April 10, 2013

Forthcoming in James D. Wright, Editor-in-Chief, *International Encyclopedia of Social and Behavioral Sciences*, 2d edition. Oxford: Elsevier Ltd (in press).

HOUSEHOLD ECONOMICS

by Shoshana Grossbard

Department of Economics, San Diego State University

shosh@mail.sdsu.edu

Abstract

Household economics analyses all decisions made by households at both the micro-economic and macro-economic level. One influential tradition based on the New Home Economics emphasises the role of household production and takes a micro-economic perspective. It includes unitary models conceiving of the household as a unified decision-making unit and models recognising that individual members of multi-person households keep their own preferences and constraints. Applications include all decisions possibly made by households, such as labor supply, consumption, savings, demand for health, time uses other than paid work, household financial arrangements, migration, marriage and divorce, other sexual behavior, fertility, demand for education, intergenerational transfers, and home-leaving by adult children. Household economists are interested in the effects of a wide range of government policies on household decision-making. Many of these applications of household economics have been pursued independently, but recently there is a tendency for more integration and cross-fertilization between the various models that can be classified under the umbrella of 'household economics'.

Keywords: household, demographic economics, household production, family, fertility, labour supply, health economics, time use, New Home Economics, economic growth, Gary Becker, health, education

Household economics analyses all decisions made by households, including those regarding consumption, savings, labor supply, leisure, home production, health, education, fertility, marriage, divorce, environmental protection, emotional wellbeing, and participation in institutions.

There are many kinds of households. Most—but not all--households are families living together, and therefore household economics overlaps with economics of the family [Becker 1981]. It also overlaps with demographic economics.

History

Even though Malthus and some other classical economists wrote on fertility and other household decisions, at the end of the 19th century the marginalist revolution moved the focus of economics to market transactions and pushed part of household economics into a black box. The parts of

household economics that continued to be studied by mainstream economists include consumption and labor supply, two areas closely tied to the monetary economy. During this period some agricultural and home economists studied household production (e.g. Reid, 1934). The New Home Economics (NHE), a movement towards the reintegration of the household into economic analysis, was initiated by Nobel-laureate Gary Becker and Jacob Mincer at Columbia University in the 1960's (Grossbard-Shechtman, 2001 and Grossbard, 2011).

Some Key Modeling Assumptions

Five elements of theoretical models of the household are considered here: number of household members, subject matter of the decision, type of decision-making, consideration of household production, and number of time periods considered.

The most common household models assume one-person households and analyze decisions regarding consumption, savings, and labor supply. Regarding type of decision-making, if multiperson households act as if they were one unit the models are called 'unitary', a term introduced by Browning et al. (1994). Some unitary models assume that the household has one altruistic head, which leads everyone in the household to act in the household's best interest, even a "Rotten Kid" (Becker 1981). A problem with unitary models is what Apps and Rees (2009) call the anonymity implication: unitary models assume that it does not matter who within the household earned a particular income. This implication has been refuted by many (a partial summary is provided by Haddad et al. 1997).

Alternative models have assumed that individual members of multi-person households keep their own preferences and constraints (Donni and Chiappori, 2011). These alternatives include consensual models, models of independent individual of decision-making, and bargaining models. Consensual models follow Samuelson (1956) in assuming that households have a social welfare function reflecting a household consensus. Independent individual models—such as Becker's (1973) competitive marriage models, Keeley's (1977) marital search model and Grossbard-Shechtman's (1984) model of marriage and labor markets--assume that marriage markets are in equilibrium and that individuals with separate preferences and constraints agree on exchanges based on equilibrium prices established in markets. Bargaining models assume that household members play games of a cooperative (e.g. McElroy and Horney 1981, Chiappori 1988) or a non-cooperative nature (e.g. Konrad and Lommerud 1995). All three types of non-unitary model analyze how outcomes vary according to factors such as age, sex ratios in marriage markets, and divorce laws on intra-household distribution of goods and individual access to leisure (and thus labor supply). Becker (1973) coined such factors [marriage] market factors, McElroy (1990) called them EEP, and Browning et al. (1994) 'distribution factors'.

