IMPLICATIONS OF PROSPECTIVE UNITED STATES POPULATION GROWTH IN THE 1960S

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I. DEMOGRAPHIC BACKGROUND AND PROSPECTS SUMMARIZED

THE United States is entering the third decade of a demographic revolution of profound significance, which has already contributed much to transform our national position, outlook, and problems.²

The 1940s witnessed an unprecedented rise in the prevalence of the married state, a decline in the median age at first marriage, a marked rise in the "general fertility rate" (number of live births per 1,000 women aged 15-44),³ and first one and then another so-called "baby boom."⁴ These were proximately responsible for our wholly unexpected population upsurge.

These developments surprisingly continued in the 1950s, though at a slower pace. Births, instead of declining, flooded to a new high average of $4\frac{1}{4}$ million a year in 1956–1959. Hence our vigorous population increase was remarkably sustained through the past decade. It is hard to exaggerate the transformation of our population position and outlook between 1940 and 1960.

In the 1960s our population growth is likely to continue

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² The data on which my statements are based are mainly those of the Departments of Commerce, Labor, and Health, Education, and Welfare. Many of these are summarized in the STATISTICAL ABSTRACT OF THE UNITED STATES, 1959, HISTORICAL STATISTICS OF THE UNITED STATES (1960 edition), HEW TRENDS, 1960 edition, and *Economic Reports of the President*. Most of the details are in *Cwrrent Population Reports* (Series P-25, No. 187, Nov. 10, 1958, is especially important); in *Vital Statistics of the United States* and other publications of the National Office of Vital Statistics, Public Health Service; and in publications and press releases of the Office of Education, also in the Department of Health, Education, and Welfare.

³ Time series of *crude* birth rates, marriage rates, and death rates (i.e., number per 1,000 population) are misleading because of radical changes since 1940 in the age composition and marital status of the population.

⁴ The term "boom" is misleading for an upswing which is not followed by a "bust" or substantial recession. The terms "bomb" and "explosion" are still more inapt for even rapid population growth movements.

vigorous—not rapid, as it was in 1790–1860⁵—if only we escape catastrophic destruction of human and natural resources and severe damage to plant, animal, and human fertility. The numerical gain will probably at least exceed the record-large 28 million increase in the 1950s,⁶ by a margin that may be small or considerable. The prospective rate of gain is also unpredictable. It may be slightly below that of the past decade about 18.5 per cent—the highest since 1900–1910; but it will vary from year to year and will probably be slower in the first half of the 1960s than in the second.

A quick cartographic summary of selected data and projections is given in Figures 1-5.⁷ Figure 1 is an updated version of Chart 15 in the present writer's pamphlet, THE POPULATION UPSURGE IN THE UNITED STATES (Food Research Institute, December 1949). Plotted on a semi-logarithmic or ratio scale, it shows our population growth in long perspective. One can observe the virtual stability of the growth rate in 1800–1860, its persistent tapering off in 1860–1930, the severe slump in the 1930s, and the subsequent sustained upsurge.

A few representative projections or "forecasts" published in 1920–1946 serve to bring out the unexpectedness of the reversal in 1940–1960. The highest curves, extending only to 1980, show

⁵ If the 3.02 per cent average annual rate of increase in that period had continued through the next century, our population now would be over 600 million. California's population increased in 1860–1960 at a fairly sustained rate still more rapid, and higher than in almost any country today.

⁶ Three "illustrative projections" for 1960, the first official ones to take account of the population upsurge, were released by the Bureau of the Census just ten years ago. *Current Population Reports*, Series P-25, No. 43, Aug. 10, 1950. The highest of these projections will prove substantially correct, but it slightly underestimated the increase in the decade. Unlike later ones, these made allowance for census undercounts of children under 5.

On census undercounts and the results of errors in age reporting, see Coale, Ansley J.: The Population of the United States in 1950 Classified by Age, Sex, Color-A Revision of Census Figures. Journal of the American Statistical Association, March 1955, L, 16-54; and Smith, T. Lynn: A Demographic Study of the American Negro. Social Forces, March 1945, XXIII, 379-87. The undercount is relatively largest in children under 5 and in nonwhites in various age groups. Conceivably the coverage of the 1960 census will be more nearly complete and less inaccurate on age data than were those of 1950 and 1940. If so, the calculated population increase will overstate the true increase, and comparisons of age groups will be somewhat distorted.

 7 Thanks are due Patricia Cedarleaf of the Food Research Institute for drafting the charts.

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Fig. 1. United States population by decades, 1800–1960, with selected projections.

two of the four latest official projections, published by the Bureau of the Census November 10, 1958. Currently, Series II and III look the more credible, but neither can be wholly trusted.

