THE TREND OF THE BIRTH RATE AMONG PERSONS ON DIFFERENT ECONOMIC LEVELS, CITY OF NEW YORK, 1929-1942

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FROM the time the question was first examined, studies have shown that the birth rate in the United States is inversely related to economic status. This inverse relationship has been found regardless of whether the index used is the general plane of living, income, rents paid by single families, or the average rental in given areas.[2]

While there has been extensive research concerning the factors affecting the birth rate and the differentials which exist between fertility and these factors, little evidence has been produced as to whether these differentials have been diminishing or increasing in recent decades.[3]

In 1936, Notestein, discussing the fertility of populations supported by public relief, concluded that "in New York City it was the well-to-do and those in comfortable circumstances, rather than the poor, who increased their fertility in 1934."[4] Notestein's conclusions were based upon the number of births to white residents of each of the constituent health areas in the City during the period, 1930 to 1935, classified into three levels of economic status on the basis of median rentals paid by resident families as reported in the 1930 Census. In his study, Notestein pointed out the fact that he made no attempt to take into account the changes which occurred

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[2] For a summary of these studies, *see*
National Resources Committee: PROBLEMS OF A CHANGING POPULATION. Washington, Government Printing Office, 1938, pages 136-138.

[3] For recent data which would seem to indicate that the differential is diminishing, *see*
Kiser, Clyde V.: GROUP DIFFERENCES IN URBAN FERTILITY. Baltimore, The Williams and Wilkins Co., 1942, especially page 244.

[4] Notestein, Frank W.: The Fertility of Populations Supported by Public Relief. The Milbank Memorial Fund *Quarterly*, January, 1936, xiv, No. 1, pages 37-49.

since 1930 either in the size or the age distribution of the population, but based his conclusions on the assumption that no considerable movement had occurred from the cheapest to the more expensive areas.

In a somewhat similar manner, the present study will attempt to ascertain whether there has been any reduction in the differential in the birth rate between economic groups of New York City's white population during the period, 1929-1942.

General Method

The health area is the basic unit of study. Since the boundaries for a considerable number of health areas have been changed, the 1930 boundaries are used throughout this paper. Miscellaneous areas, such as parks, cemeteries, forts, and islands, have not been included.

To give weight to owner-occupied homes, since there are sections of the City where they constitute a large part of the available dwelling units, one per cent of their value was taken as the equivalent monthly rental. The median of monthly rentals of tenant-occupied units combined with the equivalent value of owner-occupied units is used as the measure of economic status.[5] It should also be noted that the rental data pertain not to white but to total populations.

Rents changed radically from 1930 to 1940. In order to measure the economic status of a health area for the period, 1929-1942, the medians for 1930 and 1940 were averaged and the resulting values were used.

In deciding how to assign health areas to economic groups, the values of the medians for 1930, 1940, and the average of 1930 and 1940 were set up in a frequency distribution (Table 1). On the basis of the average for 1930 and 1940, areas having medians less than $30

[5] Median Monthly Rental, Health District and Health Area, New York City, 1930, Department of Health, City of New York, 1939 (mimeographed).

Population and Housing: statistics for health areas, new york city, 1940. Washington D. C., Government Printing Office, 1942.

were assigned as the lowest economic group, those with values $60 or more as the highest, and all others to three intermediate groups with ranges of ten dollars each.

Since the health area is used as the unit of study, each was reviewed for extreme changes in economic status or for the introduction of new population groups and sixteen areas were eliminated. (*See* Appendix, Note 1.)

Classification of New York City's health areas (*see* Appendix, Note 2) into five broad levels of economic status discloses, as would be expected, large sections of the City where adjacent health areas are of approximately similar status as well as other parts where

Table 1. Distribution of 305 health areas[1] in New York City, by median of monthly rentals[2], 1930, 1940, and average of 1930 and 1940.

