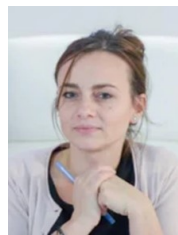


# Household financial fragility in Western Balkan countries before COVID-19



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*This paper seeks to investigate household financial fragility in Western Balkan countries, as the ability of households to cope with an unexpected expenditure shock using household-level data from the third wave of the Life in Transition Survey. We analyzed how socio-demographics and economic characteristics are related to the probability of households being financially fragile. Results show that almost half the households in the Western Balkans could not cope with an unexpected expenditure event and are considered financially fragile. Estimated results based on probit regressions show that the probability of Western Balkan households being financial fragile is, in addition to socio-demographic factors, related to households' portfolio choices.*

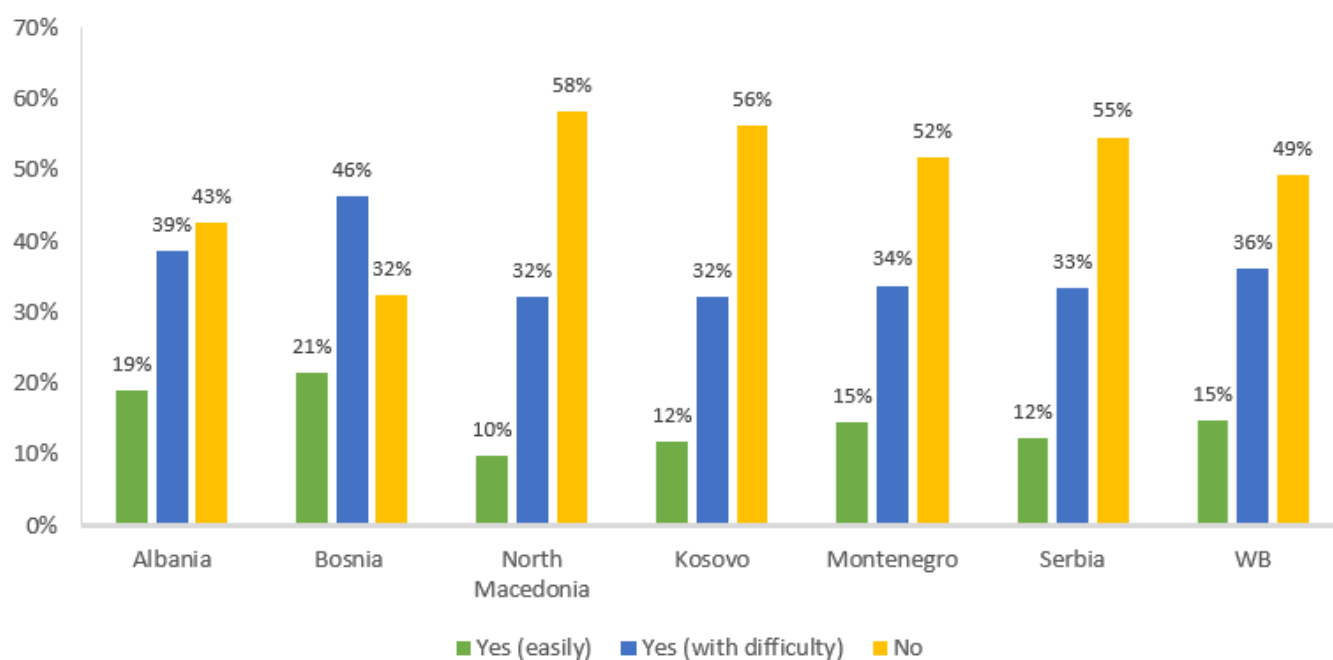
## I. Assessment of financial fragility in the Western Balkan region

The global financial crisis of 2007–2008 and, moreover, the COVID-19 pandemic crisis once again highlighted household financial fragility as a crucial component of financial well-being not only for households but also for the whole economy. The concept of financial fragility was first introduced by Lusardi et al. (2011) immediately after the 2007–2008 financial crisis with the aim of understanding the capacity of households to withstand shocks. Furthermore to determine whether household financial fragility itself can become a source of financial instability for the financial sector (Demertzis et al., 2020). Since its introduction, this measure of financial fragility has been used in various surveys and has become a well-established measure of households' coping abilities (Demertzis et al., 2020; Lusardi et al., 2011). The main advantage of using subjective measures is that respondents' self-assessment of their ability to cope with unexpected events is based not only on their level of debt and assets, but also on their expectation about their future financial situation (Lusardi et al., 2011; Halser & Lusardi, 2019; Clark et al., 2020).

