

The Double Shift of Financialization: Personal Debt & Multiple Jobholding

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Outline

- Labour Supply & Multiple Jobholding
- The Role of Financialization & Personal Debt
- Data & Methods
- Results
- Preliminary Conclusions

Labour Supply & Multiple Jobholding

Labour Supply as a static choice:

- *Work hours – Leisure* optimization problem
- Consumption preferences
- Wage income + non-wage income
- Wage rate \uparrow \rightarrow Work hours \uparrow (but, backward-bending)

Labour Supply & Multiple Jobholding (2)

Why do people choose to work multiple jobs?

Push-Vs-Pull motivations theory

(Bretz et al. 1994; Campion et al. 2020; Bhayana et al. 2024)

- **Pulled:** Career advancement; Skill Development; Personal Fulfillment (→ top of wage distribution)
- **Pushed:** Economic hardship (broadly defined)

Debt, Hardship, & Multiple Jobholding

- **Farm debt** [*ratio; interviews*]
(Weersink et al. 1998; Robertson et al. 2008)
- **Healthcare insurance** in rural US states → Debt [*interviews*]
(Gringeri 2001)
- **Student loans** affecting lifecycle choices [*not tested*]
(Wu et al. 2009)
- **Housing cost** difficulties (incl. mortgages) [*binary*]
(Atherton et al. 2016)
- **Binary variable for personal debt** using Finnish survey data (+)
(Kauhanen 2021)
- Paying off debts mentioned as a driver
(Campion et al. 2020; Smith & McBride 2021)

Debt, Hardship, & Multiple Jobholding (2)

Transient or Systemic?

- Debt as a **disciplinary labour market mechanism**
- Asking for a pay raise → risk of redundancy → debt default
→ Employment stability *over* better working conditions
- Links with the **labour share**, inv. **part-time work, unionization, strikes, wage inequalities**
(Wood 2018; Kim et al. 2019; Kohler et al. 2019; Gouzoulis 2021, 2023; Gouzoulis et al. 2023; Barradas 2024, 2026)
- A second job as a **precautionary strategy**

Research Questions, Data, & Methods

- Breakdown economic hardship → personal debt + inflation
- Multi-country, longitudinal setting → 33 countries; 2013-2024 (Eurostat; FED; AMECO; WB; Penn Tables; IMF)

