As almost everyone knows, the earnings gap between men and women is very large. In 1972, the average woman earned only 58 percent as much as the average man when both worked full time. The author directs her discussion toward the large volume of research on the topic of the earnings gap and points to areas where further work might be done. She discusses the fact that the occupational distribution itself may be a symptom of unequal opportunity. In other words, one needs to ask why women with educational preparation and other characteristics similar to men end up in lower paying jobs and establishments. An interesting study was quoted which found that many women have high aspirations but low expectations with respect to occupational achievement, and that behavior is based more on their expectations about what they can realistically hope to accomplish than on their aspirations. The author also suggests that researchers think more about what kind of analyses might be useful to those government agencies responsible for monitoring equal employment opportunities or equal pay. She concludes by mentioning research issues related to the social impact of the earning gap.

(Author/PC)
The Earnings Gap: Research Needs and Issues

Isabel V. Sawhill*

As almost everyone knows, the earnings gap between men and women is very large. In 1972, the average woman earned only 58 percent as much as the average man when both worked full time for 50-52 weeks per year. Quite a large volume of research has been directed toward sorting out the reasons for this gap and I would like to begin by reviewing this research with you and by pointing out where I think further work might be done. Then, toward the end of my talk, I would like to suggest that we think more about what kind of analysis might be most useful to those government agencies responsible for monitoring equal employment opportunities or equal pay. As researchers, once we have made a substantial amount of progress toward diagnosing the cause of the earnings gap, we should also be able to contribute to the design of a strategy for eliminating whatever inequities exist. Finally, I would like to at least mention research issues related to the social impact of the earnings gap. In other words, what kinds of problems does society face as a result of women's relatively low earnings and where can research help to identify these impacts.

Beginning with the factors responsible for the earnings differential, research has shown that it is impossible to explain away the problem by looking at male-female differences in age, education,

* Isabel V. Sawhill is a Senior Research Associate, Urban Institute, Washington, D. C.
race, residence, experience, unionization, turnover, absenteeism, hours worked and a variety of other measurable characteristics. Recently, I reviewed six econometric studies of the earnings differential, done at different times, using different data sources, and controlling for a large number of variables. (Sawhill, *Journal of Human Resource*, Summer 1973). In five of these studies, the adjusted earnings gap hovered around 33 percent. In the sixth study, the author controlled for differences in the detailed occupational distribution of men and women and came up with an adjusted earnings gap of only 12 percent but it is fairly well accepted now that the occupational distribution itself may be a symptom of unequal opportunity. In other words, we need to ask why women with the same educational preparation and other characteristics as men end up in lower paying jobs and establishments.

Clearly the most important and least tractable variable in coming to grips with this question is work experience and we will need to do some more work before we can adequately estimate and interpret its effects. In analyzing this variable, it is important to remember that it has a quantitative and a qualitative dimension. Women may spend fewer years in the labor force than men but they may also spend them in jobs where there is little or no increase in earnings over time. My own analysis, based on census data, of what happens to the earnings of single women as they age indicated negligible returns to experience. But an analysis of data from the 1967 National Longitudinal Survey of Work Experience, which involved more direct measures of years worked, although it was
based on a smaller sample, showed larger returns to experience. (Mincer and Polachek, *Journal of Political Economy*, March/April 1974). I think it will take more work in this area to completely resolve the issue. If it should turn out that the returns to experience are insignificant, then no amount of labor force experience will change the earnings gap much. If, on the other hand, we find that women gain as much from experience as men, then their more limited labor force participation over the life cycle would explain virtually all of the present gap. I feel quite confident that the truth lies somewhere between these two extremes; that is, women probably do earn more as they accumulate on-the-job experience but the returns to experience are probably lower than in the case of men with similar educational backgrounds and other characteristics.

