

Household Adaptation to Crises in Hungary: Evidence from a Survey

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Abstract: This study examines how Hungarian households experienced and adjusted to three major crises: the 2008 financial crisis, the COVID-19 pandemic, and the 2022 energy crisis. The analysis is based on an anonymous online survey of 220 respondents, focusing on perceived crisis impact, consumption changes, financial awareness, and demographic background. Descriptive statistics were calculated in IBM SPSS Statistics 33, including frequencies, percentages, means, and standard deviations. The findings show that the COVID-19 pandemic and the 2022 energy crisis were evaluated as similarly severe, although they affected households in different ways. COVID-19 was mainly connected to uncertainty and disruptions in daily routines, whereas the energy crisis was associated with higher household expenses and more cautious financial behavior. The 2008 crisis had a weaker reported effect, largely because many respondents were not yet financially independent at that time. Overall, the results indicate that household reactions to crises depend not only on the scale of external shocks but also on age, personal exposure, and previous crisis experience. The paper contributes to research on household-level crisis adaptation in Hungary and underlines the role of financial awareness and resilience during repeated periods of uncertainty.

Keywords: household resilience, crisis response, financial awareness, consumption change, COVID-19, energy crisis, financial crisis, Hungary

1 Introduction and Literature Background

The early decades of the twenty-first century have made it clear that crises are not isolated interruptions, but recurring forces that shape both economic systems and everyday household behavior. Financial shocks, health emergencies, inflation, and

energy insecurity influence families not only through national economic indicators, but also through practical decisions about spending, saving, borrowing, and financial preparedness. Since households are the level where the social effects of crises become most directly observable, their experiences offer useful insight into vulnerability, adaptation, and resilience.

Hungary provides an appropriate setting for analyzing household reactions to repeated crises, as the population has faced several major disruptions within a relatively short time. The 2008 global financial crisis affected households mainly through debt exposure, credit restrictions, exchange-rate risks, and financial uncertainty. The COVID-19 pandemic created a different form of pressure, combining health risks, employment instability, mobility restrictions, and changes in work, education, and consumption routines. The 2022 energy crisis, strengthened by geopolitical conflict and inflation, placed household utility costs, food prices, and general living expenses at the center of everyday financial decision-making. Although these crises had different origins, all of them required households to adjust their behavior under uncertain conditions.

In the economic and statistical literature, crises are commonly interpreted as complex periods of disruption in which instability and structural weaknesses become visible, rather than as simple short-term downturns [1]. This approach is especially relevant for household-level research, because macroeconomic shocks are experienced by individuals through income, employment, consumption, debt, savings, and perceived financial security. Crisis-management research similarly emphasizes uncertainty and the need for rapid adaptation. Boin et al. describe crises as situations that threaten the core functions and values of social systems and require coordinated responses from both institutions and affected actors [2]. Csaba also argues that crises should not be viewed as rare deviations from normal economic development, but as recurring features of modern capitalism [3]. This perspective is important in the Hungarian context, where households have encountered financial, health-related, and energy-related shocks in close succession.

The transmission mechanisms of crises differ considerably. Financial crises typically reach households through credit markets, asset values, indebtedness, and confidence. In Hungary, this was particularly visible during the 2008 crisis, as many households had already been financially exposed before the shock, partly due to foreign-currency lending and loan-related vulnerability [4]. For indebted households, repayment burdens and uncertainty increased sharply, making the crisis strongly connected to financial dependence and debt risk.

By contrast, the COVID-19 pandemic affected households through a broader combination of health, labor-market, social, and lifestyle disruptions. Baldwin and Weder di Mauro emphasize that the pandemic required fast economic intervention because it simultaneously affected supply, demand, and expectations [5]. At the household level, this meant that COVID-19 was experienced not only as a health

crisis, but also as a source of employment insecurity, restricted mobility, changed consumption habits, and psychological uncertainty.

The 2022 energy crisis created another form of household pressure. Káposzta et al. describe recent twenty-first-century crises as complex events with broad economic consequences, including inflation and declining purchasing power [6]. Rising energy costs, food prices, and general inflation directly influenced household budgets and everyday consumption. Unlike the 2008 crisis, this shock was less dependent on individual indebtedness, and unlike the COVID-19 pandemic, its main effect was transmitted through prices and recurring household expenses rather than health risks or restrictions.

