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## INTRODUCTION\*

Households are involved in a myriad of economic activities. Incomes are earned and spent, money is saved and borrowed, households use public services (e.g. health care, public transportation and education) and contribute to them by paying taxes and social security premiums. Many tasks and chores are performed within households which embody economic value even though no direct market transactions take place. Some members of households supply their labour on the labour market. Households rent, buy, occupy, and sell houses. Ultimately, all economic activities are undertaken by household members and are aimed at increasing households' welfare. For these reasons households can be considered to be the central entities in an economy.<sup>1</sup>

This special issue exemplifies some of the recent progress that has been made in the economic analysis of household behaviour. The primary aim of our introduction is to put the contributions into perspective, rather than to provide a review of the literature. For extensive recent reviews the reader is referred to Rosenzweig and Stark (1996) or Kooreman and Wunderink (1996).

In the articles in this issue five main themes will appear in various places and incarnations: 1) the consumer *versus* producer role of households, 2) intra-household *versus* inter-household issues, 3) subjective *versus* objective information, 4) static *versus* life cycle approach, and 5) household *versus* society.

### 1 CONSUMER *VERSUS* PRODUCER ROLE OF HOUSEHOLDS

From a theoretical point of view research on household economic behaviour received a big boost from the work of Nobel laureate Gary Becker, in particular his article on 'A Theory of the Allocation of Time' (Becker (1965)). In this 'New Home Economics' theory, Becker stressed the role of households as a producer of goods and services: utility is generated by commodities which the household may either buy on the market or produce at home. Among other things, this theory has revived the development of methods to assess and quantify the value of home production.

The paper by Maassen van den Brink and Groot reports on an attempt to value the two most important types of household production, household work and child

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<sup>1</sup> The *Journal of Economic Literature's* classification scheme reflects the prominent role of households in the economy and in economics: *Household and Family Economics* is the first subtheme (JEL-code D1) of microeconomics, the 'backbone of economic science.'

care. In the opportunity cost approach, adopted by Maassen van den Brink and Groot, household members are assumed to equalize the marginal utility of time spent on each activity. Since different individuals have different wage rates, and also differ in other characteristics, inferences can be made about the (ratios between) marginal utilities. By integration of the estimated functional for this variable one derives the total value of time spent on these activities.

The household production model associated with Becker's work is not the only approach that can be taken in the study of household behaviour. Alternatively, one may take the view that normative ideas about role patterns of household members are the dominant explanatory factors. It is not always clear to which extent the implications of this hypothesis differ from those of the home production model or from alternative economic models of household behaviour. For instance, the New Home Economics theory predicts that in certain circumstances there is an economic rationale for the male adult to specialize in market production, and for the female adult to specialize in housework and child care, which is the traditional pattern in western societies. Extending the horizon of research to other, non-western societies is expected to give rise to additional possibilities for testing the various theories. This is the approach taken in the paper by Wunderink and Niehoff, who compare household labour supply behaviour in four different countries: The Netherlands, USA, Russia, and Japan. One of their findings is that for Russia and Japan economic variables have much less explanatory power in an analysis of the division of labour within households than they have for the USA and The Netherlands. A possible explanation would be that in the latter two countries the market mechanism influences the allocation of tasks between household members to a considerable extent, whereas the marxist ideology and the role patterns of the traditional Japanese culture are more important in the other two.

## 2 INTRA-HOUSEHOLD *VERSUS* INTER-HOUSEHOLD

For a long time microeconomic research on consumer behaviour has been characterized by a remarkable discrepancy between theory and empirical analysis. The theory of consumer behaviour applies to a single individual whereas in the collection of data the household was the unit of analysis. There is ample empirical evidence, in particular for developing countries, indicating that welfare and access to resources within households is not equally distributed over household members. This has stimulated the development of more general models, usually game-theoretic in nature, in which the preferences of household members and their access to resources may differ. One implication of a traditional household demand model is that expenditures depend on total household income but not on the relative income shares earned by various household members. However, this is no longer necessarily the case in more general models of (intra-)household behaviour. In fact, the assumption of equal effects of male and female income on

the household expenditure pattern has been rejected several times in empirical research.

In the models of the New Home Economics theory the household is still regarded as a single decision unit, whereas game-theoretic models that have been developed later on explicitly incorporate different utility functions for different household members. In the paper by Dobbelsteen and Kooreman specific versions of the two types of models are formalized and tested in a study of the financial management of households. The household production approach emphasizes the efficiency aspects of the division of the tasks, whereas the alternative game-theoretic approach emphasizes the control and power aspects of this activity. The empirical results indicate that the latter does a better job in explaining the data than the former.

Van Praag and Warnaar analyze another aspect of intra-household allocation, *viz.* the expenditures of Dutch teenagers. Quite obviously, their preferences may differ from those of their parents. The teenagers in the sample studied here live with their parents and are attending school. Part of their consumption takes place by using commodities that have been bought by their parents. Another part of their consumption is from their own income, which is received from their parents, as a government allowance or as earnings from a part-time job. In some cases parents subsidize purchases for a limited number of expenditure categories. Van Praag and Warnaar focus on the expenditures from the teenager's own income, and use the variation in subsidies given by parents to estimate the price sensitivity of some of their demands.

### 3 SUBJECTIVE *VERSUS* OBJECTIVE INFORMATION

Whereas subjective data are used extensively in psychological and market research, main stream economics traditionally perceived the use of subjective information with scepticism. However, recent examples in the literature show that economists are becoming less reluctant to use subjective information. Broadly speaking, the subjective information can be classified into three types: 1) stated preferences, such as preferred working hours, willingness to pay or accept (contingent valuation); 2) subjective measures of needs and well-being; 3) perception of the economic environment (e.g. income, taxes, liquidity constraints and inflation, and measures of consumer confidence).