Range of Median Values	Number of Health Areas According To		
	1930 Medians	1940 Medians	Average 1930 and 1940 Medians
$15.00–19.99	6	7	4
20.00–24.99	12	40	24
25.00–29.99	26	29	24
30.00–34.99	11	45	21
35.00–39.99	17	57	36
40.00–44.99	31	41	36
45.00–49.99	27	50	35
50.00–54.99	26	20	38
55.00–59.99	29	6	39
60.00–64.99	39	1	18
65.00–69.99	24	3	15
70.00–74.99	21	2	4
75.00–79.99	10	1	1
80.00–84.99	10	1	3
85.00–89.99	3		1
90.00–94.99	1		
95.00–99.99	4		
100.00 or more	8	2	6

[1]1930 health area boundaries, exclusive of miscellaneous areas such as parks, cemeteries, forts, and islands.
[2]Monthly rental value of tenant-occupied dwellings and one per cent of the value of owner-occupied dwellings.

the status of one area is markedly different from an adjoining one. It should be recalled that the average economic status of the white population[6] is being measured for the period, 1929-1942. Therefore, it is possible for the actual economic status of the population within a health area assigned to one of the five groups to vary from the most wealthy at one end to borderline or poverty stricken at the other, and to improve or deteriorate during the period of study. It should also be noted that the differences between one area and another may result from an extreme weighting of some very high or very low income families in the midst of a majority of the population who are in comfortable circumstances. Nevertheless, for the areas taken collectively, the different levels of economic status probably reflect differences in the average economic status of their populations.

The poorest areas (group V) are predominantly those which have become known as the "blighted" areas — East Harlem, the Lower West Side and the Lower East Side of Manhattan, and the Greenpoint section of Brooklyn. These areas are rapidly losing

[6] The use of the average of the 1930 and 1940 medians for the total population as the measure of economic status for the white population may raise questions concerning its validity in the Harlem Health Areas. Of the nine health areas in the East Harlem Health District which are included in the study, five were assigned to the lowest economic group (all are located east of Third Avenue); three to economic group IV and one, to group III (located between Park and Fifth Avenues from 91st Street to 105th Street). On the basis of general information, these areas would appear to be properly classified.

Seven health areas located in the Central Harlem Health District were included in the study. The two areas which were assigned to economic group IV were apparently properly classified. On the other hand, the inclusions of Health Area 10 in economic group II and of Health Areas 8, 12, 19, and 24 in economic group III have a negligible effect, if any, since their white residents comprised relatively small percentages of the total white populations in those economic groups. This is shown in the following table:

Economic Group	Percentage of Population in Economic Group from Central Harlem Health Areas	
	1930	1940
	Per Cent	Per Cent
II	0.02	0.01
III	2.27	0.38

population. The well-to-do areas (group I) range from the "silk stocking" district of Manhattan, adjoining Central Park, to the most recently developed residential sections of the City — Riverdale in The Bronx; parts of Jamaica, Forest Hills, Corona, and Rockaway in Queens; and Flatbush in Brooklyn.

Trend of the Birth Rate

As can be seen from Table 2, the percentage change in the number of white births reported for each group from 1929 to 1942 was inversely related to their economic status but directly related to their gain or loss of adults of childbearing age. However, changes in the number of births reported for each group did not occur uniformly during the period (*see* Table 3).[7]

As the first step in investigating whether the birth rate in New York City has started to change to a more direct relationship with economic status, birth rates per 1,000 total white population were computed for each of the five economic groups.[8] The following results were obtained for 1930 and 1940:

Economic Group	*1930*	*1940*	*Decrease*
I (High)	13.3	11.9	1.4
II	17.9	14.1	3.8
III	17.6	14.0	3.6
IV	17.6	14.1	3.5
V (Low)	18.6	13.9	4.7
Differential (I and V)	5.3	2.0	—

It should be noted that the usually found inverse relationship is not apparent even for 1930, unless groups II, III, and IV are con-

[7] Tabulated from: *Vital Statistics by Health Area and Health Center District,* Bureau of Vital Records and Statistics, Department of Health, City of New York, annual reports.