Household adaptation can also be understood through consumption smoothing and financial decision-making. Deaton's work on household surveys shows that households react to income volatility and shocks by modifying consumption, savings, and financial behavior [7]. During crises, such adaptation may involve reducing discretionary spending, postponing purchases, increasing caution, or paying more attention to reserves. These responses are not only economic. Kopp and Skrabski highlight that financial insecurity and economic uncertainty may also harm psychological well-being, which means that household crisis reactions should be interpreted as both financial and psychosocial processes [8].

Comparative crisis research further supports the need to distinguish between different types of shocks. Eichengreen shows that the Great Depression and the Great Recession shared certain financial and institutional features, but their outcomes depended heavily on structural conditions and policy responses [9]. Czarnecki and Starosta also emphasize that crises may emerge from different sources and therefore require different types of response [10]. This distinction is central to the present study, which compares the 2008 financial crisis, the COVID-19 pandemic, and the 2022 energy crisis from the perspective of household experience.

Recent findings also point to the importance of subjective perception, inflation experience, and financial vulnerability. Mennekes and Schramm-Klein show that inflation and product scarcity during crises may increase stress and influence both impulsive and planned consumer behavior, including stronger financial planning and lower discretionary spending [11]. D'Acunto et al. demonstrate that households' perceptions of post-pandemic price increases are closely related to inflation expectations and perceived losses in purchasing power [12]. The OECD similarly underlines that financial consumers operate in an increasingly complex risk environment shaped by cost-of-living pressures, debt, financial literacy, and economic uncertainty [13]. These findings support the joint examination of perceived crisis impact, consumption change, and financial awareness.

Although crisis research has extensively addressed macroeconomic effects, institutional responses, and financial stability, less empirical attention has been devoted to the comparative household-level perception of different crises in

Hungary. This gap is important because the objective scale of a crisis does not automatically determine how strongly it is experienced or remembered by households. Age, financial independence, employment status, direct exposure, and accumulated crisis experience may all influence subjective impact. Therefore, this study compares how Hungarian respondents perceived and responded to the 2008 global financial crisis, the COVID-19 pandemic, and the 2022 energy crisis. By focusing on subjective exposure, consumption changes, and financial awareness, the paper contributes to a more detailed understanding of household resilience and crisis adaptation in Hungary.

2 Research Questions and Methodology

The empirical analysis investigates how Hungarian respondents perceived and handled the household-level consequences of three major crises: the 2008 global financial crisis, the COVID-19 pandemic, and the 2022 energy crisis. Since these events differed in their causes and transmission channels, the study does not interpret crisis impact as a single homogeneous effect. Instead, it examines three connected dimensions: subjective exposure, perceived changes in consumption, and financial awareness. This approach makes it possible to compare how different shocks influenced everyday household decisions, financial caution, and adaptive behavior.

The first research question addresses the perceived severity of the two most recent crises. Both the COVID-19 pandemic and the 2022 energy crisis directly affected daily life, but through different mechanisms. Therefore, the study examines whether respondents experienced their subjective impact differently.

RQ1: How did respondents evaluate the subjective impact of the COVID-19 pandemic and the 2022 energy crisis?

H1: Respondents perceived the subjective impact of the COVID-19 pandemic and the 2022 energy crisis differently.

The second research question focuses on consumption-related effects. Since the 2022 energy crisis was strongly associated with inflation, rising utility prices, and increasing household expenses, it can be expected to have had a particularly visible influence on consumption decisions.

RQ2: Which of the three examined crises had the strongest perceived influence on household consumption habits?

H2: The 2022 energy crisis had a stronger perceived effect on household consumption habits than the 2008 financial crisis and the COVID-19 pandemic.

The third research question examines whether earlier crisis experience contributed to later financial caution. The 2008 financial crisis was a significant financial shock in Hungary, particularly for households affected by debt, foreign-currency loans, and credit-market risks. For this reason, the study explores whether negative experiences from that period were connected to more conscious financial behavior during the 2022 energy crisis.