The inset chart shows the Pearl and Reed 1920 logistic curve, plotted on an arithmetic scale. The fit with decennial census data was fairly close in 1920–1950, but the 1960 census figure will be far above the curve. Its future course is wholly unbelievable, since its most basic assumption has become unten-



Fig. 2. Population, births, deaths, net in-migration, life expectancy, and age-adjusted death rates, United States 1910–1960, and selected projections. able (see POPULATION UPSURGE, pp. 72–73).

Figures 2 and 3 together contain eight subcharts of population data and vital statistics for 1910-60, with some projections to 1970 of which no endorsement is implied. Special attention is called to the separate curves for whites and nonwhites in Figure 2, subchart 3 and Figure 3, subcharts 2 and 4. Attention is also called to increases in marriage and fertility rates after 1940 reflected in Figure 3, subcharts 1 and 2.

Figures 4 and 5 together contain nine subcharts, for different time periods, illustrating a number of points made in the first two sections of the paper. Special attention is called to Figure 4, subcharts 1, with its startling projections of births, and 2, showing the notable "echo effects"; Figure 5, subcharts 1 and 2, showing the prospective growth of highly significant age groups under 35; and 4, showing the relative size of age groups 18-64 and the sum of younger and older groups.

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Fig. 3. Marital status, fertility rates, children under 5, and infant mortality rates, United States 1910–1960, and selected projections.

We cannot safely forecast the course of the fertility rate or the number of births.⁸ Yet we can reasonably expect that births in the 1960s will at least exceed the 40.5 million in 1950–1959, for three reasons: (1) there is no sign that our strong preferences for the married state, and for early marriage, will weaken soon;⁹ (2) the number of women reaching age 20, and the

⁸ The course of births in the 1950s bore no resemblance to any of the three official projections published in August 1950, and the total for fiscal years 1950–1959 was 2.1 million (5 per cent) above the sum of the births indicated by the high projection for the same 10-year period. For 1951–1960 the excess will be slightly larger.

Year	Married				Single (Never Married)			
	18–19	20-24	25-34a	18-34ª	18-19	20-24	25-34ª	18-34ª
1940 1950 1959	21.7 31.6 33.7	51.3 66.2 69.7	77.1 85.5 88.6	61.9 74.0 76.7	77.8 67.9 65.9	47.2 31.6 28.5	18.9 10.8 8.2	35.3 22.6 20.7

⁹ Percentages of women in selected age groups, married and single.

^a Not standardized for age.

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Fig. 4. Births, school enrollment, and high school education, United States 1910-1960, and selected projections.

numbers in the most fertile age groups, will grow impressively, especially in the second half of the decade; and (3) the prospects are good for avoiding a severe and protracted depression that might seriously curtail marriages and fertility for a time. Conceivably, births may prove even more numerous than 52.7 million in fiscal years 1961–1970—the figure implied in the highest of the four 1958 official projections; but, considering the recent height of the fertility rate, the Series I assumption that it will average 10 per cent above the 1955–1957 level (120.5) now seems too liberal.

These are the areas of greatest demographic uncertainty as we look a decade ahead—the limit of my assignment. Those in which projections have a solid basis are relatively much more important.

Though much in the unfolding future is obscure, we can have confidence in the statistics of past births—by far the most significant demographic series. We can expect the birth curve to continue to be echoed in curves for one-year age groups, since

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Fig. 5. Trends in the growth of significant age groups in the United States 1860-1960, and projections.

infant, child, and youth mortality rates have fallen very low and net in-migration is a small element in our population growth. We can put substantial trust in 10-year projections of most age groups over age 10, and expect their total in mid-1970 to be within 2–5 per cent of 167.5 million. The numbers aged 14 and over will increase by some 24 million in the 1960s, more than in the two decades 1940–60.¹⁰ Such facts are of high significance for business, economic, and social policy and planning.

The most important population development in this momentous decade will be the growing older of persons now living who

¹⁰ See: Labor Resources in the Sixties. Federal Reserve Bank of Chicago, Business Conditions, July 1960, pp. 10-16.

were born after 1939. Because of this, and continuing noteworthy gains in health and educational attainment, the effective increase in population will be larger in terms of needs, wants, and productive capacity than in mere numbers. But striking changes will surely occur in highly significant age groups in this decade and the next.

