Behavioral patterns as prerequisites for ensuring financial security of households through insurance

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Abstract. Insurance payments are an external source of replenishment for lost income or compensation for unforeseen expenses mediated by the occurrence of random events. If their size corresponds to the material needs of private household members in leveling emerging budget deviations, we can talk about the full implementation of the financial security function – a new insurance function in the context of modern challenges and threats structure transformation. The novelty of this study is the translation of a new perspective for the modern role of insurance protection associated with the support of a private household budget process, the participation of insurers in ensuring the balance of household cash flows in situations of unfavorable deviations from their planned budget parameters. This study was aimed to identify the behavioral patterns of the population regarding the basic parameters of insurance protection that affect the budget of a private household and thus lay the foundations for ensuring its financial security. The results of the survey led to the conclusion that at present the potential possibilities of insurance protection are not being used to the extent that could contribute to ensuring the financial security of a private household.

1 Introduction

Household financial security is becoming one of the most relevant topics for modern research. Researchers do not pay due attention neither to the specifics of the insurance mechanism application to solve the complex task of creating conditions for achieving an equilibrium of household’s financial and economic system, nor to the existing restrictions and prerequisites for the formation of its insurance protection, when they reflect on the substantive boundaries of “financial security” concept, identify ways to ensure financial security [1-4]. Meanwhile, insurance harmoniously fits into the architecture of private households’ financial security system – it is enough to pay attention to the general nature of the beginning that generates these two phenomena.

The need to overcome the uncertainty of the situation associated with the threat of adverse consequences determines the choice of a behavior scenario, actualizing the task of finding effective ways to mitigate its consequences [5]. Scientists agree that the level of

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household’s financial and economic interest protection depends “on the rationality and effectiveness of the efforts of an individual, i.e. on the household members” [6]. At the same time, it is necessary to take into account the fact that domestic financial reserves to cover the consequences of risks implementation are limited for households. Savings may not be enough, since the question of the optimal distribution of funds between consumption and accumulation is not always successfully solved [7]. Applying to the insurance institute allows to adapt to budget constraints of a particular household, provided that its members take advantage of the freedom to choose the parameters of insurance coverage, especially with regard to determining the insured amount. Insurance payments are an autonomous source of replenishment for lost income or compensation for unforeseen expenses, and if their amount corresponds to the material needs of private household members in leveling budget deviations, they may indicate the full implementation of such function as ensuring households’ financial security – a new function of insurance in the context of transformation of modern challenges and threats structure. This leads to the need to rethink the modern role of insurance protection that goes beyond a compensation, since studying it from a similar perspective, we are dealing with the support of a private household’s budget process, with participation in ensuring the balance of its cash flows in situations of unfavorable deviations from planned budget parameters, that is, with ensuring the financial security of the household.

Revealing this role, we must rely not only on the potential opportunities available to this institution, but also on the assessment of its demand among policyholders, that is, we must look through the prism of financial decision-making [8]. At the same time, we can talk about different decision-making scenarios related to the appeal of private households to voluntary insurance, since they are formed under the influence of various factors that have different degrees of significance for households. But they are based on behavioral patterns that determine the formation of similar models for consumer behavior of private households in the insurance market. Their study brings us closer to solving an important task formulated by Belomytseva as the formation of a “behavioral theory reflecting the thinking models and stereotypes of market relations subjects in Russia, as well as market agents carrying out operations in various sectors of the domestic financial and investment market” [9].

The authors found it necessary to study individual consumer attitudes that influence the formation of the modern insurance role among the population in ensuring the financial security of private households. Currently, they are more often viewed exclusively through the prism of demand for insurance services and the quality of its satisfaction [10].

As Molchanov notes, “the main sources of information in such cases are selective observations of households” [11]. In this regard, a random survey of households was conducted, whose members were asked questions that set the priority of choice regarding the types and conditions of insurance protection against the most significant risks that violate household’s financial security. The presented survey results are in fact indicators of the population’s insurance perception through the prism of its impact on the household budget.

