Alternative National Goals and Women's Employment

Career opportunities in the 1970's are contingent upon growth objectives.

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A broad array of goals and choices has to be accommodated when designing policies for the future. If enlarging women's career opportunities is accepted as one of the goals, then a successful strategy for furthering this objective requires that planning be extended beyond immediate issues to the years ahead. The current and projected glut of college graduates (*1*) makes it unsafe to assume that the economy will provide women with career opportunities to match their skills and training and their expected influx into the work force. It would surely be folly to encourage women's career interests without considering what level of economic activity and what kind of job structure will be required to accommodate women's career interests in the 1970's. Attention to this question should supplement current emphasis on institutional barriers to career opportunities. Also, what mix of goals and policies will provide the required economic framework? While the course of the economy may be influenced by unforeseen factors and by some underlying trends that cannot be modified, it is also shaped by policies aimed at securing desired outcomes (*2*). Finally, how do policies designed to further women's career objectives interact with the broad array of other policies affecting the future which our society will be making concurrently? Consideration of women's career objectives in isolation from other social choices might cause us to overlook some disconcerting incompatibilities.

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Keeping in mind the need to focus on the years ahead when shaping current policies, I examine three alternative prospects for the future: the world of 1980 as projected by the Bureau of Labor Statistics (BLS), a pessimistic variant, and an optimistic variant. Each reflects different assumptions that significantly affect the number and kinds of job opportunities.

Women in the Economy in 1980

The role of women in the economy of 1980, as projected by the BLS, looms large, reflecting the assumption that the trend toward increased participation in the work force, a characteristic of the last three decades, will continue. According to BLS estimates, the number of women in the work force will rise from 29.2 million in 1968 to 37 million in 1980 (*3*), an increase roughly paralleling the 26.5 percent increase between 1960 and 1968. Thus, women will contribute 43 percent of the net increase in the labor force between 1968 and 1980, as compared with their 60 percent contribution between 1960 and 1968 (*4*, *5*). By 1980, women will constitute 37 percent of the work force, as compared with 32.1 percent in 1960. Moreover, 43 percent of all women age 16 and over will be in the work force, as compared with 41 percent in 1968 and 37 percent in 1960 (*4*).

The assumptions underlying the BLS projections for the 1970's include: a 4.3 percent average annual growth in the gross national product, compared with 4.5 percent from 1960 to 1968 (*3*); annual increases in productivity of 3 percent, slightly below those of the 1960's; a gradual decline in the work week to 38 hours; unemployment averaging only 3 percent (*3*); and participation of women in the work force rising to 43 percent of all women over 16 years of age from 41.1 percent in 1968 (*4*). Obviously, deviations from these assumptions might alter the pleasant augury of equilibrium in the overall supply of and demand for labor projected by the BLS.

The BLS comments that "these projections do have a rosy glow inspired no doubt by the steady performance of economic growth during the 1960's" (*3*, p. 34). Nonetheless, the projections do not indicate a problem-free future. Although the BLS estimates an inflow equal to net job openings, it has warned that this does not ensure "a perfect fit between entry requirements and worker qualifications" (*3*, p. 20). New entrants, particularly educated women, trained for work in the traditional women's occupations are expected to face severe imbalances (*6*).

Although employment in the "professional, technical, and kindred" category is expected to increase by 50 percent (twice as much as all other occupations combined) by 1980 (*3*), employment of women in the professions will constitute a smaller proportion of total employment than it did in the last decade. Specifically, the BLS forecasts that the supply of teachers at all levels—elementary, secondary, and college—will be "nearly three-fourths above the projected requirements" (*6*, p. 22). The seriousness of this project is indicated by the fact that one-third of all women in college major in education, a far higher proportion than major in any other field, and 36 percent of all professional women are in teaching. In addition, occupations in which moderate increases in demand are expected to be matched by new entrants are social work, library work, home economics, nutrition and diet, medical laboratory work, and nursing. Nursing now ranks second to teaching, employing 18 percent of all women in technical and professional occupations. However, a variety of past efforts to increase the supply of nursing personnel, combined with altered staffing arrangements, are assumed to have engendered a sufficient response to current and prospective demands. While the job market for nurses will be favorable, no need for substantial additions to personnel is now foreseen. In social work, the proportion of women has been declining.