II. SPECIAL ASPECTS OF COMING POPULATION DEVELOPMENTS

In the 1950s there was a remarkable 50 per cent increase in the number of children in kindergarten and elementary school ages (5–13), which unexpectedly continued through the decade. Between 1949–1950 and 1959–1960, while the number of persons in high-school ages increased about 33 per cent, public and private school enrollments in kindergarten through grade 12 increased by nearly 49 per cent, from 28.7 million to 42.7 million.¹¹ In view of the course of births in 1945–1960, further sizeable increases are in clear prospect. No peak in school enrollments, such as a decade ago was expected to come in the 1950s,¹² can now be expected in the 1960s or 1970s.

Chiefly because of the rising appetite for high-school training, enrollments in secondary schools exceeded the prewar peak early in the 1950s, and in the school year 1957–1958 nearly 88 per cent of all Americans aged 14–17 were enrolled in school.¹¹ Now, in consequence of the great increase in births in 1946– 1947, an upsurge in the number of 13-year-olds is causing a marked rise in high-school enrollments which will continue in the 1960s and 1970s.

The teen-age population (ages 13-19) had declined in the 1940s in response to the fall in births in 1925-1935, and increased only moderately in the 1950s, in response to birth increases in 1935-1945 and to reduction in infant, child, and youth

¹¹ Office of Education: Progress of Public Education in the United States of America, 1959-60 (Washington, July 1960), pp. 10-11.

¹² Office of Education projections for 1950–60, published in *School Life*, May 1950, XXXII, 116 (quoted in Joint Committee on the Economic Report, THE SUSTAINING FORCES AHEAD, 1952, p. 77) had indicated peaks in total and elementary enrollments (excluding kindergarten pupils) late in the 1950s, at 32.1 and 25.5 million respectively, with 1960 figures slightly lower.

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mortality since 1935. A much sharper rise, irregular in character, is now in progress. Now numbering about 20 million,¹⁸ teen-agers will increase by about one-third in this decade, to about 70 per cent above the low of mid-1950.

The number reaching age 18 declined to a postwar low of 2.1 million in fiscal 1952. It will jump sharply in 1964–1965, reflecting the first post-war peak of births in 1946–1947, and will average nearly as large in the rest of the 1960s. The college age group proper (18–21) will grow relatively fast in this decade, from about 9.6 million to 16.3 million, and will nearly double in 1955–1975.

The age group 18–24 is especially significant, since it includes the great majority of those enrolled in colleges and universities, provides most of the newly married couples, and furnishes most of the first-born children. In the early 1960s this age group will increase by an average of about one-half million a year, and in the second half of the decade by about a million a year. In 1970 it will number about 25 million, 10 million more than in 1957.

The number of women aged 18–24 or 20–24, age groups of special significance for first marriages and first births, declined in the 1950s but will increase by over 50 per cent in the 1960s, the more rapidly in the second half of the decade. The number of women in the most fertile age groups, 20–34, declined slightly in 1950–1955 and further in 1955–1960, but will increase nearly 5 per cent in 1960–1965 and about $17\frac{1}{2}$ per cent in 1965–1970.

The population aged 25-44 will increase by only about 3 per cent in the 1960s, as compared with a total population increase probably ranging from 16.3 per cent (Series III) to 19.0 per cent (Series II). The latest projections for this age group in 1960 and 1970 are 46.8 and 48.2 million respectively.

The percentage of the population in the most productive age groups, 20-64, rose from 51.7 in 1900 to a peak of 59.5 in 1945, then declined to about 52.5 in 1960, in consequence of the post-

¹³ My estimate, since the Census Bureau does not publish figures for this odd age group.

1940 flood of births and the swelling of the numbers of older people.¹⁴ The decline will continue at a slower pace, probably to about 50.5 in 1970. It is remarkable that American levels of consumption, education, and living have notably risen¹⁵ while a significant "dependency ratio" (the sum of percentages under 20 and over 64) has risen in 1945–1960 from 40.5 about 47.5.

Projections of the labor force have mostly proved too conservative.¹⁶ The chief economist of the National Planning Association late in 1952, however, quite closely forecast the actual figure for 1960 at 72.5 million. The NPA staff "judgment projection" in October 1959 for 1970 (85.9 million)¹⁷ must therefore command respect, though slightly higher figures are given by the Bureau of Labor Statistics (87.1 million)¹⁸ and the two higher projections of the Census Bureau (87.3) published earlier in 1959.

The big uncertainties still concern labor participation rates, especially for women.¹⁹ The NPA and BLS figures imply a total increase of 13.4–13.5 million during the 1960s comparing with one of 7.8 million in the 1950s. Some such striking increase will

¹⁴ Based on official data in HEW TRENDS, 1960 Ed., p. 1. These ignore persons missed by census enumerators; the series of percentages would be slightly lower if we could adjust for these omissions.