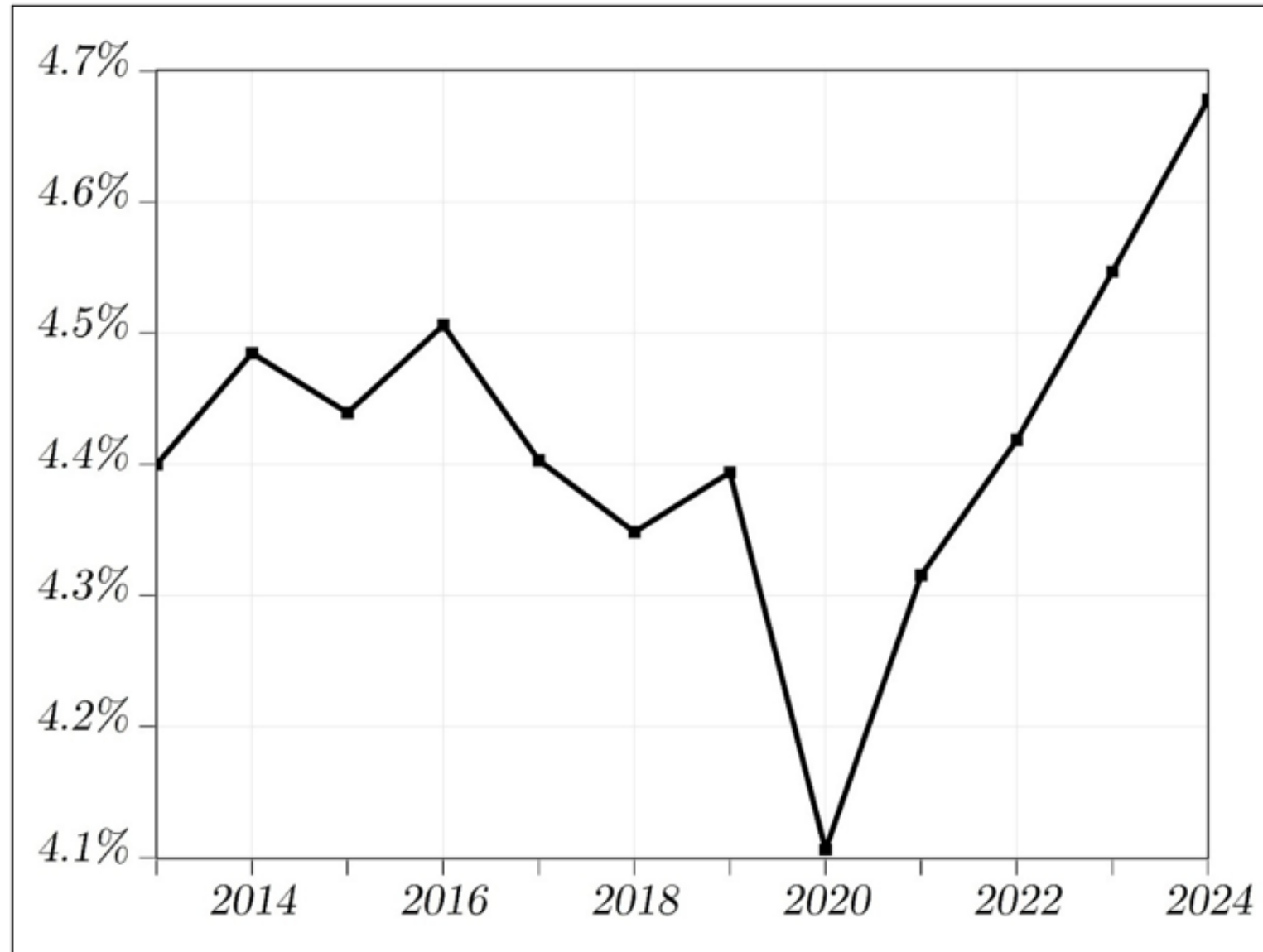
- Specification:

Multiple Jobholding Rate = f(Household Debt, Labor Share, Human Capital, Unemployment, Inflation)

Household Debt (+); Labour Share (-); Human Capital (?); Unemployment (-); Inflation (+)

