ENDNOTES


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NEOCLASSICAL ECONOMICS AND THE SEXUAL DIVISION OF LABOR

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Within mainstream economics, the body of work which consists of theoretical and empirical analyses of labor supply coversizes what may be called a "research program."[1] This program is part of a more comprehensive neoclassical research tradition and it intersects with other research programs. Specifically, it is intertwined with, and has implications for, consumer theory, human capital theory, theories of labor market discrimination, and the "new home economics."[2]

This paper is an outline of a larger project in progress[3], the goal of which is to analyze and evaluate the labor supply research program, specifically as it relates to women's labor supply. It has some similarity to the "methodology of scientific research program" formulated by Iwa Lakatos (1978) and advocated by Mark Blaug (1980).

In the first section of the paper, the rationale for the method of analysis and its divergence from Lakatos's methodology is presented. This includes a brief recap of the contributions of Lakatos and two other major philosophers of science. Also, the relationship of this analysis to the emerging feminist research tradition is presented. In the second section, the analysis itself is outlined, and specific examples are given of its content.

Many economists today would probably admit that their knowledge of the epistemological and methodological underpinnings of their discipline goes scarcely beyond Milton Friedman's (1953) defense of positivism, which, in fact, is merely a slightly more sophisticated version of the instrumentalism that was dominant in mainstream economics in the early 1950s. Indeed, the term "neoclassical economics" as it is commonly used today is little more than a label passed on to earlier work. In the past few years, however, the proliferation of research on the economics of family and gender has led to a new generation of economists who are more directly concerned with the role of gender in the economic system. This paper is an attempt to bring some of these ideas to bear on the traditional research program in labor economics.

Major exceptions to this tendency are Marquis and economists of the Institutional school who explicitly reject the orthodoxy assumptions and methodology. Of course, the relative lack of concern with methodology on the part of the orthodoxy is appropriate if Friedman's arguments are accepted. It has been argued elsewhere that they should not be, but those arguments will not be replicated here[4].

Philosophers of science are having some impact on mainstream economics, however, as evidenced by the increased use of concepts such as "paradigm," "falsifiability," and "research program."[5] These terms are attributable to Thomas Kuhn, Karl Popper, and Iwa Lakatos, respectively.

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I would like to thank Thomas Karier for helpful comments.
Ehrenfeucht (1970) is undoubtedly the best-known philosopher of science among economists. Though the term "paradigm" is used inconsistently and there is no consensus of the usefulness for economics of the concept "scientific revolution, "Kuhn has made two important contributions. First, he has pointed out the existence of a set of concepts within disciplines that are traditionally unquestioned, and perhaps metaphysical. Second, he has described a sociology of scientific progress which at least points out the possibility of work being accepted or rejected by a "scientific community" on other than scientific grounds.

Popper (1972) was motivated by the issue of what distinguishes a science from a pseudo-science. He disputed the conundrum of many disciplines by asserting that the verification of theories may be satisfying psychologically to researchers, but relatively useless for scientific advance. Rather, he claimed that "good theorists" make "falsifiable predictions" and specify the criteria that would cause them to abandon their theories. Deformations reduce verifications as signs of scientific progress. Increasingly, economists are accepting Popper's analysis, and find that it sheds a jaded light on much that has passed as "acceptable positive economics." [11] Specifically, it reveals a criticism that will appear later, what are we to make of key assumptions (such as the rationality postulate of microeconomics) that are not falsifiable?

Lakatos (1970) claimed to provide a way to proceed: "the methodology of scientific research programs." He drew attention not to a simple theoretical assertion but to a set of concepts, a research program that evolves and may "progresse" or "degenerate" over time. The program has a "hard core" of auxiliary hypotheses and a "heuristic" that directs the problem solving machinery toward certain areas, and away from others.

