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Sources and Methods of Gathering Economic Information by Household Members

ABSTRACT

The article continues the authors' exploratory analysis of the determinants of contemporary households' behaviour in a turbulent environment, undertaken in a broader research context. The aim of the article are: a) to identify current sources of information and ways of gathering knowledge and experience in contemporary households, b) to confirm the validity of considering them as potential predictors of household financial decisions. The hypotheses we adopted in the study assume that (1) households use accumulated knowledge and experience when making financial decisions regardless of the location of their residence; (2) the sources of economic information, ways of accumulating knowledge and experience depend on the age and education of the person making the greatest financial contribution to the household budget; (3) the decision-making process in households confirms the significant influence of social and

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expert factors on the gathering (accumulation and, consequently, diffusion) of knowledge and experience. The following methods were used in the study: (a) a critical analysis of literature in the field of sources and channels of obtaining and collecting information, as well as methods of transferring knowledge and experience between entities; (b) comparative analysis; and (c) pilot surveys. For the purpose of the study, 11 potential sources of economic information and 13 ways of knowledge and experience transmission were identified. The results of the pilot study confirm that households use accumulated knowledge and experience when making financial decisions regardless of the location of the residence; knowledge accumulated in the form of secondary information, i.e. already processed and at least partially interpreted, provided in the course of the exchange of views within households and by people from their environment, is more important than primary sources of information.

KEYWORDS: household; household finances; information collection and diffusion; communication; financial decisions

INTRODUCTION

The household, which is a group of persons related by blood or marriage or unrelated persons living together and supporting each other, is forced to make various choices to satisfy the needs of its members. Those choices boil down to decisions, both trivial and essential to the functioning of those entities. Those decisions are of an economic nature, leading to activities such as investing, saving or incurring liabilities. As the effects of those decisions concern all members of the household they must be made based on reliable and complete information that reduces risk.

Decisions regarding the disposal of financial resources in the household are made by its members, depending on the roles assigned to them, including those making the largest financial contribution to the household budget; however, the information necessary to make appropriate decisions is collected by everyone. There are many sources, just like there are many tools, for collecting information. Still, gathering of information alone is not

enough. Information needs to be “shared” with other household members to process it and create the pool of knowledge and experience necessary for decision-making.

In classical economics, a household was treated as a monolith in which decisions were made by the “head” of the household (often the family) – i.e., depending on the community system, either the husband or the wife. However, observation of the everyday life of households indicated the prevalence of a democratic model of decision-making, especially in economic matters. The incorporation of such observations into analytical works was made possible particularly thanks to Gary S. Becker, who presented a coherent concept of the economic theory of behaviour, defining the basis for the assessment of the decisions of group entities (Becker, 1976, 1993). Later on, the question of the impact of information collection activities of individual household members (and the exchange of information between them) on the economic decisions of households was taken up by other authors (McKay et al., 2003; Harwas-Napierała, 2006). In Poland, such research was conducted more broadly by Harwas-Napierała (2006), Tyc (2007), Patrzalek (2010a, 2010b) and Dejnaka (2011c). Those authors paid attention to sources and entities collecting information necessary to make decisions on the purchase of everyday use items or durable goods. The present study fits into the field of that type of research as it deals with the accumulation and dissemination of economic knowledge and experience in households and focuses on the sources and ways in which household members gather economic information. The novelty of the paper is that it draws attention to the significant importance of social factors (intra- and extra-household communication) in household decision-making, particularly at the stage of knowledge and experience accumulation and diffusion.

The aims of the article are a) identify current sources of information and ways of gathering knowledge and experience in contemporary households; and b) confirm the validity of

considering them as potential predictors of household financial decisions. The analyses are carried out as part of a broader study focused on modelling the behaviour of contemporary households in a turbulent environment. The hypotheses adopted in the study assume that 1) households use accumulated knowledge and experience when making financial decisions regardless of the location of their residence; 2) the sources of economic information, ways of accumulating knowledge and experience depend on the age and education of the person making the greatest financial contribution to the household budget; 3) the decision-making process in households confirms the significant influence of social and expert factors on the gathering (accumulation and, consequently, diffusion) of knowledge and experience.

In the first part of the study, based on a critical review of the literature, considerations on the essence of a household and the rationality of its functioning are presented, especially in the context of the determinants of accumulation and information flow in the process of communication and information processing in households. The following were diagnosed: sources and methods of obtaining information, communication tools, causes and effects of disruptions of communication, information processing skills of household members serving to create the household's stock of knowledge and experience. The second part of the work describes the used methodology and presents the research group. The third part presents the results of the pilot study carried out, and the fourth section offers suggestions for directions and areas of further inquiry worthy of attention and discussion questions.