Considering the advantages of households level data taken from the third wave of the Life in Transition Survey (European Bank for Reconstruction and Development [EBRD], 2016), we assess household financial fragility in the Western Balkans on the basis of the ability of households to withstand an unexpected expenditure event. Our focus is on six Western Balkan countries characterized by a low level of income and a new and less developed financial market compared to EU countries and there is a lack of studies in this topic.

Household-level data show some differences across countries reflecting differences in their economic development. Almost half the household heads are employed (full-time or part-time), with the lowest proportion of employed household heads in Kosovo, while Albania reports the highest level of employment of household heads at about 59 %. The data show that household heads in the Western Balkan region have a low level of education and, on average, report having completed high school. Less than half the households live in rural areas, except for those in Kosovo. In Serbia and North Macedonia, 60% of households live in urban areas. The data reveal that home ownership rates are high: on average, 88 % of households have a primary dwelling and 9 % have a second dwelling. On the other hand, we observe that only about 8 % of households in all the regions have a mortgage debt on their main dwelling, with some variation between countries.

Regarding the ability of households to face an unexpected expenditure shock, the data in Figure 1 show that 49% of the total households in the Western Balkan region cannot afford an unexpected event of expenses equal to the international poverty threshold. 36% of the total households can hardly afford such a shock, while only 15% of households can easily afford an unexpected expenditure event. In Montenegro, Serbia, Kosovo, and North Macedonia, more than half the households (52–58 % of total households) declared themselves to be financially fragile, while in Albania and Bosnia-Herzegovina, the data indicate a lower percentage of financially fragile households, 43% and 32% respectively. On average, 33% of households in North Macedonia, Kosovo, Serbia, and Montenegro can only with difficulty cope with a sudden shock equal to the international poverty threshold, while an average of 12% of households in these countries can easily cope with such a shock. Regarding Albania and Bosnia-Herzegovina, we observe a higher percentage of households that can hardly cope with this shock, at 39% and 46% respectively, while 20% of the households in these countries can easily withstand such a shock. These data show that even one decade after the global financial crisis and preceding the COVID-19 pandemic crisis, households in this region were considered financially fragile and an unexpected shock could jeopardise their financial situation.

**Figure 1: Meeting unexpected expenses shock with their own funds**

Source: LiTS (2016), simple averages.

Comparing financially and non-financially fragile households for each country in the Western Balkans data show that in general, the head of financially fragile households is female, has a low level of education, is not employed (retired, students, unemployed), is unmarried, and is older. Furthermore, financially fragile households are characterized by a low level of income compared to the other types of households, have more financially dependent children, are more exposed to mortgage loans, have fewer real assets, such as a second dwelling, and live mainly in rural areas. At the cross-country level, more differences are observed in households' characteristics, reflecting the dissimilarities in the economic and financial situation between the countries. Thus, we notice that in Albania and Bosnia-Herzegovina, financially fragile households have a lower percentage of mortgage loans, a lower percentage of bank accounts, and a lower percentage of ownership of real assets in the form of a second dwelling. In contrast, in the rest of the countries in the Western Balkans (North Macedonia, Kosovo, Montenegro, and Serbia), financially fragile households are characterized by a higher exposure to mortgage debt, are more financially committed, and report a higher percentage of second dwelling ownership.

## II. Some results on household financial fragility in the Western Balkans

To assess household financial fragility, we used a direct question from the third wave of the Life in Transition Survey (LiTS) of EBRD as follows: "Could your household meet with own resources unexpected expenditures up to international poverty threshold<sup>1</sup>?" Each household can choose from the following answers: "yes easily", "yes with difficulty" and "no". Through this question we assess whether households have sufficient resources to cope with an unexpected expenditure event equal to the international poverty threshold, which is the income level sufficient to cover the living costs of households.

<sup>1</sup>In the survey, households are also asked whether, with their resources, they could afford an unexpected expenditure shock of up to the domestic poverty threshold. Because our interest is in comparing the ability of households facing a shock across countries, we decided to use the international poverty line as a consistent shock across countries to account for differences in their purchasing power (Jolliffe et al., 2022).

The estimated results based on probit model show that regarding the gender of the household head, we find that there is a greater probability of households being financially vulnerable when the household head is a woman than when it is a man. This result may be because female household heads are less likely to withstand an unexpected financial shock as they may have lower levels of income, education, or financial inclusion compared to men. We find statistically significant results for Albania, Bosnia-Herzegovina, North Macedonia, and Serbia, while for Kosovo and Serbia we do not find that the gender of the household head has any role. For all households in the Western Balkan region, having a divorced/widowed/separated household head increases their probability of being financially fragile compared to the case with a married household head. Among all the countries, we find significant results for Montenegro and Kosovo and partially significant results for Bosnia-Herzegovina, while we obtain insignificant results for the rest of the countries.