Household production plays a key role in many household decision-making models, starting with the original NHE models of consumption (Mincer 1963, Becker 1965, and Lancaster 1966) and labor supply (Mincer 1962). Models also differ in terms of the number of periods that they consider. Micro-economists tend to develop one-period models, an exception being Ghez & Becker's (1975) early dynamic model of consumption and labor supply. Macro-economists—who often analyze time series--are more likely to consider changes over time. A recent survey of macro-level time use analyses can be found in Aguiar et al. (2012). Furthermore, related economic analyses of home production in farming households have continued within the discipline of agricultural economics (e.g. Taylor and Adelman 2003).

A wide range of applications

Household economics continues to cover the study of labor supply, consumption and savings, as was the case before the arrival of the NHE. However, in the fifty years since the birth of the NHE many more areas of application have sprung up.

Grossman (1972), also part of the NHE, pioneered the use of household production models in analyses of household demand for health (see also Anderson and Grossman, 2009). This has become a large field, including the study of obesity (e.g. Fertig et al. 2009) and other harmful behaviors. Among the early applications of household production models to the study of time uses other than paid work are Biddle and Hamermesh (1990) and the analyses reviewed by Juster and Stafford (1991). Time allocation models examine a variety of time uses, from sleep (Biddle and Hamermesh 1990) to social interactions (Saffer and Lamiraud 2012) and household activities conserving the environment (Matsumoto 2013).

Household economics includes the study of household financial arrangements (e.g. Woolley 2003, Negrusa and Oreffice 2011) and migration. Also included are the study of marriage and divorce, applications that originated with Becker (1973), and of other sexual behavior, including timing of first intercourse (e.g. Cannonier 2012) and marital fidelity (Fair 1978; Smith 2012; Bishai and Grossbard 2010). Unmarried cohabitation among heterosexual couples (Grossbard-Shechtman 1982) and the division of chores work inside the household are also part of the subject matter (Becker 1981, Gimenez-Nadal and Sevilla 2012). The formation of same-sex couples is a recent and growing application of household economics (e.g. Jepsen and Jepsen 2002, Badgett et al. 2008, Grossbard and Jepsen 2008, Oreffice 2011).

Children are a major focus of household economics. Micro-economic analyses of fertility were pioneered by Leibenstein (1957) and Becker (1960) and have generally assumed that couples made fertility decisions as one unit. Browning (1992) summarized a large portion of the economic literature dealing with children and published prior to 1980. More recent studies examining women's decision to have a child either alone or in couple include Ekert-Jaffe and Grossbard (2008). Analyses of children based on a collective model also introduce individual differences between the spouses (e.g. Cherchye et al. 2012). Parents invest in their children in different ways, including caring for them (Folbre and Yoon 2007), paying for their education, choosing between sending them to school and to work (Kis-Katos 2012), and giving them monetary transfers (Becker 1981). Economists study such investments in the context of a wide range of children outcomes (e.g. Currie 2011, Conway and Li 2012, and Cunha et al. 2010). Gifts of time and money from children to older parents have also been analyzed by household economists (e.g. Becker 1981, Pezzin et al. 2009) and so have unmarried adult children's decisions to live away from their parents (e.g. Le Blanc and Wolff 2006, Del Boca and Chiuri 2010).

Policy, Laws, and Technology

Household economics is interested in the effects of a wide range of government policies on household decision-making. This encompasses *inter alia* the effects of taxes on labor supply (e. g. Beninger et al. 2006), of drug policies on drug consumption (e.g. Becker et al. 2006), and of paid parental leaves on fertility and labor supply (e.g. Datta Gupta et al. 2008).

Household economics also analyzes how laws affect outcomes of household decision-making. This includes studies of the effects of divorce laws on divorce (e.g. Becker 1981, Wolfers 2006) and labor force participation (e.g. Peters 1986, Chiappori et al. 2002), marriage laws on economic growth (e.g. Schoellman and Tertilt 2006) and fertility (e.g. Guttierez and Beccera 2012), property laws on maintenance of physical capital (e.g. Ellickson 2008), and bride price refundability on sexual fidelity (Bishai and Grossbard 2010).

