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Concentrating on the trend toward early retirement in the United States and the factors responsible for it, this study draws comparisons between the work and leisure pattern in the United States, with its growing tendency toward retirement below age 65, and the patterns of certain western European nations (principally the United Kingdom, West Germany, Sweden, and Switzerland). There the author finds no comparable trend toward early retirement, and in some cases finds encouragement of workers to remain in the labor force beyond age 65. It is suggested that there may be advantages, both to the individual worker and to the economy, in distributing (and therefore financing) added leisure within the framework of working life, possibly through longer vacation periods, retraining programs, and shorter work weeks. The document includes a chart, 12 tables, and notes on census data for comparisons between and within countries over time with respect to labor force activity rates. (ly)

LIFETIME ALLOCATION OF WORK AND LEISURE

by JUANITA M. KREPS

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Foreword

THE SOCIAL SECURITY ADMINISTRATION is directly concerned with the trend toward early retirement in this country and the factors responsible for it. Time free of work continues to increase as technological advances lessen manpower requirements and scientific advances add to life expectancy. With nonworking time increasingly channeled into the period of retirement under these dual pressures, our concern is whether the retirement years are turned to productive leisure or whether, instead, they represent an extended period of social and economic deprivation.

This study draws comparisons between the work and leisure pattern of the United States, with its growing tendency toward retirement below age 65, and the patterns of certain Western European countries. There the author finds no comparable trend toward early retirement, and in some cases she finds encouragement of workers to remain in the labor force beyond age 65. The author suggests that there may be advantages both to the economy and to the individual worker in distributing (and therefore financing) added leisure within the framework of the worklife. This might take the form of longer vacation periods, retraining periods, and shorter workweeks.

The Office of Research and Statistics was fortunate in being able to arrange a contract with Duke University for Juanita Kreps, professor of economics, to make this report. We are pleased to publish it in our Research Report series. The author's career in teaching and writing reflects a longstanding interest in the problems of retirement and income of the aged. Although her opinions are not necessarily those of the Social Security Administration, we think the report makes a provocative addition to our extensive studies, both completed and underway, of retirement problems and ways of meeting them.

IDA C. MERRIAM,
Assistant Commissioner for Research and Statistics.

OCTOBER 1967.

Preface

THIS STUDY raises the question of whether the increase in nonworking time in certain high-growth European economies has differed in amount and form from the pattern that has developed in the United States since 1950. The major portion of the analysis deals with the extent and manner by which the workyear has been shortened in selected countries—the United Kingdom, the Federal Republic of Germany, Sweden, Switzerland, and the United States—and with the reduction in labor force activity of certain groups, notably the young and the elderly. While the trend toward early retirement in this country may be primarily a reflection of lack of job opportunities for men in their early sixties rather than desire for more leisure in this form, an examination of leisure patterns in fully employed economies may reveal different choices as to both the amount and timing of leisure.

Although subject to severe limitations on the availability of comparable data, the study reveals no discernible decline in retirement age in any of the European nations studied. Even when the pensionable age is 67 rather than 65, any increase in leisure appears in some other form: a shortened workweek, lengthened vacation time, or postponed entry into the labor force. Moreover, future increases in nonworking time appear to be earmarked for still further growth of leisure in these forms, with no evidence of a preference for reductions in work during later years. Under the pressure of extremely tight labor markets, the nations of Western Europe advocate flexible retirement policies, often providing higher benefits as an inducement to keep retirement-age workers on the job.

These tentative findings point up the importance of further examination of the growth of nonworking time in the United States and the necessity for making explicit the possible choices as to the use of this free time. Assuming a continuation of present productivity trends, economic growth could confer an enormous increase in leisure during the next two decades. If a substantial proportion of this free time is to accrue in the form of retirement, public and private income-maintenance arrangements will need to be reexamined, since the longer the retirement period and the more bunched the earnings into the middle years, the greater will be the necessary transfer of income from workers to nonworkers. Thus in a curious way the more productive the

economy, the more pronounced the problem of smoothing earnings throughout the lifespan.

A number of social scientists and public officials were helpful in providing data and offering their views on developments in their own countries. While in Geneva, the author received a great deal of help from Mr. Archie Evans, Chief of the Conditions of Work Branch, International Labour Office, and his staff. In Bern, Switzerland, assistance was given by Dr. Arnold Saxer, Frau Gabrielle Vetsch, and Frau L. Oberli, Bundesamt für Sozialversicherung; and by Mr. Alfred Hegner, Director of the program Aktion P. In Frankfurt and Bonn, Mr. Peter Ledig, Rationalisierungs-Kuratorium der Deutschen Wirtschaft; Mr. Ernst Leuninger, Director, Landesversicherungsanstalt Hessen; Dr. Kurt Jantz, Mr. Georg Tietz, and Dr. Hartmut Hansen, Bundesministerium für Arbeit und Sczialordnung; and the staff of Bundesvereinigung Deutscher Arbeitgeberverbande, were generous with their time and data.

Mr. C. M. Regan of the Ministry of Pensions and National Insurance was of great assistance both in arranging interviews with economists in his Ministry and the Ministry of Labour in London and in discussing the details of the present pension scheme in the United Kingdom. Mr. A. Patterson prepared data on pensions in various countries and made valuable suggestions; Mr. Douglas R. Toovey of the Ministry of Labour gave the author further suggestions. Information on the Swedish system was provided primarily by Mr. Sven O. Hydén, Försäkringsholaget Pensiongaranti, Omsesidigt. Finally, the author would like to acknowledge the detailed listing of data sources prepared by the staff of Mr. William C. Shelton, Chief of the Division of Foreign Labor Conditions of the Bureau of Labor Statistics in the United States, and the advice of Mr. William Gerber of that Division. Needless to say, none of these persons is responsible for the author's interpretations or conclusions.

The author's research was supported by the Office of Research and Statistics of the Social Security Administration and by the Duke University Research Council.

JUANITA M. KREPS

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1 Early Retirement in the United States

THE DRIFT TOWARD early retirement in the United States poses questions of both immediate and longrun significance. Currently, concern arises from the fact that benefits paid to early retirees are usually much lower than those paid to men who retire at age 65 or later. During 1964, for example, the average monthly benefit paid to men retiring before 65 was $75, as compared with an average of $105 for men retiring at 65 years of age or later. The full benefit is inadequate when it is the only source of income and, clearly, retirees cannot be expected to live on the reduced pension. The Advisory Council on Social Security has pointed out that as a result many older persons will have to seek old-age assistance.[1] Such a development would in the long run reverse the gradually declining role played by old-age assistance, adding to the assistance rolls OASDHI beneficiaries, who, according to our earlier expectations, were to acquire adequate retirement pensions.

AREAS FOR RESEARCH

In order to formulate policies for dealing with the issues related to early retirement, the Council suggested the accumulation of data on the work experience and financial status of the early retiree. It is important to know whether he was a full-time worker or only intermittently employed, how often he was the primary wage earner in the family, the level of his skill and the extent of demand for such skill, how often his retirement was voluntary, and what his recent employment/unemployment pattern has been. Such data will sharpen the profile of the early retiree, although the general outline has already emerged: he is less often voluntarily retired and he has "lower employment rates, worse health, and lower incomes than older beneficiaries." [2]

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[1] *The Status of the Social Security Program and Recommendations for its Improvement,* Report of the Advisory Council on Social Security (Washington: U.S. Government Printing Office, 1965), p. 57.

[2] Lenore A. Epstein, "Early Retirement and Work-Life Experience," *Social Security Bulletin,* XXIX (March 1966), 4.

Further extensive study is now being devoted to the characteristics of the early retiree.[3]

In addition to information that will be forthcoming from such study, other aspects of social policy need to be reexamined in the light of current practice. Demographic developments of the 1950's and 1960's—in particular, the swell in the labor force occasioned by the entrance of large numbers of young workers—have clearly led to attempts to drain off labor at the other end of worklife. New technologies have reduced the labor requirements per unit of output, making it possible to reduce working time further still. The rate of economic growth necessary to maintain full employment, given these demographic and technological conditions, has been inadequate. The impact of the resulting unemployment has been on those workers who suffer some disadvantage in the labor market: the nonwhite, the inexperienced, the poorly educated, the older worker. In the case of many workers in the 62–64 age group, reclassification from an unemployment to a retirement status provides a welcome source of support, but it also commits the early retiree to a reduced pension throughout his lengthened retirement period.

If slow growth and unemployment rather than a desire for increased leisure in old age are the primary explanation for early retirement, it follows that a tightening of the labor market would tend to draw early retirees back into jobs, assuming no institutional restraints. Moreover, it implies that in fully employed economies, with no pressures for early withdrawal from the labor force, workers would generally continue to work until at least pensionable age. Finally, one could hypothesize that, given the freedom to choose the form in which leisure is taken, workers would choose a pattern of a more even distribution of leisure and work throughout the lifespan rather than a shortening of potential worklife. The advantages of the former pattern and the historical trend in this direction were discussed by Clarence Long nearly a decade ago.[4]

The question that now arises is whether in the United States a shortening of worklife may not be emerging in contrast to the earlier pattern of shortening of the workyear. During this century a decline in the labor force participation rate for men has been offset by a rise in that for women with the result that the combined rate for 1965 (56.7) was very near the 1900 proportion (53.7). These overall trends conceal important changes in the labor force activity of older men. Among

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[3] Studies underway or in prospect by the Social Security Administration include analyses of why workers retire, their earnings and employment characteristics, labor force and industrial pension developments, and effects of social security changes.

[4] Clarence D. Long, *The Labor Force Under Changing Income and Employment* (Princeton: Princeton University Press, 1958), pp. 24–25.

men aged 65 and over the rate dropped from 63.1 in 1900 to 26.9 in 1965; for men aged 60–64 the 1965 rate was down to 76.5 (in contrast to 94.3 for men aged 45–54).[5]

One research approach that is indicated is an evaluation of the effects on retirement of diverse pressures in the United States: on one hand, increased job demands arising from current military expenditures and, on the other, inducements to early retirement offered by contractual agreements, particularly in the automobile industry. Unemployment remains high in some areas, and for some time there may be enough slack in the labor market to make it difficult for older displaced workers to find new jobs.

Through another avenue of research, one may gain insight into workers' preferences as to the amount of leisure and its apportionment among various forms—shorter hours, longer holidays, postponed entry into and early retirement from the labor force—by studying the patterns that have emerged in Western European countries during the postwar period. These countries have been characterized by high rates of growth and extremely low levels of unemployment; in fact, scarce labor persists as one of their major problems. Insofar as leisure time has grown, therefore, the growth is likely to reflect a genuine preference for free time rather than a desire for more goods and services.

The allocation of any increase in free time in such an environment would be of considerable interest. Given such freedom of choice as full-employment conditions confer, do workers choose to take additional free time by keeping young people in school longer or retiring older workers sooner than previously? Or do they prefer to have their leisure apportioned over the worklife span, with longer holidays and shorter working hours? To the extent that they choose to shorten the worklife span, it becomes necessary to reexamine income-maintenance policies.

NONWORKING TIME IN FULLY EMPLOYED ECONOMIES

This study examines current patterns of leisure time in selected Western European countries that have experienced high growth and low unemployment rates during the postwar period. These patterns, together with a review of recent changes in hours of work, annual holidays, and labor force activity rates for young and older workers, indicate the kinds of leisure choices being made under economic conditions that encourage increased working time rather than greater

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[5] U.S. Bureau of the Census, *Historical Statistics of the United States, Colonial Times to 1957* (Washington: U.S. Government Printing Office, 1960), p. 71; U.S. Department of Labor, *Manpower Report of the President, 1966* (Washington: U.S. Government Printing Office, 1966), table E–2.

leisure. The primary question is whether nonworking time in these countries differs in amount or form from that in the United States where leisure appears to have been growing as a byproduct of a job shortage. If there is a substantially smaller amount of leisure in countries that, having full employment, have somewhat more option between goods and leisure, one may question whether the increase in free time during the slow-growth period in the United States has any great utility. Or he may reason that with higher incomes workers choose to distribute time more heavily in favor of leisure; the United States, having the highest income levels, thus has the greatest amount of free time.[6] To the extent that the apportionment of nonworking time in the two cases is different, one must ask whether this difference reflects variations in workers' preferences or whether it has developed from institutional arrangements that make some forms of leisure easier to accommodate.