Starting with 1942, statistics by health area are being tabulated by 1940 health area boundaries which are not strictly comparable with data for previous years. In adjusting 1940 white population aged 15-44 years from 1940 to 1930 health area boundaries, the data by economic group had to be corrected for less than 2,000 persons. The use of white births for 1942 according to 1940 health area boundaries, therefore, is not expected to bias its comparability with data for previous years.

[8] The 1930 and 1940 census data were used to estimate, by arithmetic progression, the population for each of the years, 1929-1942, which are used in this paper.

Economic Groups	Estimated White Population						Total Number of White Births		
	Childbearing Ages			Non-Childbearing Ages					
	1929	1942	Percentage Change	1929	1942	Percentage Change	1929	1942	Percentage Change
(High) I	572,764	680,785	+18.9	449,144	622,040	+38.5	13,636	20,011	+46.8
II	966,201	1,134,486	+17.4	769,632	998,436	+29.7	31,516	38,446	+22.0
III	791,687	765,810	− 3.3	664,351	718,106	+ 8.1	26,079	24,511	− 6.0
IV	571,568	525,979	− 8.0	510,568	514,723	+ 0.8	19,417	16,058	−17.3
(Low) V	468,937	385,707	−17.7	459,159	377,884	−17.7	18,641	11,985	−35.7

Note: Childbearing ages taken as 15-44 years of age.

Table 2. Estimated white population of childbearing ages and of non-childbearing ages, and total number of white births, by economic group, City of New York, 1929, 1942, and percentage change from 1929 to 1942.

sidered as one intermediate group. However, there is evidence that a reduction in the differential has occurred. This finding is even more apparent on the basis of the annual rates for the entire period.

Could changes in the age composition of the groups have produced these results? Examination of the data in Table 2 indicates the fact that changes have occurred. For example, the white popula-

Table 3. Number of white births by economic group, City of New York, 1929-1942.

Year	Economic Groups				
	High I	II	III	IV	Low V
1929	13,636	31,516	26,079	19,417	18,641
1930	13,924	31,579	25,715	18,989	17,007
1931	13,034	29,875	24,317	18,079	15,537
1932	12,618	27,638	23,081	17,257	14,804
1933	12,094	26,241	21,256	15,893	13,986
1934	12,437	26,538	21,147	15,266	12,382
1935	12,812	26,340	20,649	15,411	11,819
1936	12,564	25,693	20,102	15,312	11,532
1937	13,152	27,094	20,777	15,311	11,242
1938	13,401	27,342	20,174	14,924	11,445
1939	13,729	27,551	20,187	14,519	11,061
1940	14,939	29,140	20,689	14,715	10,967
1941	16,197	31,676	21,775	14,984	11,195
1942	20,011	38,446	24,511	16,058	11,985

Year	Economic Groups				
	High I	II	III	IV	Low V
1929	572,764	966,201	791,687	571,568	468,937
1930	581,073	979,146	789,697	568,061	462,534
1931	589,382	992,091	787,707	564,554	456,131
1932	597,691	1,005,036	785,716	561,048	449,729
1933	606,001	1,017,981	783,726	557,541	443,327
1934	614,310	1,030,926	781,735	554,034	436,925
1935	622,619	1,043,871	779,744	550,527	430,522
1936	630,928	1,056,816	777,754	547,020	424,120
1937	639,239	1,069,761	775,763	543,513	417,718
1938	647,548	1,082,706	773,773	540,006	411,316
1939	655,857	1,095,651	771,782	536,499	404,913
1940	664,167	1,108,596	769,791	532,992	398,512
1941	672,476	1,121,541	767,801	529,485	392,109
1942	680,785	1,134,486	765,810	525,979	385,707

Table 4. Estimated white population aged 15-44 years, by economic group, City of New York, 1929-1942.

tion of both childbearing and non-childbearing ages in the lowest economic group (V) has shown the same percentage loss (17.7 per cent) from 1929 to 1942. On the other hand, the areas in the highest economic group (I) have shown the greatest percentage increase for all ages of the population. To allow for changes in age composition, the ratio of total white births to 1,000 white persons aged 15-44 years[9] was computed. These ratios are shown in Table 5 and Figure 1.