A relatively new area of research deals with the effects of technological changes in household production on economic growth (e.g. Greenwood et al. 2005) and fertility (Bailey and Collins 2011). How changes in contraceptive technology have affected fertility and wages (Bailey, Hershbein and Miller (2012) as well as labor supply (Goldin and Katz 2002, Oreffice 2007) is also a relatively new direction for research on household economics. With the increased availability of merged household and firm data it is hoped that economists will also produce analyses of how firms' policies towards their workers affect various household outcomes such as labor supply and fertility (Grossbard-Shechtman 2003).

Towards more integration

Since the start of the NHE in the 1960's household economics has experienced big leaps forward. However, these leaps have been uneven, with some applications and methodologies leaping more than others. For a long time micro household economics dominated, but in recent years the growth in macro household economics is noticeable. In part, it has been propelled by the increased availability of time use data both at the national and the international level. However, the expansion of household economics into the study of outcomes not previously considered part of economics characterizes the micro-applications of household economics more than its macro-level applications, and the more empirically oriented researchers more than the scholars specialized in theory.

More integration and cross-fertilization between the various branches of household economics would be desirable. Given that similar theoretical and empirical models can often be applied to many different kinds of outcomes being researched, there is much to gain from models developed separately for the study of a restricted set of household outcomes being exported to researchers dealing with different household outcomes. This holds for both theoretical and empirical models; micro- and macroeconomic models of household decisions.

Journals such as the *Review of Economics of the Household* and the *Journal of Population Economics*, as well as edited books such as *Household Economic Behaviors* (Molina, 2011), contribute to such crossfertilization by publishing a variety of models dealing with household economics.

Related entries: family, fertility, labor supply, health economics, household production

References

Aguiar, M., Hurst, E., Karabarbounis, L., 2012. Recent developments in the economics of time use. Annual Rev of Economics. 4,373–97.

Anderson, R., Grossman, M., 2009. Health and the household. Rev of Economics of the Household. 7,219-226

- Apps, P. F., Rees, R., 2009. Public Economics and the Household, Cambridge: Cambridge University Press.
- Badgett, M.V. L., Gates, G., Maisel, N., 2008. Registered domestic partnerships among gay men and lesbians: the role of economic factors. Rev of Economics of the Household. 6,327-346.
- Bailey, M. J., Collins, W.J., 2011. Did improvements in household technology cause the Baby Boom? Evidence from electrification, appliance diffusion, and the Amish. American Economic J: Macroeconomics. 3,189-217.
- Bailey, M., Hershbein, B.J., Miller, A., 2012. The Opt-In revolution? contraception, fertility timing and the gender gap in wages. American Economic J: Applied Economics. 4,225-54.
- Becker, G. S., 1960. An economic analysis of fertility. In National Bureau Committee for Economic Research, Demographic and Economic Change in Developed Countries, a Conference of the Universities. Princeton, N.J.: Princeton University Press.
- _____, 1965. A theory of allocation of time. Economic J. 75,493-515.
- _____, 1973. A theory of marriage: Part I. J of Political Economy. 81,813-846.
- _____, 1981. A Treatise on the Family. Cambridge: Harvard University Press, first edition.
- Becker, G. S., Murphy, K.M., Grossman, M., 2006. The market for illegal goods: the case of drugs. J of Political Economy. 114, 38-60.
- Beninger, D. et al. 2006. Evaluating the move to a linear tax system in Germany and other European Countries. Rev of Economics of the Household. 4,159-180.
- Biddle, J., Hamermesh, D., 1990. Sleep and the allocation of time. J of Political Economy. 98, 922-43.
- Bishai, D., Grossbard, S., 2010. Far above rubies: the association between bride price and extramarital Sexual Relations in Uganda. J of Population Economics. 23,1177-1188.
- Browning, M., 1992. Children and household economic behavior. J of Economic Literature. 30, 1434-1475.
- Browning, M., Bourguignon, F., Chiappori, P.-A., Lechene, V., 1994. Incomes and outcomes: a structural model of intra-household allocation. J of Political Economy. 102,1067-1096.
- Canonnier, C., 2012. State abstinence education programs and teen birth rates in the U.S. Review of Economics of the Household. 10,53-76.
- Cherchye, L., De Rock, B., Vermeulen, F., 2012. Married with children: a collective labor supply model with detailed time use and intrahousehold expenditure information. American Economic Review. 102,3377-3405.
- Chiappori, P.-A., 1988. Rational household labor supply. Econometrica. 56,63-90.

