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**“Households financially fragile in Albania: Insights from survey data.”**

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# This paper in a nutshell

- Goal: Analyzing financial fragility of Albanian households and assess the role played by the composition of household portfolio besides standard determinants of this conditions (such as income, age, gender, indebtedness).
- Data: Main source of data is Albanian Household Wealth Survey (Dushku & Cami, 2021) which contains detailed data on socio-economic characteristics of Albanian households. Financially fragile households are those households that are able to afford expected expenses, but do not have a sufficient liquidity buffer to face unexpected expenses (Bruneti et al., (2012)).
- Approach: Multinomial logit regression model to assess how socio-economic characteristics of households are correlated with their financial situation.
- Main results: 60 % of Albanian households are financially fragile. Estimates obtained from multinomial regressions show that the probability of households being financially fragile is negatively related to the education level of the reference person. On the other hand, financial access and family ties reduce the probability of Albanian household of being financially fragile.

# Methodology

Following Lusardi et al(2021), Brunetti et al (2012) financially fragile households are those that have sufficient income to afford all expected expenses, but do not have enough liquid assets to cover unexpected expenses.

The classification of the households are based on two conditions:

- whether the household income are sufficient to meet expected expenses.
- whether liquid assets held by households are sufficient to meet potential unexpected expenses.

Based on the above two conditions, households can be classified into four main groups: unconditional households, financially fragile households, over-consumer households and conditional households.

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|---|--|
| <b>i. Unconstrained households</b> are those households that have income equal or higher than expected expenses and have liquid assets equal or higher than unexpected expenses . | $\left\{ \begin{array}{l} \mathbf{Income} \geq \mathbf{Expected Expenses} \\ \mathbf{Liquidity} \geq \mathbf{Unexpected Expenses} \end{array} \right.$ |
| <b>ii. Financially fragile households</b> are those households that have income equal or higher than expected expenses but have liquid assets lower than unexpected expenses.     | $\left\{ \begin{array}{l} \mathbf{Income} \geq \mathbf{Expected Expenses} \\ \mathbf{Liquidity} < \mathbf{Unexpected Expenses} \end{array} \right.$    |
| <b>iii. Over-consuming</b> but liquid households are those households earn less than consume but have liquid assets higher or equal than unexpected expenses.                     | $\left\{ \begin{array}{l} \mathbf{Income} < \mathbf{Expected Expenses} \\ \mathbf{Liquidity} \geq \mathbf{Unexpected Expenses} \end{array} \right.$    |
| <b>iv. Constrained households</b> are those households that earn less than consume and held liquidity assets less than unexpected expenses.                                       | $\left\{ \begin{array}{l} \mathbf{Income} < \mathbf{Expected Expenses} \\ \mathbf{Liquidity} < \mathbf{Unexpected Expenses} \end{array} \right.$       |
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# Methodology

As Bruneti et al (2012), I estimate a multinomial logit model.

$$\ln \Omega_{m|b}(x) = \ln \frac{\Pr(y=m|x)}{\Pr(y=b|x)} = x\beta_{m|b} \text{ for } m = 1 \text{ to } J$$

b is the base category, which represent the category for which we choose to normalize the model, and estimating the parameters of the remaining three categories. Thus the J equations can be solved by calculating the expected probability as follows.  $Y_i$  represents the financial condition for each household, from unconstrained, fragile, overconsuming and constrained household and the probability model is specified as follows.

$$P(Y_i = m|X_i) = \frac{\exp(\beta'_{(m|b)} X_i)}{\sum_{j=1}^J \exp(\beta'_{(j|b)} X_i)}$$

