

**Beiträge zur Ökonomie von Haushalt und Verbrauch**

---

Begründet durch Prof. Dr. Erich Egner

Herausgegeben von Prof. Dr. Rosemarie von Schweitzer, Universität Gießen  
und Prof. Dr. Klaus Hesse, Universität Kiel

Heft 22

**The Role of 'Informal' Activity  
in Household Economic Behaviour**

By

**James Cécora**



**Duncker & Humblot · Berlin**

**JAMES CÉCORA**

**The Role of 'Informal' Activity in Household  
Economic Behaviour**

# **Beiträge zur Ökonomie von Haushalt und Verbrauch**

**Begründet durch Prof. Dr. Erich Egner**

**Herausgegeben von Prof. Dr. Rosemarie von Schweitzer, Universität Gießen  
und Prof. Dr. Klaus Hesse, Universität Kiel**

**Heft 22**

# **The Role of ‘Informal’ Activity in Household Economic Behaviour**

**By**  
**James Cécora**



**Duncker & Humblot · Berlin**

Die Deutsche Bibliothek – CIP-Einheitsaufnahme

**Cécora, James:**

The role of “informal” activity in household economic behaviour / by James Cécora. – Berlin: Duncker und Humblot, 1991

(Beiträge zur Ökonomie von Haushalt und Verbrauch; H. 22)

ISBN 3-428-07157-3

NE: GT

Alle Rechte vorbehalten

© 1991 Duncker & Humblot GmbH, Berlin 41

Fotoprint: Werner Hildebrand, Berlin 65

Printed in Germany

ISSN 0522-697X

ISBN 3-428-07157-3

*To my parents  
in formal recognition of many years  
of ‘informal’ inputs*



## Preface

'Informality' usually has a pleasant connotation, suggesting relaxation and a lack of constraints; for the economist, however, 'informal activity', in the sense of unobserved or unregistered economic transactions, rather incites discomfort and the need to remedy a lack of information. By filling in some of these gaps with empirical data on household economic behaviour, the author hopes to contribute to better insights into the functioning of society's most elementary economic and social entity: the family household.

The survey upon which this study is based was carried out by the Institute of Structural Research of the West German Federal Agricultural Research Centre in Braunschweig-Völkenrode with joint funding by the Research Centre and the Federal Ministry of Agriculture in Bonn. In addition to his gratitude for this financial support, the author wishes to express his sincere appreciation to Prof. Dr. E. Neander, director of the Institute of Structural Research, and to the highly professional members of the research 'task force', i.e. to Prof. Dr. H. Schulz-Borck, whose methodological experience - especially in the fields of evaluation and time-budget studies - was invaluable, and to H.-J. Günther, whose speed and precision in programming and data management were a reliable foundation of our work.

The survey was very demanding on the participants and we thankfully acknowledge their conscientious and steadfast cooperation. Their frankness and hospitality towards our research team will not be forgotten. We are also indebted to the Agricultural Chambres in Hannover and Weser-Ems for their help in establishing contact to the sample households.





## Table of Contents

<b>Preface</b> .....	7
<b>0 Introduction:</b> .....	13
0.1 General context of the subject matter .....	13
0.2 Objectives and methods of our empirical investigation .....	15
0.3 Definition of terms .....	16
<b>1 Household Behaviour in Economic Theory</b> .....	23
1.1 Three modules: state, enterprises, households .....	24
1.2 Factors influencing non-market production by members of private households .....	27
1.3 Choice theory and resource allocation .....	30
<b>2 Private Households in Public Statistics</b> .....	33
2.1 Depiction of households in general administrative statistics: National and international accounts .....	33
2.2 Statistical instruments in the Federal Republic of Germany .....	36
<b>3 Informal Economic Activity of Private Households in the Light of     Empirical Research</b> .....	41
3.1 Macro-economic investigations for evaluation purposes in administrative statistics .....	42
3.2 Behavioural research on household 'informal economic activity' .....	44
3.3 Unanswered questions and hypotheses .....	49