While new graduates are expected to fall short of the demand, the small deficiency will not provide an alternative outlet for many women who fail to find employment in other fields. Altogether, the above occupations now account for two-thirds of women's professional employment—hence the bleak conclusion that the traditional "women's professions" will not offer sufficient employment opportunities for the college-educated women who are expected to seek employment in the 1970's (*6–8*).

The professions in which demand for personnel is expected to exceed available supply over the next decade are medicine, dentistry, engineering, and science (the present restricted demand in the latter is regarded as a temporary phenomenon). These are occupations that traditionally have not attracted, or tried to attract, women. On the other hand, noncollege women are expected to have more favorable prospects. Openings in sales, services, and clerical occupations are predicted to exceed total employment (*3, 6*).

The BLS projections warn that massive readjustments in the labor market will be necessary if professional career aspirations of educated women are to be satisfied. There have been some institutional changes that will assist this readjustment, such as the Civil Rights Act of 1964 and the Equal Pay Act of 1963. In addition, employers are more willing to hire women in nontraditional occupations as a result of their having done so during periods of shortage in the work force. Nonetheless, the time needed for retraining and other adjustments will obviously exact heavy individual and social costs. These costs may be intensified if women fail to widen their training and job horizons, or if those who do so encounter resistance from employers and institutions.

Proposals for redressing imbalances in supply and demand are likely to include compulsory early retirement for women over the age of 55 (*9*). Since the percentages of working women in the age group 55 to 64 who have never married or who are widowed, divorced, or have an "absent" husband are 62.8, 51.3, 70.7, and 56.4 percent, respectively, mandatory early retirement would inflict severe economic as well as psychological injury (*10*, table B-4, p. 195). For those women who reentered the labor market in the 1960's, accumulated pension benefits are likely to be meager. Unless jobs are vacated by older incumbents, however, new entrants, experiencing early career frustration, may either consider exit from the labor market as an alternative to retraining or accept downgrading to the subprofessional ranks. Further, under circumstances in which the number of trained people exceeds the number of jobs available, much recent progress in increasing the job opportunities and rewards available to women may be undone. The quiet, unintentional, nonideological (*11*) social transformation that has swept women into the work force in such large numbers over the last several decades was brought about by demand. The opportunities beckoned, and women responded, even when this required retraining in order to enter or reenter the labor market. However, in planning for needed readjustments in the future, one must recognize that reentrants may not find it feasible, by reason of age or the costs involved, to undertake long and expensive retraining for work in expanding areas. For most of these women, professional opportunities requiring only 1 to 2 years of retraining would be more suitable (although women in their 30's or 40's should not be barred from undertaking the more demanding retraining programs—a physician of 35 or 40 would still be young enough to make the effort worthwhile, both for herself and for society). This suggests the desirability of creating a hierarchy of functions geared to different levels of post-B.A. training, an adaptation of the paramedical or paralegal concept. It should be noted, however, that such a subdivision of professional functions may contribute not only to a broader distribution of women among the professions—an opportunity to be welcomed—but also to the tendency to concentrate women in the lower skill levels of each profession, thereby reinforcing differentials in male-female incomes, social status, and psychological attitudes.

The adjustments required under the BLS projections would clearly take us to the mid-1970's and beyond. In the interim, women's institutions and organizations must be prepared to sustain the morale of women experiencing disappointment in their early professional search by means of constructive programs of counseling, postgraduate financial assistance, when necessary, and job development efforts (*17*). But even this serious adjustment will be inadequate unless the economy achieves full employment level, as defined by the BLS (*13*).

Some perspectives on current projections may be derived from examining an earlier projection of the outlook for college graduates.