LITERATURE REVIEW

A household can be defined in various ways (Świecka, 2009, pp. 19–26). Most commonly, it is considered a set of related or consanguineous individuals (in nuclear or multigenerational families;

Albuquerque, 2009), as well as unrelated individuals, under various forms of cohabitation (Commuri & Gentry, 2000; Carrero & Aletti, 2017). These individuals live together, share meals (Piekut, 2020, p. 110), support themselves together (Hodoly, 1971, p. 10; Jędrzejewski et al., 2008, p. 25) and jointly manage their assets and budget to meet the needs of the individual/household members (Bywalec, 2012, p. 16; Zalega, 2016, p. 94). These entities base their activities on the members' own material resources and labour power (Światowy, 1994, p. 139). They have peculiar characteristics and decide on the economic and organisational conditions of the daily life of their members (Kędzior, 1992). Decisions to maximise and most rationally satisfy these needs (both consumptive and spiritual) of all members are made in them based on subjective preferences (tastes), tastes and habits, traditions, size of assets and debts (Calcagnini et al., 2024, p. 967), as well as existing objective constraints (household income, market prices of goods and services) (Zalega, 2007, p. 10).

Households vary, and their size and structure at any given point in time is the product of several processes (e.g. family formation/dissolution/formal or informal relationships; children becoming independent; caring for the sick/old) (Garenne & Stiegler, 2024, p. 405). In addition to the basic determinants of their differentiation (such as: primary source of income, number and age of household members, residence), one should also point out: the profile and set of potential risk factors (Ferreira et al., 2021); the strength of investment in the careers of spouses/partners and other household members (Bastani et al., 2025); the quality and nutritional value of the food they consume (Wang et al., 2025, p. 293), affecting health status (Brown et al., 2021; Coates et al., 2018; Coleman et al., 2023; D'Souza & Tandon, 2020; De Vreyer & Lambert, 2021; Harris-Fry et al., 2018), which is particularly relevant for people in vulnerable groups (women and children: Sinclair et al., 2021; Oster, 2009; Jayachandran & Kuziemko, 2011;

Lancaster et al., 2008; older people: Calvi, 2020) and the associated level of investment in health insurance (Zhang et al., 2023).

In economic theory it is assumed that a household, as a group of consumers, is a rational entity and behaves rationally, i.e. it undertakes such actions and activities and acts in such a way as to make the best use of its resources (human, financial, material) to satisfy its consumption needs (Światowy, 2006; Gutkowska & Ozimek, 2005). The decisions are made based on optimising the individual expectations of the household members, i.e. choosing a good or service that will provide them with the greatest possible satisfaction. The benefits of the choices made can be assessed by any consumer who has access to full and reliable information about goods (Świetlik, 2011). In reality, however, the requirements of economic rationality in the household often fade into the background and give way to other subjective motives (Burgiel, 2007).

In individual source management, a consumer does not behave rationally but emotionally (Kahneman, 2002, 2010). In their plans, consumers take a short time horizon into account, overconfidently trust their knowledge, succumb to the illusion of exercising conscious control over household finances, do not distinguish the outcomes of random events and others – dependent on their actions and do not refer to theory when assessing market phenomena, as a result of which their predictions significantly differ from actual results. People look for satisfactory solutions and are often guided by intuition rather than economic calculation (Wach, 2010, p. 96; Kłopotcka, 2022, p. 31), as they operate under conditions of limited access to information (Simon, 1986, pp. 209–224). They neither strive to seek the best decisions nor follow the principles of rationality (Romanowska, 2001, p. 147), although a household is capable of developing internally consistent and acceptable strategies (e.g. financial risk management strategy: Kata et al., 2021, p. 61).

Household behaviour, like human behaviour, can be defined as activities, actions and ways of behaving stimulated by feeling

and becoming aware of needs, defining the needs, qualifying them, deciding to satisfy them or not to satisfy them as they are impossible to satisfy for economic, social, moral or religious reasons (Szczepanski, 1981, p. 165). It is a set of complex responses of the household to specific internal (directly related to household members) and external stimuli (whose source is the household environment) (Zalega, 2007, p. 1), psychologically, socially and economically conditioned (Kiezel, 2004, p. 13), affecting the physical fitness and psychological well-being of those who comprise the household (Williams et al., 2012). These reactions are often accompanied by emotions (Eibner & Evans, 2005).

Households make decisions on a variety of issues, with shorter and longer time horizons. The accuracy of the decisions, especially those of an economic nature, depends on several factors, presented in Figure 1.

For households, information is the basis for decisions concerning the allocation of their resources to optimally satisfy their needs (Maciejewski, 2011, p. 222). The search for information, both inside and outside a household (Grzegorzczuk & Sibińska, 2011, p. 192), is primarily carried out by those most willing to make a given decision (Forlicz, 2011, p. 155).

In each household, individual members are assigned consumer decision making roles (initiator, decision-maker, advisor, provider, user) (Patrzalek, 2015, p. 20), forming an internally consistent behavioural system, performed according to the established rules. The roles are the result of specific patterns according to which the internal structure of the household is organised.

