>in %</u> (VI)	Number (VII)	<u>%</u> (VIII)	Number	<u>%</u> (X)	Emigra- tion - (XI)	11/VII in % (XII)
0-4 5-9 10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65-69 70-74 75 +	•	7.83 7.47 8.23 7.02 7.97 7.71 7.82 7.76 5.29 6.88 6.30 5.25 4.66 3.79 2.91 3.11	1,882 1,817 2,027 1,718 1,951 1,872 1,897 1,903 1,304 1,732 1,598 1,341 1,194 970 744 793	7.61 7.34 8.19 6.94 7.89 7.57 7.67 7.69 5.27 7.00 6.46 5.42 4.82 3.92 3.01 3.20	- 105 - 80 - 63 - 63 - 72 - 86 - 89 - 68 - 39 - 15 - 1 + 7 + 10 + 9 + 6 + 4	- 5.28 - 4.22 - 3.01 - 3.56 - 4.39 - 4.48 - 3.45 - 2.90 86 06 + .52 + .84 + .94 + .51	1,961 1,916 2,097 -1,785 2,029 1,965 1,993 1,978 1,348 1,752 1,604 1,339 1,189 968 750 833	7.69 7.51 8.22 7.00 7.95 7.70 7.82 7.75 5.28 6.87 6.29 5.25 4.66 3.80 2.94 3.27	1,924 1,882 2,062 1,757 1,996 1,920 1,946 1,940 1,322 1,734 1,591 1,330 1,183 965 748 625	7.66 7.49 8.21 7.00 7.94 7.64 7.75 7.72 5.26 6.90 6.33 5.29 4.71 3.84 2.98 3.28	- 37 - 34 - 35 - 28 - 33 - 45 - 47 - 38 - 26 - 18 - 13 - 6 - 3 - 8	- 1.89 - 1.77 - 1.67 - 1.57 - 1.63 - 2.29 - 2.36 - 1.92 - 1.93 - 1.03816750312796
0-14 15-64 65 +		23.53 66.66 9.81	5,726 16,510 2,507	23.14 66.73 10.13	- 248 - 416 + 19	- 4.15 - 2.46 + .76	5,974 16,982 2,551	23.42 66.57 10.01	5,868 16,719 2,538	23.36 66.54 10.10	- 106 - 263 - 13	- 1.77 - 1.55 51
Total	25,388	100.00	24,743	100.00	- 645	- 2.54	25,507	100,00	25,125	100.00	- 382	- 1.50

<sup>\*)</sup> Including natural increase of migrants.

a/ Figures are estimates by Stefano Somoggi on these assumptions: (1) Mortality remains constant at the 1949-50 level. (2) Fertility remains constant at the 1950 level. Source: Previsioni demografiche a breve termine per l'Italia (1950-1960), published in Atti della commissione perlamentare d'inchiesta sulla disoccupazione, Vol. II Tomo 3, Roma, 1953.

b/ Migration Assumption I postulates on net emigration of 100,000 persons per year, 50,000 men and 50,000 women, 1951 through 1960.

c/ Figures are estimates by Organisation Europeenne de Cooperation Economique on these assumptions:
(1) Age specific mortality by sex declines gradually from the 1951 level. (2) Fertility of women in reproductive ages is held constant at the 1952-53 level until 1965. Source: Perspectives demographiques des pays membres. - Italie. Paris, 1954.

d/ Migration Assumption II postulates on net emigration of 75,000 men and women per year, 1951 through 1960. No sex and age specifications were given for the emigrants. However, Assumption II implied a noticeably lower proportion of female emigrants than that of Assumption I. Furthermore, Assumption II postulates on a net loss of population by emigration for all ages, while Assumption I, a net gain by repatriation to Italy of older migrants.

o/ The index of burden of youth dependency is the ratio (expressed in percentage) of boys and girls aged 0-14 years to men aged 15-64 years; that of old-age dependency is the ratio of men and women aged 65 years and over to men aged 15-64 years.