Within the overall context of nonworking time, the study raises certain questions regarding retirement in the two situations. This form of leisure is of special significance. The fact that a shortened workyear is financed within the regular wage scheme, whereas longer retirement periods necessitate larger transfers of income from working to nonworking persons, places the retirement form of leisure in a special category, involving important differences in financial and institutional arrangements. It is therefore necessary to consider retirement benefits in relation to earnings, the existence or nonexistence of retirement tests, and reductions in benefits for early (or increased payments for postponed) retirement in the different countries.

THE PLAN OF STUDY

Before narrowing the analysis to nonworking time patterns in five selected countries—the Federal Republic of Germany, Switzerland, Sweden, the United Kingdom, and the United States—a survey of labor force activity rates in a large number of countries is reviewed. These data, available primarily from the censuses of the various countries, allow some broad generalizations on the relation between stage of economic development and work activity, in general and by age groups. Although there is a lack of common definitions and there are differences in date of collection, it is nevertheless worthwhile to attempt some general comparisons of the division of work and leisure in different countries.

Following the discussion of activity rates in countries broadly classified on the basis of stage of industrialization, the study turns to postwar leisure patterns in the five selected countries, noting particu-

[6] See Gordon C. Winston, "An International Comparison of Income and Hours of Work," *Review of Economics and Statistics*, XLVIII (February 1966), 28–39.

larly the extent to which free time has grown and the form of this growth during the 1950's. Attention is given to income levels and the relationship of income to leisure time. In this major section of the study, tentative comparisons indicate the differences between nonworking-time patterns in the United States and those in the selected countries of Western Europe.

The final chapter considers the macroeconomic question of the allocation of national product between workers and nonworkers and suggests that the question also be viewed microeconomically, i.e., from the position of the individual family's cycle of needs and income. Further research is indicated in areas of leisure and income maintenance during retirement—research that might well be pursued under the rubric of the lifetime allocation of work, leisure, and income. In the absence of serious consideration of these questions, future retirement policy may fail either to reflect workers' true preferences as to the distribution of work and leisure or to permit the most desirable temporal distribution of income.

2 International Comparisons of Labor Force Activity

INTERPRETATION of the relative values placed on income, work, and leisure requires country-by-country data on labor force activity by age and sex and, in addition, annual hours of work and earnings. Important sources of data are the United Nations, especially the International Labour Office, and other international organizations such as the European Economic Community and the Organization for Economic Cooperation and Development.

ACTIVITY RATES AND ECONOMIC DEVELOPMENT

From censuses taken mainly in the years 1950 and 1951, a recent United Nations study compared crude activity rates (percentages of the total population that are economically active) for 107 population groups in 99 geographical areas.[1] Significant differences in definitions and coverage call for caution in interpreting the data, but the study is nevertheless the most detailed analysis available, and the number of countries included is far greater than is usually attempted in cross-national studies.[2]

Regional rates for men and women.—European countries, which were fairly homogenous in stage of economic development, in cultural heritage, and in current demographic pattern, varied little in the proportions of men who were economically active; the crude activity rates for men in 29 of the 31 areas in Europe fell in the 60- to 69-percent range. In North America the rates generally fell between 55 and 59 percent, as did typical rates in Middle and South America, despite the fact that the latter countries have smaller proportions of their populations in the active age groups. For women, the proportions active ranged from 10 to 40 percent in Europe and from 15 to 24 percent in North

[1] United Nations, *Sex and Age Patterns of Participation in Economic Activities*, Report 1 of *Demographic Aspects of Manpower* (New York: United Nations, Department of Economic and Social Affairs, 1962).

[2] See "Problems of International Comparability of the Census Data on the Economically Active Population" (ibid., pp. 1–3) and "A Note on the Possible Effect on the Female Activity Patterns by Age of Conceptual Differences in Enumerating the Economically Active Population" (ibid., p. 78).

America. In Middle and South American countries, two-thirds of the reported rates for women fell below 20 percent.[3]

Rates by stage of industrialization.—Classification of 72 of the countries into three groups—industrialized, semi-industrialized, and agricultural—revealed a consistent relationship between male activity rates and the degree of industrialization.[4] No clear relation obtained between the crude activity rates for females and the degree of industrialization, however. When male activity rates were standardized to remove the effects of differences among countries in age structure of the population,[5] the average rates were lowest for the industrialized countries, highest for the agricultural countries (table 1).

TABLE 1.—*Average activity rates for men in countries classified according to degree of industrialization, recent population censuses*

Degree of industrialization	Unadjusted	Standardized for age structure [1]
Industrialized countries [2]	62.2	60.5
Semi-industrialized countries [3]	57.8	62.8
Agricultural countries [4]	55.2	65.1

[1] Age distribution of men in the Netherlands at the 1947 census was taken as the standard.
[2] 21 countries having less than 35 percent of active men engaged in agriculture and related activities.
[3] 30 countries having 35 to 59 percent of active men engaged in agriculture and related activities.
[4] 21 countries having 60 percent or more of active men engaged in agriculture and related activities.

Source: UN, *Sex and Age Patterns of Participation in Economic Activities;* Report 1 of *Demographic Aspects of Manpower,* table 3.4 (New York: United Nations, 1962). Figures are unweighted means.

Trends in industrialized countries.—Among the industrialized countries, whose current participation rates for men are the lowest, the trend indicates further reduction. For ten industrialized countries that have decennial census data since 1910, the average rate for men 15 and over fell from a 1920 level of 91 percent to a 1950 level of 86 percent. For women, the 20th-century trend has not been consistent. In the United States and Canada the percentages of women who work increased each decade, and the standardized rates for women rose in

[3] Ibid., pp. 4–5.

[4] The index of industrialization was the proportion of the economically active males engaged in agriculture and related activities. "Agricultural" countries were those having 60 percent or more of the active males engaged in agriculture and related activities; "semi-industrialized" countries, 35 to 59 percent; and "industrialized" countries, less than 35 percent. The 72 countries included in the classification were those for which adequate data on agricultural employment were available (ibid., p. 6, and table A–14, which lists the countries in each group).

[5] The major determinant of the crude activity rate is the age structure of the population; the higher the proportion of persons of working age, the higher the crude activity rate. To calculate the age-standardized activity rates, the age-specific activity rates in each country were applied to the population in the corresponding age groups of a standard population (in this case, the male population of the Netherlands at the 1947 census). The standardized activity rate for males is the sum of these products, divided by the total number of persons in the standard population (ibid., p. 13).

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Australia, England and Wales, New Zealand, and (very slightly) the Netherlands. But France, Sweden, and Switzerland show long-term downward trends even when the rates are standardized for age composition.[6] It is difficult to predict the effect of industrialization on the labor force activity of women in the underdeveloped countries, but the majority view is that the female rate will rise, particularly among young women.

ACTIVITY RATES AND AGE

Variations in overall rates of male labor force activity through time or concurrently from one country to another are due primarily to differences in the proportions of young and older men in the labor force. Among these two groups the variations are quite wide.

Age-specific rates by region.—On the average, approximately one-fifth of the boys in the 10–14 age group are economically active in South America and among the indigenous populations of Africa; about three-fourths of the 15- to 19-year-olds are active in all regions except Asia, which has two-thirds, and North America, which has less than three-fifths. At the other end of the worklife span the differences are also quite marked. In North America and Oceania, on the average, 39 percent of the men aged 65 and over remain active; in Europe the average proportion is 44 percent; in Asia and among the nonindigenous populations of Africa, 58 percent; in Middle America, 68 percent; and in South America, 71 percent.[7]

Age-specific rates by stage of industrialization.—Sharp differences appear in the labor force rates for boys and elderly men when countries are grouped by stage of industrialization (table 2). In agricultural countries the average proportion in the 10–14 age group who

TABLE 2.—*Average age-specific activity rates for men in countries classified according to degree of industrialization, recent population censuses*

Degree of industrialization	Age							
	10–14 [1]	15–19	20–24	25–34	35–44	45–54	55–64	65 and over
Industrialized countries [2]	4.1	72.4	91.5	96.7	97.6	95.9	85.6	37.7
Semi-industrialized countries [3]	13.2	70.3	91.8	96.2	97.1	95.9	88.9	61.0
Agricultural countries [4]	23.9	78.4	91.2	96.3	97.5	96.3	91.6	70.1

[1] Excludes countries where a minimum age limit of 15 years was adopted for enumeration of the economically active population. There were 3 such cases among the industrialized countries, 2 among the semi-industrialized, and 3 among the agricultural.
[2] 21 countries having less than 35 percent of active men engaged in agriculture and related activities.
[3] 30 countries having 35 to 59 percent of active men engaged in agriculture and related activities.
[4] 21 countries having 60 percent or more of active men engaged in agriculture and related activities.

Source: UN, *Sex and Age Patterns of Participation in Economic Activities*, Report 1 of *Demographic Aspects of Manpower*, table 3.2 (New York: United Nations, 1962).

[6] Ibid., pp. 14, 28. Standardization in this case eliminated the effects of changes in age structure of a given country's population over the time period studied.
[7] Ibid., p. 11.

are active is about six times the proportion at work in the industrialized countries, and the proportion of men aged 65 and over who are active is almost twice the proportion in the industrialized countries. On the latter point, it is interesting to note that the current average participation rate for elderly men in agricultural countries is approximately the same as the United States rate toward the end of the last century.[8]

Age-specific rates in industrialized countries.—Male age-specific rates, averaged for groups of countries, fail to reveal differences between individual countries. It is important to note the variations, particularly in the utilization of young and older men, in countries that are developed and in many instances making critical decisions as to the amount of leisure that can be accommodated. Among selected countries in Europe and North America, one notes several differences in the activity rates of young and older men (table 3). Disregarding the activity rates for youths aged 10–14 (which show, incidentally, that one-third of the Italian males in this age group are labor force participants), the largest proportions of working youth are found in

TABLE 3.—*Age-specific activity rates for men in selected countries, recent population censuses*

[Figures in italics represent percentages obtained by interpolation of figures for different age groups]

Country [1]	Year	Age							
		10–14	15–19	20–24	25–34	35–44	45–54	55–64	65 and over
Austria	1951	[2] *9.0*	*85.5*	*94.0*	*97.0*	*97.8*	*93.9*	*78.4*	31.3
Belgium	1947	[2] 5.5	66.8	82.2	95.8	95.9	91.9	78.4	24.7
Denmark [3]	1950	[4] 7.8	84.2	92.0	97.3	98.4	97.3	90.6	35.9
France [5]	1954	[4] .8	59.4	90.4	96.8	97.0	95.3	78.7	36.1
Federal Republic of Germany [6]	1950	[2] 5.3	84.7	93.4	95.2	97.2	95.2	80.7	26.8
Italy	1951	*32.2*	*82.0*	*91.5*	96.5	97.6	95.2	80.3	43.7
Netherlands [7]	1947	[4] *7.2*	*72.3*	92.2	*97.5*	*98.2*	*97.0*	*85.0*	35.5
Norway	1950	([8])	73.1	89.8	*96.4*	*98.4*	*97.6*	*95.0*	42.1
Sweden	1950	[2] 1.2	74.4	90.0	97.1	98.1	96.3	86.6	36.1
Switzerland	1950	[4] 1.1	73.8	90.8	97.2	98.6	97.7	91.7	50.7
England and Wales	1951	([9])	83.7	94.9	97.9	98.6	97.8	91.5	30.7
Canada	1951	[4] 1.4	58.5	92.4	96.4	96.7	94.5	85.7	38.6
United States [9]	1950	[4] 2.5	44.6	81.9	92.1	94.5	92.0	83.4	41.5

[1] Classified as industrialized (having less than 35 percent of active men engaged in agriculture and related activities) except Italy, which was classified as semi-industrialized (having 35 to 59 percent of active men engaged in agriculture and related activities).

[2] Data on economically active persons under age 15, tabulated without subdivision, were related to the population aged 10–14 to obtain activity rates. The number of active persons under age 15 was partially estimated since census tabulations showed "under 14 years."

[3] Excludes Faeroe Islands.

[4] Tabulation of the economically active population was confined to persons aged 14 and over. In computing the activity rates, active persons aged 14 were related to the population aged 10–14.

[5] Based on a 5-percent sample of census returns.

