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THE FINANCIAL SUSTAINABILITY DURING HOUSEHOLD LIFE-STAGES

ФІНАНСОВА СТІЙКІСТЬ УПРОДОВЖ ЕТАПІВ ЖИТТЄВОГО ЦИКЛУ ДОМОГОСПОДАРСТВ

Summary. *The theoretical aspects of financial sustainability by the life stages of household impact were studied. In the research, analysis was used as a method of the scientific method for studying financial stability and synthesis was used as a method of the scientific method for studying household life stages. It is clarified that the financial sustainability of households is one of the two assessments of their financial condition. It is proposed to ensure the financial sustainability of households to consider as a goal of managing their financial resources at all stages of their life cycle. Based on the different ratios of consumption and savings of household income throughout its life cycle indicators for assessing the financial sustainability of households are studied. The direction of change in the values of these indicators at certain stages of the household life cycle is assessed. Thus, the role of indicators at a particular stage of LCH is different (the growth of their values at all life cycle stages; growth for* *a certain period and a decrease in the future; growth during the period of active labour activity, and their reduction through the use of savings and investments in the future; reductions throughout all stages of the life cycle. The study of the optimal values of these indicators for assessing the financial sustainability of households opens up prospects for further research in this area of economic science.*

Key words: *household, household life-stages, the financial sustainability, financial literacy.*

Анотація. *Досліджено теоретичні аспекти фінансової стійкості упродовж життєвого циклу домогосподарств. У статті використано аналіз як загальнонауковий метод при дослідженні фінансової стійкості домогосподарств та синтез як загальнонауковий метод при дослідженні етапів життєвого циклу домогосподарств. З'ясовано, що фінансова стійкість є однією з двох оцінок фінансового стану домогосподарств і виражає здатність за допомогою інструментів формування та використання фінансових ресурсів забезпечити розвиток даного суб'єкта фінансових відносин упродовж усіх етапів свого життєвого циклу. Встановлено, що гіпотеза життєвого циклу була розроблена Ф. Модільяні та Р. Брумбергом і стала однією із моделей міжчасового вибору домогосподарства між споживанням та заощадженням власного доходу. Запропоновано забезпечення фінансової стійкості домогосподарств розглядати як мету управління їх фінансовими ресурсами на всіх стадіях їх життєвого циклу. На основі різних співвідношень споживання та заощадження доходу домогосподарства протягом його життєвого циклу досліджено 9 показників оцінки фінансової стійкості домогосподарств. Оцінено напрямок зміни значень даних показників на окремих етапах життєвого циклу домогосподарства. Встановлено, що роль показників оцінки фінансової стійкості на певному етапі є різною (зростання значень* *на всіх стадіях життєвого циклу; зростання на певний період і зниження надалі; зростання в період активної трудової діяльності та їх зниження коштом використання заощаджень та інвестицій при досягненні пенсійного віку; зниження на всіх стадіях життєвого циклу. Дослідження оптимальних значень показників оцінки фінансової стійкості домогосподарств відкриває перспективи для подальших розвідок у даному напрямі економічної науки.*

Ключові слова: *домогосподарство, життєвий цикл домогосподарства, фінансова стійкість, фінансова грамотність.*

Statement of the problem. The problem of ensuring the financial sustainability of households as active participants in the financial system is relevant not only for Ukraine but also for all countries of the world. However, global experience does not provide universal solutions to ensure this, as each country has its specific financial system, different levels of development and financial market conditions, economic growth rates, and different levels of financial literacy. The «Life Cycle Hypothesis of Saving» (LCH) was elaborated by F. Modigliani and R. Brumberg in 1953 and 1954 [1]. LCH became one of the models of the intertemporal choice for a household between consumption and saving of ones [2, p. 297]. Therefore, we consider the effective management of consumption and savings processes within the framework of the LCH as one of the potential conditions for ensuring the financial sustainability of households.