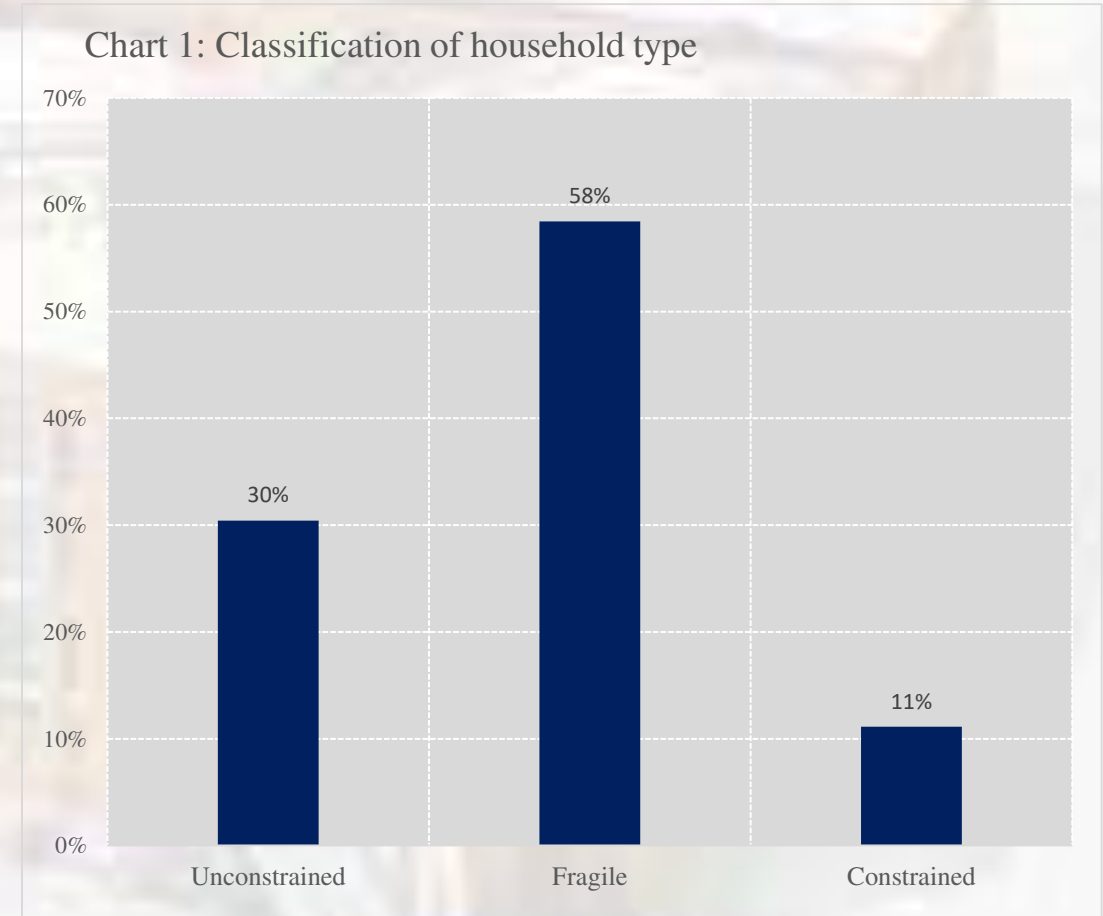
$$\text{for } m = \begin{cases} 1, \text{ unconstrained household} \\ 2, \text{ financially fragile household} \\ 3, \text{ overconsuming household} \\ 4, \text{ constrained household} \end{cases}$$

- $X_i$  is a vector of explanatory variables,
- Demographic variables: household size, gender, age, level of education and marital status of household head.
- Economic variables : occupational status of household head, as well as household disposable income, dummy variable for having a mortgage, dummy for having debt towards other families or relatives, financial access, home ownership.

# Data and descriptive statistics

Data source: The first wave of Albanian Household Wealth Survey (Dushku and Çami, 2022)

- Representative sample of around 2,100 Albanian households, from the 2019 wave,
- A complex survey, with detailed information on the preferences and behaviors of households in terms of consumption, investment, savings, supplemented with different socio-economic characteristics of all households.
- Detailed information on total assets and liabilities, as well as their amount.
- Data shows:
  - 59% of households in Albania are financially fragile, 31% are unconditional households, 10% are conditional households and less than 1% are overconsuming households.
  - Since the group of over-consumer households constitutes less than 1% of the total households, this group is excluded from the selection and empirical analysis.



# Results

	Average marginal effect (financially fragile)	Average marginal effect (financially fragile)	Average marginal effect (financially fragile)
Marital status: married	-0.156**	-0.155**	-0.171***
p-value	(0.016)	(0.019)	(0.008)
Cohabiting	-0.0564	-0.0785	-0.0785
p-value	(0.847)	(0.812)	(0.805)
Widow	-0.139*	-0.136*	-0.153**
p-value	(0.056)	(0.064)	(0.033)
Divorced	-0.00538	-0.0245	-0.0975
p-value	(0.959)	(0.820)	(0.385)
Primary level of education (base: Secondary level of education )	0.0738***	0.0756***	0.0375
p-value	(0.002)	(0.002)	(0.101)
Tertiary level of education (base: secondary level of education )	-0.178***	-0.182***	-0.116***
p-value	(0.000)	(0.000)	(0.003)
Labor status : Employed	0.0718**	0.0649*	0.0880**
p-value	(0.047)	(0.073)	(0.010)
Labor status: Retired& Others	0.0933**	0.0907**	0.0808**
p-value	(0.024)	(0.029)	(0.040)
Having debts towards others	0.0409	0.0450	-0.000916
p-value	(0.236)	(0.195)	(0.978)
Having a consumer loan	0.0530	0.0493	0.0526
p-value	(0.330)	(0.370)	(0.371)
Having a mortgage loan	-0.0271	-0.0327	-0.00306
p-value	(0.667)	(0.601)	(0.962)
Having other real estate properties	-0.0381	-0.0328	-0.0306
p-value	(0.105)	(0.164)	(0.167)
Receiving remittances		-0.0685***	-0.0680***
p-value		(0.008)	(0.005)
Financial access			-0.357***
p-value			(0.000)
Pseudo R <sup>2</sup>	0.0515	0.0602	0.1540
N	1971	1971	1971