<b>4 Design and Implementation of a Survey on Household Economic Behaviour and its 'Informal' Aspects .....</b>	<b>53</b>
4.1 Theoretical concept .....	53
4.2 Selection of the survey sample, survey design and implementation .....	57
4.2.1 Selection of the survey sample .....	58
4.2.2 Survey design and implementation .....	59
4.3 Classification and evaluation of survey data .....	63
4.3.1 Categories of time-use .....	64
4.3.2 Evaluation of time-use .....	67
4.3.3 Classification of the income and allocation of nominal and real goods .....	70
4.3.4 Evaluation of the income and allocation of nominal and real goods .....	70
<b>5 Survey Results .....</b>	<b>73</b>
5.1 Utility value and allocation of household income in nominal and real goods from 'formal' and 'informal' sources .....	75
5.1.1 Utility value of household income in nominal and real goods .....	75
5.1.2 Household allocation of income in nominal and real goods .....	81
5.2 Time-allocation and the utility value of 'formal' and 'informal' inputs of human capital into household subsistence .....	83
5.2.1 Description of time-allocation by members of the survey households .....	84
5.2.1.1 Time-input into 'formal' gainful activity .....	86
5.2.1.2 Time-input into 'housework' .....	89
5.2.1.3 Time-input into miscellaneous side-activities .....	90
5.2.1.4 Time-input into non-domestic 'informal activities' .....	91
5.2.1.5 Total productive use of time .....	92
5.2.2 Utility value of 'time-use by members of the survey households .....	93
5.3 Utility value of owner-occupied residences for household subsistence .....	94
5.4 The 'real consumption' of the survey households and a review of the contribution of 'informal' resources .....	94
5.5 Economic behaviour - as described by the 'subsistence technology' of private households .....	100

Table of Contents	11
6 Summary .....	103
Literature .....	105
Appendix	117



## 0 Introduction

### 0.1 General context of the subject matter

Economic stagnation, high rates of unemployment, the high costs of wage labour and taxes<sup>1</sup> have lead to increased interest in economic activity escaping direct observation and measurement. The fact that an economic activity is or is not directly observed and measured usually determines whether it is considered to be a 'formal' or an 'informal' transaction.<sup>2</sup> The interest taken in the unobserved 'informal' economy is engendered by the supposition that it plays a large, perhaps even a growing part in economic life or in the national economy as a whole<sup>3</sup> and that ignorance of its dimension and development increasingly hampers effective economic planning and social policy. At the same time, it is quite evident that 'informal economic activity' is not a monolithic phenomenon. Hence, efforts to describe 'informal' phenomena in administrative statistics vary methodically according to the type of activity. For example, no attempt is made to fully integrate data on 'household production', especially on domestic self-services - one of the major components of 'informal economic activity'<sup>4</sup>, into national accounting statistics. This is partially due to difficulties involved in surveying and evaluating pertinent data but also to the standpoint<sup>5</sup> that, apart from the participation of household members in the labour market, productive activity of private households is irrelevant to the purpose of national accounts. One reaction of the German Federal Bureau of Statistics to increasing interest in the interaction between 'formal' and 'informal' sectors of the economy appears to be

---

<sup>1</sup> In the Federal Republic of Germany in 1986-87 taxes on wage income and social security contributions amounted to approx. 33% of income before taxes. See *Lützel und Mitarbeiter* 1990b, p. 172.

<sup>2</sup> Definitions of the 'informal economy' can be found, eg. in *Teichert* 1988, p. 20ff and *Jessen und Siebel* 1989.

<sup>3</sup> See eg. *Schrage* 1984, p. 11; *Hilzenbecher* 1986b; *Schäfer und Wittmann* 1985, p. 619 and *Jessen und Siebel* 1989.

<sup>4</sup> See eg. *Hilzenbecher* 1986a, p. 33; *Evers* 1987, p. 358; *Chadeau et Fouquet* 1981, p. 32 and *Hawrylyshyn* 1976.