Analysis of recent researches and publications. In the papers studied that LCH is based on the following assumptions:

a) Individual consumption does not depend on income in the current period but on lifetime income [3, p. 114];

b) Households should divide their consumption. As a result, expenditure flows are even over the life course. In other words, they should favour a smooth spending trajectory over an uneven one [4, p. 19];

c) Consumption in the period after active labour activity should be provided by savings made during active labour activity. Therefore, savings are closely related to consumption and are its residual value: an increase in household disposable income, while consumption remains unchanged, will lead to an increase in savings and vice versa [5, p. 18].

However, the peculiarities of managing households' financial resources during certain stages of their life cycle have not been properly studied. Based on the positive results of the conducted research, we consider it necessary to analyze the role and importance of the LCH in the system of managing the sustainability of its financial resources.

Formulation purposes of article (problem). The purpose of the article is to study the financial sustainability of households during the stages of their life cycle. To achieve this goal, we will propose indicators for assessing the financial sustainability of households.

The main material. The Explanatory Dictionary of the Ukrainian Language defines the concept of «sustainability» as a property with the meaning of «steady» and is revealed in the following features: 1) «retaining and showing its properties for a long time»; 2) «able to withstand external influence, to resist something»; 3) «characterized by sustainability, permanence; steady» [6].

Extrapolating the understanding of «sustainability» to financial relations, «financial sustainability» is understood as one of the properties (characteristics) of the «financial condition» of a household. In conditions of sustainability, the formed financial resources fulfil their purpose – to ensure the life of households in the short, medium and long term under the influence of endogenous and exogenous factors. The opposite property of financial sustainability is its insustainability. In this sense, financial sustainability is considered one of the assessments of the financial condition of a household, which in turn is a consequence (result) of the management of its financial resources. Thus, the short-, medium-, and long-term perspectives as constituent stages of the LCH are the tangential point of interaction with household financial sustainability.

Household savings ensure a uniform (stable) amount of consumption over the life cycle of a household, regardless of changes in its income. The choice of forms and methods of savings becomes the basis for managing household financial resources during the period of active labour activity. Financial sustainability is an effective result of managing household financial resources, which ensures the completeness of consumption at all stages of its life-cycle.

The significance of the model developed by F. Modigliani lies in the fact that it explains the need for savings for a person when his or her income is above average during active work, and their use for consumption when their income is below average (for example, when reaching retirement age, temporary or permanent disability, etc.). In addition, Kizyma T. concluded that «with rising incomes, savings grow faster than consumption; and with falling incomes, savings decline even faster, as people find it difficult to abandon their habitual level of consumption» [7, p. 184-185].

According to the LCH, the management of a household's financial resources is mainly about balancing their volumes depending on the stage of the life cycle at which it is located. In particular, balancing can be manifested in the decision to attract credit resources at the beginning of its creation (e.g., mortgages, purchase of movable property) when own financial resources are not enough and the use of certain forms and instruments of savings and investments in case of excess of such resources in the future. Thus, the assumption of a shortage or surplus of financial resources during certain stages of the household's life cycle (childhood, youth, maturity (active labour activity), and old age) allows us to build an appropriate schedule for financial support of its expenses. Throughout its life cycle, a household will have periods when its needs are clearly characterized by a shortage of financial resources (childhood, youth, and old age) and a surplus of financial resources (youth and maturity, and the period of active labour activity).

Accordingly, a household needs to balance its financial resources. The balance of financial resources at a particular stage of the household life cycle (childhood, youth – stage 1) begins with the attraction of external resources of parents, credit resources of financial institutions and ends in old age with the receipt of financial resources both at one's own expense (income from funds saved and invested during active labour activity) and at the expense of other subjects of financial relations (the state – in the form of pension payments, social benefits or maintenance in nursing homes), non-state pension funds (private pension), own children or third parties (charitable assistance).