Lakatos offered criteria for evaluating a research program. It is "theoretically progressive" if it predicts new or unexpected facts (similar to Popper's risky predictions). It is "methodologically anti-realist." None of these hypotheses are corroborated. Lakatos suggested in assessing budding research programs, but also tenacity in clinging to mature ones unless a clearly superior alternative is developed. Thus, theoretical pluralism is encouraged.

Lakatos directed us to the history of a research program, but he was vague as to how the internal history or "rational reconstruction" is related to the external history. According to Lakatos, the role of the external history is to explain the "non-rational" or sociological aspects of theory selection. Thus, Lakatos had to move beyond empirical evidence (as well as historical ones) and contain many ideological, political, and intellectual tendencies.

One alternative perspective which is producing challenges to current economic policies, as well as economic theories, is the feminist perspective. Feminism, as a political movement, has been developed by women and men, and is an intellectual research tradition that has a long and complex history. It crosses historical, cultural, and intellectual boundaries (as well as national ones) and contains many ideological, political, historical, and intellectual tendencies.

Briefly and incompletely stated, most feminists assume a social rather than natural reconstruction of the division of society into separate realms inhabited differently by women and men, that is, a social construction of the sex division of labor. Many feminists have said that we are not merely female and male, we are socially women and men. Social constructs can be changed and feminism has provoked much controversy by advocating changes in the division of labor, in the distribution of social resources and power, in the definition of "appropriate" behavior for women and men, and even in theoretical understandings of language, philosophy, religion, art, and the natural and social sciences.
In the next section of this paper, a "feminist perspective" is brought to bear on a particular section of neoclassical theory in the hopes of contributing to the aforementioned "new theoretical understandings." The analysis, thus, in addition to an economic analysis of a research program, is also part of the "feminist deconstructive project." Sandra Harding and Merrill Hintikka define this project as "...identifying how distinctively masculine perspectives on masculine experience have shaped the most fundamental and most formal aspects of systematic thought." Specifically, anthropologist Lynn Betz has noted that...

"We often refer to women's and men's roles as being over, underanalyzed or absent from all but the edges of the description. Women do not appear as household workers and what they talk about is called gossip, while men's work is viewed as the economic base of society."[15]

It should be noted that the goal of this project is not to replace a "male perspective" with a "female perspective" but to show... how distinctive aspects of women's experience can provide resources for the construction of a more representatively human understanding."[19] The analysis has benefited greatly from his... studies by Bercaw, Jordan and Keverto (1976), and Matthews (1982), which address the work experiences and economic activities of women in the United States of varying ages, racial groups, and ethnic backgrounds.

In this section and analysis of the labor supply research program as it relates to women's labor supply is outlined. Six parts of the analysis will be briefly described, and examples will be given in several places to illustrate the approach.

The analysis begins with a summary of the neoclassical choice model. It's key assumptions and typical problem-solving mechanisms are presented. Any a priori or historically perceived distinctions between men and women or other groups in society, such as races or classes, would be presented and discussed here. In neoclassical theory, however, no such distinctions are made. Producers and consumers, employers and employees are not different groups of people with specific characteristics or histories. They are rather different manifestations of the universal "economic man." Neoclassical theory is ideologically individualistic and theoretically "sex-blind." Some criticisms of the hedonistic approach to human behavior that are particularly relevant to the labor supply research program may be noted here.

The second part consists of an examination of the original labor supply model. It begins with a summary of the boundary and definitions of the research program. Some historical findings are brought to bear on the question of how the original formulation of the research problem and the original empirical work are related to actual male and female work experiences.

Specifically, it is noted that the original formulation of the labor supply model held that the rational worker allocated time to the labor market, so as to balance the benefits gained from income and leisure. We can see that from the start, the analysis obscured women's economic activities in the household. Labor supply was equated with work for pay in the official labor force. The only alternative to this was defined as "leisure."
of labor-saving devices and the wages of domestic servants. These variables were seen as affecting a woman's opportunity cost of seeking paid employment. In fact, studies have shown that housework, in hours, has not decreased significantly with the proliferation of the so-called labor-saving devices. Also, domestic servants' wages seem unlikely to affect the labor market decisions of the average working woman, unless she is considering it as an occupation.