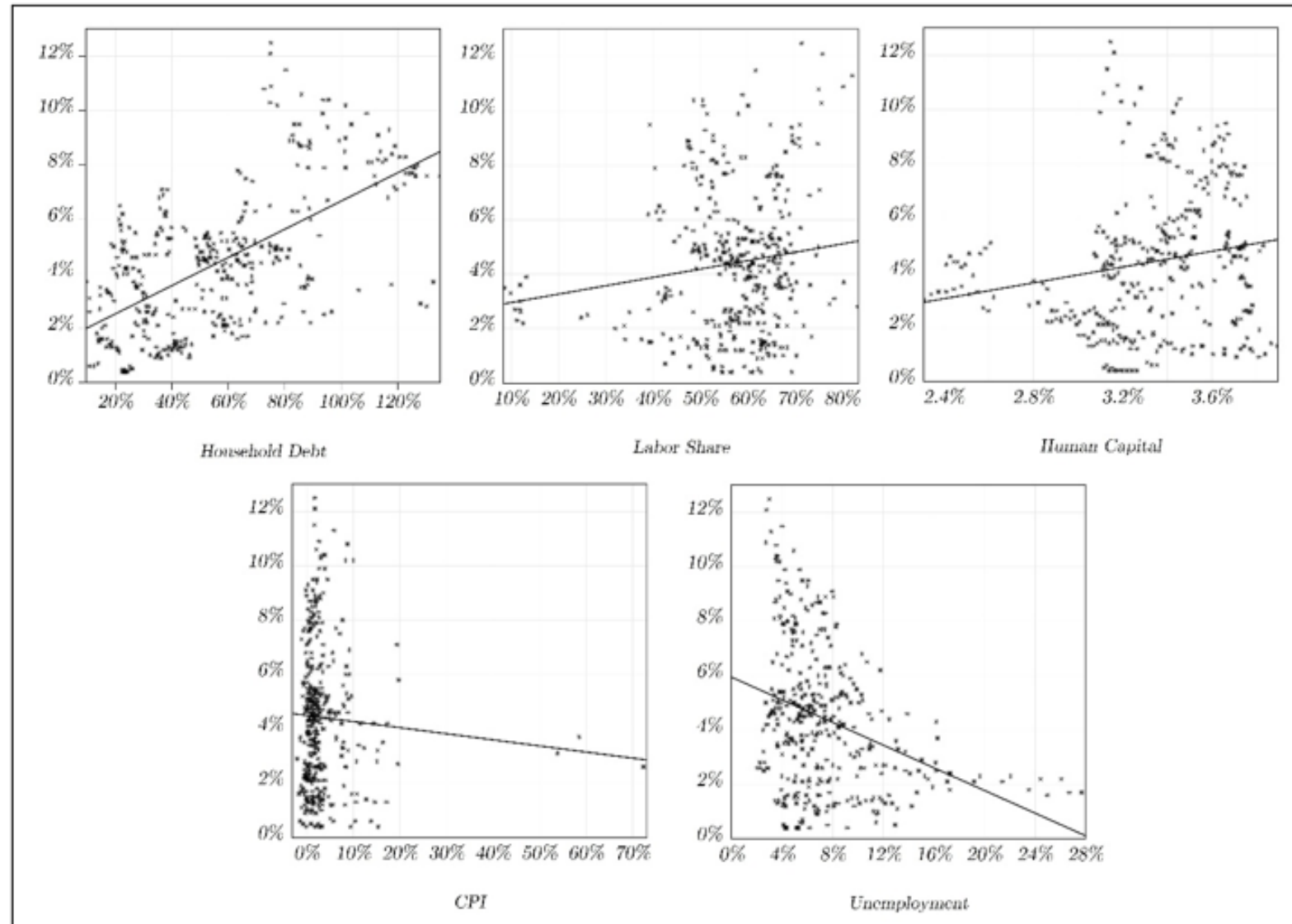
- Static, one-step GMM with period-SUR GLS weights (Lagged regressors as instruments – 2 lags)

Figure 1: Multiple Jobholding Rate (%) - Mean



Notes: The multiple jobholding rate is defined as the percentage of persons with more than one job as a share of all employed persons. This includes people who had more than one job or business during the reference week, not due to change of job or business. The longitudinal panel dataset includes Belgium, Bulgaria, Czechia, Denmark, Germany, Estonia, Ireland, Greece, Spain, France, Croatia, Italy, Cyprus, Latvia, Lithuania, Luxemburg, Hungary, Malta, the Netherlands, Austria, Poland, Portugal, Romania, Slovenia, Slovakia, Finland, Sweden, Iceland, Norway, Switzerland, the United Kingdom, Turkey, and the United States. *Sources:* Eurostat and Federal Reserve Economic Data (FRED).

Figure 2: Scatter Plots (Stacked) – Multiple Jobholding Vs Regressors



Notes: The Y axis shows the multiple jobholding rate, and the X axis shows the respective regressor (see labels).