# Results -Robustness checks

	Financially fragile households (Bruneti et al)			Financially fragile households ( less than 3 months of saving		
	(I)	(II)	(III)	(IV)	(V)	(VI)
Marital status : Married	-0.112*	-0.113	-0.127**	-0.170**	-0.185***	-0.189***
p-value	(0.099)	(0.101)	(0.052)	(0.050)	(0.031)	(0.027)
Age	-0.00186	-0.00174	-0.000867	-0.00423***	-0.00406***	-0.00379***
p-value	(0.146)	(0.173)	(0.471)	(0.000)	(0.001)	(0.001)
Primary level of education (base: secondary level of education )	0.0747***	0.0750***	0.0371	0.0773***	0.0785***	0.0649***
p-value	(0.002)	(0.002)	(0.102)	(0.001)	(0.001)	(0.006)
Tertiary level of education (base: Secondary level of education )	-0.188***	-0.191***	-0.110***	-0.117***	-0.120***	-0.105***
p-value	(0.000)	(0.000)	(0.004)	(0.000)	(0.000)	(0.001)
Labor market status - Employed	0.0661*	0.0548	0.0776*	-0.0968***	-0.114**	-0.110***
p-value	(0.066)	(0.128)	(0.022)	(0.009)	(0.002)	(0.003)
Labor market status -Retired& Others	0.0860**	0.0804*	0.0701*	-0.0223	-0.0333	-0.0389
p-value	(0.039)	(0.053)	(0.075)	(0.607)	(0.448)	(0.371)
Having debts towards others	0.0351	0.0389	-0.00290	0.0206	0.0270	0.0130
p-value	(0.303)	(0.253)	(0.928)	(0.534)	(0.413)	(0.692)
Having a consumer loan	0.0503	0.0463	0.0450	0.0110	0.00735	0.00526
p-value	(0.350)	(0.391)	(0.407)	(0.826)	(0.883)	(0.916)
Having a mortgage loan	-0.0709	-0.0788	-0.0322	-0.0838	-0.0916	-0.0809
p-value	(0.224)	(0.176)	(0.580)	(0.187)	(0.147)	(0.198)
Having other real estate properties	-0.0443*	-0.0379	-0.0344	-0.00811	-0.000409	-0.0000309
p-value	(0.059)	(0.107)	(0.115)	(0.722)	(0.986)	(0.999)
Receiving remittances		-0.0820***	-0.0851***		-0.109***	-0.110***
p-value		(0.001)	(0.000)		(0.000)	(0.000)
Financial access			-0.503***			-0.166***
p-value			(0.000)			(0.000)
Pseudo R <sup>2</sup>	0.0246	0.0284	0.1227	0.0358	0.0450	0.0570
N	1963	1963	1963	1715	1715	1715

## Some remarks

- Data show that 59% of households in Albania are considered financially fragile, 31% of households are considered unconditional and 10% of households are conditional.
- The results show that the higher the level of education of the reference person, the lower the probability of households of being financially fragile. These results are in line with the estimates obtained by Lusardi et al., (2011), Halser & Lusardi (2019), and Clark et al. (2020), which show that more educated individuals are less likely to be financially fragile as they have the ability to better manage and plan their finances.
- The results show that households with financial access have a lower probability of being financially fragile indicating that financial inclusion can facilitate the ability of households to cope with an unexpected event in line with Demirgüç-Kunt and Klapper (2013).
- Also, the findings show that households receiving remittances have a lower probability of being financially fragile, indicating the importance of this source of income to meet an unexpected expense.



An aerial, high-angle photograph of a large, modern building with a complex, multi-winged structure. The building features a prominent central atrium with a glass roof and is surrounded by a paved area. The overall color palette is dominated by the light brown and beige tones of the building's facade and the surrounding landscape.

Thank you for your attention !

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