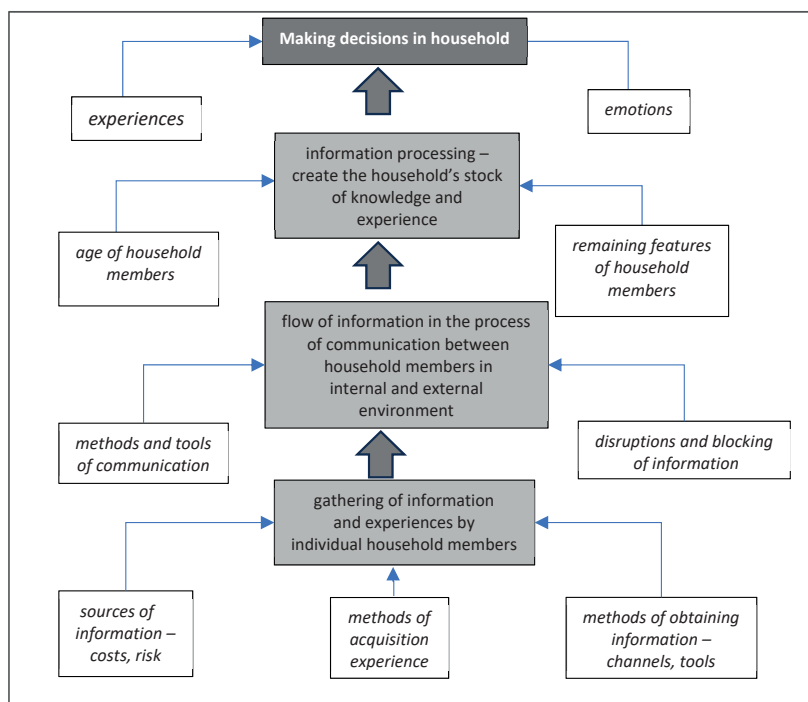
Information is usually defined as 1) a notification about something, communicating something, a hint, instruction; or 2) a factor thanks to which people or automatic devices act more efficiently and purposefully (Baran, 2008, pp. 101–103). It can be treated as both an economic resource and a commodity (Oleński, 2003, p. 204). Unlike data, information has some meaning, sense and purpose. Combined with understanding and the possibility of

using it, it constitutes human knowledge derived from information by integrating information with existing knowledge and experience.

Every piece of information has a number of characteristic features that can be divided into independent of the observer (properties of information) and dependent on the observer's interpretation (desirable features) (Skrzypek & Grela, 2005, p. 223). Importantly, the same information may have different meanings for different users (Skrzypek & Grela, 2005, p. 223), its value depends on the moment of its use (Olender-Skorek & Wydro, 2007), its quality is determined by many attributes (Miller, 1996, p. 79) and it can be classified according to various criteria (Flakiewicz, 2002). Obtaining information depends on the media on which it is recorded ("written word" – e.g., books, press, brochures, Internet resources sound – e.g., TV and radio programmes).

The literature on the subject indicates that the sources of information acquisition are closely related to the age of household members and the purpose of the search (Patrzalek, 2011, p. 278). This applies to both primary information (collected by individual household members) and secondary information (processed information) obtained from outside – research conducted by Maciejewski shows that 8 out of 10 households obtain information from people not belonging to the household (2011, pp. 234–235). It is worth emphasising that the stock of such information is greater in households with adult or adolescent children. Young people learn from each other about the current and future reality around them, especially in the world outside of school (Prensky, 2010, p. 18), and know more today than their peers did. They are curious about the world, like any previous generation, but have better access to information. Their knowledge base should therefore be much greater than that of their predecessors who grew up in an environment where information was a rare and sought-after good (Tapscott, 2010; Prensky, 2001a, 2001b). As it turns out, however, young household members know how to search for information

Figure 1. Household decision making process and its determinants.



Note. Own elaboration.

but are not able to evaluate it, analyse it critically, refer to other facts, generalise and draw conclusions, share findings with others and discuss further (Trucano, 2012). The speed with which young people search for information online means that they are just looking rather than reading it, thus they spend little time analysing it, assessing its relevance, accuracy or reliability (Rowlands et al., 2008, pp. 294–295). As a consequence, households with children and adolescents have a “disturbed” selection of information sources and information selection system, as young people have a limited perception of information in the environment of hyper-supply of data (Kamińska, 2015, p. 66).

The collection of information by household members is the first step in the entire household decision-making process. At this stage, knowledge resources are created to increase household members' well-being (Koomson et al., 2023, p. 593), to anticipate changes in the labour market (Gardeazabal & Polo-Muro, 2025), and to benefit from new technologies (Lusardi & Mitchell, 2023). Communication between household members is responsible for knowledge diffusion processes. In economic theory, this transmission of information has long gone unnoticed because the household has been treated as a unitary decision-making entity.