The use of subjective has been controversial because it was considered to be less reliable than information about actual behaviour. Respondents might be tempted to give answers that are socially desirable, so that they do not reflect their real preferences. Moreover, subjective information is often gathered on the basis of questions referring to hypothetical situations which might be perceived differently by various respondents and researches. For instance, responses to questions about preferred time use (type 1) considered by Maassen van den Brink and Groot were intended to refer to situations in which institutional constraints were

absent, but a preliminary data analysis (not reported in the paper) revealed that some women also seemed to more or less ignore the presence of children in determining their preferred allocation of time. With respect to the subjective measures of type 2, these problems may even be greater. For instance, the data used by Wunderink clearly bring out the cultural differences in the assessment of fair divisions of household tasks. The subjective information about the role of the partner in various aspects of financial management used in the Dobbelsteen-Kooreman paper is of type 3. Since these authors have information about both partners, they also know their perception of their own role, and are able to compare both answers. Their conclusion is that the differences should not be exaggerated and that the different answers by the two partners can often be interpreted as being complementary rather than contradictory.

The treatment of subjective information in the papers of this issue demonstrates the pragmatic view that most economists nowadays have with respect to the use of subjective information: it *is* information and it can, at least in some cases, be usefully exploited if its specific characteristics are taken into account. In this respect, there is not necessarily a fundamental difference with objective information. For instance, the measures of social security wealth and pension wealth used in the Alessie-Kapteyn-Klijn paper had to be constructed on the basis of some assumptions which are to some extent arbitrary. The resulting figures may, for this reason as well as for others, not adequately represent the perceptions individuals have about their claims on pensions and social security. Since saving behaviour is influenced by these perceptions, it seems worthwhile to gain more insight into the measurement and formation of these perceptions. Such research is expected to give valuable insights into the reliability of standard assumptions about, for instance, rational expectations that are used by economists to circumvent using subjective information (compare, for instance, Acemoglu and Scott (1994)).

#### 4 STATIC VERSUS LIFE CYCLE APPROACH

Households usually exist for a significant number of periods, typically decades, and changes in household characteristics often induce significant changes in the behaviour of household members. Many of these changes, such as the growing up of children and the arrival of retirement age, are known in advance. In those cases forward-looking households have a possibility to adjust consumption to their changing needs by means of saving or borrowing. A major attempt to capture some important aspects of such behaviour into an economic model was made in the 1950s by Franco Modigliani, another Nobel laureate. Modigliani focused on saving for the period after retirement, when income is reduced while consumption needs may still be substantial. The resulting life cycle model for consumption and savings has been extended and modified over the years. The validity of the cycle model as a description and explanation of household savings behaviour

has been the subject of a large literature in which theoretical, econometric and methodological developments are closely intertwined. It is probably fair to say that some fifteen years ago most economists would say that the empirical evidence was not consistent with important aspects of the life cycle model. Since then it has been argued that many of the apparent inconsistencies disappear if the theory is elaborated in greater detail, if less restrictive specifications of the utility functions are used and if micro instead of macrodata are employed. Special attention has been given, among other things, to modelling the influence of the changing household characteristics (notably the arrival, growing up and departure of children) over the life cycle. As a consequence, the empirical status of the modified life cycle theory is better than it was fifteen years ago.

In the paper by Alessie, Kapteyn and Klijn one aspect of the decisions to consume and save over the household life cycle is analyzed, viz. the effect of pension wealth and social security wealth. According to the theory, possession of such wealth should offset non-contractual savings. Alessie, Kapteyn and Klijn detect such a displacement effect, but their results suggest that it is more important for social security wealth than for pension wealth. One of the reasons for this result may be that pension wealth is perceived as a more risky asset than social security wealth and that people are less well informed about their pension wealth than about their social security wealth.

##### 5 HOUSEHOLD *VERSUS* SOCIETY

The household may be viewed as a small society in itself, which makes its own arrangements with respect to the division of labour, the distribution of income and the provision of public goods for its members. On the other hand, households can be regarded as members of a society which takes decisions about the same issues on a much larger scale. The decisions that are taken on both scales will of course interact and it is of considerable importance to know the effects of government policies on household decision-making in order to be able to judge the effectiveness of such policies. For instance, the time allocation of working women is influenced by the income tax imposed by the government, the expenditures of teenagers depend on the allowances for students, and the savings of households change when social security arrangements are altered. The paper by Folkertsma is devoted to the study of yet another type of such interaction viz. that between income taxation and the presence (or absence) of children in the household. Although the idea that consumption needs increase when children arrive is common sense, the measurement of this increase has turned out to be much more complicated than one expects after a first glance at the problem. It has been shown that information about consumption expenditures of households of different compositions is insufficient to determine the equivalence scales and that additional information, for instance in the form of normative judgements, is necessary. Moreover, it is not obvious how to trade off the effects of income

taxation on the welfare of different households without a normative specification of the social welfare function. Folkertsma analyzes these issues on the basis of a theoretical model and numerical simulations.

## 6 CONCLUSION

By personal experience, we are all quite well informed about the behaviour of at least one household, the one which we belong to ourselves. We observe the functioning of the households of relatives and friends. Yet it appears that many aspects of household economic behaviour are still poorly understood and that the available empirical evidence sometimes gives rise to widely differing interpretations. However small, households are complicated and heterogeneous social and economic institutions. As witnessed by the papers in this issue, they differ widely in their internal arrangements and they can react quite differently to internal and external developments. The art of economic modelling is to increase our understanding by developing models that can bear the tension of being simple, illuminating and realistic at the same time. The papers in this issue give an impression of the present state of this art.

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