Table 2: Determinants of Multiple Jobholding – Main Results

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Household Debt	0.045*** (0.000)	0.049*** (0.000)	0.048*** (0.000)	0.052*** (0.000)	0.047*** (0.000)	0.050*** (0.000)	0.049*** (0.000)	0.055*** (0.000)	0.049*** (0.000)	0.055*** (0.000)	0.051*** (0.000)	0.052*** (0.000)
<i>Labor Share</i>		-0.045** (0.018)				-0.015 (0.206)	-0.011 (0.665)	-0.001 (0.955)	-0.013 (0.491)	-0.017 (0.255)	-0.004 (0.860)	0.004 (0.805)
<i>Human Capital Index</i>			0.963 (0.099)			0.718 (0.287)			0.381 (0.609)	1.119 (0.175)		0.060 (0.941)
Unemployment				-0.164*** (0.000)			-0.133*** (0.000)		-0.122*** (0.001)		-0.160*** (0.000)	-0.152*** (0.000)
CPI					0.135* (0.036)			0.078** (0.01)		0.071 (0.08)	0.052 (0.119)	0.046 (0.236)
<i>Constant Term</i>	1.607** (0.002)	4.054*** (0.000)	-1.927 (0.314)	2.219*** (0.000)	1.538** (0.004)	-0.374 (0.851)	2.729 (0.083)	0.979 (0.433)	1.325 (0.629)	-2.036 (0.425)	2.429 (0.057)	1.614 (0.550)
<i>Adjusted R²</i>	0.106	0.048	0.102	0.189	-0.29	0.119	0.181	0.010	0.168	0.051	0.084	0.111
<i>Unadj. R²</i>	0.109	0.054	0.108	0.194	-0.28	0.128	0.189	0.019	0.179	0.065	0.095	0.126
<i>Cross-Sections</i>	33	33	33	33	33	33	33	33	33	33	33	33
<i>Time Periods</i>	10	10	9	10	10	9	10	10	9	9	10	9
<i>Observations</i>	324	319	293	324	324	292	319	319	292	292	319	292
<i>Durbin-Watson Stat.</i>	2.021	2.045	2.052	1.997	1.918	2.089	2.007	2.045	1.998	2.056	2.005	2.042
<i>Hansen-Sargan J-Stat.</i>	0.188 (0.664)	1.570 (0.456)	0.468 (0.791)	2.704 (0.259)	1.960 (0.375)	3.235 (0.357)	7.342 (0.062)	10.026 (0.018)	8.230 (0.083)	8.980 (0.062)	10.770 (0.029)	9.909 (0.077)
<i>Instrument Rank</i>	3	5	5	5	5	7	7	7	9	9	9	11

Notes: *, **, and *** denote statistical significance at the 5%, 1%, and 0.1% levels, respectively. P-values reported in parentheses. The dependent variable is the multiple jobholding rate, i.e., the percentage of persons with more than one job as a share of all persons in employment. The equations are estimated using the one-step Generalized Method of Moments (GMM) estimator with a White period weighting matrix, period-SUR GLS weights, and White period (cross-section cluster) standard errors. Instruments include all respective regressors with two additional lags and a constant term. Weighted test statistics reported.

Table 3: Determinants of Multiple Jobholding – Lagged Regressors

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<i>Household Debt</i> τ_{-1}	0.029** (0.002)	0.039** (0.007)	0.029*** (0.003)	0.042*** (0.000)	0.043*** (0.000)	0.039*** (0.000)	0.044*** (0.000)	0.043*** (0.000)	0.046*** (0.000)	0.046*** (0.000)	0.052*** (0.000)	0.050*** (0.000)
<i>Labor Share</i> τ_{-1}		-0.117 (0.143)				-0.029 (0.365)	-0.037 (0.152)	-0.043* (0.037)	-0.033 (0.0940)	-0.011 (0.647)	-0.313 (0.248)	-0.008 (0.339)
<i>Human Capital Index</i> τ_{-1}			1.144 (0.121)			1.247 (0.065)			-0.296 (0.782)	0.699 (0.337)		-0.377 (0.591)
<i>Unemployment</i> τ_{-1}				-0.143*** (0.000)			-0.170*** (0.000)		-0.206** (0.007)		-0.154*** (0.000)	-0.160*** (0.000)
<i>CPI</i> τ_{-1}					0.069* (0.014)			0.085*** (0.001)		0.084** (0.002)	0.084* (0.012)	0.081*** (0.001)
<i>Constant Term</i>	2.369*** (0.000)	9.041 (0.056)	-1.460 (0.564)	2.588*** (0.000)	1.456** (0.003)	-0.595 (0.841)	4.817** (0.003)	4.196** (0.004)	5.817 (0.176)	-0.425 (0.877)	3.859* (0.003)	3.878 (0.121)
<i>Adjusted R²</i>	0.159	-0.794	0.157	0.276	0.210	0.134	0.193	0.041	0.183	0.142	0.065	0.101
<i>Unadj. R²</i>	0.162	-0.781	0.163	0.281	0.215	0.143	0.201	0.050	0.195	0.154	0.078	0.117
<i>Cross-Sections</i>	33	33	33	33	33	33	33	33	33	33	33	33
<i>Time Periods</i>	9	9	9	9	9	9	9	9	9	9	9	9
<i>Observations</i>	292	291	292	292	292	291	291	291	291	291	291	291
<i>Durbin-Watson Stat.</i>	1.975	2.217	1.980	2.013	1.979	2.118	2.132	2.039	2.131	2.043	2.099	2.077
<i>Hansen-Sargan J-Stat.</i>	1.398 (0.237)	1.388 (0.499)	1.284 (0.526)	1.969 (0.373)	3.911 (0.142)	5.522 (0.137)	6.661 (0.084)	3.286 (0.349)	7.362 (0.118)	6.305 (0.178)	3.507 (0.477)	4.457 (0.486)
<i>Instrument Rank</i>	3	5	5	5	5	7	7	7	9	9	9	11