RQ3: Did previous crisis experience contribute to stronger financial awareness and later adaptive household responses?

H3: Negative experiences during the 2008 financial crisis increased financial awareness and influenced household responses to the 2022 energy crisis.

The research was based on a quantitative questionnaire survey designed to capture household-level perceptions of the 2008 financial crisis, the COVID-19 pandemic, and the 2022 energy crisis. The aim was not to measure the objective macroeconomic consequences of these events, but to examine how respondents interpreted their effects on their own household situation, consumption habits, and financial behavior.

Data collection was carried out through an anonymous online questionnaire created in Google Forms. Participation was voluntary, and no personal identification data were collected. The final sample included 220 respondents. Because the questionnaire was distributed online and completed on a voluntary basis, the sample is not representative of the Hungarian population. Nevertheless, it provides useful exploratory evidence on how respondents perceived different crisis types and how these perceptions were related to household adaptation.

The questionnaire contained demographic and crisis-related items. The demographic questions covered year of birth, gender, place of residence, and educational background. These variables helped describe the sample and interpret generational differences, especially in relation to the 2008 financial crisis. This aspect was important because many younger respondents may not have experienced the 2008 crisis as financially independent adults, which could affect how they evaluated its household-level consequences.

The crisis-related section included closed questions and five-point Likert-scale items. Respondents assessed how strongly they were personally affected by the COVID-19 pandemic and the 2022 energy crisis. They also evaluated the perceived influence of the 2008 financial crisis, the COVID-19 pandemic, and the 2022 energy crisis on their consumption habits. Further items examined whether earlier crisis experiences were associated with greater financial awareness, closer attention to household expenses, and more cautious financial decisions during later periods of uncertainty.

The data were processed in IBM SPSS Statistics 33. The analysis used descriptive statistical methods, including frequency distributions, percentage shares, means, and standard deviations. These techniques were appropriate because the study

aimed to identify general response patterns and compare perceived crisis effects rather than produce statistically generalizable estimates for the whole population.

The empirical evaluation followed three main analytical directions. First, it compared the subjective impact of the COVID-19 pandemic and the 2022 energy crisis. Second, it examined perceived changes in consumption habits across the three crises. Third, it explored whether negative experiences from the 2008 financial crisis were associated with stronger financial awareness and adaptive responses during the 2022 energy crisis. This structure allowed the crises to be compared not only by perceived severity, but also by the household-level mechanisms through which they shaped behavior.

The main methodological limitation is the non-representative nature of the sample. In addition, the age structure of the respondents affects the interpretation of the results, particularly regarding the 2008 financial crisis. At the same time, this limitation is also relevant to the research problem, because it shows that crisis perception is shaped not only by the objective scale of an event, but also by direct exposure, financial independence, and the life stage in which respondents encountered the crisis.

3 Results

The empirical findings indicate that the three examined crises influenced respondents differently in terms of subjective intensity, consumption-related change, and financial adaptation. The interpretation of the results must take into account the age structure of the sample. Since 84.8% of respondents were born after 1981, most participants were relatively young at the time of the 2008 global financial crisis and often did not experience it as financially independent adults. This helps explain why the 2008 crisis received lower subjective and financial impact scores, while the COVID-19 pandemic and the 2022 energy crisis were evaluated as more directly relevant to respondents' everyday lives.

The first hypothesis proposed that the subjective impact of the COVID-19 pandemic and the 2022 energy crisis would differ. The descriptive results do not support this assumption. The mean value for the COVID-19 pandemic was 3.73, while the 2022 energy crisis reached 3.74. The difference of 0.01 indicates practically identical perceived intensity. However, the sources of pressure were not the same. COVID-19 was mostly associated with employment uncertainty, income changes, restrictions, and disruption of daily routines, whereas the energy crisis was mainly linked to utility costs, inflation, and household budgeting.

Crisis	Mean value	Main perceived impact mechanism	Interpretation
COVID-19 pandemic	3.73	Employment uncertainty, lifestyle disruption, income fluctuation	Strong subjective impact
2022 energy crisis	3.74	Rising household costs, utility expenses, inflationary pressure	Strong subjective impact
Difference	0.01	Different mechanisms, similar intensity	No substantial difference

Table 1.