[6] Excludes West Berlin and the Saar.

[7] The economically active population includes inmates of prisons and internment camps.

[8] Economic activity of persons under age 15 was not investigated.

[9] Based on a 20-percent sample of census returns.

Source: UN, *Sex and Age Patterns of Participation in Economic Activities*, Report 1 of *Demographic Aspects of Manpower*, table A–2 (New York: United Nations, 1962).

[8] U.S. Bureau of the Census, *Historical Statistics of the United States, Colonial Times to 1957* (Washington: U.S. Government Printing Office, 1960), p. 71.

Austria, Denmark, Germany, Italy, and England.[9] Substantially lower rates apply for the Netherlands, Norway, Sweden, and Switzerland and still lower rates for Belgium, France, and Canada. The United States rate, by far the lowest, is only slightly more than half that of Austria, Germany, or England.

At the other end of the worklife span a different pattern appears. For the most part, countries with quite high activity rates for young men have relatively low rates for men aged 65 and over. With the exception of Belgium, the lowest activity rates for older men are found in Austria, which has the highest rate for youth; Germany, whose youth rate is second highest; and England, which has the second lowest rate for older men and the fourth highest rate for young men. The United States, whose rate for youth is the lowest, has a higher participation rate for older men than most other countries; in fact, her rate is substantially exceeded only by that of Switzerland.

Detailed analysis of worklife patterns in various countries will be possible only when more reliable data are available, particularly on work activity of the young and on the extent of part-time employment, and when standardized definitions of participation are used in the collection of data. Finer age breakdowns are also necessary in order to establish age of entry into and retirement from the labor force. Subject to the limitations of the available data, however, one may conclude tentatively that among industrialized countries there is some tradeoff between working time in youth and working time in old age. To the extent that this conclusion is borne out by further study, it suggests that income maintenance may be as much a problem of timing as it is one of total expenditure.

INDUSTRIALIZATION AND THE LENGTH OF WORKLIFE

The length of the male worklife also varies somewhat, along with the timing of the economically active period. Analysis of net years of working life in countries classified according to degree of industrialization indicates that the proportion of life spent in the labor force, as well as the amount of labor force activity, declines with industrialization.

Worklife by stage of industrialization.—Among 37 countries that were classified according to degree of industrialization, the average proportion of lifetime spent in the labor force was 65 percent in industrialized countries, 67 percent in the semi-industrialized countries, and 70 percent in the agricultural countries.[10] The average number of

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[9] All countries included in this analysis were classified as industrialized except Italy, which was classified as semi-industrialized (United Nations, op. cit., table A–14).

[10] Ibid., p. 19.

years of active and inactive life for men varies widely, as the following summary indicates:

	Average net years at birth		Average net years at age 15	
	Active years	Inactive years	Active years	Inactive years
Industrialized countries	42.2	22.8	45.3	9.2
Semi-industrialized countries	35.6	17.2	43.1	6.4
Agricultural countries	33.9	14.4	41.5	4.6

Source: UN, *Sex and Age Patterns of Participation in Economic Activities* (New York: United Nations, 1962), table 4.4. Figures are unweighted means.

At birth the male in the industrialized country has eight more years of worklife expectancy than the male in an agricultural country, and he can also expect his nonworking period to be eight years longer. In years of nonparticipation, he thus has about fifty percent more leisure than the man living in an agricultural nation. If life expectancy and worklife expectancy are calculated at age 15 in order to take account of mortality during infancy and youth, the number of inactive years (in this instance, largely retirement years) is twice as great in the developed nations.

Worklife in industrialized countries.—Among the advanced countries, which have both longer worklife expectancy and inactive-life expectancy than the less advanced countries, there is some variation in the number of years spent at work and in proportion of life expectancy that these years constitute (table 4). Active life as a proportion of life expectancy in the selected countries varies by 7 percentage points. In the United States the male works only 61 percent, whereas in Switzerland he works 68 percent (and in England 67 percent), of his life. At birth, a male in the United States has a worklife expectancy which

TABLE 4.—*Expectation of life and average net years of active life for men at birth in selected industrialized countries*

Country	Year [1]	Net years of active life		Average net years of inactive life
		Average number	Percent of expectation of life	
Austria	1951	40.5	65.4	21.4
Belgium	1947	37.7	60.8	24.3
Denmark	1950	45.0	66.4	22.8
France	1954	41.8	63.0	24.5
Federal Republic of Germany	1950	41.1	63.6	23.5
Netherlands	1947	44.8	64.6	24.6
Norway	1950	45.4	65.6	23.8
Sweden	1950	44.6	64.6	24.4
Switzerland	1950	45.0	67.8	21.4
England and Wales	1951	44.1	67.0	21.7
Canada	1951	42.0	63.3	24.3
United States	1950	39.7	60.6	25.8

[1] Year to which the data on economic activity relate.

Source: UN, *Sex and Age Patterns of Participation in Economic Activities*, Report I of *Demographic Aspects of Manpower*, table A-8 (New York: United Nations, 1962).

may be more than 5½ years shorter than that of a male in a Western European nation, and he will be inactive for as much as 4½ years longer than some of his European counterparts.

Although precise measurement of worklife is not possible, there is nevertheless sufficient evidence to demonstrate an inverse relation between the proportion of life spent at work and the level of industrial development.[11]

Other factors in worklife.—The problem of economic support during the nonworking period is intimately bound up with the question of the length of this period and its timing, i.e., whether it comes at the beginning or at the end of worklife. An equally important question has been raised by Stuart Garfinkle. In appraising social and economic developments in various countries, he stresses the fact that the ratio of productive to total population is but one factor to be considered; what is needed is an index of man-years of productive capacity that combines the length of worklife with "a measure of the more intensive training of our work force, and/or with a measure of the increasing output per man-year."[12] Growth in productivity may indeed have such profound effects on total output as to bring about significant changes in the patterns of worklife.

It should be noted also that in many instances there are potentially many more hours of work than are in actual use. The number of hours worked per year may be affected, for example, when capital or land is so scarce as to place limits on total working time. Moreover, when work cannot be programed with sufficient skill and varies seasonally, the length of the workyear may be considerably shorter than the customary 2,000 to 2,500 hours derived from a 50-week span of 40- to 50-hour workweeks.[13]

Description of work/leisure patterns in the different countries requires data on length of the workyear as well as length of worklife. Workyear figures, at least as difficult to obtain as activity rates by age

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[11] See John D. Durand, "Population Structure as a Factor in Manpower and Dependency Problems of Under-developed Countries," *Population Bulletin of the United Nations*, No. 3 (New York: United Nations, October 1953), p. 11.

[12] "The Lengthening of Working Life and Its Implications," United Nations World Population Conference (New York: United Nations, 1965), p. 6.

[13] Colin Clark and Margaret Haswell, *The Economics of Subsistence Agriculture* (London: Macmillan & Co., Ltd., 1964), pp. 113–14, 121–23, 126, 128, 131, 135–48; Theodore W. Schultz, *Transforming Traditional Agriculture* (New Haven: Yale University Press, 1964), chap. iv; Juanita M. Kreps and Joseph J. Spengler, "The Leisure Component of Economic Growth," in *The Employment Impact of Technological Change*, Appendix Volume II of *Technology and the American Economy*, The Report of the National Commission on Technology, Automation, and Economic Progress (Washington: U.S. Government Printing Office, 1966), pp. 388–89.

and sex, are drawn from information on the workweek and annual and public holidays. In the following chapter the available data for the selected countries are reviewed and the workyear is estimated for 1950 and for 1960 or a later year, in order to see whether leisure patterns in these countries have been changing during the period following the Second World War.

3 Worklife and Workyear in Selected Countries

IN ORDER TO EXAMINE work and leisure patterns in detail, the study of labor force activity rates, weekly hours, and vacation and holiday time has been limited to five countries—the United States, the United Kingdom, the Federal Republic of Germany, Sweden, and Switzerland. The four European countries typify the highly prosperous nations of postwar Europe, having economic growth rates higher than that of the United States and, with the exception of Switzerland, well-developed social security schemes. In these four countries there are shortages of labor; Germany and Switzerland, especially, have found it necessary to import laborers from Southern Europe in order to meet industry's needs. Unemployment has been negligible and retraining programs have aimed at serving tight labor markets. In brief, the shortage of laborers has led to the development of various policies that offer incentives to work longer, whereas the United States' economic climate has been the opposite.

WORKLIFE COMPARISONS

As noted in the preceding chapter, the fraction of life spent in the labor force decreases with increased industrialization and also varies somewhat among advanced countries, considered individually. At mid-century the five countries selected for detailed study, ranked below by years of male economic activity, showed the following variations in number of inactive years and ratio of active years to years of total life expectancy:

	Active years	Inactive years	Proportion of life active
United States	39.7	25.8	60.6
Federal Republic of Germany	41.1	23.5	63.6
England and Wales	44.1	21.7	67.0
Sweden	44.6	24.4	64.6
Switzerland	45.0	21.4	67.8

Source: Table 4, above.

The 1950 census data also revealed differences in the timing of work within the lifespan. Of the five study countries, the United States had by far the smallest proportion of young men in the labor force;

Switzerland, Sweden, England and Wales, and Gemany had much higher rates for youth. With the exception of Switzerland, which had a high proportion of its elderly as well as its youth at work, the order was pretty well reversed in the activity rates for men aged 65 and over: Germany had the lowest rate, followed by England and Wales, Sweden, and the United States (table 3).

Changes in activity rates since 1950.—A comparison of the 1950 activity rates with the most nearly comparable rates for 1960 or later reveals significant changes in most of the countries (table 5). The problem of intercountry comparability of labor force data, however, discourages any firm conclusions, and changes within countries over time present even more serious difficulties. The nature of the problem can be discerned in the appendix below ("Notes on Census Data for Intercountry Comparisons and Comparisons Within Countries Over Time with respect to Labor Force Activity Rates"), in which various differences in the data are noted.

For young men, the decline in labor force activity was particularly great in Sweden, where the proportion of 15- to 19-year-olds dropped by more than a third between 1950 and 1965. The United States (14–19) had a decline of almost a fifth in roughly the same period, followed by the United Kingdom, Germany (in a shorter period), and Switzerland.

For young women the rates also decreased, but less rapidly; in Sweden from 1950 to 1965, by almost a third; in the United States, by a tenth, followed by Germany and the United Kingdom, the Swiss proportion remaining the same. For both sexes, the proportions of youth in the labor force, therefore, declined rapidly in Sweden, less sharply in the United States, the United Kingdom, and Germany, and only very slightly in Switzerland.

For older men, activity rates declined most steeply in the United States: almost 40 percent between 1950 and 1963. The Swedish rate fell by a fourth in the decade of the 1950's alone; the United Kingdom rate fell by almost a fifth, followed by the Swiss rate. Only in Germany did the rate remain approximately the same.

Older women's activity rates also declined very sharply in Sweden; they declined moderately in Germany and Switzerland, remained about the same in the United States, and actually rose in the United Kingdom. The net effect of these changes for older people of both sexes was a decline of about a third in the United States, slightly less in Sweden, approximately 15 percent in the United Kingdom and Switzerland, and a very small drop in Germany.