Economists have also invoked psychological explanations to consider a woman's decision to work in the labor market. For example, in Glen Cain's study (1966), he suggests that black women's high labor force participation rate relative to white women is due to a fear of losing their husbands.272

These examples are pointed out not because they are totally implausible, but to expose the assumptions imbedded in them that do not follow automatically from a specified theoretical structure. Note that women are assumed to be secondary workers, seeking work in case their husband is unable to support them. The traditional division of labor is assumed. Children and housework affect women's opportunity costs, not men's. Women in these models are endowed with certain feminine characteristics such as being significantly influenced in their labor force decisions by "pleasant working surroundings."

This section concludes with a summary of the results of the empirical work. Significant differences have been found in the labor force elasticity of wages and income changes of white women, black women, black men, and white men.82 One of the major conclusions of this analysis is that these different responses to pecuniary variables cannot be explained by the neoclassical model without resort to ad hoc hypotheses.

For example, assumptions made about women are thrown into question as black women are found to respond more like black men than white women.29 Unfortunately, this issue is often overlooked as results and assumptions of different studies are not usually made to confront one another. Mark Killingsworth's (1983) recent study is a useful exception to this tendency.

An example of the shortcomings in this area can be seen in a recent work by Heckman and Hazen.26 Non-white women were excluded from their empirical analysis. In addition, they confined their study to middle-aged women, though it is young women who are showing the most dramatic increases in labor force participation. Finally, they restricted their sample to families with a male family composition. The sample they used contained only twenty-five percent of the single women available in the sample. It must be questioned if this is a valid test of "female labor supply" as the title suggests.

In the fifth section, the current state of the labor supply research program is assessed. Two major tendencies can be seen in the current literature. The first is summarized by Lloyd and Rain.1979, who advocate treating men and women symmetrically. The second is that men and women basically have the same innate abilities and patterns of response to incentives, whose differential opportunities have led to different labor market outcomes.198

They conclude that "varying labor supply behavior" can be explained by demand factors that affect women and men differently. They point out that women's lower and more discontinuous labor force participation can be seen as women's rational response to discrimination. Discrimination is manifested by women's relative restriction in occupational choices, higher unemployment, and lower earnings in comparison with men. Thus, the explanation for women's secondary economic status is a self-reinforcing cycle of discrimination and differential labor supply behavior.198

Gary Becker (1957) is the founder of the second tendency, which I have labeled the "housework as a comparative advantage" approach.291 In Becker's model, a household production function is maximized. Time and goods are inputs and time income are constraints in the production of "commodities" including but not limited to "children, prestige, and esteem, health, altruism, envy, and pleasure of the senses."244

With respect to labor supply decisions, it is the relative efficiencies of household members that determine their rational allocation of time to home or market. One's comparative advantage is the ratio of his or her productivity in the market (measured by the wage) to productivity in the home. As might be expected, the theory shows that a household can profit from specialization when the relatively pure market-efficient members allocate time there and household-efficient members allocate time to the domestic sphere.

However, Becker goes further to demonstrate that even if household members have identical productivities and training, an efficient household would specialize in his words. "Theorem 2.9: An efficient household would specialize completely since it is in the market or household."238 This explanation for this conclusion, though presented in a rigorous mathematical manner, is quite simple and intuitive. The gains from specialization in the model derive from savings in training costs for human capital. That specialization increases productivity is, of course, a well-established doctrine in economics.

On the other hand, as an explanation for the sexual division of labor in all societies at all times, as it becomes in Becker's model, the specialization principle is inadequate. The question remains why the split between market and home has developed along gender lines. Becker realizes this, too, and he tries to get to the root of the problem. Why is it women who take care of the home and men who take care of the job? He must rely on biology. He finds that women care and nurture for children because "they have...." which biological investment in reproduction to be worthwhile.244

Furthermore, according to Becker, biological differences in comparative advantage explain not only the sexual division of labor, but also heterosexuality (same sex households are less efficient) and child-rearing practices which support traditional roles, as this lengthy quote illustrates.