Subjective impact of the COVID-19 pandemic and the 2022 energy crisis

Source: Own editing based on the survey results.

Based on these values, H1 was not confirmed. Although the COVID-19 pandemic and the energy crisis operated through different mechanisms, respondents experienced their overall intensity at nearly the same level. This suggests that distinct crisis types can create comparable household-level pressure when they affect basic security, predictability, and everyday stability. This result is consistent with the broader crisis-management literature, which interprets crises as disruptions that threaten the normal functioning of social systems [2].

The second hypothesis assumed that the 2022 energy crisis had the strongest perceived effect on household consumption habits. The findings only partially support this expectation. The 2008 financial crisis had the lowest mean value, 1.19, which is mainly attributable to the sample's age composition. Many respondents were not yet independent household decision-makers during that period. The COVID-19 pandemic produced the highest consumption-related score, with a mean of 2.83, while the 2022 energy crisis also had a clear but slightly lower effect, with a mean of 2.60.

Crisis	Mean value	Relative strength of effect	Interpretation
2008 financial crisis	1.19	Low	Limited direct effect in the sample
COVID-19 pandemic	2.83	Highest	Strongest perceived consumption change
2022 energy crisis	2.60	High	Strong effect, but lower than COVID-19

Table 2.
Perceived change in consumption habits across the three crises
Source: Own editing based on the survey results.

These results show that the 2022 energy crisis visibly influenced consumption, but its perceived effect did not exceed that of COVID-19. The pandemic probably had the broadest behavioral impact because it simultaneously changed work, mobility, services, social interaction, and household routines. The energy crisis, in contrast, was more directly concentrated around rising prices, utility costs, and recurring household expenses. Therefore, H2 was only partly supported: the 2022 energy crisis had a stronger perceived effect than the 2008 financial crisis, but not a stronger effect than the COVID-19 pandemic.

This finding is in line with Baldwin and Weder di Mauro's interpretation of the pandemic as a multidimensional shock affecting supply, demand, expectations, and everyday behavior [5]. COVID-19 did not influence consumption only through income or employment risks; it also reorganized daily life through restrictions, remote work, service closures, and uncertainty. The 2022 energy crisis, by contrast, fits the interpretation of energy and inflationary crises as shocks that primarily operate through purchasing power, household expenditure structures, and cost sensitivity [6]. Its impact may therefore be understood less as a general lifestyle disruption and more as a financial-discipline shock.

The third hypothesis examined whether negative experience during the 2008 financial crisis increased later financial awareness and shaped responses to the 2022 energy crisis. The findings again provide only partial support. The perceived financial impact of the 2008 crisis had a low mean value of 1.47, indicating that most respondents did not report strong direct financial difficulty connected to that period. In contrast, adaptive responses to the 2022 energy crisis reached a mean value of 3.15, showing greater financial caution, more active adjustment, and stronger attention to planning, spending control, and savings.

Indicator	Mean value	Interpretation
Perceived financial impact of the 2008 crisis	1.47	Low direct financial impact in the sample
Adaptive financial response to the 2022 energy crisis	3.15	Stronger financial caution and active adjustment
Main explanatory factor	—	Age composition and more recent direct exposure

Table 3.
Financial experience and adaptive response
Source: Own editing based on the survey results.

H3 was therefore only partly confirmed. The 2008 crisis did not directly increase financial awareness for most respondents, mainly because many of them were not financially independent at the time. However, the repeated sequence of crisis experiences, especially the COVID-19 pandemic followed by the energy crisis, appears to have strengthened financial caution. This supports the view that household financial awareness may develop cumulatively, through repeated exposure to uncertainty rather than through a single crisis event.

The low perceived impact of the 2008 crisis should not be interpreted as evidence that the crisis itself was less important. In macroeconomic and financial terms, it was a major shock, particularly in Hungary, where household vulnerability was closely connected to indebtedness, foreign-currency lending, and exchange-rate risks [4]. However, many respondents in the present sample were not active borrowers or independent household managers at that time. This demonstrates that aggregate vulnerability and individual retrospective perception may diverge. Crisis perception is therefore shaped not only by the objective severity of the event, but also by life stage, direct exposure, and economic responsibility.