¹⁵ ECONOMIC REPORT OF THE PRESIDENT January, 1960, Appendix C: Statistical Tables Relating to the Diffusion of Well-Being. Per capita consumption expenditures in 1959 dollars, a crude but useful general measure, rose from \$1,470 in 1946 to \$1,760 in 1959, an increase of nearly 20 per cent in 13 years. Mean personal income (after tax) per family, in 1959 dollars, rose $22\frac{1}{2}$ per cent in 1947–1959. *Ibid.*, p. 132.

¹⁶ Late in 1949, Slichter forecast the labor force in 1980 at 72.5 million. Slichter, S. H.: How Big in 1980? Atlantic Monthly, November 1949, pp. 39-43, esp. p. 39. This figure is being reached in 1960. The latest Bureau of the Census projections for 1980, published in December 1958, range from 101.5 to 104.8 million.—STATISTICAL ABSTRACT OF THE UNITED STATES, 1959, p. 207. Late in 1952 the Bureau of the Census had projected the labor force at about 89 million in 1975. Current Population Reports, Series P-50, No. 42, Dec. 10, 1952. Its latest projections for 1975 range from 93.3 to 95.7 million.

¹⁷ Colm, Gerhard: The National Economy in 1960. (NPA Planning Pamphlet 81, Washington, Dec. 1952), pp. 15–17, and NPA Staff Report, Long-Range Projections for Economic Growth (NPA Planning Pamphlet 107, Oct. 1959), p. 6.

¹⁸ HEW TRENDS. 1960 Ed., p. 12, and Bureau of Labor Statistics, *Population and Labor Force Projections for the United States*, 1960 to 1975 (Bulletin 1242, June 1959).

¹⁹ See Bancroft, Gertrude: Factors in Labor Force Growth. ASA, Proceedings of the Social Statistics Section, 1959 (Washington, 1960), pp. 29-33.

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doubtless occur, but various uncertainties (e.g., regarding the extent of shortening the workweek, changes in the relative importance of part-time work,²⁰ and employment of older men) cast doubt on precise forecasts. The most marked increases will almost surely be in workers under age 25 (perhaps 46 per cent) and in workers aged 45–64 (perhaps 20 per cent), while "the number of women workers will increase at nearly twice the rate for men."²¹ The median age of the labor force, which has risen strikingly in the past two decades, will begin an impressive fall in the 1960s.

Completion of childbearing at earlier ages (many of them under age 30)²² tends to release more mothers from pressing family duties in middle age, permitting them to enter the labor force.¹⁹ It is striking that the number of married women over 35 in the labor force rose from 2.1 million in 1940 to 4.9 million in 1950 and 8.1 million in 1959, implying about a four-fold increase in two decades. The unexpectedly large net increase in the total labor force in 1940–1960 was due mainly to this; and its prospective continuation is largely responsible for the official projection that by 1970 there will be about 30 million women workers, 25 per cent more than in 1960.

The persistent tendency to prolong one's schooling, reinforced by evidence that more education tends to increase individual earnings,²³ is raising the median age of entrance into the full-time labor force. Of this we have no precise measure. The numbers reaching age 18 will be much higher in 1961–1964, and sharply higher in 1964–1970, than in most of the 1950s.

²⁰ Federal Reserve Bulletin, May 1960, p. 469.

²¹ United States Dept. of Labor: MANPOWER: CHALLENGE OF THE 1960s (Washington, 1960).

²² Glick gives the median age of wives (in years) at the birth of the last child as follows: 1890—31.9; 1940—27.1; 1950—26.1. Glick, Paul C.: The Life Cycle of the Family. *Marriage and Family Living*, Feb. 1955, xv11, 4.

²³ The 1950 Census of Population provided the basis for computing, on a $3\frac{1}{2}$ per cent sample, the median income by years of school completed, for various age groups in 1949. See STATISTICAL ABSTRACT OF THE UNITED STATES, 1959, p. 110. Similar data from the 1960 Census are likely to be still more impressive. More extensive but different data for 1957 are broadly confirmatory. See *Current Population Reports*, Series P-60, No. 27, Apr. 1958, esp. pp. 10–11.

