

Household Adjustment to Economic Shocks: Saving, Consumption Smoothing, and Life Satisfaction

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2026 Carpathian Stata Conference, 27 July, Cluj-Napoca

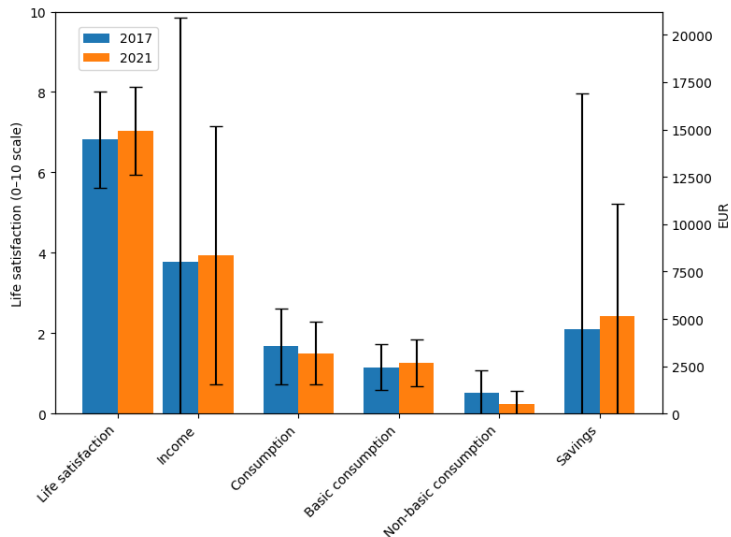
Research question and findings

- During COVID-19, incomes and economic activity fell sharply.
- Yet average life satisfaction barely changed. Why?
- What is the interplay of economic adjustment channels in the background?
- **We find that:**
 - Households smoothed discretionary consumption,
 - High-income households used savings,
 - This attenuated the transmission of shocks to life satisfaction

Literature

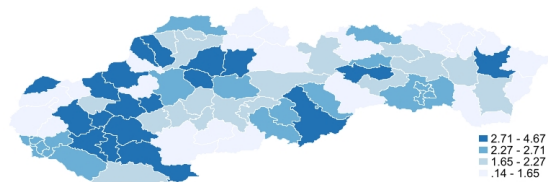
- Large shocks disrupt economic opportunities and lower life satisfaction (LS). Pandemic mobility and workplace restrictions, social isolation, health. (Möhring et al., 2021; Zaninotto et al., 2025; Cheng et al. 2024)
- Yet cross-country evidence reports surprisingly stable LS over the same period. (OECD, 2021; World Happiness Report, 2022)
- Evidence of decoupling and non-linearities between income and LS during the pandemic. (Delhey et al., 2023; Clark & Lepinteur, 2022; Wanberg et al., 2020)
- The literature examines income, consumption components and wealth separately. (Yang & Ma, 2021; Baker et al, 2020; Kim et al., 2022; Chen et al., 2021)
- **We consider** multiple adjustment channels in a mediation framework with DiD evidence

Data: Slovak HFCS household panel (2017 vs. 2021)

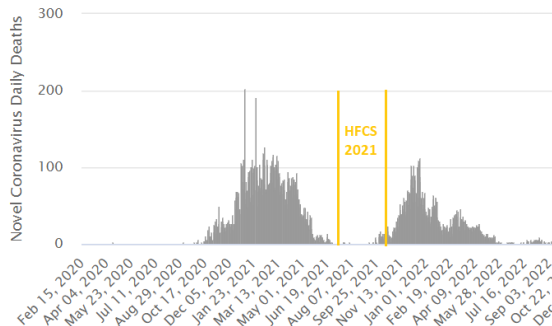


means $\pm$ SD
 $N = 838$

Data: Covid-19 and HFCS 2021 in Slovakia

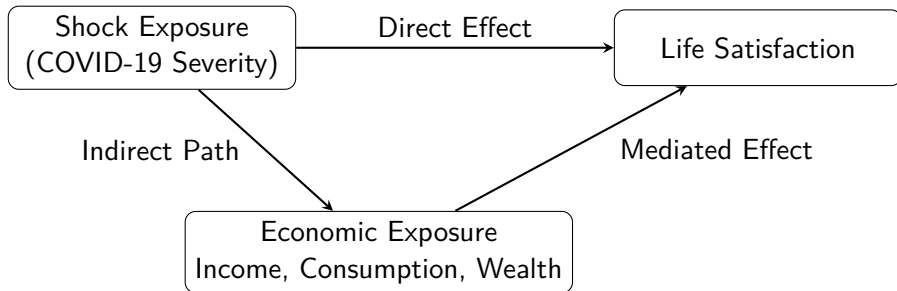


Covid deaths per district population, Jul-Oct 2021



New covid deaths daily

Conceptual Framework: Mediation Structure



Causal assumptions: parallel pre-treatment trends, unconfoundedness of both paths, SUTVA

Empirical approach - Diff-in-Diff

Life satisfaction and heterogeneous shock exposure

$$LS_{it} = \alpha_i + \lambda_t + \beta_1 Shock_{rt} + \sum_k \beta_{2k} (Shock_{rt} \times BaseX_{ik}) + \delta' M_{it} + \phi Retired_{it} + \varepsilon_{it}$$