It is apparent from the data that the birth ratio was inversely related to economic status until 1934, but that thereafter the relationship fluctuated among the lower economic groups — by 1942, there was a more direct relationship between the birth ratio and economic status.

[9] In order to adjust the 1930 census data for persons reported with "age unknown," it was assumed that no person less than 15 years of age was so reported. The number of white persons reported with "age unknown," therefore, was pro-rated to the white population aged 15 years or more.

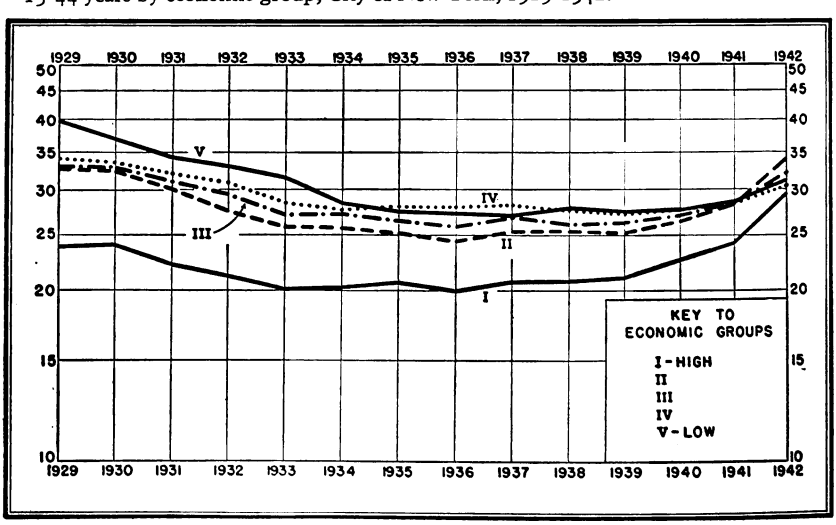
The estimates of the white population aged 15-44 years, by economic group, are presented in Table 4.

Year	Economic Groups				
	High I	II	III	IV	Low V
1929	23.8	32.6	32.9	34.0	39.8
1930	24.0	32.3	32.6	33.4	36.8
1931	22.1	30.1	30.9	32.0	34.1
1932	21.1	27.5	29.4	30.8	32.9
1933	20.0	25.8	27.1	28.5	31.5
1934	20.2	25.7	27.1	27.6	28.3
1935	20.6	25.2	26.5	28.0	27.5
1936	19.9	24.3	25.8	28.0	27.2
1937	20.6	25.3	26.8	28.2	26.9
1938	20.7	25.3	26.1	27.6	27.8
1939	20.9	25.1	26.2	27.1	27.3
1940	22.5	26.3	26.9	27.6	27.5
1941	24.1	28.2	28.4	28.3	28.6
1942	29.4	33.9	32.0	30.5	31.1

Table 5. Ratio of total white births to 1,000 estimated white population aged 15-44 years, by economic group, City of New York, 1929-1942.

From 1930 to 1933, all groups experienced approximately parallel declines. However, the sharp declines of the lowest economic group

Fig. 1. Actual ratio of total white births to 1,000 estimated white population aged 15-44 years by economic group, City of New York, 1929-1942.