This will be followed, with some lag, by a heavy flow of young entrants into the full-time labor force, and its effect will be increasingly felt through the decade 1965–1975. The United States Department of Labor estimates that 46 per cent of the increase in the total labor force in 1960–1970 will be workers under age 25, and that the increase in this group will be about 10-fold that in 1950–1960.²¹ The biggest increases in opportunities for employment will be in professional and technical jobs, and there will be little change in the number of jobs for the unskilled, who have been most subject to extensive unemployment in the 1950s.

The younger persons who will enter the labor force in increasing numbers in the late 1960s and 1970s will have had much more schooling than those who will be leaving the labor force in these years,²⁴ and illiteracy will be low even among nonwhite entrants. Most of those retiring will have completed well under 8 years of schooling, while something like two-thirds of those entering will have completed high school, and a sizeable fraction of these will have completed four years of college. Granting that exposure to schooling does not ensure educational achievement, and that there are quality deficiencies in schooling, there is no doubt that the educational level of the labor force is rising significantly.

The number of persons in age groups 65 and over (commonly miscalled "the aged") has been and is continuing to increase faster than the total population,²⁵ but the percentage in these age groups has risen only from 8.1 in 1950 to about 8.8 in 1960 and is likely to be 9.1–9.4 in 1970 and under 10 in 1980. The 1958 official projections indicate that in 1950–1980 the total

²⁴ See: Projections of Educational Attainment in the United States, 1960-1980. Current Population Reports, Series P-20, No. 91, Jan. 12, 1959 (summarized in STATISTICAL ABSTRACT OF THE UNITED STATES, 1959, p. 112), and Medsker, Leland S.: THE JUNIOR COLLEGE: PROGRESS AND PROSPECTS. McGraw-Hill, New York, Mar. 1960.

²⁵ See the valuable volume in the Census Monograph Series by Sheldon, Henry D. and Tibbitts, Clark: THE OLDER POPULATION OF THE UNITED STATES. Wiley, New York, 1958; an illuminating article by Civic, Miriam I.: Recent Trends in Income of Older Persons. In *Conference Board Business Record*, Aug. 1960, xvII (8), 10-13; and data in STATISTICAL ABSTRACT OF THE UNITED STATES, 1954, p. 263, *ibid.*, 1956, p. 259, and *ibid.*, 1959, p. 270.

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number will double, but that those aged 65-69 will increase by 75 per cent while those aged 85 and over will increase by over 200 per cent.

So great has been the increase in the number of young people since 1940 that the median age of the population, which had risen persistently for 150 years, reached a peak in the early 1950s ($30.\overline{2}$ years) and will decline for at least another decade or two. In this significant sense, our Nation is now growing *younger*, not older.²⁶ Moreover, increasing recognition is rightly given to the progressive "youthening of the elderly," which leaves growing fractions of those in age groups 65–74 competent physically and mentally. Though the contributions made by older people are not readily measured—many of them important though nonmaterial—they are surely far below potentials. Here is a significant "new frontier" on which pioneering is under way.

The number of deaths per year, which had risen very slightly in 1910–1950, trended moderately upward in the 1950s, rising from 1.45 million in 1950 to about 1.65 million in 1959. Some such uptrend can be expected to continue through the 1960s and beyond. Yet it is confidently expected that the age-adjusted death rate will resume its long-term downtrend (the recent interruption, in 1954–1959, had a precedent in the 1920s). Life expectancy at birth is expected to continue to rise, at a slowing pace because the levels for various age groups are now so high. Estimates underlying the 1958 official population projections suggest a rise for females from 72.9 years in 1955 to 76.0 in 1975–1980 and to 77.1 in the year 2000.²⁷ These may prove conservative, especially if widely anticipated "breakthroughs" are made in coping with cancers and heart diseases,

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²⁶ Notestein, Frank W.: As the Nation Grows Younger. Atlantic Monthly, October 1957, pp. 131-36. "This trend to a younger average age is new in the Western world." It is of slight significance that the mean age of the population is expected to change little over the next 20 years.

²⁷ 1958 *Projections*, p. 12. The same source gives corresponding figures for males as 66.7, 69.8, and 71.3, and (p. 13) the following projections of the crude death rate by quinquennia for projection Series II: 1950-55-9.5; 1955-60-9.2; 1960-65-8.9; 1965-70-8.7; 1970-75-8.4; 1975-80-8.1.

which have greatly increased in prevalence as life expectancy has risen.²⁸

It is important also to note the rising proportion of nonwhites. In 1900 they made up about 12.1 per cent of the population. By 1920 the percentage had fallen to 10.3, and it remained at about this level through 1949. In the 1950s it rose to 11.0 in 1957 and 1958. This rise, largely the result of the much higher fertility of nonwhite women and the more marked improvement in life expectancy of nonwhites,²⁹ will almost certainly continue in the 1960s.