2 Materials and methods

This study was aimed to identify the behavioral patterns of the population regarding the basic parameters of insurance protection that affect the budget of a private household and thus lay the foundations for ensuring its financial security. The objectives of the study included the following:
● to identify what causes greater concern among members of private households – the effects of income or expenditure shocks;
● to find out whether it depends on the assessment of the protection priority in case of local shocks impact for different types and the choice of insurance type associated with the possibility of mitigating its consequences;
● to determine which characteristics of a private household have a greater impact on the choice of insurance type priority that are of interest from the point of view for protecting the household budget;
● to find out which financial factors determine the decision to conclude an insurance contract to a greater extent – the impact on the household budget of the unconditional funds outflow or the hypothetical prospect of replenishing the budget from external sources in the event of an insured case;
● to find out whether households determine the impact of the expected insurance payments on the budget and whether the period of time during which they will ensure its adjustment is taken into account when determining the insured amount;
● to identify the most common approach among private households for determining the insured amount, within which the mitigation of shocks effects from external sources will be carried out.

For the purposes of the study, a survey was organized and conducted among representatives of private households located on the territory of the Russian Federation. A simple random sampling took place. In order for the sample to retain the most essential characteristics of the general population for this study, the criteria for the formation of the respondent group were not established – its properties were predetermined by the input characteristics of private households that took part in the survey (household composition, number of employed members, level of material well-being, location, etc.). An online survey was conducted using the functionality of Google Forms, a software designed to administer surveys. 166 private households have participated in the survey. The passivity of potential respondents in relation to participation in the survey has become the only limitation on the way of the study. We attribute this to the unwillingness to disclose the financial aspects of life and to the insufficient popularity of insurance protection topic among the population of the country. The processing of the survey results involved the analysis of data both on the total set of responses received during the survey, and on the groups obtained as a result of their clustering.

3 Results

As a result of the study, the following was found.

1) Currently, private households are more concerned about spending shocks than income shocks, so they often choose insurance that smooths out budget “gaps” arising from the need to carry out unforeseen expenses that go beyond the existing possibilities of the household budget. According to the survey, 64.5% of households opt for insurance in case of unforeseen expenses and only 35.5% opt for insurance in case of income shortfalls.

2) The impact of households’ assessment for various local shocks on the choice of insurance type associated with the possibility of mitigating their consequences is obvious (Table 1).
Table 1. The proportion of private households that have chosen a certain type of insurance as a priority, depending on the assessment of fears for the consequences of various shocks, %.

<table>
<thead>
<tr>
<th>The type of local shocks selected as causing the greatest concern</th>
<th>The type of insurance chosen as a priority to protect the household budget</th>
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<tbody>
<tr>
<td></td>
<td>Endowment Insurance</td>
</tr>
<tr>
<td>Income shocks</td>
<td>18.6</td>
</tr>
<tr>
<td>Spending shocks</td>
<td>45.4</td>
</tr>
</tbody>
</table>

Source: Compiled by the authors.

As we can see from Table 1, households that are more concerned about income shortfalls than the prospect of unplanned spending are more likely to opt for short-term exposure risk insurance – 39% of respondents noted illness or injury insurance as a priority. Attention is drawn to the fact that each of the households that have made this choice has employed members: 48% of such households have one employed member, 52% – two or more. Taking into account the fact that the loss of income due to temporary disability of an employee is compensated within the framework of compulsory social insurance with a replacement rate of 60 to 100%, and permanent disability does not imply such replacement, it becomes obvious that there is an underestimation of “long-term” risks consequences, which are more significant for the household budget. For example, only 18.6% of households chose insurance in case of breadwinner loss as a priority, 15.3% of households chose disability insurance, 8.5% of households chose long-term care insurance for seniors. Such attitudes cause certain concerns, as they demonstrate the irrationality in making important financial decisions related to ensuring the financial security of a household for the long term and in relation to situations in which the usual level of income is really lost forever.

Households that are more concerned about the risks of unforeseen expenses are more likely to choose endowment insurance as a priority type of budget insurance protection (45.4% of households). It can be assumed that such insurance is seen by the population as a more flexible and understandable security mechanism, perceived as a gradual creation of a reserve in case of unplanned expenses that can lead the household budget to an imbalance, without reference to a very specific potential event, which should correspond to the signs of an insured event. Illness and injury insurance is the second most common choice for this group of households (it is a priority for 30.9% of respondents who participated in the survey). At the same time, only 6.2% of the respondents noted the need for long-term care insurance for seniors, despite the fact that such insurance type is associated with compensation for more significant household budget expenses, which, moreover, are carried out in conditions of budget constraints and the futility of increasing current income. Most likely, this is due to the temporary remoteness of old age and a more emotional perception of the current moment, in which health problems are associated with the obvious need to carry out additional expenses, but regardless of their size and assessment of the real impact on the household budget.