In summary, since 1950 the labor force activity of both young and older people has fallen markedly in the United States and Sweden;

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TABLE 5.—*Labor force participation rates and percentage change in selected countries, by age and sex, 1950 to 1965*

Country	Aged 15-19			Aged 20-64			65 and over			15 and over		
	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women
Federal Republic of Germany: [1]												
October 1958 [2]	76.9	78.9	74.8	66.5	93.1	44.1	14.6	23.4	8.4	60.5	82.8	41.8
April 1964	69.4	69.6	69.2	67.2	92.7	44.7	14.0	23.5	7.7	58.9	81.2	39.8
Percentage change	−9.8	−11.8	−7.5	1.1	−.4	1.4	−4.1	0	−8.3	−2.6	−1.9	−4.8
Sweden: [3]												
1950 [4]	64.5	74.4	54.3	63.0	94.7	31.6	20.9	36.1	7.7	57.5	85.8	30.0
1960 [5]	51.9	52.8	49.0	64.6	92.0	37.1	14.9	27.1	4.6	55.7	79.0	32.8
1965 [6]	41.9	46.3	37.2	66.7	88.5	44.0	[7] 27.2	[7] 47.8	[7] 8.8	[8] 61.1	[8] 81.2	[8] 40.8
Percentage change, 1950-60	−19.5	−29.0	−9.8	2.5	−2.9	17.4	−28.7	−24.9	−40.3	−3.1	−7.9	9.3
Switzerland:												
1950	68.8	73.8	64.0	63.8	96.0	34.2	28.4	50.7	11.9	59.8	88.8	33.8
1960	66.2	69.1	63.2	65.9	96.4	36.5	24.0	41.9	11.0	60.5	87.2	35.4
Percentage change	−3.8	−6.4	−1.2	3.3	.4	6.7	−15.5	−17.4	−7.6	1.2	−1.8	4.7
United Kingdom:												
1951 [9]	81.2	83.9	78.7	65.2	96.7	36.2	16.0	31.4	5.3	59.6	87.6	34.7
1964 [10]	72.9	72.8	73.1	70.5	96.8	44.7	13.6	25.6	6.1	61.9	85.4	40.3
Percentage change	−10.2	−13.2	−7.1	8.1	.1	23.5	−15.0	−18.5	15.1	3.9	−2.5	16.1
United States: [11]												
1950	42.6	53.4	31.5	64.8	94.0	36.5	26.7	45.8	9.7	58.4	84.5	33.1
1963	36.0	43.5	28.4	68.4	94.0	43.9	17.9	28.4	9.6	57.3	78.8	37.0
Percentage change	−15.5	−18.5	−9.8	5.6	0	20.3	−33.0	−38.0	−1.0	−1.9	−6.7	11.8

[1] First and last years for which microcensus data (including unemployed) are available for F.R.G. including West Berlin.
[2] Excludes the Saar.
[3] Excludes "persons on compulsory military service."
[4] Excludes persons working less than half the normal workday.
[5] Excludes persons working less than half the normal workweek.
[6] Forecasts. Excludes persons working less than half the normal workweek.
[7] Aged 65-69.
[8] Aged 15-69.
[9] Excludes U.K. soldiers and merchant seamen stationed overseas.
[10] Forecasts. Excludes foreign merchant seamen and soldiers stationed in U.K.
[11] Data are for age groups 14-19 and 14 and over. Data from national monthly sample survey of households.

Sources: Germany: *Arbeits- und Sozialstatistische Mitteilungen*, July-August 1965, p. 172. Sweden: *Tilgången På Arbetskraft 1960-1980*, Statens Offentliga Utredningar 1966, tables 9, 11. Switzerland: *ILO, Yearbook of Labour Statistics, 1956*, table 2; *1964*, table 2 (Geneva: International Labour Office); UN, *Demographic Yearbook, 1962*, table 5 (New York: United Nations). United Kingdom: ILO, op cit., *1964*, table 2; *Ministry of Labour Gazette*, January 1965, p. 4; Central Statistical Office, *Monthly Digest of Statistics*, No. 200 (April 1964), table 13. United States: U.S. Department of Labor, *Manpower Report of the President, 1964*, tables A-1, A-2; *1966*, tables A-2, A-7 (Washington: U.S. Government Printing Office).

moderate declines have occurred in the United Kingdom, with much smaller decreases in Switzerland and Germany. In percentage of decline in labor force activity, the countries rank from high to low in the following order:

Aged 15 to 19 (both sexes)
Sweden
United States (14–19)
United Kingdom
Germany
Switzerland

Aged 65 and over (both sexes)
United States
Sweden
Switzerland
United Kingdom
Germany

Labor force activity in the 1960's.—Although census reports provide the most nearly comparable figures over a period of time, labor force survey data, when available, give a somewhat better picture of current participation rates. Subject to the qualifications stressed below, the current data indicate the following points of comparison (table 6).[1]

For all ages combined, the participation rates both for men and for men and women combined are lowest in the United States. Following the United States, the male rates are approximately the same in Sweden and Germany, somewhat higher in the United Kingdom, and highest in Switzerland. The participation rate for women of all ages combined is lowest in Switzerland, followed by the United States, the United Kingdom, Germany, and Sweden. Following the United States low of 57, the combined rate for men and women of all ages is second lowest for Germany, which, in turn, is about the same as that for Switzerland and only slightly below the rate for the United Kingdom. Sweden's high rate reflects her high proportion of female workers.

Turning to the proportion of each age group that is active, one finds that men aged 65 and over are labor force participants least frequently in Germany and the United Kingdom, followed by the United States. Switzerland and Sweden have much higher rates. The Swedish proportion, overstated because of the 65–74 base, could be as low as 32 percent (the active persons aged 65 to 74 divided by the population aged 65 and over), but even then it would rank above all countries except Switzerland. The combined rates for the elderly fall in roughly the same order: the United Kingdom, Germany, the United States, Switzerland, and Sweden.

The participation of male youth is lowest in the United States. Sweden, Switzerland, Germany, and the United Kingdom have significantly higher rates for males aged 15 to 19. Female rates for these age groups fall in the same order, with the result that the countries have

[1] Data are for 1963 except for Switzerland (1960) and United Kingdom (1964). Age groups for United States are 14–19 and 14 and over; for Sweden, 15–74 and 65–74.

TABLE 6.—*Labor force participation rates in selected countries, by age and sex, most recent year available*

Country	Year	Aged 15–19			Aged 20–64			65 and over			15 and over		
		Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women
Federal Republic of Germany [1]	1963	68.2	69.2	67.1	67.7	93.3	45.1	14.6	24.8	8.1	59.9	82.6	40.5
Sweden [1 2]	1963	51.3	52.7	49.7	72.5	90.8	54.1	[3] 27.8	[3] 47.0	[3] 11.4	[4] 65.4	[4] 82.0	[4] 48.8
Switzerland	1960	66.2	69.1	63.2	65.9	96.4	36.5	24.0	41.9	11.0	60.5	87.2	35.4
United Kingdom [5]	1964	72.9	72.8	73.1	70.5	96.8	44.7	13.6	25.6	6.1	61.9	85.4	40.3
United States [1]	1963	[6] 36.0	[6] 43.5	[6] 28.4	68.4	94.0	43.9	17.9	[7] 28.4	9.6	[8] 57.3	[8] 78.8	[8] 37.0

[1] Based on sample survey.
[2] Excludes persons on compulsory military service.
[3] Aged 65–74. Dividing these data by total population aged 65 and over yields the following rates for the 65-and-over group: Total, 18.3; men, 31.4; women, 7.4.
[4] Aged 15–74.
[5] Forecasts.
[6] Aged 14–19.
[7] 1966 participation rate for men aged 65 and over was 27.6.
[8] Aged 14 and over.

Sources: Switzerland, United Kingdom, United States: table 5. Germany: *Arbeits- und Sozialstatistische Mitteilungen*, May 1965, p. 107. Sweden: *Tilgången På Arbetskraft 1960–1980*. Statens Offentliga Utredningar, 1966.

combined youth activity rates, from low to high in the following order: the United States, Sweden, Switzerland, Germany, and the United Kingdom.

The countries rank from low to high in labor force participation rates of young and older men as follows:

Aged 15 to 19	*Aged 65 and over*
United States (14–19)	Germany
Sweden	United Kingdom
Switzerland	United States
Germany	Switzerland
United Kingdom	Sweden (65-74)

Low activity rates for male youths have been typical of the United States for some time, but changes in Sweden during recent years account for that country's small proportion of active youth. These two countries have relatively high proportions of older persons at work, despite significant declines during the past decade or so. High activity rates for young men characterize Germany and the United Kingdom, but smaller proportions of older men work in these two countries. Switzerland has a relatively high proportion of older men at work and an intermediate figure for young men.

Perhaps the most striking conclusion to be drawn from such a limited comparison is the extent of tradeoff of work during youth (as in Germany and the United Kingdom) for work after age 65 (as in the United States and Sweden). The rapid decline in the participation rates of both young and older men, particularly in the United States and Sweden, suggests that the present rankings may not hold for very long, although participation rates have been somewhat more stable during the postwar period in Germany, Switzerland, and the United Kingdom than in the first two countries.

WORKYEAR COMPARISONS

The length of the workyear, determined by the number of hours worked per week and the number of weeks worked per year, must take into account not only average weekly hours but the amount of time normally allowed for annual vacations and holidays.

Hours of work.—For data on hours actually worked or even hours paid for (as opposed to standard hours [2]), the most reliable series is for hours worked in manufacturing. This series is used for present purposes, although it is generally recognized that hours in manufacturing are likely to be lower than in certain other sectors, notably agriculture and retail trade.

The United States has a much shorter workweek (40.5) than any of the European countries except Sweden, despite substantial reduc-

[2] The number of hours above which overtime rates become applicable.

tions in European schedules during the 1950's and early 1960's (table 7). In West Germany, for example, weekly hours were reduced by three, to 44.3 per week; the workweek in both the United Kingdom, now 43.7, and Switzerland, now 45.5, fell by two hours. No reduction has occurred in the United States during this period.

Annual and public holidays.—Examination of paid vacations and holidays in the various countries again reveals quite different patterns (table 8). Sweden has the most generous provision for annual vacations (18 days) and in addition allows 11 public holidays. She is followed by Germany, with a total of 25 to 28 days free; Switzerland, with 14 to 26 days depending on the canton; and the United Kingdom,

TABLE 7.—*Average weekly hours of work in manufacturing and percentage change in selected countries, 1950 and 1963*

Country	Average weekly hours		Percentage change
	1950	1963	
Federal Republic of Germany [1]	[2] 47.4	[2] 44.3	−6.6
Sweden	41.6	[4] 38.5	[5] −7.8
Switzerland	47.5	[3] 45.5	−4.2
United Kingdom [4]	45.7	43.7	−4.4
United States [7]	40.5	40.5	0

[1] Excludes West Berlin.
[2] 1951 data; includes building and quarrying.
[3] Hours paid for.
[4] 1961 data; includes mining.
[5] Computed from hours of work per month (179 and 165, respectively).
[6] Manual workers.
[7] Production workers; national data from sample survey of employers, relating to persons on payrolls.

Sources: 1950 column and 1963 (except U.K. and U.S.): ILO, *Yearbook of Labour Statistics, 1956* and *1964*, table 13A (Geneva: International Labour Office). United Kingdom, 1963: *Ministry of Labour Gazette*, November 1964, p. 456. United States, 1963: U.S. Department of Labor, *Manpower Report of the President, 1966*, table C-7 (Washington: U.S. Government Printing Office).

TABLE 8.—*Annual and public holidays with pay in selected countries, 1963*

[In days, except as noted]

Qualifying period of work	Federal Republic of Germany: [1] Statutory and collective agreement	Sweden: Statutory	Switzerland: [2] Statutory (cantonal)	United Kingdom: [3] Statutory and collective agreement	United States: [4] Statutory (public holidays) and collective agreement (annual holiday)
Annual holidays:					
1–4 years	15	18	6–18	(2 weeks) 12	(1 week) 5
5–19 years	15	15			(2 weeks) 10
20–24 years	15	18			(4 weeks) 20
25–29 years	15	18			(4 weeks) 20
30 or more years	15	18			(4 weeks) 20
Paid public holidays	10–13	11	8	6	6

[1] Generally supplemented by collective agreement.
[2] 1962 data.
[3] Statutory minimum is 14 days, breakdown by qualifying period not available; by collective agreement, 3–4 weeks (qualifying period ranges from 5 to 35 years).
[4] Extensions by collective bargaining.

Sources: "Labour Overseas," *Ministry of Labour Gazette*, February 1962, p. 59; November 1964, p. 456; Dr. Hans Neithafer, "How Much Holiday for Europe's Workers," *Free Labour World*, July–August 1963; ILO, *Annual Holidays with Pay* (Geneva: International Labour Office, 1964); William Gerber, "Time Off with Pay in the United Kingdom," unpublished paper.

with 18 days. Probably the most frequent arrangement for workers in the United States is the 2-week, or 10-day, annual vacation, which can go up to 4 weeks with extended length of service, plus 6 paid holidays—a total of 16 days.

