# Women

# and

# Unpaid

# Work:

## ABSTRACT/RESUME

Les distinctions faites par les économistes entre l'activité économique (le travail rémunéré) et l'activité nonéconomique (le travail non-rémunéré) sont devenues de plus en plus artificielles et trompeuses. Il en résulte de fausses prédictions quant au comportement du marché ainsi que d'absurdes explications données aux phénomènes économiques. Des exemples de ce genre sont présents dans l'inapplicabilité d'une théorie du consommateur moyen jusqu'au comportement des individus d'une société pré-industrialisée, ainsi que face aux prédictions du PNB. La production nationale englobe la valeur donnée aux ménagères, male oublie de rendre compte de la production de la femme au foyer.

The Economic

Consequences

by Judith Alexander



Dans cet exposé nous soulevons la dichotomie qui existe dans l'économie traditionnelle entre les activités au sein du marché du travail et celles prenant place en dehors de celui-ci. Les économistes ont de plus différencié l'activité humaine entre deux types: le travail (activité productrice) et les loisirs ou activités de consommation (activités utilisant les biens et les services). Ces deux taxonomies ne résultent pas en deux classifications identiques--une certaine activité productrice se passe en dehors du marché du travail--et les classifications elles-mêmes présentent des symptômes d'inconsistance et d'inégalité.

La description inexacte de l'économie telle qu'avancée par les économistes est simplement malheureuse mais certaines des conclusions tirées de cette description pourraient être effectivement pernicieuses.

Il est clair que les femmes sont fortement représentées au sein du groupe de personnes impliquées dans le travail non-rémunéré et, par le fait même, tout énouncé à ce sujet s'appliquerait a fortiori au femmes. Une révision des conclusions suivantes ayant une importance particulière pour les femmes fera partie de cette présentation: les avantages de retraite, les contributions des femmes à la propriété matrimoniale, la contribution à l'activité familiale au niveau du

bien-être national et du travail bénévole.

Finalement, cette présentation revisera quelques uns des nouveaux développements encourageants survenus dans l'évaluation économique du travail non-rémunéré.

This paper reviews recent developments in economics in the analysis of unpaid work. Such a review is useful since traditional economics is sometimes too hastily dismissed as a vehicle of analysis of some non-market activities and also because researchers in this area may not be aware of the economic literature.(1) For the purposes of this paper non-market work can be equated with unpaid work since a market is an institution in which goods are exchanged at established prices and hence all who surrender goods are paid. Much of non-market work is, of course, housework performed primarily by women. Other forms of unpaid work include volunteer work, hobbies and leisure activities which produce goods (sewing, carpentry, etc.), and which may be performed by men and women. This paper will concentrate on unpaid housework.

Traditional economics has dichotomised activities into those which take place in the market place and those which occur outside. Economists have tended to concentrate their analyses on those activities which occur within the market, in itself a serious undertaking,

with the rationale that only market activities generate observable prices or rates of exchange, and that all such research is, in principle, potentially testable. Furthermore, all non-market activity is, implicitly, leisure. Thus the whole constellation of productive activities which do not appear on the market were ignored and in fact the whole question of what it is that people do when they are not working (for wages) has remained unanswered by economists.

In its basic form economics is the study of the allocation of scarce resources to competing ends in order to maximize satisfaction. The use of these resources, either directly through consumption or indirectly through the creation of produced goods which themselves provide satisfaction, requires time. Economists have only recently incorporated time in any significant way into their analysis(2)beginning with the publication of Gary Becker's seminal article in 1965.(3) The point is made by Becker that economists have not paid sufficient attention to non-market activities and the time they consume:

Throughout history the amount of time spent at work has never consistently been much greater than that spent at other activities. Even a work week of fourteen hours a day for six days still leaves half the total time for sleeping, eating and other activities. Econ-

omic development has led to a large secular decline in the work week, so that whatever may have been true of the past, to-day it is below fifty hours in most countries, less than a third of the total time available. Consequently the allocation and efficiency of non-working time may now be more important to economic welfare than that of working time; yet the attention paid by economists to the latter dwarfs any paid to the former. (4)

Before disparaging the profession further, it should be pointed out that a case might be made for ignoring nonmarket activity. Although economics is described as the allocation of scarce resources to competing ends, the much more restricted goal of explaining the production and consumption of market goods only, and the formation of their prices is often sought. If the focus of interest is the market, then non-market activity need only be analysed if it affects the market variables. There are two cases where non-market behaviour has a neutral effect on the market, which does not mean that non-market activity has no effect on the market but simply that its effect does not change as market variables change.