An excess of college graduates seeking professional employment was forecast in 1948 by Seymour Harris. Estimating that there would be a minimum of 10.6 million working college graduates in 1968, and citing the possibility that different assumptions indicated a possible rise to 12.6 million or even 14.5 million, Harris speculated that "the time may come when, on the average, the college-trained worker will earn less than the noncollege worker" and found "no remedy for the surfeit of college graduates" (*14*, p. 7; *15*). Yet, the period between 1948 and 1968 turned out to be one of economic expansion, with a great demand for educated personnel. By 1969, 12.9 million college graduates were in the civilian labor force, or 2.3 million more than the minimum projected number that Harris found so disturbing (*16*). Despite his fears that "professional openings would not be one-half those required" (*14*, p. 18; *17*), 84 percent of all employed college graduates were in the professions or were managers or proprietors of businesses (*4*).

The decades envisioned by Harris in somber terms turned out to be so buoyant that new alarms were sounded on the basis of projections which indicated approaching ceilings on the supply of professional and scientific personnel (*18*), ceilings that, it was feared, would constrain scientific effort and economic expansion. Once again, however, extrapolations from the current period of slackened demand present the 1970's as grim years of excess supply for the highly educated job seeker (*8*). Surely our experience provides ample basis for rejecting projections as prophecies of an unavoidable future. It would even be misleading to view the BLS projections as the "most probable" outcome, because the future is open to the influence of social choice and policy at critical points, adopted policies frequently have unintended consequences and engender new problems, and discontinuities and basic changes caused by unforeseen and uncontrollable forces are far from uncommon.

Accordingly, one is obliged to explore the implications of alternative assumptions about future trends, as well as possible means of encouraging preferred outcomes. Relying solely on projections derived from assumptions of

continuity represents "backcasting" (*19*), minimizes sensitivity to emergent changes, and delays the required adaptations. To explore such alternative assumptions about the future, I first examine a more pessimistic outlook for women's employment than projected by the BLS and then examine a brighter one.

A Pessimistic Variant

Four possible developments could engender a larger excess supply of professional women than that envisaged by the BLS: (i) an unintentionally lower growth rate and higher rate of unemployment (*20, 21*); (ii) achieving greater productivity, thereby reducing demand for personnel in many fields; (iii) a planned reduction in economic growth rates in order to limit environmental damage and resource depletion; (iv) higher percentages of participation in the work force by women, as a result of falling birthrates and increasing education. None of these four developments should be considered highly probable, but neither can they be rejected out of hand. Hence, it may be instructive to consider the effects of such possible developments on the adjustment problems discussed in connection with the BLS projections.

Under conditions of higher unemployment rates, there is grave danger of wider support for the view that women are not (or ought not) to be considered a permanent part of the work force, thus weakening or reversing recent trends in public policies. The presidential mandate to the Commission on the Status of Women declared, "Women should not be considered a marginal group to be employed periodically only to be denied opportunity to satisfy their needs and aspirations when unemployment rises or a war ends" (*22*, p. 8). But the anachronistic contrary view still persists. George Katona and associates, for example, have recently declared, with reference to married women in the labor force, "This reservoir is particularly valuable from the point of view of manpower policy. It can be expanded in national emergencies or at times of high levels of business activity, and it can be contracted whenever necessary" (*23*). Such analysis seems to have missed the significance of the economic and social transformation that has been brought about by the increasing participation rates (actively seeking work and therefore considered part of the work force) and employment of women. Most women in the labor force unquestionably consider themselves permanently attached—as a matter of preference, because of stark need (women are now heads of households in 6 million families with 20 million members), or because family standards of living have adjusted to the larger incomes provided by two wage earners. Contraction of their earnings would have significant effects throughout the economy, reducing aggregate demand and hence employment of other groups (*24*). Therefore, concern for women's employment should form part of a full employment policy in the economy today. Moreover, if employers, in the interests of efficiency, require continuity of work attachment by women, then economic policy should be framed to buttress such continuity. Unemployment still tends to be higher for women than for men—6.9 and 5.3 percent, respectively, in 1971 (*10*, table A-14, p. 175). Even a pattern of discontinuity for some women, involving exit and reentry when economic circumstances are discouraging, only disguises the fact that most women are strongly attached to the labor force, needing but favorable job opportunity to so demonstrate (*6*).