Length of the workyear.—For the full-time factory worker in the various countries, very rough estimates can be made of the number of hours worked per year. In Sweden the short workweek means that the workyear would be low even with no holidays (38.5 x 52, or 2,002 hours). After deducting 29 holidays (5.8 weeks x 38.5 hours), the average workyear is about 1,779 hours. Similar computations yield a workyear of 1,976 hours for the United States (40.5 hours per week x 52 weeks, or 2,106 hours, less 3.2 weeks for vacations and holidays); 2,092 hours for West Germany (44.3 hours for 52 weeks, less 15 vacation days and 11.5 public holidays, totaling 4.8 weeks or 213 hours); 2,137 for the United Kingdom (43.7 hours for 52 weeks, less 87.4 hours for annual vacations and 48 hours for public holidays); and for Switzerland, 2,214 (45.5 hours for 52 weeks, less 20 days or 3.33 weeks for annual and public holidays).

The range between Sweden's short and Switzerland's long workyear is thus more than 400 hours, or about 10 weeks annually. Of the intermediate countries, the United States stands about midway between the two extremes set by Sweden and Switzerland, while Germany and the United Kingdom have workyears that more nearly approach that of Switzerland.

VARIATIONS IN LEISURE-TIME PATTERNS

Data on the amount of leisure may be illuminated by further analysis of the forms this leisure takes in the various countries. The following country-by-country discussion sketches the current patterns of nonworking time and points up recent changes in the amount of leisure appearing in any particular form.

West Germany.—In exchange for a high labor force participation rate in youth, German workers have a relatively low work activity rate in old age. Of the five countries reviewed, Germany has the lowest proportion of elderly men at work. The manufacturing employee in Germany works several hours more per week than the Swedish or United States worker, but again there is an offset: a great many days for annual and public holidays. As a result of the long workweek and the generous holiday arrangements, the German worker's annual hours are in an intermediate position, with hours in Sweden and the United States below and those in the United Kingdom and Switzerland above. Germany's workweek has fallen substantially during the past decade, and there is every indication of continued pressure toward a 40-hour week. In interviews, both labor and industry spokesmen indi-

cate that a shorter workweek has priority over any other form of increased leisure. There is no evidence of a desire for increase in leisure in the form of retirement and no apparent move for reducing the retirement age.

United Kingdom.—Both men and women in the United Kingdom have exceptionally high labor force participation rates as teenagers but relatively low rates in old age. The high participation rates for young people in 1964 nevertheless represent a substantial decrease from the 1951 level; the combined participation rate for this age group fell from 81 in 1950 to 73 in 1964. This pattern of change was quite similar to that in the United States, and the resemblance between the two countries is even more striking in the 20–64 age groups. In both countries the male rate was stabilized at a high level: 97 percent in the United Kingdom and 94 percent in the United States. On the other hand, women in both countries significantly increased their economic activity, the rates in the United Kingdom rising by 24 percent and those in the United States by 20 percent. For aged men in the United Kingdom, participation rates, which were relatively low, have fallen only moderately during the past decade, and the participation of older women has actually increased.

There are also similarities between the United States and the United Kingdom in workyear patterns. Vacation allowances are practically the same in the two countries, and each provides 6 public holidays. The United Kingdom workweek of 43.7 hours, although down by 2 hours from the 1950 level, remains substantially longer than that in the United States.

Sweden.—Both the amount of leisure and its allocation over the worklife in Sweden differ significantly from the patterns in other countries. Swedish youth aged 15 to 19 have the lowest participation rate among the European countries; men aged 65 and over have relatively high rates, however. Women in Sweden have the lowest teenage labor force rates in the European countries studied, but their participation rate during the 20–64 age period is the highest of all countries, including the United States (table 6). It is obvious that the Swedish woman is likely to stay in the labor force even during the years when family responsibilities are heaviest. The extremely high female rate in this age group is more than sufficient to offset a very low rate for men of prime working age, giving Sweden the highest combined rate of any of the countries studied.

The short workweek is accompanied by frequent paid holidays and extremely generous annual holidays. In 1963 the weekly hours for men in manufacturing were shorter in Sweden than in the other countries, and the rate of decline in hours was much faster there than elsewhere. In 1965 annual holidays increased from 18 to 24; collective agreements add to this vacation period. Swedish men thus have a short workyear,

enter the labor force late, and retire late. The heavy labor force participation of women, following much the same pattern in the timing of worklife, serves to spread nonworking time between the sexes somewhat more evenly than in the other countries.

Switzerland.—The participation rate for Swiss men is higher than for men in the other countries; this was also true in 1950. Unlike those in other countries, the male activity rates are high for all three age groups: 15–19, 20–64, and 65 and over. Among women, teenagers and those in the 20–64 age group are in the labor force less frequently, on the whole, than their counterparts in other countries, but the participation rate for older women is high. Changes in Swiss activity rates over the decade of the 1950's follow much the same pattern as in other countries, at least with respect to direction. However, the magnitude of change was relatively small for all groups of workers except aged men.

The Swiss workweek is also high; however, this figure is for hours paid for and therefore probably overstates working time somewhat. Weekly hours are thus not too different from hours worked in West Germany and the United Kingdom. The decline in hours has been significant, approaching the relative decline in the United Kingdom. Annual holidays vary widely by canton. In Geneva the 18 days provided by law compares favorably with holiday time in most other countries; as to public holidays, the 8-day pattern ranks Switzerland midway among the countries.

United States.—During the two decades following World War II, weekly hours for United States workers in nonagricultural industries have fallen only slightly; the major gains in workweek reduction occurred early in the century. Paid vacations, on the other hand, have grown in both coverage and length during the postwar period. Although pressure for further reductions in hours worked per week occasionally appears, there is equally strong opposition to any nationwide movement in this direction, particularly if it involves statutory changes.[3] Further growth in vacation time seems more likely, its pro-

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[3] U.S., Congress, House, Select Subcommittee on Labor of the Committee on Education and Labor, *Hearings, Hours of Work*, Parts 1 and 2, 88th Cong., 1st sess., 1963. See the statements of Ewan Clague in Part 1 of these hearings for a summary of historical data on hours of work, vacation time, and paid holidays in the United States. See also James Frederick Dewhurst et al., *America's Needs and Resources* (New York: The Twentieth Century Fund, Inc., 1955); Arnold Strasser, "Plant and Paid Leave Hours in Manufacturing, 1959 and 1962," *Monthly Labor Review*, LXXXVIII (April 1965), 413–15; Frances Jones and Dorothy Smith, "Extent of Vacations with Pay in Industry, 1937," *Monthly Labor Review*, XLVII (July 1938), 269–74; Vacations with Pay in Union Agreements, 1940," *Monthly Labor Review*, LI (November 1940), 1070–77; U.S. Bureau of Labor Statistics, "Paid Sick Leave Provisions in Major Union Contracts, 1959," BLS Bulletin 1282, November 1960; Enzo Puglisi, "Employer Expenditures for Selected Supplementary Remuneration Practices for Production Workers in Manufacturing Industries, 1959," BLS Bulletin 1308, January

Footnote continued on following page.

vision being by voluntary agreement rather than through legislation. American workers at present enjoy a significantly shorter workweek than those in Germany, the United Kingdom, or Switzerland, but fewer annual and public holidays than workers in the European nations other than the United Kingdom.

In changing patterns of working life, the United States somewhat resembles Sweden. Participation rates for men have declined and those for women have increased. Moreover, in these two countries men enter the labor force later than elsewhere. But there are important differences. In Sweden the high proportion of working women of all ages is partially offset by greatly reduced working hours per week and increased holiday time; in the United States the increased labor force activity of women has been counterbalanced by the reduced participation of both younger and older men.

Footnote continued from previous page.
1962; Seymour Wolfbein, "Changing Patterns of Working Life," U.S. Department of Labor, Manpower Administration (Washington: U.S. Government Printing Office, 1963). Several articles by Peter Henle deal with the overall growth in leisure; see his "Recent Growth of Paid Leisure for U.S. Workers," *Monthly Labor Review*, LXXXV (March 1962), 249–57, and "The Quiet Revolution in Leisure Time," *Occupational Outlook Quarterly*, IX (May 1965), 5–9: also Joseph Zeisel, "Labor Force and Employment in 1959," *Monthly Labor Review*, LXXXIII (May 1960), 491–500. Many of the issues involved in reduced workweeks are analyzed in Clyde E. Dankert et al., *Hours of Work* (New York: Harper and Row, 1965).

4 Income and Leisure Issues in Advanced Economies

THE DISTRIBUTION of lifetime between working years and leisure years apparently depends primarily on the nation's stage of economic development or, more precisely, on the productivity of labor and hence the extent to which nonworking time can be supported. Evidence cited earlier indicates that labor force activity rates for men are highest in agricultural and lowest in industrialized countries. The downward trend among the industrially advanced nations continues, moreover, with the major declines appearing at the beginning and at the end of the worklife span. Since midcentury, the rates of decline in the activity of young men have differed among the five countries surveyed, as have the rates for men aged 65 and over; yet the overall effect has been to increase the number of nonworking years for men in all of these countries.

The scientific and technological progress that increases productivity per manhour also increases life expectancy, with the result that both working and nonworking years have increased during the 20th century. Male worklife expectancy in the United States saw its first downturn in the decade of the 1950's, but the number of years spent outside the labor force has grown throughout the century, and it seems likely that additional years of life will henceforth be allocated to education, training, and retirement rather than to work.

This chapter reviews some of the evidence of an inverse relation between income level and amount of work performed, in terms of both workyear and worklife, and considers the levels of income maintained during nonworking (in this case, retirement) years. The latter issue becomes increasingly important as the proportion of the population living to retirement age grows and the retirement span lengthens with longer life and possibly earlier retirement. For while average earnings in a particular society may be quite high, the apportionment of these earnings may be bunched in such a way as to permit the incomes of nonworking persons to be low. Differences, then, between earnings and retirement income may be sufficiently large to argue for temporal redistribution of earnings through whatever mechanisms, public or private, the society elects.

Inactive years for men are few in the underdeveloped countries, as John D. Durand noted a decade and a half ago. Rurality and low incomes, he suggested, were the major reasons for high activity rates in those countries; hence, the appearance of nonagricultural industries, the growth of cities, and increases in output per worker should lead to a decline in the labor force activity of men at both ends of working life.[1]

The data presented in the second and third chapters, above, although far from satisfactory as precise measures of differences among the countries, nevertheless bear out Mr. Durand's earlier thesis. Irene Taeuber's work on Japanese demographic patterns reveals even more clearly than the European data a downward trend in activity rates for young and older men in the 1920–1940 period, despite Japan's wartime mobilization. Among the 10- to 14-year-olds, the economically active proportion fell from 20.6 to 10.1 during these two decades, and the participation of men in the 15–19, 55–59, and 60-and-over age groups also declined substantially.[2]

The tendency for growth in productivity and real income to be accompanied by increasing amounts of time free of work has been noted often, but rarely has attention been given to international comparisons of income and work. Winston's recent study, however, addressing itself to the question of whether as incomes rise people systematically change their distribution of time between work and leisure, employs aggregate international cross-sectional data. The author concludes that there is a significant negative correlation between income and the aggregate allocation of effort to income acquisition, and that the values of the estimated relationship are strikingly similar to those from earlier studies using intercity and industrial cross-sectional data and cross-sectional data on occupational subgroups within societies.[3]

As the indicator of the amount of effort devoted to income acquisition, Winston uses hours worked per capita, which is the product of average hours worked and the rate of labor force participation. For the latter, two measures are employed: (1) the participation rate for persons aged 14 and over, standardized for population composition, and (2) the participation rate for men of prime working age, 20 to 64.

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[1] Loc. cit., p. 10. The author concluded also that male labor force activity rates in the more highly developed sections of some of the underdeveloped countries resembled the activity patterns in the industrially advanced countries. Urbanization thus has a particularly pronounced tendency to lower the participation rates for young and old males.

[2] Irene B. Taeuber, *The Population of Japan* (Princeton: Princeton University Press, 1958).

[3] Winston, loc. cit., pp. 28, 38.

For hours of work, again, alternatives are used: average hours per week, using aggregate-hours data, and average hours in manufacturing. Regardless of the combination of hours and participation rates, the negative relationship between income and social effort was maintained. For example, the fully aggregated data (the standardized participation rate multiplied by general hours) regressed against per capita national income indicate a highly significant negative relationship (at the 0.5-percent level). The value of the regression coefficient would indicate a 1.074-percent reduction in per capita working time with a 10-percent increase in per capita real income. In the case of one underdeveloped country, the author points out that if such a relationship held for Peru, a doubling of its per capita income ($125 in 1957) would be accompanied by a per capita decline of 135 working hours per year.