## These assumptions are: (5)

(i) Leisure and unpaid work respond similarly to market variables and their importance, relative to each other remains unchanged, when market variables change. For instance, suppose an increase in the wage rate results in an individual working less, she then has more time available for nonmarket activity--this assumption would require that leisure and unpaid work increase in the same proportion. However, our intuition would suggest that an increase in the wage rate would raise the opportunity cost of unpaid work and we would expect some substitution of non-market goods by market goods. This assumption in economic jargon is simply an appeal to Hicks' composite good theorem. (6)

(ii) Leisure and unpaid work are fixed inputs into family satisfaction and hence need not be analysed separately. The assumption of such a composite input cannot be accepted uncritically.

An analogous problem exists at the level of national income accounting. G.N.P. statistics have been designed to provide a measure of market activity and this indicator has been used as a proxy measure for economic welfare. If the boundary of production between market and non-market activities is changing, then it is difficult to know precisely what it is that G.N.P. measures.

Oli Hawrylyshyn argues that: Even if at one time it were true

that welfare and G.N.P. were closely related it is conceivable that past increases in productivity have also led to an increase in two factors that cause deviations of G.N.P. from welfare: externalities of production (joint production of bad's) and the increasing importance of noneconomic or non-market activities, particularly leisure and pleasure Thus, just as in an activities. underdeveloped economy we are often suspect of G.N.P. because it excludes much activity not yet commercialized, we may now question G.N.P. in highly developed economies because much important (new) activity is taking place outside the market. (7)

In short, the case to be made for ignoring the impact of non-market work is very weak and economists have responded to Becker's challenge by expanding the analysis of the individual's choice from the dichotomy between work and leisure to the trichotomy of market work, homework and leisure.(8)

The analysis of homework, market work and leisure has not been prompted entirely by disinterested scientific curiosity. Any attempt to upgrade the social and economic status of women requires that their major activities—housework and childcare—be acknow—ledged as legitimate productive activity. The implications of this acknowledge—ment are important for recognizing the contribution of a wife to the family estate, the problem of pensions under

the Canadian Pension Plan and even the more problematic question of "wages for housewives."(9) The two paths that economic research has recently taken are theoretical analyses of the work/leisure choice and empirical estimates to measure the value of unpaid work.

The previously mentioned work by Gronau is the most thorough in its examination of the paid work-unpaid work/leisure choice. Gronau develops a model and then tests the implications against both American and Israeli data.

The problem which Gronau addresses in relation to non-market activity is the difficulty of distinguishing between work and leisure. Should, for example, playing with the baby or doing needlework be described as work or leisure? Gronau suggests an interesting distinction between work and leisure--"work at home (like work in the market) is something that one would rather have somebody else do for one (if the cost were low enough), while it would be almost impossible to enjoy leisure through a surrogate."(10) The distinction is not perfectly defined-many of us enjoy at least some aspects of our jobs and would not willingly let others do them--however, it does capture the symmetry of market and nonmarket work; both are unpleasant and only undertaken for their respective monetary and non-monetary rewards. Formally, Gronau posits a single person household which maximises the

utility of the goods and services it consumes and its leisure time. consumption goods are provided either through market or non-market work, but the household makes no distinction between market and non-market work (i.e., all work is equally unpleasant). constraints faced by the consumer are that the amount of time she /he can spend on work and consumption is fixed. and that the amount she/he can spend on market goods is limited by her/his The individual will wage and income. choose the optimal combination of goods and leisure and may specialise in either market work or non-market work, or may be active both inside and outside the market.

In the case where the household consists of a husband and wife the opportunity cost for home-produced goods may well be lower for the wife than the husband because she often receives a lower wage; also the transactions costs for entering the market may well be higher for the wife. The market wage and non-market work should be negatively correlated, although the impact of the wage rate on leisure is ambiguous. Wage increases may induce individuals to spend more time working (because they enjoy the things that money buys) or less time working (because they can earn the same amount of money in less time) and more time pursuing leisure time activities.