If the economy were to operate at an average growth rate of less than 4.3 percent per annum over the coming decade, and if it were registering unemployment of more than 3 percent, the problems already discussed would probably be intensified. In short, unemployment rates higher than those in the BLS projections would tend to increase resistance to the entire complex of women's work aspirations, from increased employment opportunities to professional upgrading, equal pay for equal work, and occupational diversification. "What is needed is not a way to rationalize unemployment, but a way to reduce it where it is now highest" (*21*, p. 439).

Even more serious adjustment problems are posed for women by current proposals to reduce economic and population growth rates in order to reach a steady-state equilibrium (*25*). Debate concerning the merits and dangers of a steady-state economy is still in an early stage. Hence, the following discussion will first center around the question of whether the objective of increased employment for women is compatible with the objective of reduced or zero economic growth. If not, are there any social adjustments that can accommodate both objectives? Failing any adjustment, how would women choose between such incompatible goals?

Any slowing of the economic growth rate would result in a more than proportionate reduction in total demand for personnel, because continuing increases in productivity (output per worker) require comparable gains in output merely to maintain employment levels. Reduced demand could be mitigated to some extent by a shift in production to labor-intensive service activities. But such structural changes are not likely to be extensive enough to absorb the full negative impact that a reduced growth rate would have on the demand for personnel. In the case of zero economic growth, future aggregate demand would be frozen, hence the expansion of some sectors would necessitate the contraction of others. One result would be sharpened competition among all employed personnel for a shrinking number of jobs. Another result would be to reduce employment opportunities for new entrants or reentrants into the work force.

The basic alternatives in such a labor market are either higher unemployment or, if work continues to be a value held by society, a work-sharing strategy. This might involve progressive reductions in the work week to create employment opportunities for new entrants. Along with new work-leisure patterns (*26*), however, this would also involve decreases in per capita incomes. Moreover, it might also prove necessary to supplement a reduced work week with a policy of earlier retirement in order to permit sufficient absorption of new entrants—again combining increased leisure (whether preferred or not) with reduced per capita income.

A somewhat different interpretation of these strategies of adjustment could be rooted in a positive leisure ethic, which would emphasize the benefits of increased leisure instead of bemoaning the loss of career opportunities. Such an approach would pose the issue of whether increased participation by women should be slowed or reversed instead of being encouraged as an inherently desirable means of satisfying the work interest of women while also extending the leisure options of men through work-sharing. In either case, it would seem reasonable to permit women, as well as men, to choose

among alternative work-leisure patterns. However, dividing fixed output among an increased number of people necessarily reduces the per capita income, whatever the pattern of distribution—thus posing a second issue.

While a policy of low or zero economic growth will tend to limit the need for additional personnel, population stabilization tends to encourage women's participation rates.

One reason for this is that participation is affected by the number and age of children in the family. In 1971, for example, 29.3 percent of married women with children under age 6 and 49.4 percent of those with children between 6 and 17 were working (*27*). The tendency toward smaller families may also shorten the period of mothers' separation from the work force (if society continues to affirm a strong work ethic) and thus further increase the numbers in the work force. The percentages of women in the work force are highest in the age groups 20 to 24 (57.9 percent) and 45 to 54 (53.7 percent), and dip in the intermediate age groups, 25 to 34 (43.6 percent) and 35 to 44 (49.3 percent) (*10*, table A-4, p. 164; *28*).