Of the variables other than income that explain the allocation of effort, the most important, Winston concludes, is the state of aggregate demand as indicated by the level of unemployment. Positive deviations from the fitted regression occur in countries with low levels of unemployment, while negative deviations appear in cases of high unemployment levels. It is interesting to note the relation of the two variables, per capita national income and level of unemployment, to social effort in the five countries under scrutiny. The United States has by far the highest income; she has also suffered the greatest unemployment. Germany, Switzerland, the United Kingdom, and Sweden have lower income and unemployment levels than the United States.[4]

Although generalizations are perhaps not in order, it does appear that the United States high-income/high-unemployment position has lessened the amount of effort allocated to work. Questions may well be posed for those European countries whose productivity and income levels are rising rapidly: How successfully will a portion of their higher standards of living be translated into greater leisure, including retirement? Will they be able to make the transfer more smoothly, avoiding the unemployment problem that has constituted the primary pressure for the growth of leisure in the United States?

INCOME LEVELS AND WORK IN OLD AGE

International comparisons of income levels can be drawn either from per capita income data or from wage rates in the different countries. In the United Kingdom, Germany, and Switzerland the general wage per hour is less than half that in the United States; even the Swedish general wage is only two-thirds the United States rate (table 9). Rapid growth in output in West Germany, which in the earlier year had the

[4] Ibid., p. 35.

lowest per capita income, nevertheless raised that nation's income per person to only 52 percent of the United States level for 1964 (table 10). The United Kingdom had slower economic growth during the period and consequently achieved a per capita income only 47 percent of that in the United States in 1694. Income in the United States thus continued to be one and a half to two times as high as the income in the other countries, despite recent differences in rates of growth.[5]

TABLE 9.—*Average hourly earnings* [1] *for men in selected countries, 1957 and 1964*

Country	1957		1964	
	General	Manufacturing	General	Manufacturing
Federal Republic of Germany	$0.562	$0.551	$1.045	$1.025
Sweden	[2] 1.039	1.031	[2] 1.550	1.482
Switzerland	.707	.717	1.080	1.064
United Kingdom	.730	.761	1.062	1.11
United States	[3] 1.90	[3] 2.05	[3] 2.30	[3] 2.53

[1] Derived from rates reported in local currency by the International Labour Office and converted to U.S. currency at the exchange rates reported by ILO.
[2] General wage level not reported. Entry computed by weighting sectoral wage levels reported by ILO and Bureau of Labor Statistics by sectoral distribution of the labor force. However, data were not complete and may not be comparable to the other entries in these columns. In addition, computed rate is for both men and women.
[3] Rate for both men and women, which thus understates the male rate.

Sources: ILO, *Yearbook of Labour Statistics, 1965*, tables 18, 19A, 20–22 (Geneva: International Labour Office); UN, *Statistical Yearbook, 1962*, tables 39, 67: *1965*, tables 53, 82, 139 (New York: United Nations); U.S. Department of Labor, *Monthly Labor Review*, December 1958, tables A–2, C–1; November 1966, tables A–9, C–1.

TABLE 10.—*Per capita gross domestic product and national income in selected countries, 1957 and 1964*

[Current dollars]

Country	Per capita gross domestic product at factor cost		Per capita national income	
	1957	1964	1957	1964
Federal Republic of Germany	$837	$1,541	$741	$1,409
Sweden	1,273	2,013	(1)	(1)
Switzerland	1,308	2,003	1,220	1,815
United Kingdom	1,039	1,472	955	1,275
United States	2,345	3,002	2,110	2,696

[1] National income data not available in United Nations sources.

Sources: UN, *Yearbook of National Accounts Statistics, 1958*, table 1; *1965*, tables 1, 9A; *Statistical Yearbook, 1958*, table 1; *1965*, table 19 (New York: United Nations).

[5] Index numbers of total and per capita product at constant prices are as follows (1958=100):

	Total product		Per capita product	
	1957	1964	1957	1964
Federal Republic of Germany	97	141	98	131
Sweden	99	135	99	130
Switzerland	102	140	103	124
United Kingdom	100	124	101	119
United States	101	129	103	117

Source: UN, *Statistical Yearbook, 1965* (New York: United Nations, 1966), table 179.

In contrast to the much higher per capita incomes and wage rates in the United States, the proportion of earned income maintained for persons in retirement in this country is relatively low (table 11). The Federal Republic of Germany, which has next to the lowest per capita national income, assures the highest proportion of average wages to old-age recipients. These benefits are payable, moreover, without regard to whether the older person has retired. Sweden's average benefit is also a substantially higher proportion of average wages than is our own retirement benefit; pensionable age is also later.

The relation between average earnings and retirement benefits would seem to be more relevant to the retirement decision of an individual than earnings as such, at least when full employment prevails and retirement is optional within the age range of, say, 65 to 69.[6] In the case of West Germany, the lower participation rate of men in this age group bears out this hypothesis (table 12). Swedish figures are not comparable, since pensionable age is 67, and the proportion of older men at work in the United Kingdom is slightly lower than in the United States, despite the somewhat larger proportion of earnings maintained in the latter country.

Examination of the pension/earnings ratios for other countries may reveal a direct relation between the ratio and the proportion of men who retire in the 5-year span following pensionable age. But such comparisons are hazardous for several reasons: measures of part-time work in old age, which are crucial to such analysis, are poor; the data on other sources of income of the elderly are sparse except for older people

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[6] An earlier study, by Margaret Gordon ("Income Security Programs and the Propensity to Retire," in Richard H. Williams, Clark Tibbitts, and Wilma Donahue (eds.), *Processes of Aging* [New York: Atherton Press, 1963], pp. 436–458), computed coefficients between "benefit rates" (ratio of average benefits to average annual earnings) and the proportion of men 65 and over in the labor force for 14 countries, using data for old-age, survivors, and invalidity benefit programs, and for 9 countries, using data for old-age only. Coefficients were —.83 and —.78, indicating that "a substantial proportion of the variation in labor force participation rates of elderly men in industrialized countries is associated with differences in benefit ratios." Her data on the 5 countries reviewed in the present study show the following relationships for 1950:

	Men 65 and over in labor force	Average benefit as percent of annual earnings		Average benefit (OASI) as percent of national income per capita	
		OASI	OA	1950	1957
Federal Republic of Germany	26.8	22	----------	55	60
Sweden	36.1	16	15	28	38
Switzerland	50.7	9	10	14	19
United Kingdom	31.4	18	18	28	27
United States	41.4	14	15	18	41

For differences in benefits as percent of annual earnings as shown in table 11, see footnotes on table 11 and the basis of computations made by Professor Gordon (loc. cit., pp. 444–46, 451). Note also that data are for different years.

in the United States;[7] and, finally, there is considerable variation in the practice of using a retirement test as a condition of drawing pensions.[8]

TABLE 11.—*Average old-age benefits as a percentage of average wages in manufacturing, and pensionable age, in selected countries, most recent year available*

Country	Year		Average benefits as a percentage of average wages for all workers	Normal pensionable age[1]	
	Benefits	Wages		Men	Women
Federal Republic of Germany	[2] 1963	[3] 1963	31.4	65	65
Sweden	[4] 1962	1961–62	22.4	67	67
Switzerland	[5] 1963	[6] 1963	18.0	65	62
United Kingdom	[7] 1965	1965	15.2	65	60
United States	[8] 1964	1964	18.2	65	65

[1] Earlier retirement, under varying conditions, is provided in most countries.
[2] June.
[3] May; includes family allowances paid directly by employer.
[4] January; old-age pensions.
[5] Old-age and survivor payments.
[6] Adult male (skilled and unskilled) and all women workers weighted by the number of persons in each category.
[7] Retirement pensions.
[8] Old-age, survivor, and disability awards.

Sources: Germany: Georg Tietz's summary of data in *Zalenwerk zur Sozialversicherung* (Berlin, 1963). Sweden: *Statistisk Årsbok för Sverige, 1964*, tables 253, 272. Switzerland: *Statistisches Jahrbuch der Schweiz, 1965*, pp. 296, 371. United Kingdom: *Report of the Ministry of Pensions and National Insurance for the Year 1965*, pp. 78, 132; *Ministry of Labour Gazette*, August 1965, p. 525. United States: U.S. Department of Health, Education, and Welfare, *Social Security Bulletin*, March 1966, table Q–6; U.S. Department of Commerce, *Survey of Current Business*, July 1966, pp. S–14, S–15. Pensionable age: U.S. Department of Health, Education, and Welfare, *Social Security Programs Throughout the World, 1967* (Washington: U.S. Government Printing Office, 1967).

TABLE 12.—*Labor force participation rates for men aged 65 to 69 in selected countries, recent years*

Country	1950	1960	1964
Federal Republic of Germany	[1] 26.8	[2] 33.2	36.6
Sweden:			
Census (excluding unemployed)	56.4	50.6	[3] 47.8
Survey	[4]	58.6	48.5
Switzerland	65.9	59.2	[4]
United Kingdom	[5] 48.7	[6] 39.5	[7] 39.6
United States	59.8	43.8	42.6

[1] Aged 65 and over. Excludes West Berlin.
[2] 1961 data. Excludes West Berlin.
[3] 1965 data.
[4] Not available.
[5] 1951 data.
[6] 1961 data.
[7] Forecast.

Sources: 1950 and 1960 columns: UN, *Demographic Yearbook, 1955*, table 15; *1964*, table 8 (New York: United Nations). 1964 column: Germany: *Arbeits- und Sozialstatistische Mitteilungen*, July–August 1965, p. 172. Sweden: *Tilgången På Arbetskraft 1960–1980*, Statens Offentliga Utredningar, 1966, tables 6, 9. United Kingdom: *Ministry of Labour Gazette*, January 1965, p. 4; Central Statistical Office, *Monthly Digest of Statistics*, No. 220 (April 1964), table 13. United States: U.S. Department of Labor, *The Older American Worker*, June 1965, p. 145.

[7] Lenore A. Epstein and Janet H. Murray, *The Aged Population of the United States* (Washington: U.S. Government Printing Office, 1967).

[8] T. Higuchi, "Old-Age Pensions and Retirement," *International Labour Review*, XC (October 1964), 1–19.

Although the relevant group would seem to be men aged 65 to 69 for countries with pensionable age of 65, this age group typically has the highest incomes among the elderly because of continued work and higher benefits. The lower benefits accrue to men aged 70 and over, older women of all ages, and, in the United States, to retired men aged 62 to 64, whose characteristics often suggest that the pension is a form of unemployment compensation. Pension incentives probably have little to do with the act of retiring in such cases; retirement is not optional, but is a product of economywide circumstances that for the older group seem unlikely to change. For the early retirees in the United States the recent shift in economic climate may be more promising.

PENSIONABLE AGE AND THE AGE OF RETIREMENT

An inverse relation between average earnings and time spent at work has been demonstrated, using international cross-sectional data. Similarly, an inverse relation between the proportion of earnings maintained as pension and the labor force participation of men in the early years of eligibility might well be shown if reliable data were available. However, the influence of normal pensionable age on actual retirement age is obviously of primary significance, despite variations in pension arrangements among various countries. It is important to note the extent to which actual retirement age has come to approach pensionable age and then to examine the factors that account for the establishment of, or change in, pensionable age.