Mediator equations: first stage (a-paths)

$$M_{it}^m = \alpha_i + \lambda_t + \theta_1 Shock_{rt} + \sum_k \theta_{2k} (Shock_{rt} \times BaseX_{ik}) + \phi Retired_{it} + u_{it}^m$$

Mediated effects on life satisfaction: second stage (b-paths)

$$LS_{it} = \alpha_i + \lambda_t + \gamma Shock_{rt} + \delta' M_{it} + \phi Retired_{it} + \eta_{it}$$

BaseX: 2017 income/consumption/wealth M: log of income, consumption, saving, and wealth

Results 1: Life satisfaction, reduced form DiD, base year heterogeneity

Variable	Baseline DiD			Extended DiD with contemporaneous mediators	
	(1)	(2)	(3)	(4)	(5)
Shock severity	0.007 (0.083)	0.223 (0.839)	0.034 (0.092)	0.040 (0.089)	0.054 (0.092)
year=2021 dummy	0.187 (0.190)	0.181 (0.188)	0.190 (0.189)	0.122 (0.177)	0.270 (0.191)
Retired dummy	0.188 (0.385)	0.243 (0.388)	0.214 (0.385)	0.229 (0.384)	0.258 (0.392)
Shock x ln (2017 income)		-0.131** (0.064)			
Shock x ln (2017 consumption)		0.216** (0.096)			
Shock x ln (2017 wealth)		-0.074 (0.061)			
Shock x 2017 income q5			-0.203*** (0.068)	-0.169** (0.069)	-0.210*** (0.074)
Shock x 2017 consumption q5			0.237*** (0.072)	0.234*** (0.085)	0.232*** (0.081)
Shock x 2017 wealth q5			-0.108 (0.099)	-0.104 (0.101)	-0.116 (0.100)

Results 2: First stage (a-paths) - shock to mediators

Quintile	Income	Consumption	Saving	Saving rate
Q2	-0.119*** (0.035)	-0.063*** (0.021)	-0.160* (0.086)	-0.008 (0.013)
Q3	-0.186*** (0.035)	-0.077*** (0.028)	-0.297*** (0.088)	-0.031** (0.015)
Q4	-0.212*** (0.039)	-0.119*** (0.027)	-0.379*** (0.100)	-0.045** (0.018)
Q5	-0.289*** (0.038)	-0.190*** (0.028)	-0.544*** (0.095)	-0.073*** (0.015)

Results 3: Second stage (b-paths) - shock to life satisfaction

Variable:	(1)	(2)
	Specification with Total consumption	Specification with Disaggregated consumption
Shock severity	0.028 (0.079)	0.027 (0.081)
Ln (Income)	0.240** (0.103)	0.226** (0.101)
Ln (Consumption)	-0.139 (0.246)	
Ln (Basic consumption)		-0.315 (0.286)
Ln (Non-basic consumption)		0.053 (0.035)
Ln (Wealth)	0.027 (0.215)	0.045 (0.199)
Year = 2021 dummy	0.093 (0.178)	0.233 (0.192)
Retired dummy	0.219 (0.383)	0.234 (0.391)

Results 4: Mediated effects on LS ($a \times b$) are attenuated

Income

Quintile	a	SE(a)	b	SE(b)	$a \times b$	SE($a \times b$)
Q1	0.087	0.066	0.240	0.193	0.021	0.030
Q2	-0.032	0.069	0.240	0.193	-0.008	0.020
Q3	-0.099	0.066	0.240	0.193	-0.024	0.019
Q4	-0.125*	0.066	0.240	0.193	-0.030	0.022
Q5	-0.202***	0.071	0.240	0.193	-0.048	0.034

Consumption

Quintile	a	SE(a)	b	SE(b)	$a \times b$	SE($a \times b$)
Q1	0.105***	0.027	-0.139	0.365	-0.015	0.039
Q2	0.043	0.026	-0.139	0.365	-0.006	0.018
Q3	0.028	0.030	-0.139	0.365	-0.004	0.016
Q4	-0.014	0.026	-0.139	0.365	0.002	0.012
Q5	-0.085***	0.033	-0.139	0.365	0.012	0.033

Wealth

Quintile	a	SE(a)	b	SE(b)	$a \times b$	SE($a \times b$)
Q1	0.073	0.051	0.027	0.358	0.002	0.022
Q2	0.030	0.021	0.027	0.358	0.001	0.014
Q3	0.014	0.031	0.027	0.358	0.000	0.013
Q4	0.015	0.023	0.027	0.358	0.000	0.010
Q5	-0.004	0.040	0.027	0.358	-0.000	0.015

Summary of the main findings

- Average life satisfaction remained stable despite a strong economic shock.
- Caps on wage support seem to disproportionately affect higher-income households.
- Higher-income households adjusted through lower saving and discretionary consumption.
- Income is the main channel linking covid exposure to life satisfaction.
- Adjustment mechanisms attenuate the overall transmission to life satisfaction.

Conclusion

- Large economic shocks do not translate mechanically into lower life satisfaction
- Saving decumulation by households and consumption smoothing weaken this transmission
- Stabilization policies should preserve household's ability to smooth consumption.
- Caps on wage support disproportionately affect higher-income households.
- Uniform support policies may have heterogeneous welfare effects.

Thank you!

Questions welcome.