Before assessing the priority of choosing the insurance type that protects the budget of a private household, it could be assumed that insurance in case of breadwinner loss should be primarily relevant for those households in which there is complete dependence on the only source of income available to a particular household member. However, the actual result showed that such insurance can be equally significant for households with the only breadwinner (in the structure of those households chose insurance in case of breadwinner loss as a priority type, their share was at the level of 34.6%), and for households where there are several sources of income, but there is no complete individual financial
independence yet (30.8%), and even for households where all employed members can be completely financially independent (19.2%).

3) As for the general explication of insurance priority choice that are of particular interest from the point of view of protecting the household budget, it showed an obvious dependence on the degree of financial autonomy within the household. We identified 3 variants of its self-determination and analyzed the frequency of choosing the most significant type of insurance protection within each of the established groups (Fig. 1).

As can be seen from the data presented in Figure 1, endowment insurance is of the greatest interest for households with full individual financial independence of their members (chosen by 41.9% of respondents in this group), as well as illness and injury insurance (33.9%), while disability insurance is of the least interest (1.6 %). The group of households with several sources of income but the only significant one demonstrates clear shifting in the priority of choice from endowment insurance (36.5%) and health insurance (28.8%) to breadwinner insurance (15.4%). In households with complete financial dependence on the only source of income, 25% of respondents showed priority interest in breadwinner insurance, while only 36.1% of respondents showed interest in illness and injury insurance, and long-term care insurance for seniors was almost completely ignored.

4) A similar social portrait and the same insurance patterns were revealed in a group of households that chose endowment insurance as a priority type of insurance budget protection, which allows to cope with the consequences of the income shortfall risk (18.6 %):

- these are representatives of polysubject households, where some members have a job, but there are no contracts in case of job loss (although the risk of income loss causes them the greatest concern);
- they do not plan insurance costs, but they value an individual assessment of the risks for the household budget and choose insurance of other household members as a priority, rather than personal one.

5) We were also interested in which of the financial factors determines the decision to conclude an insurance contract to a greater extent – the impact on the household budget of the unconditional funds outflow or the hypothetical prospect of replenishing the budget from external sources in the event of an insurance case. According to the general sample, opinions were divided almost evenly:
54.2% of households noted that the decision on insurance is more influenced by the assessment of how the payment of insurance premiums under the insurance contract will affect their budget; for 45.8% of households, the obligations of the insurance company within the framework of the formed responsibility for the consequences of household risks realization are more important.

At the same time, among households that primarily assess the financial burden associated with insurance, only 43% plan a budget for insurance. Of these, insurance is an integral element of financial planning for one household of six only, the rest determine the amount of insurance costs only in order not to go beyond their own psychological limit of their magnitude. It should be noted that this category of households demonstrates the most favorable picture associated with the inclusion of insurance costs in the financial plan. In general, according to the sample, only 21.7% of private households in the process of financial planning provides for payment of bills related to insurance protection due to formed financial literacy. Another 18.7% of households do this only because they have set their own threshold for “psychologically comfortable” spending and it is important not to go beyond it. 11.4% of households noted that, in principle, they do not engage in financial planning, and 27.7% act solely on the situation, so they do not determine the insurance budget.

6) It was found that the population is also irrational in an assessment of the proposed insurance payments impact on the household budget:
- members of almost every third private household (28.9% of the respondents), in principle, do not think about the need for such an assessment before concluding an insurance contract;
- 27.7% of households carry out a very approximate, so-called “rough” assessment;
- only 43.4% of respondents indicated that before entering into an insurance contract, they carry out calculations that allow to determine the possible impact of insurance payments on the household budget, taking into account different scenarios of events development.

Attention is drawn to the fact that among those who noted the priority of the prospect of receiving insurance payments over the fact of insurance premiums when making a decision on insurance, only 39.8% of respondents actually carry out a preliminary quantitative assessment of mitigating the risks consequences that disrupt the financial balance of the household budget.

7) As for the demonstrated approaches to determining the insured amount within which the risk liability will be transferred to the insurance company, the majority of households (38% of the respondents) prefer to choose from the options offered by the insurance company, and 8.4% assign it arbitrarily, focusing solely on the desire to receive a payment of a certain amount from the insurer. For 21.1% of households, the amount of insurance premiums that will need to be paid to the insurer plays a crucial role in determining the insured amount. It should be noted that 40% of those who gave such an answer initially indicated the priority of the insured amount value over the insurance premiums when making a decision on insurance. Only 23.3% of households from among those who had previously noted that the decision to conclude an insurance contract is predetermined mostly by the assessment of the insurance premiums impact on the household budget demonstrated the stability of their position and when answering the question about determining the insured amount indicated that everything depends on the insurance premiums.