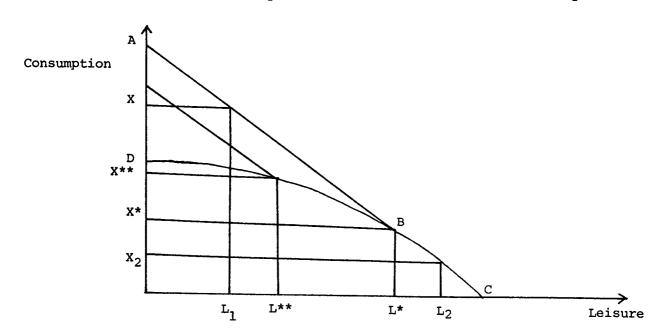
Shmuel Sharir has provided a useful

diagrammatic exposition, showing how an individual might simultaneously work in the market and outside the market.(11)

If we assume a perfectly competitive market wage AB and a home production possibilities curve DBC with diminishing marginal productivity then three different results are possible. An individual who chose point  $(L_1, X_1)$  would have  $L_1$  units of leisure and  $X_1$  units of goods, but  $X^*$  of these goods would be produced at home and only  $(L^*-L)$  units of labour would be supplied on the market. Similarly, an individual who chose the point  $(L_2, X_2)$  would specialise in non-market work and provide no market labour. Finally, an individual whose market productivity was

everywhere higher than his non-market productivity would specialise in market work. Alternatively, the slope of the DBC line can be interpreted as the production possibilities curve for an individual with an initial endowment of (L\*\*,X\*\*) who can "buy" leisure through the purchase of labour saving devices.

The presence of children in the family will result in different effects, depending on whether they are associated with leisure activities or the production of home-produced goods. If children require high consumption of goods relative to time (that is, are more goods intensive) than other activities, then "an increase in the number of children at the expense of



other activities should reduce the person's leisure." The effect of children on work at home and in the market depends on the profitability of home production. Women are, usually, offered lower wages than their husbands, and they may also be more pro-An increase in ductive in home work. the number of children, therefore, leads working mothers to work less in the market and more at home. Similarly, nonparticipants shift time from less goods intensive to more goods intensive activities, increasing their work at home.(12) Finally, if market substitutes for home produced goods (such as babysitters, diaper services, etc.) are available, the cheaper these are the less profitable for the mother to divert her time from the market. Gronau, in fact, found this result in a comparison between Israel (where maids and nursery schools are cheaper) and the United States.(13)

The distinction between work at home and leisure is useful for the evaluation of labour force participation; the discussion of the economic determinants of marriage and the division of labour (market and non-market) within the family; and for the evaluation of the output of the non-market sector. There are, of course, limitations to the approach. Both joint production and joint consumption are ignored and the leisure component of non-market work is ignored. Since these criticisms can be levelled at most analyses

of the market sector they cannot be regarded as particularly devastating. However, the assumption of a utility function for the family (the "single person household") is much less innocuous—the welfare of all members of the family enter into the utility function of one decision maker. This has aptly been called the <u>Samuelsonian finesse</u> by Marc Nerlove who quotes Samuelson:

Where the family is concerned the phenomenon of altruism inevitably raises its head: if we can speak at all of the indifference curves of any one member, we must admit that his tastes and marginal rates of substitution are contaminated by the goods that other members consume. These. . . external consumption effects are the essence of family life. . . Such problems of home economics are, abstractly conceived, exactly of the same logical character as the general problem of government and social welfare.

## and:

can be assumed to take place an optimal reallocation of income so as to keep each member's dollar expenditure of equal ethical worth then there can be derived for the whole family a set of well-behaved indifference contours relating the totals of what it consumes: the family can be said to act as if it maximises such a group preference function. (13)

As Sharir notes, his analysis does not allow for the substitution between a husband and wife of non-market work and the aggregation of their production possibilities would also require the aggregation of their utility functions. The clarity of his exposition is lost once a joint utility function is posited.

It has been suggested that the decision to marry is prompted by the gains from trade, (14) but once the marriage has taken place there is no mechanism for generating a joint utility function; similarly, it is not clear how children (potential or actual) figure in this utility function. We would all agree that a utility function for the family is a reasonable concept and that the "John Donne effect" (to use another of Nerlove's happy phrases) (15) must be extremely important, with each member of the family caring for the others. However, it is unfortunate, but true, that sometimes families break up, and at these times the altruism and caring posited by Samuelson and Nerlove appear to be somewhat idealistic. What is needed is an extra constraint for a "catastrophe clause" which prevents the total erosion of one member's market skills and assets in the event of a breakup. The symmetry, hypothesised by the Chicago economists such as Nerlove and Samuelson, between the two parties to the marriage unfortunately does not exist. Gary Becker has also commented on the decision to

divorce, suggesting that the incentive to divorce increases as the expected returns from that divorce increase.(16) However, marriage and divorce are not symmetric events—the decision to marry is almost always mutually arrived at (marriage does not take place unless both agree) while divorce or at least separation, seldom is (only one person need make the decision). Thus it is difficult to argue that both parties benefit from divorce or that both are prepared for it.