"If only a small fraction of girls are biologically oriented to market rather than household activities, then to the face of no initial information to the contrary, the optimal strategy would be to invest mainly household capital in all girls and mainly market capital in all boys until any deviation from the norm is established. In this manner investment in children with "normal" orientations reinforces their biology, and division of labor. Investments in "deviant" children, on the other hand, conflict with their biology, and the net outcome for them is uncertain."241
From a feminist perspective Becker's analysis seems objectionable: a thinly disguised analogy for the traditional division of labor. For an economist it presents more of a challenge, being for the most part a logical and reasonable extension of the neoclassical model.

Some objections can be raised, however. It might be argued that Becker's model is not correct if the many families have two or more members engaging in market and home work. Recent study shows only fifteen percent of U. S. households conform to the "male-breadwinner female-housemaker" configuration (38). Are the rest of the households irrational?

Another empirical anomaly to Becker's model arises in considering the issue of "efficient size of households." His analysis shows not only the benefits of specialization, but also that a larger household is better able to take advantage of specialization (39). Yet households in the U. S. are becoming smaller and the number of one-person households has been growing. Becker's ad hoc explanation for this is that the gains of privacy must be outweighing the gains of specialization. He gives no convincing reason why this should be changing over time, but obviously this fits his bias toward the conventional nuclear family.

Becker's analysis selectively includes non-material commodities that he believes contribute to "utility." He fails to mention the utility of education for its own sake, the utility of work beyond its income producing power, and the utility of change and diversity. Once these very human qualities are introduced the case for a traditional division of labor and extreme specialization becomes much weaker.

The final section of the analysis addresses policy issues. The connections between various theories and policies are examined. For example, pay discrimination that results from labor demand behavior cells for different jobs than pay differentials that arise from labor supply "choices." Becker's analysis, which is based on intrinsically different values between men and women leads to different policy prescriptions regarding child care, education, unemployment, and income security programs than Lloyd and Neiss's analysis, in which men and women respond to market incentives and opportunities in essentially the same way.

Conclusion

This paper raises two major issues. First, it attempts to demonstrate the usefulness of evaluating a research program in economics both internally and externally. It is hoped that existing assumptions and challenging received wisdom from an alternative perspective will stimulate further critical analysis and comparison of our "scientific" models. Second, the labor supply research program can be seen as a touchstone to larger concerns: social issues such as the sexual division of labor, and theoretical issues such as the reliability of neoclassical economic. Rather of these may serve as of immediate concern to the lives of working women whether they work in the home, market, or both. But the implications of the analysis can be seen to lead directly to the problems confronting women in the home, in the "pink collar ghetto" and in the unemployment and food stamp lines.

ENDNOTES


[2] "New home economics" is the label given to the Chicago school analysis which applies the "economic approach" to all human decisions from choice of size and number of children. For examples of the literature see Becker (1976, 1981). A discussion and critique of this tendency is found in Firber, M. and Birdbaum, B. (1977).


[10] Popper (1972) makes this point.


[15] It is difficult to capture in a short summary the range and variety of feminist thought. The classic text of Western "second-wave" feminism is de Beauvoir (1953). Anthropologists, sociologists, psychologists and economists have all made important contributions. See, for example, Reiter, ed. (1970), Rosaldo and Lamphere (1974), Firstone (1979), Oatley (1972), Mitchell (1971), and Hartmann (1981).

[16] See Karpink (1960) for further explanation of the nature of a feminist standpoint.


[26] For an alternative view of the impact of labor-saving devices see Vann (1980).
[38] "What's Happened to the Labor Force?" Dollars and Sense, March 1982.

BIBLIOGRAPHY