Finally, a substantial redistribution of our population has accompanied the vigorous growth of the postwar period. Three types deserve emphasis. (1) Important state and regional shifts have taken place. The largest absolute increases in state populations in 1950-1960 were in California (over 5 million), Florida, New York, Texas, and Ohio (1.8 million), in this order, and the largest relative increases in Florida, Nevada, Alaska, Arizona, and California, in this order, while West Virginia, Arkansas, and Mississippi appear to have lost population. (2) Most of the recent growth has been concentrated in the "standard metropolitan statistical areas," reflecting the notable suburbanization of our people, while central cities and truly rural areas have tended to lose population relatively, and in some instances absolutely. (3) Employment in agriculture, like the farm population, has continued to decline, while government, trade, and service occupations have continued to make large gains in employment. Though the 1960s will not faithfully follow the pattern of the 1950s in these respects, further redistribution of population of all three types bids fair to be substantial in this decade.

The prospective population developments in the 1960s have many significant implications and evoke many pertinent observations. I have time to present briefly only a few of each.

²⁸ See: Recent and Future Mortality Trends. In Metropolitan Life Insurance Company Statistical Bulletin. June 1960, pp. 1-3.

²⁹ HEW TRENDS. 1960 Ed., pp. 2-4, and Vital Statistics of the United States, e.g., 1955 (Washington, 1957), 1, Table AC.

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III. LEADING IMPLICATIONS

1. The aggregate demand for consumption goods and services in the 1960s—on the reasonable assumption that earnings and total purchasing power will insure conversion of wants into effective demand—will rise significantly more than in the 1950s, because those born since World War II will be a decade older, their educational level will be higher, and disposable family income will be generally larger.

2. Especially pronounced will be the demands for more educational facilities and qualified personnel. Our ability to meet these demands will be under continuing strain, even though we count as our most vital investment, that in "human resources," what we spend on the schooling of our children, youth, and young adults.³⁰ (a) The sustained flood of births in the 1950s insures continuing expansion, if at a slowing pace, in needs for elementary education. (b) The expansion will be much sharper in requirements for secondary education, primarily because the numbers aged 14–17 are increasing strikingly, but also because economic incentives keep sharpening appetites for more schooling.³¹ (c) For similar reasons, perhaps after a moderate time lag, the demands for facilities and personnel for junior college, 4-year college, and university education will rise even more sharply.

3. The marked increase in the number of teen-agers in the 1960s (probably by about one-third) will not only expand their aggregate demands for all sorts of nondurable goods, cars, schooling, recreational facilities, and part-time jobs, but will also intensify baffling problems of traffic congestion, automobile accidents, and juvenile crime.

4. For lack of education and experience, adverse discrimination, and other reasons, the capacities of nonwhites are not being adequately developed and used to the advantage of the Nation, and rates of unemployment, illegitimacy, and crime ³⁰ Atwater, Thomas V., Jr.: Education: Key Economic Problem. In PROBLEMS OF ECONOMIC DEVELOPMENT (CED, New York, May, 1958), II, pp. 325-32.

³¹ Some data are given in STATISTICAL ABSTRACT OF THE UNITED STATES, 1959, p. 110.

are much higher among them. The relatively rapid increase in the nonwhite population, it is necessary to add, must tend to retard their economic and social progress. Disparities between whites and nonwhites are still wide, though they have been very significantly narrowed. Faster progress in this direction will be more urgent in the 1960s, when there will be a marked enlargement of the group of Negro youth.

5. Among the major tasks of the near future will be the smooth absorption of a much enlarged flow of young entrants into the full-time labor force, and appraising and coping with its repercussions on other components of the labor force, on hours of labor, and on part-time employment.

6. Our continuing population upsurge, coupled with the rise in per capita investment required to support our high and rising level of living, virtually assures increasing demands for investment capital in the United States, while the pressure for American investments to supplement limited supplies of domestic capital in the developing nations is increasing because of their population increase and rising "aspirations." Odell recently concluded:

The demand for investment capital in and from the United States through the next twenty years will be so strong that the greatest economic problem will be to limit the amount of capital investment to a level which can be met primarily from real savings.³²

Some such emphasis is justified, even if one cannot wholly endorse this assertion.

7. In the second half of the 1960s we can confidently expect a major upswing in family and household formations, though our ability to forecast their timing and extent is still weak. In consequence, a "housing boom" of large proportions will presumably start before the end of the decade and continue in the

³² Odell, William R. (vice president and director, International Harvester Company): A World Wide Shortage of Investment Capital. In PROBLEMS OF ECONOMIC DEVELOPMENT, op. cit., II, 89–93.