NUMBER AND PERCENTAGES OF POPULATION OF

ITALY IN THREE MAJOR AGE-GROUPS, 1950 AND 1960

Age	lation,	ed popu- 31 Dec. 50. <u>a</u> /	lation, 19 Without tion si	ed popu- 31 Dec. 960. migra- nce 951. a/	Effect by end of 1960 of emigrating 170,000 men and 170,000 women per year to keep male labour force constant at 1950 level.	31 Dec. 1 With emig 170,000 m 170,000 w	960. ration of en and
	Number	80	Number	%	net emigration - net return migration +	Number	<u>%</u>
				Male (In	thousands)	: .	
0-14 15-64 65 +	6,204 14,707 1,712	27.43 65.00 7.57	6,241 16,265 1,870	25.60 66.73 7.67	- 954 - 1,558 + 213	5,287 14,707 2,083	23.95 66.61 9.44
Total	22,623	100.00	24,376	100.00	- 2,299	22,077	100.00
	5-64 b/ 5-64 b/	82.74 25.71		75.10 26.79			70.84 31.52
Sum	_	108.45		101.89			102.36
			<u>F</u>	emale (I	n thousands)		
0-14 15-64 65 +	5,965 15,782 2,069	25.05 66.26 8.69	5,974 16,926 2,488	23.53 66.66 9.81	- 843 - 1,414 + 65	5,131 15,512 2,553	22.13 66.86 11.01
Total	23,816	100.00	25,388	100.00		23,196	100.00
			Во	th Sexes	(In thousands)		
0-14 15-64 65 +	12,169 30,489 3,781	26.20 65.66 8.14	12,215 33,191 4,358	24.55 66.69 8.76		10,418 30,219 4,636	23.01 66.75 10.24
rotal	46,439	100.00	49,764	100.00		45,273	100.00

a/ See footnote a/ of TABLE 12.

b/ See footnote e/ of TABLE 12.

### NUMBER AND PERCENTAGES OF POPULATION OF INDIA IN THREE MAJOR AGE-GROUPS, 1950 AND 1960

Age	Estimat lation,	ed popu- 1950.	lation Without	ed popu- 1960. <u>a/</u> migra- nce 195Q	Effect by 1960 of emigrating 1.72 million men and 0.84 million women per year to keep male labour force constant at 1950 level. b/	1960. With emig 1.72 mill 0.84 mill	ion men and
	Number	<u>%</u>	Number	%	net emigration -	Number	%
				Male (In	thousands)		
0-14 15-59 60 +	71,005 104,127 9,742	38.5 56.1 5.4	83,978 .117,580 12,935	39.2 54.7 6.1	- 3,947 - 13,451 - 220	80,031 104,128 12,715	40.7 52.7 6.6
Total	184,874	100.0	214,493	100.0	- 17,618	196,874	100.0
0-14/1	15-59 c/ 15-59 c/	133.9 18.8		141.5			171.6 23.4
Sum		152.7		162.5	•		195.0
			F	emale (Ir	thousands)		
0-14 15-59 60 +		39.5 54.6 5.8	82,430 110,743 11,717	40.2 54.0 5.8	- 3,755 - 5,547 - 112	78,675 105;197 11,605	40.3 53.8 5.9
Total	173,126	100.0	204,389	100.0	- 9,h14.	195,477	100.0
			Bot	h Sexes (	In thousands)	,	
	139,413 198,988 19,599	38.9 55.6 5.5	166,408 228,323 24,652		- 7,702 - 18,998 - 332	178,706 209,325 24,320	43.3 50.8 5.9
Total	358,000	100.0	419,383	100.0	- 27,032	412,351	100.0
4							

a/ Estimated on assumptions of constant fertility at the 1941-46 level and a gradually declining mortality from the level set by Kingsley Davis' Life Table of India, 1931-1940.

b/ Including natural increase of emigrants. Estimated on the basis of constant fertility at the 1941-46 level, and constant mortality according to S.P. Jain's All India Life Table, 1941-1950, Census of India, Paper No. 2, 1954.

c/ The index of burden of youth dependency is the ratio of boys and girls aged 0-14 to men aged 15-59 years; that of old-age dependency is the ratio of men and women aged 60 and over to men aged 15-59 years.