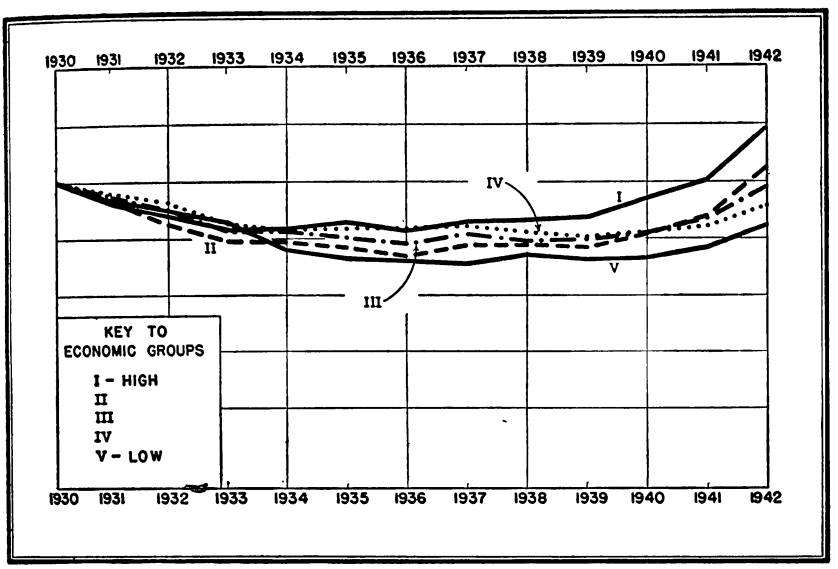


Fig. 2. Relative change in the birth ratio[1] among economic groups, City of New York, 1930-1942. (Semi-logarithmic scale, with 1930 points superimposed.)

[1]Ratio of total white births to 1,000 estimated white population aged 15-44 years.

during both 1930 and 1934 — the depths of the depression — resulted in a decrease in the range of the birth ratios between the two extreme economic groups from 16.0 in 1929 to 8.1 in 1934, or by almost 50 per cent.

During the next five years, through 1939, the continued downward trend for the four lower economic groups, together with the reverse trend for the well-to-do, though slight in either direction, resulted in a further reduction of 20 per cent in the differential.

From 1940 on, all groups recorded marked increases in their birth ratios, the extent of the increases being in direct relationship to economic status. As a result, in 1941, there was practically no difference in the ratios between the four lowest groups. In 1942, the ratios for groups II and III were above those for groups V and IV — the well-to-do (group I) having almost erased the differential between them and the underprivileged (group V).

The ratio for the lowest economic group was significantly greater than those for the intermediate groups during the first five years,

but thereafter fluctuated at the level of groups III and IV. On the other hand, the differential between the highest economic group and the next more fertile group was consistently greater than the differential between any other two adjoining groups. The differential, however, was reduced during each succeeding year and, as has already been noted, was practically erased in 1942.

The findings for the five economic groups can, perhaps, be better evaluated by means of Figure 2 and Table 6 for the period, 1930-1942. The Department of Health questions the accuracy of their tabulation of births by health area for 1929. Since the inclusion of the figures for that year would emphasize the apparent reduction in the differential, they have been omitted in this re-evaluation of the problem.

In order to compare the relative rate of change of the birth ratios of the five groups, Figure 2 was constructed by tracing the individual trend lines of Figure 1 from a common point for 1930. Three

Table 6. Percentage change of ratio of total white births to 1,000 estimated white population aged 15-44 years, by economic group, City of New York, 1930-1942 (base year—1930).

Year	Economic Groups				
	High I	II	III	IV	Low V
1930	0.0	0.0	0.0	0.0	0.0
1931	− 7.9	− 6.8	− 5.2	− 4.2	− 7.3
1932	−12.1	−14.9	− 9.8	− 7.8	−10.6
1933	−16.7	−20.1	−16.9	−14.7	−14.4
1934	−15.8	−20.4	−16.9	−17.4	−23.1
1935	−14.2	−22.0	−18.7	−16.2	−25.3
1936	−17.1	−24.8	−20.9	−16.2	−26.1
1937	−14.2	−21.7	−17.8	−15.6	−26.9
1938	−13.75	−21.7	−19.9	−17.4	−24.5
1939	−12.9	−22.3	−19.6	−18.9	−25.8
1940	− 6.25	−18.6	−17.5	−17.4	−25.3
1941	+ 0.4	−12.7	−12.9	−15.3	−22.3
1942	+22.5	+ 5.0	− 1.8	− 8.7	−15.5

definite facts are disclosed by this method of presentation. First, the lowest economic group (V) declined most rapidly from 1933 to 1934 and never regained this loss. Secondly, from 1936 on, the highest economic group (I) consistently experienced the greatest rate of increase. Finally, the rates of increase or decrease for the period are directly related to economic status; the two highest economic groups having net gains in 1942 as compared with 1930 and the other three groups net losses.