The way information is communicated within households and with the environment has changed over time. The acquisition of information in the past consisted primarily of the transmission of knowledge from generation to generation (vertical transmission) and spread relatively slowly due to communication limitations. The tools today dramatically increase the possibilities and transform (Castells, 2014; Ivan, 2023; Klimczyk, 2021). Nowadays, information is transmitted rapidly, also beyond individual households (horizontal transmission), definitely increasing the stock of knowledge and experience of households, often using artificial intelligence (AI) for this purpose (Hohenstein, 2023).

Communication is a social process involving the intentional transmission of signals (symbols) that engage the sensory receptors of the recipient, the purpose of which is to exchange thoughts and share knowledge, information and ideas (Dejnaka, 2011b, p. 290). One type of social communication, distinguished by the goal of its participants, is informative communication, defined as the process of intentional transmission or exchange of information between individuals, groups or institutions. The purpose of such communication is to develop the recipient's stock of knowledge without influencing their attitude and behaviour.

The transfer and exchange of information involves its movement between different entities using appropriate information channels, known as media (Dobek-Ostrowska, 2002, p. 17).

Intra-household communication is interpersonal – as it takes place between two individuals or among a small group of people. Information transmitted in that process produces specific effects and types of feedback (Dejnaka, 2011b, p. 291). Such communication takes place on three levels: factual (Baney, 2009, p. 46), instrumental (Mignot & Baylon, 2009, pp. 76–81) and affective (Bruno, 2010, pp. 17–18), in which cases verbal and non-verbal information is exchanged. Household members are involved in such communication when they provide, process, interpret and respond to information (Adams & Galanes, 2008, p. 24; Bloor et al., 2001). In terms of purchasing decisions, communication depends on the specialisation of household members, their gender and type of product (Patrzalek, 2010a, p. 169), or level of education (Zani et al., 2019), having most often a direct dimension (Forlicz, 2011, p. 157). Outside the household, consultation takes place with other family members specialising in selected product groups, with friends considered experts in a given field and with trustworthy individuals. The most popular form of behaviour in households when making purchasing decisions is mutual assistance of adult members, conversations and bringing information from outside – from friends and family (Patrzalek, 2011, p. 275). Communication (inside and outside a household), thanks to electronic channels, is no longer limited by time and space (Small & Vorgan, 2008, p. 20). The accessibility of information channels means that information obtained from anonymous market participants in the form of opinions posted on the Internet is becoming essential (Dejnaka, 2011c, p. 300; Scheibe, 2014, p. 71). Technological innovations are designed to help consumers save time (Koenigstorfer, 2012). Their emergence has resulted in changes in the way communication takes place within a household (Dejnaka, 2011a, p. 463; Dejnaka, 2011b, p. 290; Granström & House, 2007, p. 68).

The flow of information within households or its exchange with the external environment – despite the use of many modern tools – does not always run smoothly. Disruptions to

communication occur, resulting in information blockage and, as a consequence, individualisation of the behaviour of individual household members. Disturbances in the flow of information are most often caused by differences in views, age, gender and values of individual household members (Patrzalek, 2010b, pp. 43–44).

Households acquire information to process it, to create a stock of knowledge. Research on consumer information processing was conducted in the 1970s, and the theory formulated based on that was Fishbein and Ajzen's attitude theory (Fishbein & Ajzen, 1975; Ajzen & Fishbein, 1977; Fishbein & Ajzen, 2010). Research on people's attitudes was based on the above, as well as many other analyses the purpose of which was to predict human intentions and actual behaviour. In the 1980s, researchers focused on, in addition to cognitive processes, emotions – as it was recognised that they also play an important role in the choices and behaviour of many consumers. In the 1990s, studies of consumer behaviour took the accompanying experience into account (Grzywińska-Rapca, 2010, p. 348). As a result, it is known that – apart from the accumulated knowledge and experience of households – other factors influence their decisions.

METHODOLOGY

The results presented here are part of a broader project intended to develop a methodology for studying and modelling household behaviour in a turbulent environment. This project takes as its basis the results of a pilot study which focuses on various aspects of households' decision-making behaviour. Thus, it should be emphasised that the issues of information collection and knowledge gathering were overtly subordinated to decision-making processes.

The findings of the pilot study made it possible to, e.g., demonstrate that households can be studied in the convention adopted

for learning organisations (Kotlińska et al., 2023) and that those units are characterised by cautious attitudes when making financial decisions (Kotlińska et al., 2024). In this study, only features of the households related to their members' acquisition of economic information and accumulation of knowledge and experience were selected for analysis.