- Chiappori, P.-A., 2011. Collective labor supply with many consumption goods. Rev of Economics of the Household. 9,207-220.
- Chiappori, P.-A., Fortin, B., Lacroix, G., 2002. Marriage market, divorce legislation, and household labor supply. J of Political Economy. 110,37-71.
- Conway, Karen S., Minghua L., 2012. Family structure and child outcomes: a high definition, wide angle snapshot. Rev of Economics of the Household. 10,345-374.
- Cunha, F., Heckman, J.J., Schennach, S.M., 2010. Estimating the technology of cognitive and noncognitive skill formation. Econometrica. 78, 883-931.
- Currie, J., 2011. Inequality at birth: some causes and consequences. American Economic Rev. 101, 1-22.
- Datta Gupta, N., Smith, N., Verner, M., 2008. The impact of Nordic countries' family friendly policies on employment, wages, and children. Rev of Economics of the Household. 6,65-89.
- Del Boca, D., Chiuri, M.C., 2010. Home-leaving Decisions of Daughters and Sons. Rev of Economics of the Household. 8,393-408.
- Donni, O., Chiappori, P.-A., 2011. Non-unitary models of household behavior: a survey of the literature, in J.A. Molina (ed.) Household Economic Behaviors. New York: Springer.
- Ekert-Jaffe, O., Grossbard, S., 2008. Does community property discourage unpartnered births? European J of Political Economy. 24,25-40.
- Ellickson, R. C., 2008. The Household: Informal Order around the Hearth. Princeton: Princeton U Press.
- Fair, R., 1978. A theory of extramarital affairs. J of Political Economy. 86,45-61.
- Fertig, A., Glomm, G., Tchernis, R., 2009. The connection between maternal employment and childhood obesity: inspecting the mechanism. Rev of Economics of the Household. 7,227-256.
- Folbre, N., Yoon, J., 2007. What is childcare? Lessons from Time Use Surveys from major English-speaking countries. Rev of Economics of the Household. 5,223-248.
- Ghez, G., Becker, G.S., 1975. The Allocation of Time and Goods over the Life Cycle. New York: Columbia University Press.
- Gimenez-Nadal, J. I., Sevilla, A., 2012. Trends in time allocation: a cross-country analysis. European Economic Review. 56,1338-1359.
- Goldin, C., Katz, L., 2002. The power of the pill: oral contraceptives and women's career and marriage decisions. J of Political Economy. 110,730-70.
- Greenwood J, Seshadri A, Yorukoglu M., 2005. Engines of liberation. Rev of Economic Studies. 72,109–33