The next question, then, is why do women fail to move up the earnings ladder at the same rate as men, and why do they work in occupations in which earnings profiles are relatively flat? Some economists have suggested that women, because of their more limited labor force attachment, prefer not to invest as much time and energy to getting ahead in the job market as men do. In addition, employers are reluctant to invest in the training of women because of their relatively short working careers. For both reasons, women end up in a different set of occupations than their male counterparts. Others contend that the concentration of women in dead-end jobs is the result of discriminatory hiring and promotion practices. I would hope that additional research might help us sort out or choose
between these competing hypotheses. Those who suggest that women go into dead-end type jobs because they don't feel it is profitable to invest in their own training must show that there really is an investment cost in the form of lower initial earnings in the more desirable jobs. And those who argue that employers are justified in not hiring women for jobs involving training costs must show that female quit rates are significantly higher than male quit rates within a given occupational category.

Finally, it would be nice if we could find better measures of women's own preferences with respect to a career. Most of the work done to date has used marital status and/or presence of children as a proxy for degree of commitment to the working world. However, recently I have read of some interesting research done by social psychologists who have begun to measure women's preferences directly. They point out that many women have high aspirations but low expectations with respect to occupational achievement and that behavior is based more on their expectations about what they can realistically hope to accomplish than on their aspirations. I'm sure this comes as no great surprise to anyone. What it means is that women's observed preferences are not independent of occupational opportunities. For this reason, I doubt that we will ever be able to completely disentangle the two, but I do think it is important that people become sensitized to the way in which they interact so that they will not fall into the error of believing that women's career choices are immutable, perhaps even biologically ordained. This kind
of interaction between female behavior and female opportunities is at work in several different areas.

Turnover rates, for example, are both a cause and a consequence of the fact that women are concentrated in low-paid jobs. Or, to take another example, some economists have begun to develop models hypothesizing that the sexual division of labor within the household is a direct result of women's lower earnings. Put very simply, most families would suffer a financial loss if men stayed home to take care of the children while their wives went out to work. But then these same economists turn the problem on its head and argue that women's lower earnings are largely a result of their household responsibilities. Of course, what is really true is that women's earnings and their home/market choices are jointly determined. So eventually we may need to design a simultaneous system to handle the chicken-egg problem involved here. The earnings gap will narrow as women work more continuously but women will only increase their labor force attachment as it becomes more profitable for them to do so.

Let me digress for a moment to talk about some data problems. Frankly, I am somewhat at a loss when it comes to suggesting where we are going to get the data to analyze the work experience variable more adequately. Unfortunately the Census does not collect information on work histories. Thus, the NLS survey, or Parnes data, which I have already referred to is the best source of data we have although it only covers a specific age cohort of women and although the
earnings for a male control group had to be taken from an entirely different data source. More longitudinal data of this sort would clearly be helpful, especially if it were truly longitudinal and not just retrospective. I also think that carefully designed estimates of work-life expectancy similar to those traditionally published by the BLS are useful because they help to reveal changing patterns of labor force activity by successive cohorts of women. More analysis of turnover rates would also be good, but I am not sure how we are going to do this analysis now that the BLS no longer publishes quit rates by sex, even for the manufacturing sector. We know, for example, that male-female differences in quit rates narrowed during the sixties but it is unclear whether this was a secular or cyclical effect.

Up to this point I have focused my discussion on the role of work experience in explaining the earnings gap. The reason I have given it so much attention is because research to date indicates it is 1) important and 2) somewhat controversial. I would not want to leave the impression, however, that other variables may not play some role in explaining the gap. For example, no one, to my knowledge, has ever estimated the contribution of differences in physical strength or the limited geographic mobility of many married women to the earnings differential. In general, the more evidence we have on these and other factors, the more confidence we will have that the residual gap is something more than a symptom of our ignorance.

