

Economics in Society: The Ethical Dimension, a Panel organised by the World Economics Association.

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The Ethics of the Economics of Working Time of Couples: Theory and Applied Statistical Methods.

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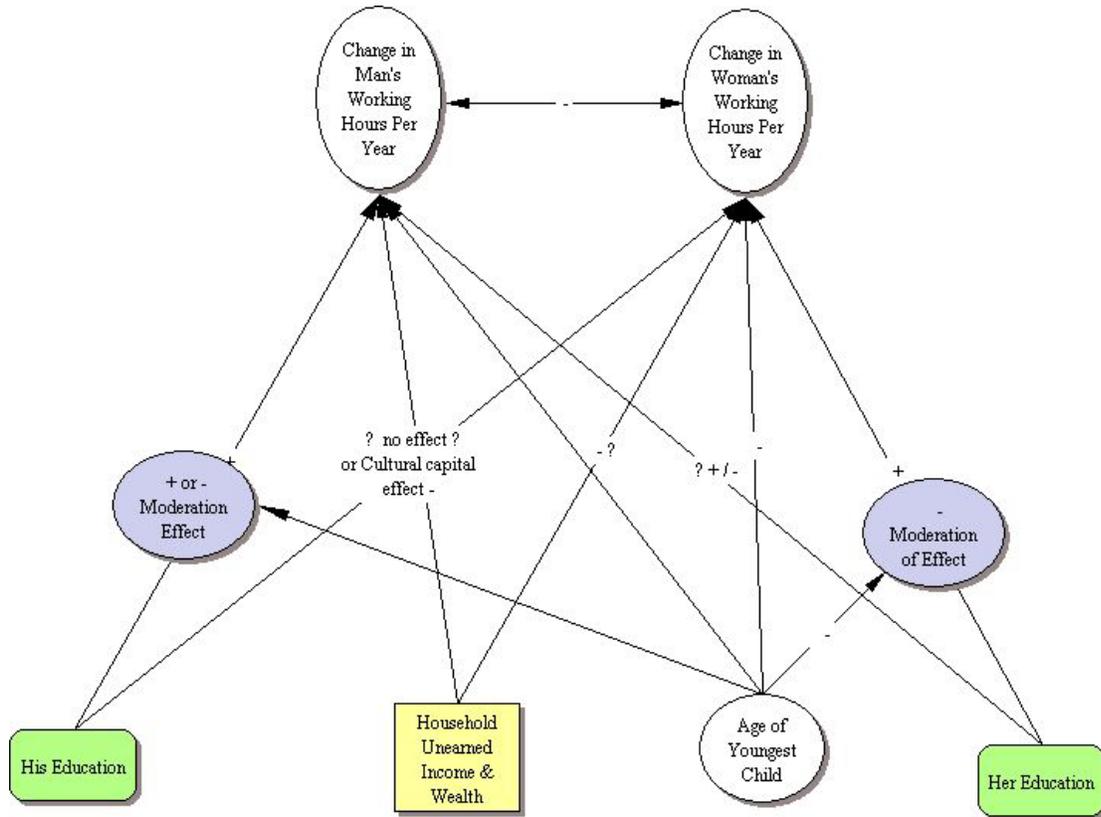
Background: As a member of the Fairness At Work group I co-authored a paper for the 2nd conference on Regulating Decent Work, titled “Informality and Institutional Change in Child Labour: An Indian Case Study”, with S. Watson. The present proposal is about ***The Ethics of Statistical Analysis of Working Time***. In general the ethics of labour supply offer an interesting testing ground for applying human capabilities theory to an area that is challenging for both policy and economic theory. Three challenges exist – firstly to deal with domestic and subsistence labour in ways that do not denigrate (or ignore) them, whilst separating out labour ‘supply’ as the provision of labour to the paid-labour market; secondly, to deal with intra-household disagreement as well as household-level strategizing about labour supply, i.e. avoid methodological individualism; and thirdly, to carry out empirical work without prejudicing too far the policy dialogue that others can have (in a pluralistic, democratic society) – yet still without trying to offer isolated facts from an empiricist viewpoint.

Introduction: I am working on applying new statistical methods to study paid weekly working hours of both spouses in a couple, using ‘hours’ as a dependent variable in regression models. For example, in heterosexual couples, a man’s decision about labour supply is influenced by the characteristics of his partner, and vice versa. Trials show clear asymmetry of these effects. Education, other caring duties, age of the youngest child, and marital status all have different effects for UK men and women in couples. For those who leave couples, too, the effects of these variables suddenly change and we might want to know about this rather than assuming each worker provides labour independently of their household structure and their divorce experience. The direct impact of **dependent children** in shaping working hours tends to be **negative** for women and **positive** for men. This descriptive statement plays the role of a ‘fact’ and in this short paper I trace several ethical aspects of such statements. The statistical work continues by using structural equation modelling (SEM), an alternative to more traditional econometric methods. We find interactions of the gendered pattern of doing childcare with people’s education and household wealth.