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1970s.³³ The prospective expansion will exert pressures to enlarge the building industry's labor force, materials, supply, and financing, when other construction requirements will also be making heavy demands. These pressures will also aggravate the already difficult problem of providing and financing investment in local public facilities.³⁴

8. Expansion of suburban residential and light industrial areas, together with the decentralization of heavier industry and modern industrial architecture, tend to force land values upward. This process not only yields taxable capital gains to individual landowners, including farmers who own a large proportion of the available land. It also raises basic costs to new users. Here is a pervasive, persistent factor making for price increases, to which the rise in our standards of living also contributes.

9. Water and some other natural resources in limited supply also tend to become scarcer in an economic sense, particularly as changing techniques and higher consumption standards make for increased per capita requirements. These operate to raise capital and product costs, though the aggregate effect on the price level may well be less than through rising land values. The resulting problems should not be minimized, but I can see no cause for alarm over the exhaustion of exhaustible resources in the near future.

10. Expansion of demands for food, fiber, and tobacco at rates assured by growth in adult-male equivalents threatens no shortages and is surely favorable to farmers. But it by no means assures a solution of the farm surplus problem, which continues to be aggravated by technological progress in farming and obsolete political programs of price support. The persistent

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³³ Held, Harry (vice president, The Bowery Savings Bank): Adequate Housing for the Expected Increase in Population and Family Formation. In *ibid.*, 11, 219–25. For the latest official projections of households and families by type, see *Current Population Reports*, Series P-20, No. 103, July 6, 1960.

³⁴ Hoffman, Morton: Economic Implications of Increasing Urbanization. . . . In *ibid.*, 11, 233–41, and Sheppard Victor H.: The Financing of Municipal Governments. *In* PROBLEMS OF ECONOMIC DEVELOPMENT, op. cit., 11, 267–72. Hoffman says: "By 1977 the economic well-being of metropolitan areas may be the country's foremost economic concern."

decline in the farm population, and increasing proportions of their income derived from nonfarm sources, contribute only moderately to raise their per capita income.

IV. PERTINENT OBSERVATIONS

1. Our vigorous population increase since 1940 has certainly contributed to our economic growth and freedom from severe postwar depressions. Similarly, the population prospects for the 1960s are favorable for both economic stability and more rapid economic growth, as well as for meeting the Communist threat, though they insure neither continuous prosperity nor "a 20-year boom." Keynes, Hansen, and others in the 1930s stressed the adverse effects on investment and national income from the retardation of population growth and the threatened decline in Western populations, and also their important influence in intensifying and prolonging business depressions.³⁵ Their reasoning was broadly sound, though their view of the population outlook soon proved wrong. Among other things Keynes well said:

An increasing population has a very important influence on the demand for capital. Not only does the demand for capital —apart from technical changes and an improved standard of life—increase more or less in proportion to population. But, business expectations being based much more on present than on prospective demand, an era of increasing population tends to promote optimism, since demand will in general tend to exceed, rather than fall short of, what was hoped for. Moreover a mistake, resulting in a particular type of capital being in temporary over-supply, is in such conditions rapidly corrected....

2. The Gross National Product reached a \$500 billion rate in the first quarter of 1960, and the 1970 figure is now commonly

³⁵ Keynes, J. M.: Some Economic Consequences of a Declining Population. Eugenics Review, Apr. 1937, XXXIX, 13–17; Hansen, Alvin H.: Economic Progress and Declining Population Growth. American Economic Review, March, 1939, XXIX, 1–15; and Achinstein, Asher: INTRODUCTION TO BUSINESS CYCLES. Crowell, New York, 1950, pp. 373–87.

forecast at \$750-800 billion in 1959 dollars.³⁶ Of the anticipated 50-60 per cent increase, a substantial fraction will be attributable to factors associated with our growth in population, families, and the labor force. If we succeed in better realizing our potentials, such forecasts will prove conservative.³⁷

3. The decade ahead is surely rich in opportunities but it bristles with challenging problems, many of which grow out of population developments. These developments threaten increases in such evils as air and water pollution, noise, and congestion in various forms, and increased social costs to mitigate or eliminate these. For this decade at least, however, I cannot endorse Spengler's arguments that "population threatens prosperity" and that "undue population growth [sic] is currently tending to debase aesthetic values and to be fostered by such debasement."³⁸

4. The need and opportunity for adult education, in the middle and older years of life, are rapidly growing as older knowledge becomes increasingly obsolete, as increased longevity and leisure permit more individuals to enlarge and modernize theirs, as married women take jobs after release from major household responsibilities, and as older persons seek employment after being retired from jobs or positions they have long held.³⁹ The prospective shortages in the teaching and medical professions, among others, call for increasingly effective development and utilization of human potentials for supplementing the skills of the great body of these professionals, and for evolving new

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³⁶ United States Dept. of Labor: MANPOWER: CHALLENGE OF THE 1960s. (Washington, 1960), pp. 2–3; and National Industrial Conference Board: Economic Growth in the Sixties: Prerequisites, Potentials, Problems. New York, May 1960.