Some reconciliation between the potential effects of a no-growth economic policy, which reduces work requirements, and of a population stabilization policy, which increases the work force, may have to be considered. When population effects are combined with the trend toward increasing levels of education for women, which also engenders higher percentages of participation in the work force, severe labor-market imbalances are likely to result. Population stabilization need not involve diminished demand for labor, as long as society continues to seek increased per capita income. Such growth could fully offset increases in the labor force. However, the combination of zero growth in the economy and in the population cannot but generate tensions in the work force so serious that they will challenge current values and institutional arrangements relating to work and to leisure activities.

Any increase in productivity greater than the 3 percent assumed by the BLS would tend to reduce its estimates of overall employment opportunities. In the past, the displacement effect of increases in productivity was offset by a long-term trend toward increased output. If the economic growth rate is reduced as a matter of policy, while increases in productivity continue to be sought, the possibility exists that men will perforce seek to invade traditional women's occupations because not enough new jobs have been generated by the economy.

The foregoing analysis of the special adjustments required by four possible developments shows these developments to be a pessimistic variant of the BLS projections, in which hoped-for employment opportunities will turn out to be chimerical. The tensions generated by the consequent excess supply of labor may well erode such social approbation as is now accorded to women's desire to work. It is difficult, indeed, to imagine a smooth transition through such a social transformation of habits, expectations, and institutions.

An Optimistic Variant

An expanding economy is the only milieu in which women could easily increase and diversify their employment opportunities and enhance their status and rewards. But it seems quite unrealistic to root an optimistic outlook in the assumption that the sectors in which women are represented will expand, even if the economy as a whole does not.

Can a policy of economic growth in the 1970's be justified on grounds other than women's career interests? There is a body of opinion (*29*) that views growth in the 1970's as essential to raising standards of living for the poor; reconstructing the urban environment; improving health services; expanding cultural activities; increasing educational services for children in nursery school and kindergarten; expanding adult self-development opportunities; improving legal, judicial, penal, and rehabilitation services; increasing technical assistance to underdeveloped countries; and limiting environmental damage and resource depletion. Such an illustrative list of "unfinished business" is intended to emphasize the fact that the reordering of priorities and the reallocation of resources would not meet all of the urgent needs of contemporary society. Indeed, advocates of economic growth believe that, should these social needs be neglected much longer, catastrophe will visit the social and political future—a vision of the future which matches that of the advocates of zero economic growth.

Any easing of constraints on labor supply would allow the goals for economic growth to be raised. This would be especially important in sectors where personnel stringencies have prevented optimal volume and quality of output. For example, an increase in nurse-to-patient ratios might be offset by cost reductions resulting from faster patient recovery, shorter hospital stays, reduced capital outlays on instrumentation, and so on. Moreover, easing constraints on the supply of personnel would facilitate an upgrading of the professional qualifications required for those in sectors hitherto at the bottom of the demand queue, thereby increasing the quality of service performed. The penal and police systems, for example, would certainly benefit from greater access to, and utilization of, counseling, rehabilitative, and teaching services of high quality.

In an optimistic variant, demand for professional personnel is not determined independently of supply. David Reisman has noted that "The Germans developed great chemists at a time when the country did not need them, but they became so good that they made possible the growth of a tremendous chemical industry and thus created a demand for their services" (*30*, p. 114). Similarly, we know that mathematicians helped to create the computer industry and thus a demand for their services. Therefore, it is argued, it would be harmful to economic growth potential to take a narrow, merely instrumental view of professional education, one that sees it as geared to the existing job structure—quite apart from the moral issue of the harm that would result from treating human beings as means to an end (*30*). Would-be physicists, psychologists, or other potential professionals should not be coerced away from their true interests, since innovative talent can create, as well as adapt to, opportunities. The optimist would further argue that it is not necessary (or possible) to foresee what new sectors and jobs will emerge; intellectual and economic drive simply assures that they will.