In a recent survey, more than one-third of the responding nations stated that the average exact age of initial receipt of pension was either the same as or within one year of normal pensionable age, i.e., the earliest age at which the normal old-age pension becomes payable. When there were differences between pensionable and actual retirement age the latter was higher, but for schemes having 65 as the pensionable age the variation was generally small. The observance of a "normal" retirement age is noteworthy, particularly in view of the availability of advanced pensions in more than half the countries; many of these advanced pensions were not reduced.[9]

Deferred retirement credits were also available in 24 of the 57 schemes covered in the report, but there is not sufficient evidence to demonstrate that a delayed retirement credit induces workers to postpone retirement, even when the amount of the increment is substantial. The role played by a retirement test is also unclear. Thirty-seven

[9] Alvin M. David, "Problems of Retirement Age and Related Conditions for the Receipt of Old-Age Benefits," Report IX of the Fifteenth General Assembly, *Bulletin of the International Social Security Association*, XVIII (February–April 1965), 97–109.

schemes imposed some sort of retirement condition, ranging from the stipulation that the worker give up all remunerative work to less stringent rules, such as limitations on earnings up to a specified age. With only one exception, the 20 schemes having no retirement test were content with their arrangements, whereas almost half the 37 having such tests reported some sentiment for changing the regulations. The estimated costs of eliminating the retirement condition ranged from "negligible" in Italy to a 40-percent increase in Jersey (C.I.). The estimated longrun rise in cost in the United States was 10 percent.[10]

Higher costs resulting from removal of a retirement test would presumably be more than offset by an increase in the total output of the larger labor force. If the state of the economy called for additional manpower and retirees constituted a potential labor source, waiving the retirement test could be justified, since it would furnish the inducement to older workers to remain in the labor force. The three countries in the present study with the tightest labor markets impose no retirement provision. In Sweden, entitlement to benefits does not depend on financial participation of the worker or on any qualifying period; the scheme is tax-financed and allows concurrent receipt of wages and benefits. Switzerland and the Federal Republic of Germany have social insurance schemes in which the pension is again not contingent on retirement or income. Moreover, the German worker may claim an advanced pension at age 60 or afterwards if he has been unemployed for a year and is unlikely to find work. The United Kingdom and the United States apply earnings tests up to age 70 and 72, respectively.

The tendency for actual retirement age to approach pensionable age is easy to understand in an economy of labor excess. The bidding for limited jobs must either force some of the workers out of jobs or push down the wage rate; the latter would require considerably more downward flexibility of wages and prices than has prevailed in the postwar economy in the United States. Thus, those workers who have pensions are expected to vacate their jobs in favor of younger men who have not only better education and more up-to-date skills but also greater financial needs. It is precisely the logic of this retirement-on-schedule pattern that compels attention to any movement toward a lowering of pensionable age or even any increase in the prevalence of early-retire-

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[10] Ibid., pp. 105–106. The author concludes: "The literature indicates that there is a relationship, in a given country, between the existence of provisions requiring a pensioner to retire from paid or insurable employment or to limit his earnings in order to receive his pension, the nature and purpose of the old-age scheme itself, the economic conditions prevailing in the country and the proportion of the gross national product that is made available for social security programmes. However, it has not been possible to confirm that such relationships exist" (p. 105).

ment provisions in private-pension schemes. The question of whether the age at which one *may* retire is to become the age at which one is *expected* to retire must be kept clearly in mind.

RETIREMENT POLICY AND MANPOWER NEEDS

The imposition of a retirement condition and the selection of pensionable age itself are likely to reflect the policymaker's view of the manpower situation. One of the major considerations in the establishment of old-age benefits in the United States was the intent of drawing elderly persons off the labor market and thus helping to restore the balance between the supply of and demand for labor. It followed that the benefit would have to be contingent on actual retirement. The lowering of pensionable age for men further recognized the need to provide income for men aged 62 to 64 who for reasons other than disability could no longer find employment. But perhaps the clearest example of the relation between manpower problems and retirement policy is the pension scheme negotiated by the United Automobile Workers. Here, the need to remove the excess of labor from a rapidly automating industry led to extremely generous private pensions, permitting workers to retire as early as 55.

In contrast, the nations of Western Europe have attempted to keep older persons at work, and the advantages of a flexible retirement age are frequently cited.[11] Although pensionable age clusters at 65 for both men and women in the member countries of the Organization for Economic Cooperation and Development, inducements to continue working, such as West Germany's scheme for increasing the size of the pension if retirement is postponed, are frequent. In Sweden the pensionable age is 67, with provisions for a .6-percent reduction for every month the pension is taken prior to that age, down to 63; a similar increment is added for each month beyond age 67 that the pension is postponed. In Great Britain the newly introduced graduated pension, not being subject to a retirement test, may provide some incentive to work beyond age 65.

Although convincing arguments are being made for flexible retirement age in European countries suffering labor shortages, there has been no attempt to raise pensionable age. It is understandable that there is also no movement to lower the age of retirement, given the need for manpower. Curiously, while incentives are being offered to older

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[11] See, for example, Sven O. Hydén, *Flexible Retirement Age* (Paris: Organization for Economic Cooperation and Development, 1966). Other OECD studies dealing with retirement and older-worker problems are: A. Heron, *Age and Employment* (1962); Stephen Griew, *Job Re-design* (1964); R. M. Belbin, *Training Methods* (1965); Irving Sobel and Richard Wilcock, *Placement Techniques for Older Workers* (1965); Bert Andersen, *Work or Support* (1966) and *The Employment of Older Workers* (1965).

workers to keep them at work, there is strong pressure for shortening the workweek and lengthening annual vacations. Moreover, there are many inducements to bring women into the labor force: child-care centers, special arrangements for rest periods on the job, and extensive maternity- and sick-leave provisions.

These attempts to serve manpower needs by increasing the number of workers, while still allowing each employee gradually to reduce his workyear, are in direct contrast to the situation in the United States, both as to manpower needs and the manner of meeting these needs. Here, demographic developments have been markedly different. The population of working age has been growing rapidly and will continue to do so; comparable data on the percentage increase, 1966–1976, in the United States and in European nations, summarized in OECD studies, are as follows:

0–4 *percent*	5–9 *percent*	10–14 *percent*	15–19 *percent*	20–29 *percent*
Austria	France	Netherlands	United States	Turkey.
Belgium	Norway	Portugal		
Denmark				
Germany				
Ireland				
Italy				
Sweden				
Switzerland				
United Kingdom				

In addition to the much greater increase in persons of labor-force age in the United States, the faster pace of technology in this country has reduced the demand for labor per unit of output, thereby creating a further labor market imbalance. The solution to this imbalance has resulted in growth of leisure in a form that differs from any added free time in the European nations. Here, the labor force has been reduced at both ends of the worklife span. Despite the fact that our age of entry into the labor force has traditionally been much later than in European nations, the movement toward further postponement continues here, with Sweden the only close competitor in number of years of schooling provided youth.

The allocation of a substantial portion of the growth in leisure to the retirement period has the advantage of making the free time available to all workers who survive to retirement age. Conceivably, leisure in the form of extended vacations might be somewhat less evenly apportioned over the labor force, accruing, initially at least, most generously to workers whose bargaining strength enables them to gain contractual concessions providing for reduced working time.[12] Moreover, there is the broader question of the extent of the practica-

[12] The author is indebted to Robert L. Stein, formerly of the Office of Research and Statistics, Social Security Administration, for raising this question and making other valuable criticisms.

bilityof tradeoff between retirement leisure and vacation (or other workyear) arrangements. The difficulties inherent in a reapportionment of the amount of nonworking time now available are clearly evident in the discussions surrounding any proposal for reductions in working hours. Finally, we know very little about workers' actual preferences as to the distribution of free time. The question of whether increased leisure in old age is in fact preferred directs attention to a consideration of the broader issue of the allocation of future leisure, which promises to grow rapidly. Evidence that other advanced countries are choosing patterns of leisure time that are somewhat different from our own underscores the importance of discerning actual preferences before policy is established.

5 Income Maintenance in the United States

DURING THE PAST DECADE both real incomes and the number of hours free of work have grown rapidly in the United States and most Western European nations. The amount of free time currently available to a worker varies in the different countries, and there are important differences in the forms the additional leisure is taking. The European nations surveyed have distributed the year's leisure more heavily in annual and public holidays and less in a shortened workweek than has the United States; however, there are now strong drives throughout Western Europe to reduce hours worked per week. As to change in worklife, the pattern varies from one country to another. Sweden has decreased significantly the labor force participation of young persons while increasing the activity of all women beyond teenage. The Federal Republic of Germany and the United Kingdom have lowered somewhat their traditionally high work activity in youth, with the participation of older persons changing less significantly. Switzerland continues to have a long worklife for men and low participation rates for women, the rates for both changing more slowly than in other nations.

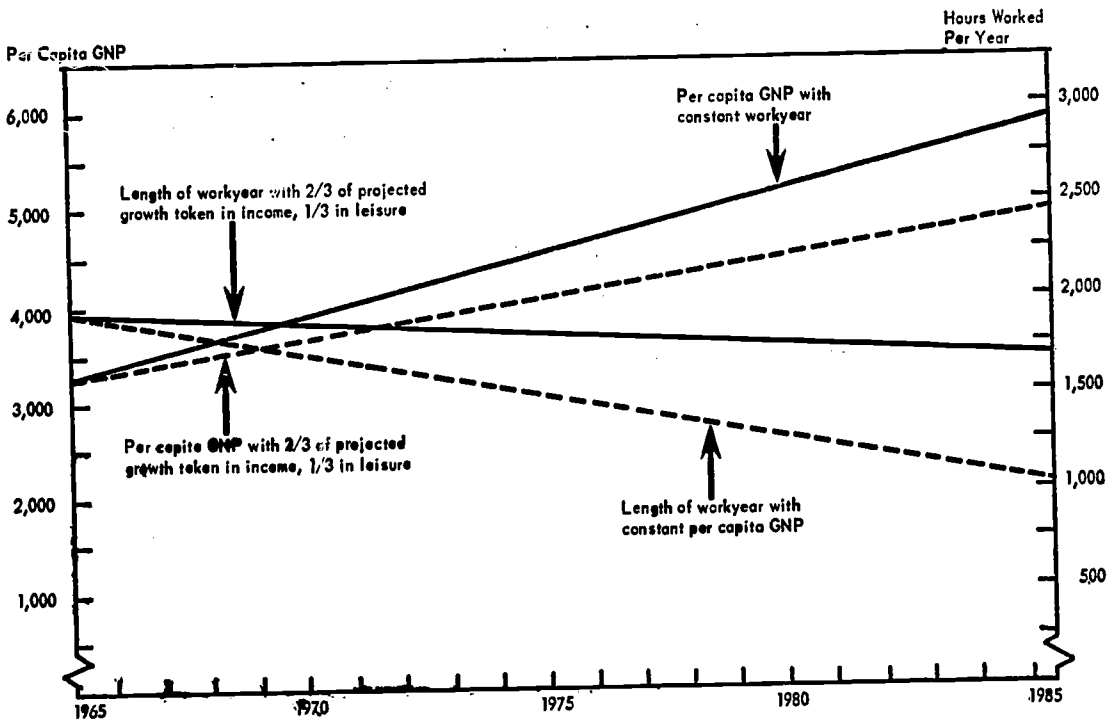
GROWTH OF LEISURE IN THE UNITED STATES

Growth of leisure in the United States promises to be even greater as technology continues to raise productivity per manhour. As a rough dimension of past growth in free time, the employed worker has about 1,200 hours per year more nonworking time than his 1890 counterpart. The additional time is apportioned over the year in the following forms: reduction in workweek (from 61.9 to 40.5 hours), approximately 1,100 hours; increase in paid holidays (4 days), 32 hours; increase in paid vacation (6 days), 48 hours; increase in sick leave (1 week), 40 hours. The shortened workweek has thus accounted for most of the century's rise in free time during worklife. In addition to a shortened workyear, nonworking years have grown by about 9 for a male at birth, with present life and worklife expectancies. This increased free time, therefore—bunched at the beginning and end of

worklife—amounts to about one-third the amount added through workweek reductions, added vacations, etc.[1]

With regard to the possible future growth in leisure and its distribution, rough estimates have been made on the basis of anticipated rates of economic growth, population increase, and unemployment levels and under varying assumptions regarding preferences as to the distribution of time between work and leisure. At one extreme, assuming no change in working time, per capita gross national product could rise from $3,181 in 1965 to $5,802 in 1985, or by about 80 percent. At the other extreme, if one supposes that all growth is taken in leisure time except the amount necessary to keep per capita GNP constant at $3,181, the possible changes in working time would be as follows: the workweek could fall to 22 hours, or the workyear could be limited to 27 weeks per year, or retirement age could be lowered to 38 years, or almost half the labor force could be kept in retraining programs, or additional time available for education might well exceed our capacity to absorb such education (see chart).

Alternative Uses of Economic Growth: Per Capita Gross National Product and Hours Worked, 1965–1985



Source: Juanita M. Kreps and Joseph J. Spengler, "The Leisure Component of Economic Growth," in *The Employment Impact of Technological Change*, Appendix Volume II of *Technology and the American Economy*, fig. 5, p. 364 (Washington: U.S. Government Printing Office, 1966).