COMPARISON OF POPULATION MOVEMENTS IMPLIED IN POPULATION STATISTICS WITH MOVEMENTS ACCORDING TO MIGRATION STATISTICS, ARGENTINA, 1934-1953

Year	Estimated Population, 1 January (A)	Births during the year (B)	Deaths during the year (C)	Population + Births - Deaths (D)	Difference (A-D) (E)
1934	12,729,045	319,674	143,065		33,919
1935	12,939,573	322,020	162,768	12,905,654	49,118
1936	13,147,943	318,662	150,092	13,098,825	55,221
1937	13,371,734	320,875	155,440	13,316,513	71,259
1938	13,608,428	325,869	161,715	13,537,169	68,076
1939	13,840,658	328,972	149,092	13,772,582	34,073
1940	14,054,611	340,672	152,105	14,020,538	40,545
1941	14,283,723	341,186	149,336	14,243,178	43,649
1942	14,519,222	340,634	150,731	14,475,573	46,595
1943	14,755,720	360,131	150,806	14,709,125	34,005
1944	14,999,050	382,084	154,980	14,965,045	33,859
1945	15,260,013	388,191	157,785	15,226,154	29,541
1946	15,519,960	386,599	149,635	15,490,419	30,250
1947	15,787,174	398,468	158,059	15,756,924	72,392
1948	16,099,975	413,132	152,648	16,027,583	158,541
1949	16,519,000	419,656	150,604	16,360,459	172,948
1950	16,961,000	438,395	154,826	16,788,052	176,431
1951	17,421,000	437,985	155,043	17,244,569	146,058
1952	17,850,000	443,636	156,593	17,703,942	83,957
1953	18,221,000			18,137,043	continued)

			et Immigra	tion	
Year	Argentinians and aliens by air, sea, river and land	Argentinians and aliens by sea, travelling 1st, 2nd and 3rd class	Aliens by sea travelling 1st, 2nd and 3rd class	Aliens by sea, travelling 2nd and 3rd class	Net permanent immigra- tion of aliens by sea, travelling 1st, 2nd and 3rd class
	(Series 1) (F)	(Series 2) (G)	. (Series 3) (H)	(Series 4) (I)	(Series 5) (J)
1934					***
1935	21,110	17,789	16,322	15,162	
1936	27,207	21,613	19,933	18,232	
1937	43,900	29,836	28,601	27,166	1
1938	40,327	27,734	26,498	24,986	
1939	6,155	6,375	4,916	3,911	
1940	14,402	4,127	3,200	3,017	
1941	16,977	2,538	2,172	2,561	
1942	19,295	. 669	512	801	
1943	6,705	- 606	- 661	21	
1944	7,406	602	- 924	2	
1945	3,041	- 1,380	- 1,033	- 352	
1946	3,750	- 785	- 154	- 205	
1947	46,113	30,774	31,812	30,172	32,663
1948	138,192	119,319	118,717	107,252 a/	103,464
1949	157,195	144,431	143,627	133,689 a/	134,557
1950	159,863	114,005	113,753	111,429 <u>a</u> /	105,400
1951	128,322	82,516		90,320 g/	70,762
1952 1953	67,206	43,094		58,043 <u>a</u> /	18,580

a/ Only this series is available by age and sex.

Sources: Anuario Estadístico de la República Argentina. Tomo I, Compendio, 1948. Síntesis Estadística Mensual de la República Argentina. Año VII. Nos. 8-10, Agosto-Octubre, 1953; United Nations Demographic Yearbook, 1948-1952.

#### APPENDIX B.

## ESTIMATES OF THE NUMBER OF TRANSIENTS FOR ARGENTINA

Transients should be excluded from arrivals and departures in order to obtain the numbers of migrants to or from Argentina. To estimate the number of transients, we have calculated the difference between the number of arrivals, for each sex, according to series (1) and series (4), assuming the latter to be an approximation of the number of permanent immigrants. (See Column III of Table 1). We have also calculated the difference between the numbers of departures of each sex shown by the two series. (Column VI of Table 1). Of the two differences in Columns III and VI of Table 1, we have chosen the one which gave the lower values as our maximum estimate of the number of transients.