We seem to have strayed far from the topic of unpaid work. However, the current state of economic analysis of unpaid work in the family is that a mutual decision is made within the family for the allocation of market and non-market work and leisure time. This results in the optimum consumption of goods and leisure within the family. However, no provision has been made in the analysis for the depreciation of market skills of an individual who specialises in non-market work nor does there appear to be any acknowledgement that the breakup of a marriage need not be seen as an optimising decision by both individuals. It is axiomatic in economics that no individual need participate in a transaction which makes him or her worse off--economics does not analyse the politics of power yet this unfortunate corollary to marriage is ignored by all economists discussing the "new home economics."

The conclusion to be drawn from this is that the analysis of unpaid work in the family is useful and in ongoing families the allocation posited by the model meets the standard marginal criteria for an optimum. Since the allocation of work within the family occurs through non-market mechanisms the arguments for wages for household and unpaid work are specious.(17) However, on the breakup of a marriage either through death or divorce the contributor of the unpaid work should receive recognition for that work through a share in the assets of the marriage and an interest in any pension plan.

Attempts have been made to measure the value of household work. Oli Hawrylyshyn's paper is the only work based on Canadian data, (18) and he has also completed a survey of attempts in other countries.(19) Margrit Eichler has described the process of change in Canadian housework since the fifties as "industrialisation," by which she means the large scale change in technology within the household. (20) qualitative description of the household is a useful complement to Hawrylyshyn's dollar estimates. The surprising result reported by Hawrylyshyn is that the estimates of the value of household work range from 28% to 39% of G.N.P. with a mean of 34%. These figures are certainly significant! Also interesting are the findings that, in general, the labour force participation of wives

is inversely related to their household and that no matter what the wife's labour force participation her contribution to the total household work is never found to be less than two-thirds. Although the existence of these aggregate estimates is useful, they provide little guidance at the micro level for establishing the contribution to family welfare made by the individual in the family who performs the non-market activities.

In conclusion, economists have made attempts to analyse non-market work, but have (yet again!) fallen into the neoclassical trap of regarding all markets as perfect and in long run equilibrium. In many cases we cannot regard transactions as being freely made between autonomous individuals who are perfectly aware of their future preferences and these future options. Thus the analysis they provide must be severely limited.

## NOTES

- For example see: F.A. Blau, Comment on Mueller's "Economic Determinants of Volunteer Work by Women," <u>Signs</u>, Vol. 2, No. 1, (1976), p. 251.
- For early discussions see: A.K. Cairncross, "Economic Schizophrenia," Scottish Journal of Political Economy, Vol. 5 (1958), pp. 15-21; O. Morgenstern, "Demand Theory Reconsidered," The Quarterly Journal of Economics, Vol. 62 (1948), pp. 170-173; P.N. Rosenstein-Rodan, "The Role of Time in Economic Theory," Economica, Vol. 1, n.s. (1934), pp. 77-97; E. von Böhm-Bawerk, Capital and Interest, Vol. 11, Positive Theory of Capital, (English Translation), South Holland, Illinois (1959).
- G. Becker, "A Theory of the Allocation of Time," Economic Journal, Vol. 75 (September 1965), pp. 494-517.
- 4. G. Becker, op. cit., p. 494.
- See: R. Gronau, "Leisure, Home Production and Work the Theory of the Allocation of Time Revisited," <u>Journal of Political Economy</u>, Vol. 85 (December 1977), p. 1100.

- J.R. Hicks, <u>Value and Capital</u>, 2nd Ed. (Oxford: Oxford University Press, 1946), p. 33.
- O. Hawrylyshyn, <u>A Review of Recent Proposals for Modifying and Extending the</u> Measure of G.N.P., Statistics Canada, Occasional Paper #13-558, December, 1974, p. 11.
- 8. See: R. Gronau, op. cit., p. 1123 for a fairly complete list of references.
- 9. O. Hawrylyshyn, op. cit., p. 10.
- 10. R. Gronau, op. cit., p. 1104.
- Shmuel Sharir, "The Income Leisure Model: A Diagramatic Extension," <u>Economic Record</u>, Vol. 51 (March 1975), pp. 93-98.
- 12. R. Gronau, op. cit., p. 1111.
- 13. R. Gronau, "The Allocation of Time of Israeli Women," <u>Journal of Political Economy</u>, Vol. 84, sup. (August 1976), pp. S201-S220.
- P.A. Samuelson, Social Indifference Curves, <u>Quarterly Journal of Economics</u>, Vol. 70 (February 1956), p. 9 and p. 21 as quoted by: Marc Nerlbove, "Household and Economy: Toward a New Theory of Population and Economic Growth," <u>Journal of Political Economy</u>, Vol. 82 (March 1974), p. S204.
- G. Becker, "A Theory of Marriage," Part I, <u>Journal of Political Economy</u>, Vol. 81 (July/August 1973), pp. 813-846.
- 16. M. Nerlove, op. cit., p. S204.
- 17. G. Becker, A Theory of Marriage Part II, <u>Journal of Political Economy</u>, Vol. 82 (March/April 1974), p. S23. '
- 18. This is not to deny that some women are exploited within the family. Economists discuss the "representative consumer" with the implicit understanding that some individuals may be idiosyncratic, the same holds true for women in the home. It is true a model may break down when its parameters are too constricting, thus traditional consumer analysis is probably inappropriate for paupers and millionaires, but most wives are neither paupers nor millionaires (so to speak) and the bargaining solution reached with respect to the allocation of unpaid work within the household is amenable to economic analysis.
- O. Hawrylyshyn, <u>Estimating the Value of Household Work in Canada</u>, Statistics Canada, Occasional Paper #13-566, June, 1978, Ottawa.
- O. Hawrylyshyn, "The Value of Household Services: A Survey of Empirical Estimates," <u>Review of Income and Wealth</u> (September 1976), pp. 101-131.
- M. Eichler, The Industrialisation of Housework, Group for Research on Women, Ontario Institute for Studies in Education, Toronto, October, 1976.