- Grossbard, S., 2011. Independent individual decision-makers in household models and the New Home Economics. in J.A. Molina (ed.) Household Economic Behaviors. New York: Springer.
- Grossbard-Shechtman, A., 1982. A theory of marriage formality: the case of Guatemala. Economic Development and Cultural Change. 30,813-830.
- ______., 1984. A theory of allocation of time in markets for labor and marriage. Economic J. 94,863-82.
- ______., 2003. "Introduction" in Grossbard-Shechtman, S. (ed.), Marriage and the Economy. Cambridge and N.Y: Cambridge U Press.
- Grossbard, S. & L. Jepsen. 2008. "The economics of gay and lesbian couples: Introduction to a special issue on gay and lesbian households," Review of Economics of the Household, 6(4): 311-325.
- Grossman, M., 1972. On the concept of health capital and the demand for health. J. of Political Economy. 80,223–255.
- Gutierrez, E., Suarez Becerra, P., 2012. The relationship between civil unions and fertility in France: preliminary evidence. Rev of Economics of the Household. 10,115-132.
- Haddad, L., Hoddinott, J., Alderman, H., 1997. Intrahousehold resource allocation in developing countries: Models, methods and policy. Baltimore and London: John Hopkins University Press.
- Jepsen, L., Jepsen, C., 2002. An empirical analysis of the matching patterns of same-sex and opposite-sex couples. Demography. 39,435-453.
- Juster, F.T., Stafford, F.P., 1991. The allocation of time: empirical findings, behavioral models, and problems of measurement. J of Economic Literature. 29,471-522.
- Keeley, M. C., 1977. The economics of family formation. Economic Inquiry. 25,238-250.
- Kis-Katos, K., 2012. Gender differences in work-schooling decisions in rural North India, Rev of Economics of the Household. 10,491-519.
- Konrad, C., Lommerud, K.E., 1995. Family policies with non-cooperative families. Scandinavian J of Economics. 97,581-601.
- Lancaster, K. J., 1966. A new approach to consumer theory. J of Political Economy. 74,132-57.
- Le Blanc, D., Wolff, F.-C., 2006. Leaving home in Europe: the role of parents' and children's incomes. Rev of Economics of the Household. 4,53-73.
- Leibenstein, H., 1957. Economic Backwardness and Economic Growth. New York: John Wiley.
- Matsumoto, S., 2013. Spouses' time allocation to pro-environmental activities: who is saving the environment at home? Rev of Economics of the Household ONLINE FIRST http://link.springer.com/article/10.1007/s11150-013-9177-x

- McElroy, M.B., 1990. The empirical content of Nash-bargained household behavior. J of Human Resources. 25,559-83.
- McElroy, M.B., Horney, M.J., 1981. Nash-bargained household decisions: toward a generalization of the theory of demand. International Economic Rev. 22,333-49.
- Mincer, J., 1962. Labor force participation of married women: a study of labor supply. in H. Gregg Lewis (ed.) Aspects of Labor Economics. Princeton, N.J.: Princeton University Press.
- Molina, J.A. (ed.), 2011. Household Economic Behaviors. New York: Springer.
- Negrusa, B., Oreffice, S., 2011. Sexual orientation and household financial decisions: evidence from couples in the United States. Rev of Economics of the Household. 9,445-463.
- Oreffice, S., 2007. Legalization of abortion, intra-household bargaining power, and labor supply. Rev of Economics of the Household. 5,181-207.
- Peters, H. E., 1986. Marriage and divorce: informational constraints and private contracting. The American Economic Rev. 76,437-454.
- Pezzin, L.E., Pollak, R., Schone, B., 2009. Long-term care of the disabled elderly: do children increase caregiving by spouses? Rev of Economics of the Household. 7,323-339.
- Reid, M., 1934. The Economics of Household Production. New York: John Wiley and Sons.
- Saffer, H., Lamiraud, K., 2012. The effect of hours of work on social interaction. Rev of Economics of the Household. 10,237-258.
- Samuelson, P. 1956. Social indifference curves. Quarterly J of Economics. 70,1-22.
- Schoellman, T., Tertilt, M., 2006. Marriage laws and growth in Sub-Saharan Africa. American Economic Rev, Papers and Proceedings. 96,295-298.
- Smith, I., 2012 Reinterpreting the economics of extramarital affairs. Rev of Economics of the Household. 10,319-344.
- Taylor, J., Adelman, I., 2003. Agricultural household models: genesis, evolution, and extensions. Rev of Economics of the Household. 1,33-58.
- Wolfers, J., 2006. Did unilateral divorce laws raise divorce rates? A reconciliation and new results. American Economic Rev. 96,1802-1820.
- Woolley, F. 2003. Control over money in marriage. in S. Grossbard-Shechtman (ed.) Marriage and the Economy. New York: Cambridge University Press.