<sup>5</sup> See *Schäfer* 1988, p. 310ff.

the development of a programme of 'satellite surveys' on 'household economic activity' to indirectly supplement the 'hard core' macro-economic data.

Among the interesting aspects of 'informal activity' from a macro-economic point of view are:

- the amount of foregone taxes (fiscal implications),
- the size and organisational form of the 'informal labour force' (implications for the employment market),
- the dimension of illegal or criminal activity (fiscal, juridical and criminological implications of the 'shadow economy'),
- the allocative and distributive effects of informal economic activity (socio-economic implications) and
- the interaction of informal economic activity with fluctuations in the formal economy (implications for the national economy).

Research activity on a macro-economic level is mainly directed to the study of the exchange of economic values between the state, private enterprises and private households,<sup>1</sup> while usually implying a more or less productive economic role to the state and to private enterprises but, apart from their input into the labour market, a purely consumptive role to private households. By contrast, our investigation is concerned with *the way private households interact economically with the state and other collective organisations, with private enterprises and with other households in order to attain their achieved level-of-living*. At the same time, we attribute basically the same rules of economic behaviour to private households as to private enterprises regarding the management and *productive use of available resources* in view of the attainment of a maximum of utility. Thus, we are not attempting to estimate the economic importance of the 'informal economy' for the national economy as a whole.<sup>2</sup> Our attention is directed to the *contribution of 'informal', i.e. statistically unknown or only roughly estimated economic activity of the members of private households to their own level-of-living* with the intention of achieving a descriptive analysis of the wide spectrum of household economic behaviour. As such, the questions asked and the answers provided by this study are indeed also quite pertinent to macro-economic research.

---

<sup>1</sup> See eg. Schäfer 1988, p. 310 and Hesse 1976.

<sup>2</sup> Depending on how it is defined and measured, 'informal production' has been assessed to amount to between 2% and over 60% of the GNP; see, eg.: Blades 1982; Peskin 1982; Schäfer 1988 and Rürup 1983.

## 0.2 Objectives and methods of our empirical investigation

Our comparative research on 'living conditions' of households in different geographic locations and in different socio-economic segments of the population has disclosed the total inadequacy of such frequently used economic indicators of household social and economic welfare as the level of earned income or of expenditures. For this reason we have sought new measures of a household's 'real consumption', 'real income' and 'total resource input' into the attainment of a given level-of-living, assuming that each household has, as a collective decision-making body, its own utility function pertaining to its preferred and optimal resource input and the desired resultant consumption utility.

There are basically two reasons why it is not, in our estimation, possible to make use of existing data to investigate the contribution of 'informal economic activity' to the given level-of-living found in private households:

- First, existing data are not only incomplete; they are also unreliable. In most cases, such data are based on the results of interviews or questionnaires. Interviews and questionnaires are apt to give a considerably distorted picture of the phenomenon in question.<sup>1</sup> For example, at the conclusion of the Income and Consumption Surveys in the Federal Republic of Germany, in which income and selected expenditures are recorded on a daily basis (diary method), the participating households are requested to estimate the value of their consumption of self-produced fruits and vegetables during the entire preceeding survey year. Our own research experience has revealed that most persons are not able to accurately or even realistically assess the (market) value of self-produced wares and services, even shortly after actual consumption. In addition, the survey periods of most wide-scale surveys are extremely short (i.e. a few days).
- Secondly, resources are often more or less interchangeable, depending on their availability to the household in question and on the household's specific utility function. Hence, it would be inappropriate to simply collect and combine available data from various sources and to subsequently conduct a survey attempting to fill the gaps in an effort to construct a purely synthetic model household. We have chosen the '*holistic approach*', considering that 'the whole is more than merely the sum of its parts', i.e. we have gathered information about the *entire spectrum of resource income and allocation* during an extended survey period of a 'non-representative', but nonetheless sufficient number of identical survey

---

<sup>1</sup> In the case of studies of time-allocation see, eg.: Hilzenbecher 1986 and for studies of taxes on income and wealth: Schmolders 1984, p. 74.