The pilot survey was prepared and conducted in January 2023, under conditions typical of CAWI (Computer-Assisted Web Interview). A non-random sample of households in Poland, whose primary source of income was hired labour, was taken as the basis. Other characteristics differentiated the collective and formed the basis for proposals for the classification of farms, which will be used in further research. The random selection was supplemented with elements of purposefulness, subordinating them to the two-dimensionally identified criterion of the household location (regional diversity supplemented by demographic potential and level of urbanisation). The survey used a dedicated LimeSurvey environment (links to the survey were made available to the respondents via e-mails and selected social media).

A total of 112 questionnaires were returned in the pilot study. Of these, the results obtained from 86 questionnaires (completed in full) were included in further analysis.

The survey consisted of 34 questions, including 22 in the core section and 12 metric questions identifying the surveyed entities. It was assumed that closed questions would be the basis of the information in both the metrics and the main part of the survey, although text comments were allowed to supplement the information on selected issues. In the section relevant to the verification of sources of economic information, ways of gathering knowledge and experience and the dependence of behaviour on the information context, the research material included 20 qualitative questions (taking the subject characteristics from the metrics into account), as a result of which source data covering over 70 variables was obtained. Of those, respondents' answers

to three questions were considered to be the leading ones for further analysis (dependent variables, in the case of which potential predictors were sought among information sources and ways of gathering knowledge and experience). One of them concerned the broader context of assessing the usefulness of the acquired knowledge and experience for improving the accuracy of financial decisions made in the household, without being more specific. The responses were categorised as follows: *yes* (82.5%), *hard to say* (16.3%), *no* (1.2%). The second question focused on assessing the intensity of using knowledge and experience from past periods when making decisions regarding the directions and methods of obtaining income and spending funds in the household. The obtained answers were: *always* (31.4%), *often* (57%), *occasionally* (11.6%). The third question – with the purpose of assessing the use of information, knowledge and experience in decision-making, addressed the issue of the frequency of conversations about household finances (including, in particular, the possibility of spending additional funds and the need to reduce expenses). A three-element categorisation included responses: *often* (80.2%), *occasionally* (15.1%), *no conversation* (4.7%). Potential predictors included a variety of household features, among which there were: 11-element categorisation of detailed information sources; 13-element categorisation of specific ways of gathering knowledge and experience; characteristics of respondents' information openness in terms of multi-source and multi-diffusion of knowledge.

The purpose of the survey was a preliminary, targeted characterisation to identify patterns in the behaviour of household members. The qualitative nature, however, limited the cognitive possibilities of the collected material. A traditional statistical analysis, supplemented by a characterisation of the interdependence of selected features, was initially adopted as the exploratory basis. The variables providing feedback in the surveys, relevant to the description of sources of economic information and ways of gathering knowledge and experience, are discrete variables (primarily

nominal, with symbolic representation of variables measured on an ordinal scale). Recognising the information potential of such variables in the subsequent stages of the project required explicit confirmation of the association of features based on cross-analysis. In the pilot study, this was accomplished by falsifying the hypothesis of independence using a chi-square test based on an assessment of the risk of a type I error (rejecting the null hypothesis despite its truth). It was assumed that the probability p of making an error should be less than the reference level of 0.05. A probability value of p higher than the reference value resulted in the rejection of the null hypothesis about the independence of the variables and the acceptance of the alternative hypothesis – that the variables were not independent. In this respect, the V-Cramer coefficient (sometimes called Cramer's V , denoted here as VC^1) was used in the study. In cases where the use of that measure of dependence was not possible due to insufficient representation of objects in the individual cells of the contingency table, standard analyses were supplemented with Fisher's exact test.²

Of the households surveyed, 31.4% were based in a rural area or town of up to 20,000 inhabitants, 20.9% in a city of 20,000–100,000, 30.2% in a city of 100,000–500,000, and 17.5% in a city of over 500,000 inhabitants. The largest group was represented by households where the principal bread-winners were

¹ This is a classical measure of association between the nominal variables, based on Pearson's chi-squared statistic, developed by Harald Cramér (1946). This coefficient is used for confirming associations between categorical (nominal/ordinal) variables, just like the phi coefficient introduced by Karl Pearson and strengthened by Udny Yule, of which V-Cramer is a modification and an extension to contingency tables, larger than 2×2 (Cramer, 1946; Sheskin, 2011, pp. 677–680; Liebetrau, 1983, pp. 14–16).

² The Fisher exact test (which is also referred to as the Fisher–Irwin test) was in 1934–1935 simultaneously described by R. Fisher, J. Irwin and F. Yates (Sheskin, 2011, pp. 649–655). This is a non-parametric statistical test used in the analysis of contingency tables, for testing hypotheses about the relationship between two categorical variables, especially in the case of small samples.

aged 41–50 years (38.4%), 51–60 years (29.1%) and 31–40 years (20.9%). In the survey, the largest group were households consisting of 4 persons (29.1%), 3 persons (27.9%), 2 persons (24.4%), 5 persons (10.5%) and single-person (8.1%) households. Two-generation households were represented by 54.7% of respondents, one-generation households by 40.7% and three-generation households by 4.6%.