At the stage of active labour activity in the life cycle, when there is a surplus of financial resources that significantly exceeds the level of its consumption (stage 2), the household balances their volume by making savings and investments. The dynamic balance of financial resources at all stages of the household life cycle is achieved on a planned, operational or final basis, and is the object of management and justification for the use of specific tools that should be used to regulate the processes of formation and use of household financial resources. A household will be able to achieve a state of static or dynamic balance of its financial resources only if it establishes a process of managing them depending on the stages of its life cycle and achieves the goal of such management – household financial sustainability.

It is necessary to recreate financial sustainability as the goal of managing household financial resources in accordance with the stages of its life-cycle through the following 9 indicators:

1) The share of employees' wages in GDP (W_{GDP});

2) The share of household wages in income (W_{HI});

3) Household savings rate (H_{SR});

4) The ratio of households' borrowed funds to their income (H_{BFI});

5) An indicator of household investment potential is defined by dividing the volume of the monetary aggregate which measures cash outside depository corporations (M_0) by total household income (H_{IP});

6) The indicator of income sufficiency is defined by the method of dividing the amount of income by the amount of the subsistence minimum per month (H_{IS});

7) An indicator of household non-consumption expenditures (H_{NCE});

8) An indicator of household food expenditures (H_{FE});

9) Engel index (E_I).

The initial stage of the household's life cycle begins with insignificant amounts of own financial resources, which explains the low values of indicators that assess own income (W_{GDP}, W_{HI}, H_{SR}) and the possible growth of the indicators that assess funds raised from external sources H_{BFI}. The value of the household savings rate (H_{SR}) and the indicator of investment potential (H_{IP}) will be close to zero. Satisfaction of the household's priority consumer expenditures with low values of own financial resources will be reflected in high values of the indicators (H_{FE}, E_I) and low values of an indicator of household non-consumption expenditures (H_{NCE}). As financial resources increase and the transition from the youth to the maturity (active labour force) stage in the household life cycle, the values of H_{FE}, E_I and will decrease, and H_{NCE} on the contrary, will continue to grow. At this stage of transition, the value of the household savings rate H_{SR} and the indicator of investment potential H_{IP} will start to increase. The presence of excess financial resources should lead to a reduction in the values of the ratio of households' borrowed funds to their income H_{BFI}.

Excess financial resources and awareness of the need for savings and investments to ensure a uniform level of income (in case of temporary disability at the stage of active labour activity) and to ensure a constant level of consumption; to compensate for the lost level of income (in case of permanent disability) and to ensure a constant level of consumption at the next stage of one's life cycle – retirement age, will lead to an increase in the household savings rate H_{SR} and the indicator of investment potential assessment H_{IP}.

Thus, the role of indicators for assessing the financial sustainability of households at a particular stage of the household life cycle is different: 1) The optimal for some of them will be the growth of their values at all stages (W_{GDP}, W_{HI}, H_{IS}, H_{NCE}); 2) Growth for a certain period and a decrease in the future for H_{BFI}; 3) Gowth during the period of active labour activity, after the primary consumption needs are met and financial resources are surplus H_{SR} and H_{IP} and their reduction through the use of savings and investments in the future; 4) Reductions throughout all stages of the life cycle (H_{FE}, E_I).

Thus, considering financial sustainability as the goal of managing households' financial resources, we note that the objects of such management are the individual components of their financial activities (income, expenses, savings, and investments) during LCH.

Insights from this study and perspectives for further research in this direction. Based on the results of our study, we have deepened the understanding of the concept of financial sustainability of households and demonstrated its achievement through the prism of life cycle stages. In particular, it is proposed to consider financial stability as considered one of the assessments of the financial condition of a household, which in turn is a consequence (result) of the management of its financial resources. The study of the optimal values of the Indicators (from 1 to 9) for assessing the financial sustainability of households deepens the existing approaches to understanding the process of managing personal income and expenses and opens up *prospects for further research* in this area of financial science.

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