These facts may also be seen quantitatively from Table 6, which shows the percentage change of the ratios, using 1930 as the base year.

Limitations

Throughout the fourteen years studied, there were only minor differences between the ratios of the three intermediate groups — possibly indicating that the index of economic status is not sufficiently sensitive to differentiate between them or reflecting the fact that no true differential exists.

It is also possible that migration within the City may have caused greater changes than are allowed for by the elimination of only sixteen health areas. In order to examine this possibility, all 305 health areas (exclusive of miscellaneous areas) were ranged according to their 1940 medians and divided into three groups with populations approximately equal to those of the highest economic group (I), the intermediate groups (II, III, IV) and the lowest (V). The 1940 birth rates per 1,000 total white population for the three groups, so established, and the 1930 rates for three groups of health areas constructed by taking an equal number of areas per group in the order of the 1930 medians are as follows:

Rental Group	*1930*	*1940*	*Decrease*
High	13.0	11.9	1.1
Intermediate	17.4	13.8	3.6
Low	18.6	14.3	4.3
Differential	5.6	2.4	—

It is apparent that the lower rental groups had the greater decreases from 1930 to 1940, and that the differential between the groups was reduced.

Finally, even had the economic status of some health areas changed from one group to another during the period, the findings would not be seriously affected. As long as the economic status of any health area did not change from the lowest to the highest group or vice versa (and this possibility has been excluded by eliminating health areas if the rank of their medians changed 60 or more from 1930 to 1940), the conclusions would still be valid.

One might also be tempted to interpret partially the rapid decline in the fertility of the lower economic groups as the effect of changes in the age composition of the groups. This is possible under the assumption that the foreign born constituted a larger proportion of the populations in the lower economic groups than in the high.

The data presented below afford an approximation of the effects of the changes in the age composition within the 15-44 year age span between the economic groups. The data for the "high" group are based upon the 15-44 year population in four health districts, which had all but one health area of 38 included in economic groups I and II, while those for the "low" group are based upon the population of a similar number of health districts which had all but five health areas of 45 included in economic groups IV and V. The nonwhite populations, in 1940, were less than 2 per cent for either group. The age distributions, based upon populations of approximately one-half million persons, are as follows:

Group	Per Cent of Total Aged 15–44					
	1930			1940		
	15–24	25–34	35–44	15–24	25–34	35–44
"High"	32.8	37.5	29.7	29.5	36.7	33.8
"Low"	37.8	31.3	30.9	37.4	33.6	29.0

Judging from these data, it would appear that there had possibly been a more pronounced aging of the population among the higher than among the lower economic groups. It does not seem probable, therefore, that the reduction in the differential between the groups can be interpreted even partially in terms of variations in the age distribution of the economic groups.

There is no way of judging the extent to which the year to year fluctuations of the birth ratios are affected by population changes not in accord with the population estimates that are used. For the period 1930 to 1940, the annual changes are assumed to be equal to one-tenth of the total changes for the ten-year period. However, it is possible that the net changes for the decade resulted from markedly different patterns; the population of any one group might have experienced a sharp decrease for several years followed by an even greater increase during the remaining years of the period in contrast to the population of another group which might have experienced increases followed by decreases. If such population changes did occur, the fluctuations of the birth ratios would be different.

For the post-censal years (1941-1942), there is even less justification for the population estimates used. For example, on the basis of the number of registrations for War Ration Book One, it would appear that New York City's population in May, 1942, was more than 5 per cent less than it was at the time of the 1940 Census. Nevertheless, the population estimates used for computing the 1941 birth ratios seem to be justified. First, it was not until after the declaration of war, in December, 1941, that any considerable number of New York City's potential fathers was inducted into the armed forces or found employment in neighboring cities or states. Secondly, many of these families have continued to maintain their homes in the City during the temporary absence of their male members.