RESULTS

Based on the survey results, as many as 88.4% of the surveyed households used the knowledge and experience from earlier periods when making decisions on the directions and methods of income generation and spending (31.4% of households always used accumulated resources and 57% used them frequently). According to the respondents, that practice brought good results (82.6% of the households stated that the accumulated knowledge and experience allowed them to make more accurate financial decisions). Additionally, both the practice and the belief in its effectiveness were popular and independent of the location of the household ($VC = 0.16$, $p \approx 0.620$ and $VC = 0.135$, $p \approx 0.793$, respectively), which positively verifies the first hypothesis put forward in the article. That verification can be strengthened by emphasising the independence from the location of not only the assessment of the household's level of economic knowledge ($VC = 0.150$, $p \approx 0.757$), including the assessment of the change of the household members' level of economic knowledge over the previous year ($VC = 0.172$, $p \approx 0.534$), but even the frequency of conversations in the household about its finances (e.g. opportunities to spend additional funds or the need to reduce spending – $VC = 0.121$, $p \approx 0.866$).

For households to use knowledge in decision-making, there must be information sources accepted by them, constituting a base

reference for the knowledge. Among those, the following should be considered as significant predictors of decision-making correlation between knowledge and the directions and modes of household income generation and spending (Table 1): acquaintances outside of work ($VC = 0.252$, $p \approx 0.027$), family members other than household members ($VC = 0.243$, $p \approx 0.037$), other adult household members ($VC = 0.239$, $p \approx 0.043$). Since the necessary medium for those sources is direct interaction with other people, they can be categorised as social sources. Adopting that order, there is a noticeable lack of statistical confirmation for the association of the analysed context with non-social sources of information (another source in the group rejected at the adopted reference level is also social in nature, indicating work colleagues as a carrier of information: $VC = 0.219$, $p \approx 0.083$).

Table 1. Predictors for dependent variable: the frequency of use of knowledge and experience from earlier periods in decisions on directions and ways of raising revenue and spending funds.

List of correlated predictors – Cramer's V			
Independent variable label		Value	Approx. significance
1	2	3	4
1	Assessment of the usefulness of households' knowledge and experience for the accuracy of financial decisions	0.313	0.002
2	Analysis of the size and structure of household expenditure as a means of accumulating knowledge and experience within the household	0.306	0.003
3	Age of the person making the largest financial contribution to the household budget	0.297	0.057
4	Watching (TV, Internet) popular science programmes as a means of accumulating knowledge and experience within the household	0.295	0.005
5	Reading the press as a means of accumulating knowledge and experience within the household	0.280	0.009

1	2	3	4
6	Comparing and analysing the level of interest rates of bank loans and deposits as a means of accumulating knowledge and experience within the household	0.270	0.014
7	Friends outside the workplace as a source of information about the economy for household decision-makers	0.252	0.027
8	Family members not belonging to the household as a source of information about the economy for household decision-makers	0.243	0.037
9	Talking with colleagues as a means of accumulating knowledge and experience within the household	0.242	0.039
10	Talking to family members outside the household as a means of accumulating knowledge and experience within the household	0.241	0.041
11	Other adult members of the household as a source of information about the economy for household decision-makers	0.239	0.043
12	Multiple sources of diffusional processes as informational openness	0.239	0.044
13	Colleagues from the workplace as a source of information about the economy for household decision-makers	0.219	0.083

Note. Dependent variable: "The frequency with which past knowledge and experience are used in decisions on directions and ways of raising revenue and spending funds."

Multi-diffusion was also highlighted as significant in the association with the subjective assessment of the usefulness of knowledge and experience gained within the household for making more and more accurate financial decisions (Table 2). Interestingly, at the assumed reference value for rejecting the correlation hypothesis, no information source was confirmed as a valuable predictor. Instead, such a role was attributed to as many as six ways of gathering knowledge and experience, including the socially categorised one in the form of exchanging

views between household members ($VC = 0.289, p \approx 0.006$). Other methods constituting significant predictors of the aforementioned feature were: watching popular science programmes on television and the Internet ($VC = 0.292, p \approx 0.006$), watching news ($VC = 0.253, p \approx 0.027$), and three ways of gathering information of a directly or indirectly expert nature: comparing and analysing interest rates on loans and bank deposits ($VC = 0.280, p \approx 0.009$), analysing the volume and structure of expenditure ($VC = 0.255, p \approx 0.025$) and reading books ($VC = 0.235, p \approx 0.049$).

Table 2. Predictors for dependent variable: the assessment of the usefulness of households' knowledge and experience for the pertinence of decisions made in terms of finances.