What about the residual? If it turns out to be large—and all evidence so far suggests that it will be—then there is a
presumption that discrimination exists. But it is not sufficient
to simply assume discrimination exists without exploring the pro-
cess by which it occurs. Some students of the problem make a
distinction between individual prejudice and institutionalized
discrimination. The latter can occur even in a world in which
there are no real villains. It is related to various customary
practices and historical patterns which lead to discriminatory
results even in the absence of discriminatory intentions. For
example, sex-segregated want ads, recruiting management trainees
at men's but not at women's colleges, informal networks of informa-
tion, and the discomfort involved in being a token female in an
all-male work place all tend to place women at a disadvantage even
though there is no overt act of individual prejudice involved. It
would be interesting, although difficult, to attempt to analyze
such informal practices to determine their impact on the utilization
of women in nontraditional jobs.

Where there is individual prejudice, it would be nice to know
whose prejudices are important in limiting opportunity (top manage-
ment, personnel people, other employees, customers, etc.) and to
what extent such prejudice is based purely on tastes or preferences
for associating with one group rather than another and to what extent
on erroneous beliefs and the costs associated with obtaining better
information. For example, how do employers' perceptions about
absenteeism and turnover differ from the facts and how does this
affect their behavior. And are they discriminating against indivi-
dual women by erroneously assigning to them the characteristics of
women as a group. If so, are there relatively costless ways of improving the information on which they base their decisions?

If we did all of our homework on the earnings gap and felt we really understood something about both the magnitude and the process of discrimination, then presumably we would want to use this information for some socially useful purpose. Here, I am thinking particularly about government policies with respect to equal pay and equal employment opportunities, and I think that one very promising area for further research is in the area of designing analytic tools for monitoring pay levels and employment opportunities at the level of the firm. In fact, I think that unless researchers give some thought to how their efforts can be ultimately useful to policy makers, they may end up doing the wrong things. Several of us at the Urban Institute have been giving some thought to how one might attempt to 1) establish standards of nondiscriminatory behavior, 2) apply these standards to evaluating the employment patterns of an individual employee, 3) decide how fast progress toward a nondiscriminatory standard can take place, 4) monitor the actual rate of progress and 5) design an effective set of incentives and/or sanctions for improving the performance of employers. We view the development of such a system as an analytic tool which would be designed to fit into a more broadly based and flexible compliance review process. I would think that there is plenty of useful and challenging work to be done in this area.
As a final comment on research related to the earnings gap, I would like to note that it may be just as appropriate to study the social consequences of the gap as it is to study the reasons for its existence. For one thing, if the social consequences are negligible or uninteresting, then there is less justification for studying the gap. For another, if women’s earnings rise relative to men’s in the future, it would be useful to know how this may alter such things as the incidence of poverty, welfare expenditures, the distribution of family income, marriage rates, consumption patterns, and a host of other variables which impinge upon people’s welfare and life styles. Let me just mention a couple of interesting examples of existing research in this area. A study by the Survey Research Center at the University of Michigan has shown that about a half of all poor families would have moved out of poverty if the female heads or working wives in those families had been paid wages comparable to those of men. (Five Thousand American Families - Patterns of Economic Progress, 1974.) In the meantime, research we are doing at the Urban Institute indicates that separation or divorce rates are positively related to the relative earnings of women. Putting these two pieces of evidence together suggests that if women’s wages rise relative to men’s, there may be more female-headed families but fewer of them will be poor. In passing, I should also point out that research on how fast the earnings differential is changing is another prime candidate for attention.
Although there are several interesting papers which have been done recently on this subject (Oaxaca, Ruggles, Fuchs, Barrett), there is as yet no consensus about how to interpret the observed postwar trends which show that women have made little or no progress in catching up with men.

I would like to conclude with the thought that there is plenty of interesting work to be done. This has been a fairly broad review of research needs and issues and yet in some respects I feel I have hardly scratched the surface. In closing, I would like to commend the Women's Bureau for the excellent work it does in providing all of us with data and carefully organized information and analysis on women's economic and social status. I can personally attest to the tremendous assistance they have provided to me in my own research efforts in this area.