Because of the accelerated intra and inter-city movement of the

population following "Pearl Harbor," nothing short of a census enumeration would afford reliable population estimates for 1942. However, the 1942 birth ratios seem to follow the trend of the previous years and have therefore been included.

Finally, there can be no question concerning the accuracy of the population estimates for 1930 and 1940. How would the results be affected if the present investigation was restricted to these two years? Combining the three intermediate groups, the birth ratios are as follows:

Economic Group	*1930*	*1940*	*Decrease*
High (I)	24.0	22.5	1.5
Intermediate (II, III, IV)	32.6	26.8	5.8
Low (V)	36.8	27.5	9.3
Differential	12.8	5.0	—

It is evident that the decreases were inversely related to economic status — resulting in a reduction of the differential from 12.8 in 1930 to 5.0 in 1940.

Conclusions

There is strong evidence from the data examined that the differential in the birth rate between economic groups of New York City's white population was reduced. It would also seem possible, should the forces at work prior to the war continue, for the birth rate to be approximately related to economic status in the post-war era.

Reduction of the differential for New York City's white population would not be expected to have occurred as an isolated incident. Rather, it would appear more likely that it is part of a trend which can be expected in many of the large cities which have previously experienced sharp decreases in the fertility of their higher income groups.

In speculating on why birth rates have been inversely related to economic status, it is of interest to quote Notestein's opinion.[4] "This

[the inverse relationship] does not mean that the poor have many children and the comfortable and well-to-do few children simply because of their respective incomes. The income status affects and is doubtless affected by an entire complex of living standards, attitudes, and customs which are the important factors in determining fertility. A sudden loss of income, even if sustained for several years, is not likely to change established attitudes and standards of one income group to those characteristic of a poorer and more fertile group. Whatever the standard of the group, loss of income means that for that group new babies are a heavier burden than before. The lines of interest set up would therefore lead one to expect a reduction in the fertility of any group in which voluntary control plays a significant part." The fact that the birth ratios of all groups decreased markedly during the depths of the depression (Figure 1) would seem to confirm this argument. That it was true for all groups might indicate that a fairly large proportion of the individuals in New York City know how to control fertility and make varying use of this knowledge. Deliberate control of births would also seem to be indicated by the fact that, following improved economic conditions in 1939 and the imminence of conscription in 1940, all groups increased their birth rates.

Probably the most significant finding from the data is the fact that, following the depression years, the birth ratio of the lowest economic group continued to decline and thereafter remained at a lower level.

Contrary to the belief of many persons during the past decade, no evidence has yet been produced to indicate that families supported by public relief increased their fertility after going on relief.[10] It may even be possible that the great depression, which brought many of these families under the influence of public and private

[10] Sydenstricker, Edgar and Perrott, G. St. J.: Sickness, Unemployment, and Differential Fertility. The Milbank Memorial Fund *Quarterly*, April, 1934, xii, No. 2, pages 126-133.
Stouffer, Samuel A.: Fertility of Families on Relief. *Journal of the American Statistical Association*, September, 1934, xxix, No. 187, pages 295-300.
Frank W. Notestein, *previous citation*.

social welfare agencies, introduced forces which have resulted in a lowered fertility among these families.

That attitudes and customs have changed among the higher income groups seems evident from the fact that their birth rates have shown the greatest increases since the depression. While they may not continue at their present levels, it is quite possible that the higher income classes will contribute to the future population more nearly in proportion to their economic ability than they have in the past.

Appendix

Note 1.

In addition to the miscellaneous areas, the areas eliminated from the study are: health area 13.10 in The Bronx, eliminated because of the opening of "Parkchester" in 1940; health areas 26 and 80 in Manhattan, 8 and 41 in Brooklyn, and 7 in Queens, eliminated because of the opening of public housing projects which introduced populations constituting one-fifth or more of the population reported in the 1940 Census; and health areas 15, 39, 46, 49, 50, 52, 54 and 56 in Manhattan, 12 in Brooklyn, and 8 in Queens, eliminated because in each the rank of the median changed 60 or more from 1930 to 1940.