Summary and Conclusions

I have stressed the importance of economic growth and employment policies for the furtherance of women's career objectives. Legal action to remove discrimination, as well as transformation of attitudes and expectations,

will prove but hollow successes if adequate career opportunities do not become available. For this reason, the employment outlook for professional women in the 1970's has been examined on the basis of three alternative views of the future. All three involve elements of uncertainty and would require adjustments in the labor market. In the first alternative, although the BLS projected an overall balance in the labor market, supply and demand were expected to be ill-matched in several professional sectors, entailing burdensome retraining for those finding themselves in the areas of excess supply. The more pessimistic variant, based either on failure to reach growth and employment goals or on deliberate pursuit of reduced growth goals—combined with population stabilization and increased productivity—would require such fundamental adjustments in the labor market as work-sharing and early retirement or deemphasis of career objectives. The optimistic variant posits economic and social needs great enough to warrant high growth rates and views an expanded labor supply as a factor enabling the economy to attain such growth rates and to extend the utilization of professional personnel in new as well as in established areas (*31*). The major burden posed by the optimistic variant involves the need to achieve social consensus on the goals of society and to maintain the commitment to those goals with energy and intelligence.

References and Notes

1. *Bus. Week* (23 September 1972), p. 48.
2. In this connection, it is useful to note De Jouvenel's distinction between those aspects of the future which are "dominating" and those which are "masterable" and to consider his view that "The proof of improvidence lies in falling under the empire of necessity. The means of avoiding this lies in acquainting ourselves with emerging situations while they can still be molded, before they have become imperatively compelling" [B. De Jouvenel, *The Art of Conjecture* (Basic, New York, 1967), pp. 52, 276].
3. *Mon. Labor Rev.* **93**, 3 (April 1970).
4. S. C. Travis, *ibid.* (May 1970), p. 3.
5. It is significant that, whereas only 6 percent of the increase in the total work force is attributed to increased participation (94 percent to increased population), about 25 percent of the net increase of women in the work force is attributed to increased participation. The participation of men, on the other hand, is expected to decline because of earlier retirement (*ibid.*, p. 7).
6. J. N. Hedges, *ibid.* (June 1970), p. 19.
7. In this connection, the conclusions reached by Wolfle and Kidd (*8*) on the basis of their projection of the supply and demand of Ph.D.'s, male and female, is pertinent. They state that "Projections of future utilization agree that the number of positions will also increase substantially during the 1970's, but not as rapidly as the number of degrees. Many new doctorates will enter nontraditional jobs and will do work that has not attracted many of their predecessors. Moreover, unless strong corrective actions are taken soon, new doctorates of the 1980's will face even bleaker prospects for jobs in the fields where they have traditionally been employed" (*8*, p. 784).
8. D. Wolfle and C. V. Kidd, *Science* **173**, 784 (1971).
9. See, for example, discussion of this strategy by Wolfle and Kidd (*8*). They point out that, with respect to professionals holding the doctorate, "The potential significance of early retirement is clear: 14 percent of the doctoral scientists in the 1968 National Register of Scientific and Technical Personnel were 55 or older. If retirement age were gradually lowered from 65 or 68 to 60, or 58, or if necessary even to 55, several thousand additional positions would become available each year. Opportunities for younger doctorates would thus be improved" (*8*, p. 790). Early retirement is also cited as a component of an equilibrating strategy in the professional and technical labor market in R. C. Hall, *Brookings Pap. Econ. Act.* (No. 1) (1971), p. 218.
10. Department of Labor, *Manpower Report of the President* (Government Printing Office, Washington, D.C., 1972).
11. C. N. Degler, *Daedalus* **93**, 653 (Spring 1964).
12. When the number of job seekers exceeds the jobs available, improved placement strategies will be critical. In this connection, see the discussion of techniques and problems involved in women's placement by H. Kahne [*J. Econ. Issues* **5** (No. 3) (1971), p. 28].