List of correlated predictors – Cramer's V			
Independent variable label		Value	Approx. significance
1	2	3	4
1	Multiple sources of diffusional processes as informational openness	0.359	0.000
2	Education level of the person making the largest financial contribution to the household budget	0.316	0.014
3	Frequency with which past knowledge and experience are used in decisions on directions and ways of raising revenue and spending funds	0.313	0.002
4	Assessment of the household's level of economic knowledge	0.301	0.004
5	Watching (TV, Internet) popular science programmes as a means of accumulating knowledge and experience within the household	0.292	0.006
6	Exchange of views among household members as a means of accumulating knowledge and experience within the household	0.289	0.006
7	Comparing and analyzing the interest rates of bank loans and deposits as a means of accumulating knowledge and experience within the household	0.280	0.009

1	2	3	4
8	Total number of people in the household	0.276	0.109
9	Assessment of the change in the level of economic knowledge of household members in the last year	0.260	0.020
10	Analysis of the size and structure of household expenditure as a means of accumulating knowledge and experience within the household	0.255	0.025
11	Watching (TV, Internet) programmes providing information as a means of accumulating knowledge and experience within the household	0.253	0.027
12	Reading books as a means of accumulating knowledge and experience within the household	0.235	0.049
13	Frequency of discussions about household finances	0.231	0.057

Note. Dependent variable: "An assessment of the usefulness of households' knowledge and experience for the accuracy of financial decisions."

The relevance of the above-mentioned categories was also confirmed by the analysis of the predictors of the assessment of the frequency of conversations within a household about its finances, categorised into three elements (often, occasionally, no conversation). As many as 80.2% of the surveyed households declared that such conversations often took place. In this case (Table 3), the confirmation of the significance of the feature association includes the social source of information (information from acquaintances outside of work: $VC = 0.244$, $p \approx 0.036$; information from work colleagues: $VC = 0.233$, $p \approx 0.053$ – only slightly exceeded the reference value). Among the modes of knowledge and experience accumulation, social variables such as the exchange of opinion between household members and acquaintances outside of work were also confirmed to be significant predictors (Table 3, items 1 and 11). The already indicated features such as analysing the volume and structure of expenditure (item 4), comparing and analysing interest rates on loans and bank deposits (item 8) and reading books (item 9) were verified positively. In that case, in addition

to multi-diffusion, the significance of the feature association was also confirmed by the age of the person making the greatest financial contribution to the household budget ($VC = 0.414$, $p < 0.001$).

The age of the person making the greatest financial contribution to the household budget can reasonably be considered as a predictor of only two sources of information: Internet portals ($VC = 0.412$, $p \approx 0.0003$) and work colleagues ($VC = 0.331$, $p \approx 0.016$). For the indicated active ways of knowledge acquisition and experience accumulation, age may be considered a predictor (VC ranging from 0.328 to 0.412, $p \approx 0.0003$ to 0.18) for watching popular science programmes on television and the Internet, reading newspapers, reading books, changing employers and conversations with work colleagues. The significance of the association of those variables with age is quite evident, as is the confirmation of age as a potential predictor of multi-source information ($VC = 0.324$, $p \approx 0.021$) and knowledge multi-diffusion ($VC = 0.495$, $p < 0.0001$).

Table 3. Predictors for dependent variable: the frequency of discussions about household finances (opportunities for additional spending, the need to reduce spending, etc.).

List of correlated predictors – Cramer's V			
Independent variable label		Value	Approx. significance
1	2	3	4
1	Exchange of views among household members as a means of accumulating knowledge and experience within the household	0.425	0.000
2	Age of the person making the largest financial contribution to the household budget	0.414	0.000
3	Total number of people in the household	0.393	0.001
4	Analysis of the size and structure of household expenditure as a means of accumulating knowledge and experience within the household	0.386	0.000

1	2	3	4
5	Multiple sources of diffusional processes as informational openness	0.372	0.000
6	Decision-making model	0.314	0.015
7	Number of people contributing to the household budget	0.277	0.010
8	Comparing and analyzing the interest rates of bank loans and deposits as a means of accumulating knowledge and experience within the household	0.273	0.012
9	Reading books as a means of accumulating knowledge and experience within the household	0.260	0.020
10	Friends outside the workplace as a source of information about the economy for household decision-makers	0.244	0.036
11	Talking to friends outside the workplace as a means of accumulating knowledge and experience within the household	0.240	0.042
12	Colleagues from the workplace as a source of information about the economy for household decision-makers	0.233	0.053
13	Assessment of the usefulness of households' knowledge and experience for the accuracy of financial decisions	0.231	0.057

Note. Dependent variable: "The frequency of discussions about household finances (opportunities for additional spending, the need to reduce spending, etc.)."