8) We were also interested in whether households take into account the period of time during which the insurance payments calculated on the basis of the established insurance amount will ensure the adjustment of the household budget when determining the size of
the potential consequences of risks transferred to the responsibility of the insurance company. This is especially important in relation to “long-term” risks, the consequences of which are stable for a long period, up to a lifetime (for example, the risk of disability or the need for long-term care). Unfortunately, 45.8% of private households do not take into account the time factor. In fact, it means that these households do not take into account the financial consequences of adverse events under different scenarios of their development and focus on the short-term effect of payments impact on the household budget.

4 Discussion

Our results confirm the assumption of Badel and Huggett [12] that households are more concerned about spending shocks than income shocks. As we can see, this trend is stable and can be considered beyond economic borders. The demonstrated approaches to determining the potential consequences of risks and the insurance amounts established on their basis prove the validity of the statement made by Antipina [7], that consumers do not have a holistic view of economic dynamics, which means that the task of optimizing the budget funds allocation remains relevant.

In addition, the results of the study confirm earlier conclusions that the decisions of financial market agents “cannot always be called rational or balanced” [9]. This can be observed both with regard to the planning of the insurance budget, and with regard to determining the size of the insurance coverage being formed, which allows leveling budget “gaps” that arise under the influence of shocks consequences. Households need more self-responsibility and rationality in drawing up insurance plans than they are demonstrating now, because “it is pointless to expect insurers to function as social security” [13]. Unfortunately, at present very little attention is paid to financial planning in general, and taking into account the parameters of insurance protection in the process of its implementation. In our opinion, this adds to the list of reasons that determine the quality of the insurance coverage being formed: it depends not only on the actions of insurance companies, which expresses the most common conclusion [14], but also on the efforts of the policyholders themselves.

It can be concluded that the general vectors of behavioral attitudes in the field of insurance protection formation are unchanged. However, we were able to identify particular features of their manifestation. In light of the criticism of the general preferences model noted by Levin and Matrosova [15], it can be assumed that studies based on the assessment of individual preferences with the choice of a compromise solution could be more revealing, but, unfortunately, they are extremely difficult, especially in conditions of a reluctant response of households to participate in such events.

5 Conclusion

Thus, the conducted research allowed us to draw several conclusions. Since Russian private households are more concerned about spending shocks, they are more likely to opt for insurance that allows them to compensate for expenses that go beyond the existing capabilities of their budget, rather than insuring the risk of income shortfalls. The tendency to worry about the specific consequences of risks determines the choice of insurance type, but to a greater extent this choice is associated with ideas about its capabilities than a clear understanding of the implementation specifics. At the same time, the obvious dependence of the insurance protection type choice on the degree of financial autonomy within the household was revealed: when family members can be financially independent from each other the choice is made in favor of endowment insurance, in other cases – in favor of risky
types with a short period of insurance coverage. In most cases, households do not participate in the discussion of the insurance amount established under the contract and agree with the insurer’s proposal. At the same time, in every second case, the ignoring of the time factor is demonstrated – the period during which the budget adjustment due to insurance payments will be required is not taken into account, and in every third case, in principle, the impact of payments on the household budget is not determined. Thus, when answering the question of what factor has the greatest influence on the decision to conclude an insurance contract, half of households note the priority of the potential possibility of receiving payments – it mostly demonstrates the influence of mental, psychological characteristics of the insurance perception than a rational, financially balanced approach. Therefore, at present, the choice of insurance protection basic parameters is not always rational and cannot indicate the use of insurance protection opportunities to the extent that could contribute to ensuring the financial security of a private household.

These conclusions contribute to a more accurate understanding of the basic patterns among potential consumers of insurance services, which allows to adjust the marketing plans of insurance organizations on a specific target segment, and also indicates the need to strengthen work with the population in the field of financial literacy and financial competence aimed at making rational decisions in the field of voluntary insurance.

The prospects of the study are associated with clarifying the impact of the life cycle stage on changing the relevant settings regarding the parameters of insurance protection that can affect the financial security of households.

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