[1] Estimates prepared for Kreps and Spengler, loc. cit., p. 355. For sources, see especially the summary data presented by Ewan Clague in *Hearings, Hours of Work*, loc. cit., Part I, pp. 73–104; also the other sources cited above in chap. 3, footnote 3.

More realistically, it might be supposed that the division of productivity gains would be approximately the same as during the first half of the century—two-thirds in increased goods and one-third in time free of work. Then per capita GNP would rise to approximately $5,000 by 1985, and the immediate growth in leisure would be sufficient to achieve the following goals: retrain 1 percent of the labor force annually and increase vacation time by 1 week for each worker. These goals could be attained by the late 1960's. The workweek could then start declining by, say, one-half hour per week in 1969, the decline reaching 2½ hours per week by 1980. Between 1980 and 1985 society could choose to retrain much more heavily (4.25 percent of the labor force per year) or add 1½ weeks per year to vacation time. By 1985, the choice could be between retraining almost 7 percent of the labor force annually and taking an additional 3 weeks of vacation. Obviously, other choices are possible.[2]

In summary, the amount of time free of work in the United States not only has grown rapidly during this century but also is destined to expand to much greater dimensions in the coming decade. What forms this new leisure will take is of great significance—as important, perhaps, as the composition of the goods produced. A greater amount of free time at the end of worklife is but one of several forms in which leisure could be allocated. Its desirability over other forms of free time, moreover, is in part dependent on the financial arrangements made for the retirement period, or on the temporal distribution of income.

THE PROBLEM OF RETIREMENT INCOME

To the extent that the growth in nonworking time takes the form of a shortened workyear, the cost of the leisure, measured in terms of product foregone, is concealed in the wage/price relationship, and income-maintenance arrangements are not affected. Increased leisure in the European nations, being apportioned largely in shorter workweeks and longer vacations, has not magnified the problem of income maintenance in old age. Tight labor markets, moreover, have encouraged the utilization of older persons who cared to continue working. In the United States, by contrast, the level of unemployment during the past two decades has led industry and the Congress to make early retirement possible. Meanwhile, few incentives have been offered to induce continued labor force participation past the age of 65.

As F. Le Gros Clark has pointed out, the acceptance of 65 as the age of withdrawal from work occurred earlier in the United States than in the United Kingdom, and an inching down below age 65 has

[2] Kreps and Spengler, loc. cit., pp. 363–65.

now begun in this country. Whether such a movement will continue here and develop in other nations as their income levels approach our own is difficult to predict. Nevertheless, it is clear that certain retirement-related problems are peculiar to the United States, if for no other reason than the fact that we reached a certain level of economic development somewhat earlier than other countries.[3]

Perhaps the best indicator of this nation's economic advance is its faster pace of technology and the resulting acceleration of real incomes during the past two decades. Higher postwar rates of economic growth in Western Europe have narrowed but by no means eliminated the United States' lead in per capita income. Paradoxically, the higher per capita income rises, the more acute become the income problems of certain groups of people, i.e., those groups who are not current participants in the economic process. For the higher income reflects higher productivity per manhour, and such increases in our economy are expected to accrue to the workers who are actually at work rather than to those of the preceding or succeeding generation of workers.

Considerable disparity between income during working and retirement years may be more acceptable in an economy that places great stress on the output of the individual worker. Job performance is supposedly rewarded by a wage roughly commensurate with productivity; in fact, the promise of higher income provides the incentive for greater worker effort. Given a wage structure explained largely in terms of output per manhour, it is easy to develop a rationale for variations in wages for different jobs (or individual performances on a particular job), a gradual decline in income if productivity declines with age, and a still lower assured income during retirement.

The social security program justifies a transfer of income from workers to nonworkers on the basis of previous earnings and contributions. The essence of the retirement benefit—this transfer of income claims from workers to nonworkers—is not always recognized, however. That such a transfer is necessary may also be obscured, and the range of options as to methods of transfer may not be systematically explored. Intergenerational transfers of income, once made chiefly within families, have come increasingly to be made between workers and nonworkers, irrespective of family ties,[4] and the remaining issue has to do with the amount of the transfer, i.e., the extent of the smoothing-out process.

In explaining the development of a scheme of retirement benefits, the role played by economic ideology cannot be overlooked, even

[3] Frederick Le Gros Clark, *Work, Age, and Leisure* (London: Michael Joseph, Ltd., 1966), p. 137.

[4] Juanita M. Kreps, "Economics of Intergenerational Relationships," in Ethel Shanas and Gordon Strieb (eds.), *Social Structure and the Family: Generational Relations* (Englewood Cliffs: Prentice-Hall, Inc., 1965) pp. 267–288.

though its quantitative importance is difficult to assess. For whatever reason, reluctance to apportion larger percentages of the nation's income to retired persons in this country—in contrast to the allocation made from much lower incomes in the Federal Republic of Germany, for example—results in a marked difference between the income of the worker and that of the retiree, even when the savings and part-time earnings of the latter are included. The problem of income maintenance in old age is magnified now by technological developments that render obsolete the job capacities of older men of low educational levels and by the present shape of our demographic profile.

THE TEMPORAL DISTRIBUTION OF INCOME AND LEISURE

To the extent that free time is chosen by the individual in lieu of income, the worker maximizes his satisfactions, given the overall time constraint.[5] There are, however, instances in which time is not convertible into income, although such a conversion would greatly increase total utility. Unemployment is the prime example, but involuntary retirement may result in much the same removal of the income alternative. Free time may in fact have no utility in periods when it is excessive, nor work any disutility when it is very scarce.

The concept of diminishing marginal utility, whatever its shortcomings, is applicable to the consumption of leisure time as well as to the consumption of goods. It is a balancing of goods (i.e., income) and leisure that maximizes satisfactions, and this balance may be disturbed by too much free time in one stage of life and too little in another. Similarly, a somewhat more even distribution of income throughout the lifespan might increase the total utility of any given amount of lifetime earnings. Such a smoothing of income can be and often is accomplished by individual savings arrangements; many people, on the other hand, have extremely high time-preferences for goods and relatively little willpower for saving. Reliance on some form of forced savings is therefore quite common.

Since it is not possible to save the goods one produces this year for consumption several decades hence, today's worker can only acquire deferred claims against the goods produced later in the form of an annuity or "rights" to retirement benefits. In the case of an annuity, he knows how many dollars of income he will receive (though he does not know what their purchasing power will be); rights to retirement benefits, however, are not guaranteed in amount. He knows only that if payroll taxes go up now he will have fewer present dollars, retirees will have more dollars, and (since benefits have never been reduced) his own benefits will probably be at least as high as those that beneficiaries

[5] See Lowell E. Gallaway, "The Aged and the Extent of Poverty in the United States," *Southern Economic Journal*, XXXIII (October 1966), 212–22.

are currently receiving and presumably will reflect to some extent changes in earnings levels as well as in purchasing power.

The smoothing of lifetime earnings roughly in accordance with family needs throughout the life cycle is more easily accomplished the longer the worklife or the more heavily the leisure is apportioned during worklife and the less it is bunched into retirement. The more concentrated the working time, obviously, the more concentrated will be total earnings. If retirement age is lowered, the volume of income transferred from workers to nonworkers must be increased just in order to hold benefits to their present level. Attempts to set percentage limits on the payroll tax—if this is to continue to be the sole source or revenue for benefits—are therefore tied to the question of the temporal distribution of leisure.

At present, our most vexing income-maintenance questions pertain to the issue of early retirement—its financing and the extent to which the retirement years are to absorb the leisure component of the Nation's economic growth. The positive value to retirees of leisure in this extended form has been given little thought, and there are no parallels in other advanced countries that one can study. It is clear, however, that any significant trend in the direction of early retirement calls for reexamination of the income-maintenance rules for at least two reasons: (1) The retirement benefits available to early retirees are particularly low, and private-pension coverage, though growing, is still limited to a small proportion of the total labor force, and (2) the added length of the retirement period thins the annual income from savings and other assets meant to be spread over the nonworking period.

Whether additional leisure in the form of early retirement is the most desired allocation of any new free time we choose to take is also a question for consideration. Although the European nations, with somewhat lower incomes and less free time, do not face this question immediately, it is evident that reduction in retirement age has a very low priority in their range of leisure preferences, which are for shorter workweeks, additional holidays in some cases, and extended education and training periods. These might well be preferred by workers in this country if they were, in fact, alternative options. Preferences for a shorter workyear might be expressed even among those workers whose retirement incomes are adequate; certainly this would be true for persons retiring on reduced social security benefits alone.

Appendix

Notes on Census Data for Intercountry Comparisons and Comparisons Within Countries Over Time With Respect to Labor Force Activity Rates

INTERCOUNTRY COMPARISONS

West Germany, United States, Sweden.—Reasonably comparable labor force survey data are available for West Germany, the United States, and Sweden for 1963 (table 6). The labor force includes persons who in the survey week worked at least one hour, or were unemployed but looking for work. Unpaid family workers are included, and the United States and Germany include persons in military service; Sweden excludes persons in compulsory military training. The United States lower rates are somewhat understated by the inclusion of 14-year-olds. Swedish labor force estimates for 1963 do not include persons over 74, but calculation of the lower limit to the activity rates of the aged yields a rate higher than that in any of the countries except Switzerland.

United Kingdom.—For the United Kingdom, 1964 forecasts are used, and although these are not based on a survey their coverage is comparable to survey data in their inclusion of part-time workers, the unemployed, and at least some unpaid family workers.

Switzerland.—Swiss figures are the least satisfactory for making comparisons. Census figures are available for 1950 and 1960, but the coverage was different from what it now is. The labor force through 1961 included employed persons and nonemployed persons (rents- and pensions-receivers and persons with unknown earnings). The remainder of the population consists of dependents, inmates of institutions, and jobless persons in "strange" families.

INTRACOUNTRY COMPARISONS OVER TIME

Several problems arise in the study of changes within countries over a period of time. First, the degree of change is quite sensitive to the choice of terminal year and the time of year, as in the case of West Germany, for example. Second, the selection of the end year is dictated in most cases by the availability of data; hence it is not possible to show changes over the same time interval for all countries

(table 5). At best, the figures are rough indicators of intracountry changes in labor force activity.

Germany.—For Germany, 1951 census figures cannot be used for comparison because in that year only persons whose employment was their primary source of livelihood were included in the labor force. Although data based on this definition are available for 1961 most comparisons appear to be based on microcensus data, which use the 1963 definition described in the section above. Accordingly, figures are presented for the first and last years (1958 and 1964) for which they are available for the Federal Republic, including West Berlin.

Sweden.—The Swedish data used to show changes between 1950 and 1965 are not comparable to those used in the intercountry comparison for 1963. The latter cover all part-time workers. The former are based on the census definition of the labor force, which includes only persons working at least one-half the normal workweek (1960 and 1965) or at least one-half the normal workday (1950 census). In addition, the 1965 figures are forecasts. Since these data exclude many part-time workers, and those unemployed or temporarily absent from work at the time of estimation, the degree of change based on such data may not be used for comparisons with changes in other countries. The changes in participation rates through time, although not strictly comparable to the changes observed in other countries, were extremely pronounced in the 1950–63 period, particularly for young men—a decline of about 29 percent during the period. A second significant change was the steady fall in the activity rates for men in the prime working age, 20–64. Since part-time work and unemployment are least significant for this group of workers, the coverage for this age span is most nearly comparable between years and among countries. This holds true for 1960 Swedish figures: the participation rates by the census and the survey definitions are 92.0 and 92.5 percent, respectively. Assuming that it also holds for intercountry comparisons, Sweden is the only country analyzed for which the 20–64 male participation rate did not remain stable.

United Kingdom and United States.—Data for the United Kingdom for 1951 and 1964 and the United States for 1950 and 1963 are more nearly comparable. Coverage of the United Kingdom 1964 forecasts differs from 1951 census figures primarily by including in the forecasts United Kingdom soldiers and merchant seamen stationed overseas and excluding foreign persons in these categories stationed in the United Kingdom.

Switzerland.—The Swiss comparison uses 1950 and 1960 census data and is therefore adequate for showing changes within Switzerland. But the labor force definition is sufficiently different from that used elsewhere to make intercountry comparisons hazardous.

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