Research Questions: What ethical factors influence how we report on new empirical results in the area of labour supply in a globalising economy? Using dyadic models, how

best can we interpret labour-market statistical models for couples or mother-child pairs using panel data? (See Figure 1 for illustration).

Figure 1: Asymmetric Cross Effects of Education Interacting with Children on Working Hours



Key References

Kaplan, D. (2008). Structural Equation Modeling: Foundations and Extensions. London: Sage.
 Kenny, D. A., D. A. Kashy, et al. (2006). Dyadic Data Analysis. New York, Guilford Press.

Ethical Issues:

The paper will take a position that coherently marries up a response to all of the following five main issues:

- i) What overall theory of labouring deals well with the supply of p aid labour and the other nonpaid forms of work? (Human capabilities theory, which encompasses some other theories, but also needs to be complemented by other explanatory theories of paid-labour supply.) (Nussbaum, Fevre) and What aspects of HC theory are morally preferable to the main competing theirs? [this section involves briefly explaining Human Capabilities theory as advocated by feminists, and how it differs from both Sen’s and Human Capital theories.]

- ii) What treatment of non-paid labour is needed when one wants to focus on paid labour? I.e. in general, if studying commercial markets, one does not ignore the non-commercial part of that market; and in any case, the non-commodification of the work done in other domains is something that must be taken seriously so that paid and nonpaid work are not simply taken as substitutable or comparable. (Anderson, Nelson, Himmelweit)
- iii) When writing about people who are part of couples, it is sexist and/or damaging to use an ideal typical heterosexual couple? What alternatives are there – perhaps calling all couples ‘cohabiting dyads’;
- iv) What aspects of conflict within households can be brought to bear on statistical and econometric analysis of paid labour time, and does this annul or contradict existing regressions of labour supply? I.e. is there omitted variable bias (**OVB**) when the tensions of a cohabiting couple are omitted from statistical estimates, or when the past history of divorce is ignored? (Luckily we may have empirical panel data for UK from which to work on this as an empirical rather than a theoretical question.) Is the ignoring of caring work also causing OVB? (Yes)
- v) And finally, if we want a pluralistic policy dialogue, what kind of factual status do various sorts of interpretation have, after doing regression? (This section leads to general conclusions about microeconomic econometrics so is done very carefully.)

Further Exploration of v) above, on ‘facts’ and different kinds of claims, and their validity:

Examples include:

Descriptive statistics, inferential statements about means of variables.

The prediction that a rise in X is associated with a specific rise in Y.

The statement that X’s cause Y in this empirical area of paid working hours.

(this has a modal status, i.e. is about tendencies not deterministic)

Errors in the equation are useful for technical reasons and at times, of interest in themselves as deviations from a local norm, using a regional ontology we find errors informative and hence not errors but merely deviations. This is a change in the statistical discourse.

Discourse –has power relations embedded, has aspects of legitimacy and authority of speakers in it, and has normative connotations. This example is very important in illustrating a combination of a post-structuralist statistical interpretation discourse with a very sophisticated form of statistical modelling. It is possible to avoid common errors of neoclassical-economic essentialism in carrying out the research. This opens up a huge arena for optimism about using Quantitative Methods along with other methods in Economics.

Interpretation of statistical significance of slopes

Interpretations of the Goodness of fit tests.

Lastly,

Interpretations of slope coefficients.

We suggest that the pluralism is between schools A, B, and C of labour supply. School D is more open to encompassing all that is true of A, B, and C.

A=human capital theory

B=Bourdieuian sociological theory of economic life

C=other theories of wealth effects on labour supply, e.g. drudgery theory as entrenched in basic tenets of Neoclassical economics.

D=an interdisciplinary study of the economy, rooted in human capabilities theory, recognising that economic activity is just one part of what people construe as a **'good life'**. Paid work is both a means and an end, according to HC theory. So A B C get embedded into a wide-ranging theory of labour supply. This is in turn consistent with the New Home Economics but only with considerable modifications to avoid Methodological Individualism and homo-economicus assumptions.

Most of these theoretical claims are widely accepted by feminist economists and should be taken on board by WEA.