13. Full employment is usually defined on the basis of a 4 or 4.5 percent unemployment rate, any lower rate being viewed as certain to generate strong inflationary pressure under present conditions.
14. S. Harris, *The Market for College Graduates* (Harvard Univ. Press, Cambridge, Mass., 1949).
15. Harris was not alone in this concern—he quotes the supporting views of J. B. Conant: "My chief concern comes, however, from a fear that we may educate more doctors, lawyers, engineers, scientists, and college professors than our economy can 'support'" (*14*, p. 3).
16. W. Deuterman, *Mon. Labor Rev.* **93**, 9 (October 1970).
17. It is interesting to note that an excess supply of graduates in medicine was anticipated by the Harris projections (*14*, p. 18).
18. See, for exam[→] W. R. Brode, *Science* **143**, 313 (1964).
19. For discussion of the limitations of "backcasting," see B. Gold, *Explorations in Managerial Economics* (Basic, New York, 1971), p. 259.
20. Note the prevailing gloom about reducing the current 6 percent unemployment rate by the means that seemed effective in the 1950's and 1960's. Because of a sharp increase in structural unemployment (caused, in part, by an increase in women's participation rates), which is presumed to worsen the terms of the unemployment-inflation trade-off, one member of the Council of Economic Advisers is reported to regard 6 percent unemployment "as a practical limit of pushing on aggregate demand, given the present structure of the labor force, without causing the reemergence of pretty strong inflationary pressure" [*Bus. Week* (25 December 1971), pp. 36–37]. For a discussion of the significance of structural unemployment, see G. Perry, *Brookings Pap. Econ. Act.* (No. 3) (1971), p. 533.
21. G. Perry, *Brookings Pap. Econ. Act.* (No. 3) (1970), p. 411.
22. E. D. Koontz, *Mon. Labor Rev.* **93**, 3 (June 1970).
23. G. Katona, B. Strumpl, E. Zahn, *Aspirations and Affluence* (McGraw-Hill, New York, 1971), p. 135.
24. See, in this connection, the statistical evidence concerning the importance of employment and income stability to women and the importance of their earnings in sustaining the level of aggregate demand in the economy [C. S. Bell, *Wall Street Journal* (15 March 1972), p. 16].
25. A variety of proposals have been made, ranging from those aiming at a zero growth rate for both the economy and the population to others that merely propose some reduction to still others that would limit growth only in heavy resource-using sectors, while allowing expansion in light resource–using sectors. Proposals also vary in the time period allowed over which a steady state is achieved.
26. For extended discussion of work and leisure models and their bearing on women's choices, see S. S. Gold, in *Values and the Future*, K. Baier and N. Rescher, Eds. (Free Press, New York, 1969), pp. 266–293.
27. E. Waldman, *Mon. Labor Rev.* **93**, 12 (June 1970).
28. Long-range implications of the changing age composition of the work force as the rate of population increase drops are not considered here. Some increase in participation rates has recently been noted for the age group 20 to 44. This increase includes even those who are mothers of preschool-age children, despite the general absence of supportive services such as day-care centers (*4*).
29. See, for example, the critical attack on reduced growth objectives by Passell, Roberts and Ross [*New York Times Book Review* (2 April 1972), p. 1] in their review of D. H. Meadows, D. L. Meadows, J. Randers, W. W. Behrens III, *The Limits to Growth* (Universe, New York, 1972).
30. D. Riesman, in *Education and Public Policy*, S. Harris, Ed. (McCutchan, Berkeley, Calif., 1965), pp. 108–119.
31. Thus, Betty Vetter, executive director of the Scientific Manpower Commission, foresees a future in which ". . . the needs for technologically trained experts to meet national and social goals will not have diminished. . . . We will still be trying to erase urban blight, produce adequate clean energy, purge the environment, create effective transportation systems, and provide adequate health care, while maintaining our national defense and continuing some level of space exploration. If the state of the economy and reordering of national priorities has enabled us to convert these needs into demand (meaning jobs), the supply of technologically trained specialists may again be too small in a few years. . . . we should be careful not to overemphasize the problem of displaced scientists and engineers lest we diminish our future ability to meet our need[→] [B. Vetter, *Science* **176**, 9 (1972)].