TABLE 1. Maximum Estimate of Number of Transients based on
Difference between Series (1) and (4)

Year	Recorded arrivals Series (1)	Recorded arrivals Series (4) (II)	Difference (I minus II) (III)	Recorded departures Series (1) (IV)	Recorded departures Series (4) (V)	Difference (IV minus V) (VI)
1946 1947 1948 1949 1950 1951	214,212 271,312 365,825 379,930 398,159 329,272 224,366	2,476 <u>a/</u> 23,860 <u>a/</u> 75,208 97,787 81,503 55,924 40,112	Male 211,736 247,452 290,617 282,143 316,656 273,348 184,254	218,420 254,140 281,446 282,196 308,750 268,510 195,916	3,239 <u>a/</u> 6,259 <u>a/</u> 9,272 12,018 18,260 18,498 23,094	215,181 247,881 272,174 270,178 290,490 250,012 172,822
			Female			
1946 1947 1948 1949 1950 1951	137,230 180,963 245,379 261,980 294,339 265,661 180,736	1,946 a/ 15,254 a/ 45,050 53,200 55,274 52,894 41,025	135,284 165,709 200,329 208,780 239,065 212,767 139,711	129,272 152,022 191,566 202,519 223,885 198,101 141,980	1,388 <u>a/</u> 2,683 <u>a/</u> 3,734 5,280 7,088 8,753 14,845	127,884 149,339 187,832 197,239 216,797 189,348 127,135

Data were not given by sex. Their distribution by sex has been made on the basis of the sex ratios of alien migrants to and from Argentina for six European countries.

Series (5) gives the total of permanent migrants, but not by sex. Hence, we chose Series (4).

### APPENDIX B. (continued)

We then selected the series of Argentinian arrivals as the minimum estimate of the number of transients. (See Table 2). Finally, the average of these two estimates was taken. (Table 3).

Minimum Estimate of Number of Transients based on
Argentinian Arrivals according to Series (1)

Year	Arri	vals	Departures		
1001	Male	<u>Female</u>	Male	Female	
	(I)	(II)	(III)	(IA)	
1946	73,630	46,786	73,021	46,173	
1947	91,433	58,790	88,866	56,995	
1948	109,289	73,446	106,082	69,104 61,375	
1949	96,372 102,927	62,046 66,007	98,207	62,361	
1950 1951	92,568	57,757	89,139	53,662	
1952	62,831	39,910	60,313	36,161	

TABLE 3. Estimated Numbers of Transients

Year	Estimated upper limit		Estimated lower limit		Estimated Humber of Transients (average of upper and lower limits)	
	Male	<u>Female</u>	Male	Female	<u> Male</u>	<u>Female</u>
1946 1947 1948 1949 1950 1951	215,181 247,381 272,174 270,178 290,490 250,012 172,822	127,884 149,339 187,332 197,239 216,797 189,348 127,135	73,630 91,433 109,289 96,372 102,927 92,568 62,831	46,786 58,790 73,446 62,046 66,007 57,757 39,910	144,405 169,657 190,731 183,275 196,708 171,290 117,826	87,335 104,064 130,639 129,642 141,402 123,552 83,522

## APPENDIX B. (continued)

An evaluation of the effect of the number of transients on net migration was made, for males, for the years 1949 and 1952. The result is given in Table 4.

TABLE 4.

Effects of Transients on Recorded Net
Migration, Males, Argentina, 1949 and 1950

Age	Recorded net migration a/ (arrivals minus departures)	Estimated net migration (immigrants minus emi- grants) based on recorded arrivals and departures, transients being taken into account.	Difference	Difference as , of recorded net migration			
	For the Year 1949						
0-9 10-19 20-29 30-39 40-49 50-59 60-69 70-79 80-89	+ 63,998	÷ 20,910 ÷ 25,716 ÷ 40,907 ÷ 22,528 ÷ 809 - 6,502 - 4,949 - 1,547 - 118	17,080 19,811 23,091 28 21,591 21,646 12,683 3,814 220	45 44 36 0 104 77 72 71 65			
Total	97,754	97,754	. 0	0			
	For the Year 1952						
0-9 10-19 20-29 30-39 40-49 50-59 60-69 70-79 80-89	+ 21,662 + 25,551 + 32,964 + 6,541 - 19,451 - 21,630 - 12,995 - 3,927 - 235	+ 10,687 + 12,821 + 18,125 + 6,553 - 5,571 - 7,714 - 4,851 - 1,476	10,975 12,730 14,839 12 13,880 13,916 8,144 2,451 141	51 50 45 0 71 64 63 62 60			
Total	28,480	28,480	0	0			

a/ Assuming no transients.

The last column shows that transients affect greatly the age composition of "net migrants". Hence, it is important to take transients into account.