³⁷ Knowles, James W.: THE POTENTIAL ECONOMIC GROWTH IN THE UNITED STATES.... (Joint Economic Committee print, Jan. 30, 1960).

³⁸ Spengler, J. J.: Population Threatens Prosperity. Harvard Business Review, Jan.-Feb. 1956, xxxiv, 85-94, and The Aesthetics of Population. Population Bulletin (Population Reference Bureau, Inc., Washington, D. C.), June 1957, x111, 61-75. For a forceful presentation of a different view, see Turck, Fenton B.: The American Explosion, Scientific Monthly, 1952, LXXV, 187-91.

³⁹ See Stewart, Charles T. Jr.: Adult Education: America's Leading Economic Problem of the Next Twenty Years. In PROBLEMS OF ECONOMIC DEVELOPMENT, op. cit. II, 355-67.

types of jobs and new techniques to meet the swelling demands.

5. The prospective enlargement of the older population (proiected at 24 per cent in the 1960s) deservedly attracts attention. Yet the notion that our "senior citizens" necessarily impose an increasingly heavy burden on the Nation's economy is ill-founded. To an extent seldom realized, older people are increasingly self-supporting despite low money incomes, if old age insurance benefits, pensions, self-service, mutual service, use of an owned home, and drafts on savings are all taken into account. Most of their needs and wants are simple and small. Increasingly, they are provided with prepaid medical, surgical, and hospital coverage at a cost within their own means or those of their children or interested relatives. There are of course gaps to be filled, as the current drive for expansion in such coverage at public expense testifies. Fuller utilization of talents and experience of oldsters, not only in unpaid activities but also in remunerative work if they want it, looms large among nationally justified objectives. Whatever net burden the elderly and aged really entail on the economy, moreover, will be the more easily borne as the Nation as a whole grows younger and increasingly productive.

6. The resumption of vigorous population growth since 1940, and its maintenance for two decades, reflect the vitality of the American people, the strength of non-material wants, strong preferences for marriage and family life, and renewed faith in America's future, as well as the generally high level of economic activity. The unexpected upsurge cannot be attributed to policies deliberately designed to promote population growth, though certain public measures incidentally contributed to it. Children have a higher place in American standards of living proper (i.e., levels desired with sufficient urgency to lead to sustained efforts to attain, maintain, or regain them)⁴⁰ than before World War II; and in the competition among more goods, more

⁴⁰ See my Standards and Content of Living. *American Economic Review*, Mar. 1945, XXXV, 1–15, and UN: REPORT ON INTERNATIONAL DEFINITION AND MEASURE-MENT OF STANDARDS AND LEVELS OF LIVING. (United Nations, Mar. 1954, E/CN. 3/179, E/CN. 4/299), esp. pp. iii–vii, 5, 87–88.

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 leisure, earlier marriage, and more children, gains in leisure have been least.

7. The sorry experience of the ablest demographic, economic, and educational specialists in looking a decade ahead to the 1940s and 1950s should warn us not to be too sure of our ground as we look to the 1960s. Papers in this area are peculiarly subject to obsolescence, and one must reserve the right to change his views, without undue delay, as new evidence comes to light.

8. I have had to resist the temptation to examine our population prospects in the 1970s and beyond. Both tasks should be seriously undertaken, but no simple extrapolation can be trusted. If our postwar average rate of increase (over 1.7 per cent per year) cannot continue indefinitely, the timing and course of its eventual decline are not safely predictable. Whether the demographic developments in progress are wholesome or ominous for the longer future,⁴¹ I have not discussed. Let me merely add that Americans are accustomed to rise to challenges, and that our economic and social history has typically confounded both superoptimists and pessimists of all degrees.

⁴¹ For Philip M. Hauser's alarmist projective analysis, in an address of May 19, 1960, see *Population Bulletin* (Population Reference Bureau, Inc., Washington, D. C.), August 1960, XVI, 91-106.