Methodological Remarks:

Popper has often been misunderstood. In testing hypotheses, numerous interpreters have thought along Popperian lines that they can only state claims that have been tested, or are testable. This restricts the scope of science. This is a false interpretation of Popper. ... (Cite examples of economists' and geographers' typical response to the above issues). In Table 1 I set up a contrast of this widespread standard empiricism with a competing approach. The standard empiricism cites Popper but may not be true to the original works by him. In the last column I add my own response to each issue. This is a critical realist interpretation based on the principles of data collection & interpretation we have worked on through a period of years, including doing several empirical studies (Morgan and Olsen, 2005; ch. 1 by Olsen, 2010; Olsen and Morgan, 2010). We find hypothesis testing to play a role, but to be complemented nicely by retrodution, leading to a need to appreciate the truths found at the explanatory level in unpalatable theories. Hence pluralism is not only needed on macro-ethical grounds but also in order to acquire fuller explanations and to avoid 'throwing out the baby with the bath water'. When rejecting the bulk of widely accepted neoclassical economic explanations for labour supply patterns, we need to be careful, for good ethical as well as empirical and methodological reasons; some of these claims are true. It would be awful to reject a theory that bears a lot of valid material just because of not liking its connotations (Olsen, CJE 2009).

Table 1. Labour Supply Theory and Testing from Two Standpoints in Philosophy of Science

Issue	Standard Empiricist Economics	Critical Realist Economics
Domestic labour	Often ignored or separated out as an isolated issue	Integrated
Paid labour as a 'thing'	Taken for granted	Seen as an open boundary and a process of

		delineation/demarcation
Testing hypotheses about slopes of lines	<p>Falsification is a widespread practice, but it nevertheless leads to ongoing doubts about facts</p> <p>Unfalsifiable claims cannot be argued to be valid;</p> <p>Claims that survive falsification are central to a valid argument</p>	<p>Claims are embedded in arguments about the real, giving solidity to an overall interpretation but with a willingness to consider challenges (i.e. fallibility) on all specifics.</p> <p>Hence falsification is not central to overall validity.</p>
Comparing men with women	Empirically seen as parallel, comparable, and even symmetric as workers	Seen as asymmetric and related to each other
Goodness of fit (GOF) tests	Seen as damning if tests fail	Researcher simply moves back to qualitative methods if GOF tests fail
Deduction	Preferred (but actually one could do standard empiricist methods without having deduced a model from axioms)	<p>Not preferred.</p> <p>Ontology is not prior to epistemology, but instead they interact.</p>
Induction	<p>Rejected (but actually from looking at patterns in data, economists pick up stylised facts and this is a form of induction)</p> <p>Do not do qualitative research</p>	<p>Preferred, but only in conjunction with retroduction – asking why things look the way they do in the data</p> <p>Mixing qualitative with quantitative data all the time</p>
Retroduction	Not used	Used- example of combining news reports and Government published data with micro-data
Interpretation of the slopes of lines	Seen as factual for the whole universe of population sampled	<p>Seen as a representation</p> <p>Regression is seen as potentially a ‘practically adequate’ research design (note Sayer, 1992, gives us this concept but applies it with different results)</p>
Interpretation of the means of variables	With their confidence intervals, seen as factual for	Seen as potentially masking inequality, difference, and

	the whole universe of population sampled	different levels within configurations ie. Subgroups of the sample.
Role of 'errors'	<p>Individual case errors help show whether model is a good fit or not</p> <p>Correlations of male and female errors would suggest a lack of independence of these two regression equations</p> <p>Dealing with homogeneity, further improvements would generate truly random errors, which are usually seen as a sign of improved specification</p>	<p>Errors are seen as evidence in themselves</p> <p>These deviations help us find out how difference works with a population</p> <p>After studying errors we again do retrodiction</p> <p>Inference is not the focus here, but looking closely at the sample itself</p> <p>All models are seen as simplifications so errors would be usual</p> <p>Agrees that the reduction of error by developing a less parsimonious model is generally good; agrees also that if endogeneity is a problem, then orthogonality of the variables on the explanatory side of a regression should be sought</p> <p>For couples, this implies using the dyadic methods with actor-partner interdependence (APIM).</p>
Homosexuality	<p>Heterosexual couples are often seen as normal</p> <p>This makes heterosexual couples and other forms of relation seem like deviance</p>	<p>Deviance is seen as normal because of ongoing social change</p> <p>Heterosexual and other couple types are each expected to require separate retrodiction, therefore smaller samples</p>

		<p>Movement from one couple-type to another is expected, so people are not pigeonholed into the labels ([essentialism]), and panel data is preferred</p>
Crosssectional data	<p>Rarely seen as adequate, since panel data shows up unobserved heterogeneity; panel data preferred.</p>	<p>Cross sections are expected to be dominated by longterm inequality and structural features. Thus they are appreciated.</p> <p>Panel data are treasured for showing transitions and shortterm movements.</p> <p>Unobserved variables, if important, are sought to get representation in new data sets & new data sources! Retrodution on any important point of unobserved heterogeneity, such as supposed lazy-worker syndrome and supposedly workshy, benefit-dependent households.</p>

Conclusions and implications for microeconomics in general

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