It can be deemed surprising that there are even fewer factors in the case of which the association with education (primary, secondary, higher) can be considered significant. This applies only to two ways of gathering knowledge and experience, i.e. conversations with work colleagues ($VC = 0.279$, $p \approx 0.036$) and watching popular science programmes on television and the Internet ($VC = 0.275$, $p \approx 0.039$). That source of information acquisition, together with the ways of gathering knowledge, is the only one for which economic education can be a predictor – $VC = 0.318$, $p \approx 0.013$). The above means that education, as a rule, has no

explanatory potential for either the sources of information acquisition or the ways of gathering knowledge. The only exceptions are the two mentioned ways of collection. The same conclusion applies to the age of the person making the greatest financial contribution to the household budget, with the proviso that it is a possible predictor in relation to elements that are naturally age-dependent (e.g. taking up a professional activity that allows conversations with colleagues). Thus, sources of information and ways of diffusing knowledge and experience are available and appreciated by the general public, regardless of age. The exception is watching popular science programmes, as it is significantly associated with age. Thus, the second hypothesis was falsified in principle – its confirmation is rather related to the nature of the sources of information and the ways in which knowledge and experience are gathered, as well as the costs of acquiring them.

The third hypothesis – i.e., the social and expert determination of the processes responsible for the accumulation of knowledge and experience and their subsequent diffusion is important for households – was confirmed by the research. It is noteworthy that when the correlation between financial decisions and information factors as well as knowledge and experience is analysed, the significant associations mainly concern the ways in which knowledge and experience are accumulated, rather than the source reference to the information potential. Information sources become relevant only in the context of specific questions (about decisions already made or planned). However, in that case, socially conditioned sources (adult household members, friends outside of work, family members other than household members) come to the fore. Under the circumstances, social intermediation also dominates the methods of gathering knowledge and experience confirmed as predictors – with a special role given to conversations with work-mates (who, as a source of information, only slightly exceeded the reference value of probability p). The accumulation of knowledge and experience, defined by elements that do not involve personal

social contact, indicates expert exploratory activities (such as analysing the volume and structure of expenditure or comparing and analysing interest rates on loans and bank deposits) or cultural products that summarise expert knowledge (popular science programmes or books) as relevant factors.

DISCUSSION AND CONCLUSIONS

The analysis of the literature on household behaviour indicates a one-dimensional approach to that issue, as the presented results refer to studies focused mainly on their consumption function. Meanwhile, the complexity of the decision-making processes in households and their multidimensional interconnections suggest the need to implement a different research procedure. This also applies to the informational context of the economic decisions made.

The results presented in this work were obtained in research conducted under methodological rigour, which assumed the use of statistical material taking data of a qualitative nature (limiting cognitive capabilities) into account. The method and contingency tables used in the study revealed insufficient representation of individual cells (identifying households with common features for a given contingency). This, however, did not deprecate the *in toto* conclusions, relevant from the perspective of further analyses. Therefore, this research should be regarded as complementary to the previous studies, but requiring continuation at the same time.

- The analyses confirmed the processes of knowledge and experience accumulation in households and the conscious use of the resources in the decision-making context.
- The research indicated the important role of social factors (in the case of both information sources and ways of knowledge accumulation) in the process of economic decision-making in households, including their multi-source and multi-diffusion nature.

- Considering the social factors in research dedicated to household decision-making raises methodological challenges, the resolution of which is a prerequisite for the development of data acquisition strategies describing the multidimensional contexts of household behaviour (this especially applies to the unambiguity of defining concepts in the procedure of collecting source material, as well as the need to introduce mechanisms for cross-verification of their understanding).
- The research confirmed the social and expert determination of the processes responsible for knowledge diffusion (also, when the link between financial decisions and information factors and knowledge and experience is analysed, the relevant associations mainly concern the diffusion of knowledge and experience, rather than the source reference to information potential).
- Sources of information only become relevant in the context of questions about specific decisions, already taken or planned, but then socially conditioned sources come to the fore (adult household members, friends from outside work, family members from outside the household).
- Social intermediation also dominates the ways of gathering knowledge and experiences confirmed as predictors, conversations with colleagues playing a special role. In the absence of this intermediation, the diffusion of knowledge occurring through self-analysis (size and structure of expenditure, interest rates on loans and deposits) or cultural works (popular science programmes, books) becomes significant.
- The study undermines confidence in the traditional vehicles of knowledge distribution (press, radio, television) in the role of actual predictors of economic decisions focused on finance. Their importance in the context of the decision-making process was not confirmed by the *V-Cramer* index (Table 2), despite the recognition of the role of these sources in the search for predictors explaining the respondents; state

of economic knowledge; this is undoubtedly a direction that requires further exploration.

The authors are willing to conduct further research on the impact of household members' communication, and in particular its types, channels and intensity, on the stock of knowledge and experience necessary for decision-making processes. Based on the results of the pilot study, some of which are included in this paper, the authors will conduct a nationwide study based on a random sample.

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