The findings also support the broader argument that crises are recurring features of modern economic systems rather than rare exceptions [3]. Respondents encountered the three examined crises not as unrelated historical episodes, but as part of a sequence of repeated shocks. This is especially relevant in Hungary, where financial instability, pandemic disruption, inflation, and energy-price pressure occurred within a relatively short period. Household adaptation consequently appears to be cumulative: financial caution, consumption control, and attention to reserves may gradually strengthen as households face repeated uncertainty.

The results are also compatible with Deaton's view of household adjustment under income volatility and shocks [7]. Households may react by reducing discretionary spending, postponing purchases, reallocating expenditure toward necessities, or

increasing savings-oriented behavior. In this study, such adaptive logic is most visible in relation to the COVID-19 pandemic and the 2022 energy crisis. At the same time, the results show that household responses are not determined only by measurable economic indicators. Subjective uncertainty, fear of future losses, perceived instability, and reduced predictability also influence financial and consumption decisions.

The psychosocial aspect of crisis experience is also important. Kopp and Skrabski emphasize that income insecurity and economic uncertainty may negatively affect psychological well-being [8]. The present findings are consistent with this interpretation, because both the COVID-19 pandemic and the energy crisis were perceived as strong household-level pressures, despite operating through different channels. Household resilience therefore depends not only on financial resources, but also on perceived control, stability, and the ability to maintain everyday routines under changing conditions.

Recent international findings further support this interpretation. Mennekes and Schramm-Klein show that crisis-related inflation and product scarcity can increase stress and influence both impulsive and planned consumer behavior, including financial planning and reduced discretionary spending [11]. D'Acunto et al. similarly demonstrate that perceived price increases after the pandemic are closely related to inflation expectations and perceived losses in purchasing power [12]. These findings help explain why the 2022 energy crisis, although not producing the highest consumption-change mean, still generated strong financial caution among respondents.

Overall, the results show that each crisis produced a distinct household-level adaptation pattern. The 2008 financial crisis mainly illustrates the importance of generational position and direct financial exposure. The COVID-19 pandemic shows how lifestyle disruption, employment uncertainty, and restrictions can reshape consumption habits. The 2022 energy crisis highlights the role of inflation, utility costs, and everyday financial discipline. The main finding is therefore not that one crisis was universally more severe than the others, but that household crisis perception depends on the interaction between crisis type, transmission mechanism, direct exposure, and the respondent's life stage. This comparative perspective contributes to a more detailed understanding of household resilience and crisis adaptation in the Hungarian context.

Conclusions

This study analyzed how Hungarian respondents experienced and adjusted to three major crises: the 2008 global financial crisis, the COVID-19 pandemic, and the 2022 energy crisis. The findings indicate that household crisis perception is influenced not only by the objective magnitude of a shock, but also by personal exposure, age, financial independence, and the way the crisis affects everyday life. The COVID-19 pandemic and the 2022 energy crisis were assessed with almost the

same subjective intensity, despite their different transmission mechanisms. The pandemic mainly affected employment, mobility, daily routines, and consumption behavior, whereas the energy crisis was more closely linked to rising living costs, inflation, utility expenses, and stronger financial caution. The 2008 financial crisis had a weaker direct effect in the sample, largely because many respondents were not yet independent household decision-makers at that time. The results show that household adaptation to crises is not a uniform process. Different shocks may lead to different responses, including lifestyle changes, modified consumption habits, stricter expenditure control, and increased financial awareness. The findings also suggest that financial caution is more likely to develop through repeated exposure to uncertainty than through one isolated crisis experience. The main limitations of the research are the non-representative sample and its age structure, which limit the broader generalizability of the results, particularly in relation to the 2008 crisis. Further studies should rely on larger and more balanced samples and use more advanced statistical procedures to explore generational differences, income-related effects, and the long-term connection between crisis experience and household financial behavior.

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