## REFERENCES

- Becker, Gary. "A Theory of Marriage," Part I, Journal of Political Economy, Vol. 81 (August 1973), pp. 813-846.
- \_\_\_\_\_\_. "A Theory of Marriage," Part II, <u>Journal of Political Economy</u>, Vol. 82, sup. (March/April 1974), pp. S11-S26.
- . "A Theory of the Allocation of Time," Economic Journal, Vol. 75 (September 1965), pp. 494-517.
- Blau, F., A Comment on Mueller's "Economic Determinants of Volunteer Work by Women," <a href="Signs">Signs</a>, Vol. 2 (1976), pp. 251-254.
- Böhm-Bawerk, E. von. Capital and Interest, Vol. 11, Positive Theory of Capital, English Translation (South Holland, Illinois, 1959).

- Cairncross, A.K. "Economic Schizophrenia," Scottish Journal of Political Economy, Vol. 5 (1958), pp. 15-21.
- Eichler, M. The Industrialisation of Housework, Group for Research on Women, Ontario Institute for Students in Education, October, 1976.
- Gronau, R. "The Allocation of Time of Israeli Women," <u>Journal of Political</u> Economics, Vol. 84, sup. (August 1976), pp. 5201-5220.
- "Leisure, Home Production, and Work: The Theory of the Allocation of Time Revisited," <u>Journal of Political Economy</u>, Vol. 85, No. 6 (December 1977), pp. 1099-1124.
- Hawrylyshyn, O. Estimating the Value of Household Work in Canada, Occasional Paper #13-566, Statistics Canada, June, 1978, Ottawa.
- A Review of Recent Proposals for Modifying and Extending the
  Measure of G.N.P., Occasional Paper #13-588, Statistics Canada, December,
  1974 Ottawa
- . "The Value of Household Services. A Survey of Empirical Estimates,"
  Review of Income and Wealth (September 1976), pp. 101-131.
- Hicks, J.R. Value and Capital, 2nd edition (Oxford: Oxford University Press, 1946).
- Mincer, Jacob. "The Labour Force Participation of Married Women," in: Aspects of Labour Economics, National Bureau of Economic Research, Princeton, 1962.
- Morgenstern, O. "Demand Theory Reconsidered," The Quarterly Journal of Economics, Vol. 62 (1948), pp. 170-173.
- Nerlove, Marc. "Household and Economy: Toward a New Theory of Population and Economic Growth," <u>Journal of Political Economy</u>, Vol. 82 (March 1974), pp. \$200-\$218.
- Oakley, Ann. <u>The Sociology of Housework</u> (Bath: Martin Robertson, Pitman Press, 1974.
- Perlman, Richard. Labour Theory (New York: John Wiley & Sons, 1969).
- Rosenstein-Roday, P.N. "The Role of Time in Economic Theory," Economica, Vol. 1, n.s (1934), pp. 77-97.
- Sharir, Shmeul, "The Income Leisure Model: A Diagrammatic Extension," <u>Economic Record</u>, Vol. 51 (March 1975), pp. 93-98.
- . "Work Choices Under an Earnings Target," Journal of Behavioural <u>Economics</u>, Vol. 5, No. 2 (Winter 1976), pp. 93-118.
- Usher, Dan. G.N.P. and Economic Welfare (Oxford: Oxford University Press, 1968).