With regard to employment status variables, we observe that having household heads who are retired or student/unemployment/inactive increases the likelihood of household financial fragility compared to the case with employed household heads. We find statistically significant values for both parameters for Bosnia-Herzegovina, North Macedonia, and Serbia, while for Montenegro and Kosovo significant results are obtained only for the category “others”, and in Albania we observe that retired household heads are associated with households that are not immune to unexpected financial shock.

Concerning other variables, such as the age of the household head, the number of financially dependent children, and where the families live (rural/urban area), we do not find any significant coefficients for any of the households in the Western Balkans, although we get some mixed results from country estimates between the age of the household head and the likelihood of being financially fragile. Thus, for Bosnia-Herzegovina, Montenegro, and Kosovo we find that households with older household heads have a higher probability of being financially fragile, while for Albania and Serbia we find opposite results, with households with an older household head being more resilient than those with younger household heads.

For all households, we find that education significantly decreases the probability of financial fragility. More concretely, it falls by 14 % in the case of household heads who have a bachelor's or higher degree compared to those with a high school diploma, while household heads with only primary level education lead to an even higher probability of the household being financially fragile. Presumably having a higher education improves the ability to deal with shocks due to better financial management and planning. So better-educated household heads are more likely to be more capable of handling an unexpected expenses shock with their resources because they better manage and plan their finances. Additionally, higher education may also account for better career prospects, and, as a result, these households may enjoy higher income and are then more resilient to shocks than others (Lusardi & Mitchel, 2008; Lusardi et al., 2011; Brunetti et al., 2012; Halser & Lusardi, 2019). Country estimates also confirm this result, thus indicating that better-educated households have a lower likelihood of being financially fragile than households with less education.

The next sets of explanatory variables concern households' preferences regarding financial inclusion, financial risk, and the composition of households' portfolios. Our results indicate that having a bank account reduces the probability of households' being financially fragile by 12 % compared to households without a bank account. Thus, access to the financial sector could facilitate the affordability of an unexpected expenditure shock through access to credit. This is the case for households in all the Western Balkan countries, except North Macedonia. This result is in line with large literature showing that access to bank smooths the ability of households to withstand a shock (Demirgüç-Kunt, & Klapper, 2013).

In terms of the financial risk variable, measured through exposure of a household to mortgage debt, we find a negative but insignificant result at the regional and country levels. This result might be due to fact that the financial system in this region is underdeveloped, is dominated by banks which are stricter in their screening procedures, and ensures that wealthier households receive loans so that loans can be repaid without difficulty. For the home ownership variable, we find that owning a second dwelling might reduce the likelihood of household financial fragility, in line with “crowding-out effect”. This result shows that investing in housing discourages households from investing in risky assets. One reason for this is related to the fact that a vast portion of a household’s wealth is automatically locked into the illiquid asset of housing. Another reason is that financial markets in this region are new and not very developed and do not offer a substantial variety of financial products, which limits the choice of financial instruments (European Investment Bank, 2018). In general, there is little capital market activity, the penetration of financial products is negligible, and non-bank financial institutions are insignificant (Comunale et al., 2019). At country level, we find that in Albania, Bosnia-Herzegovina, Serbian, and Kosovo, owning a second dwelling reduces the probability of households being financially fragile, while we do not find any significant results for North Macedonia and Montenegro.

### III. Final remarks

The data show that prior to the COVID-19 pandemic crisis half the households in Western Balkan region are financially fragile when the expenditure shock is equal to the international poverty line and less than one-third of households when the hit is equal to the domestic poverty line. These findings indicate that any shock that may affect households could damage their financial position and as a result may have a large effect on household well-being and their economic situation. We find that households with female and/or retired or unemployed household head have a higher probability of being financially fragile than households where the household head is male and/or employed. The estimated results for all the households in the Western Balkan countries, as well as country estimates, show that education level negatively affects the probability of household financial fragility. As we find in the literature, better-educated household heads improve the ability to deal with shocks due to better financial management and planning, We find that having bank access and owning a second dwelling lower the probability of households being financially fragile in the case of all the households in the Western Balkans and for almost each country in this region individually. These results suggest that bank access can facilitate the ability of households to withstand an unexpected event. Moreover, households in this region invest more in illiquid assets, such as home ownership, in spite of holding risky financial assets and this effect is more dominant in Albania, Bosnia-Herzegovina, Kosovo, and Serbia, where housing is considered an investment opportunity.

Despite assessing the level of financially fragile households in the Western Balkan region and the factors associated with this, we need to understand the mechanisms and policies we have to promote and implement to improve financial resilience as opposed to household fragility. ■

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