Information concerning public housing projects, including the name, boundaries, opening date, and population as of December, 1941, was obtained through the courtesy of Catherine F. Lansing, Management Division, New York City Housing Authority, December, 1942, and for the Metropolitan Life Insurance Company's residential community, "Parkchester," from news releases.

In order to determine whether the elimination of these health areas had any significant effect on the birth rate for the remaining 289 areas, birth rates per 1,000 total white population for the entire City, for the total of 305 areas, and for the total of the 289 areas were computed for each year. No marked differences were found between the three sets of rates.

Note 2.

Identification of 289 health areas in New York City included in study by economic group:

Economic Group and Range of Medians	*Borough*	*Health Area (1930 boundary)*
I ($60.00 or more)	Manhattan:	3, 5, 6, 18, 23, 31, 32, 34, 35, 36, 40, 41, 48, 53, 57.
	The Bronx:	1, 14.10.
	Brooklyn:	45, 49, 53.20, 71.10, 71.20, 72.10, 72.20, 73.10, 73.20, 74.20, 76, 79, 85.10, 87.10, 88.10.
	Queens:	6.20, 10.10, 13.10, 13.20, 14.20, 19, 21.10, 21.20, 26, 28.10, 28.20, 29, 35.10, 35.20, 37, 38.
II ($50.00 to $59.99)	Manhattan:	1, 2.10, 2.20, 4, 7, 9, 10, 61.
	The Bronx:	2, 3, 4.10, 4.20, 5.10, 5.20, 6.10, 6.20, 7, 8.10, 8.20, 9, 12, 14.20, 15, 16, 22.10, 22.20, 23, 30.10, 30.20, 31, 32.10, 33.10, 33.20.

II $50.00 to $59.99 (continued)	Brooklyn:	23, 29, 48, 50, 53.10, 54, 55.10, 55.20, 58.10, 67, 68, 70, 74.10, 78.10, 78.20, 81.10, 81.20, 83, 84, 85.20, 86.10, 87.20, 88.20, 91.
	Queens:	1.10, 2, 6.10, 9, 10.20, 11, 12, 14.10, 18.10, 18.20, 20, 25, 27, 31, 32, 35.30.
	Richmond:	3, 6.
III ($40.00 to $49.99)	Manhattan:	8, 12, 14, 19, 24, 27, 28, 47.
	The Bronx:	10, 13.20, 17, 19, 20, 21, 25, 27, 29, 30.30, 35, 36, 37, 38, 42, 43.
	Brooklyn:	5, 13, 20, 27, 28, 30, 38, 39, 46, 58.20, 63, 64.10, 64.20, 66, 69, 75.10, 75.20, 77, 80.10, 80.20, 82, 86.20, 89, 90.
	Queens:	1.20, 3, 4, 5, 15, 17, 24, 30, 33, 34, 36.10, 36.20.
	Richmond:	2, 4, 5, 7, 8, 9.
IV ($30.00 to $39.99)	Manhattan:	11, 13, 16, 20, 25, 29, 37, 38, 42, 44, 59, 64.
	The Bronx:	11, 18, 24, 26, 28, 32.20, 34, 39, 40, 41, 44, 45, 46, 47.
	Brooklyn:	6, 18, 19, 21, 24, 25, 26, 31, 34, 35, 36, 37, 42, 47, 51, 52, 56, 57, 60, 61, 62, 65.
	Queens:	16, 22, 23.
	Richmond:	1.
V (Less than $30.00)	Manhattan:	17, 21, 22, 30, 33, 43, 45, 51, 55, 58, 60, 62, 63, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79.
	Brooklyn:	1, 2, 3, 4, 7, 9, 10, 11, 14, 15, 16, 17, 22, 32, 33, 40, 43, 44, 59, 64.30.