Notes: *, **, and *** denote statistical significance at the 5%, 1%, and 0.1% levels, respectively. P-values reported in parentheses. The dependent variable is the multiple jobholding rate, i.e., the percentage of persons with more than one job as a share of all persons in employment. The equations are estimated using the one-step Generalized Method of Moments (GMM) estimator with a White period weighting matrix, period-SUR GLS weights, and White period (cross-section cluster) standard errors. Instruments include all respective regressors with two additional lags and a constant term. Weighted test statistics reported.

Preliminary Conclusions

- From “hardship” to debt, inflation, and LM conditions
- Household financialization lit → MJH *push-vs-pull* literature
- Household debt as cumulative Vs binary (+ Longitudinal & multi-country setting)

Key results

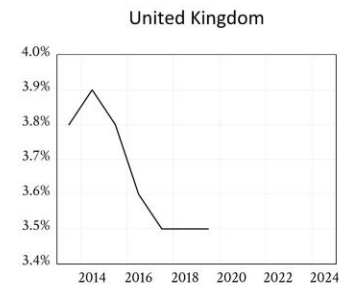
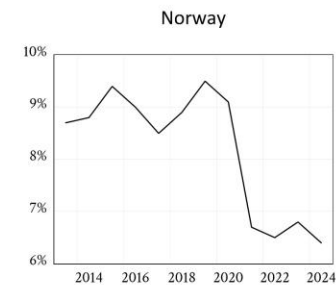
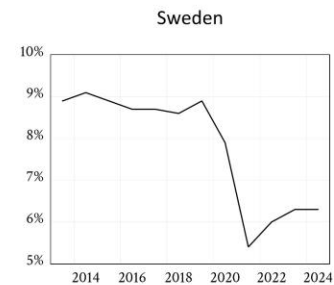
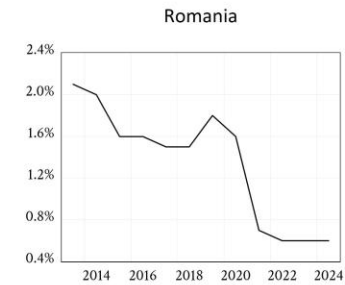
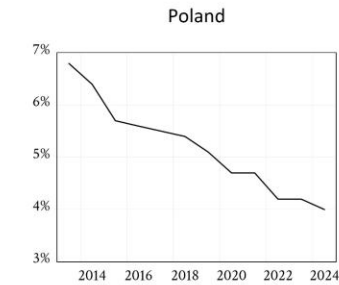
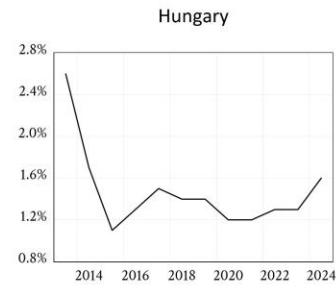
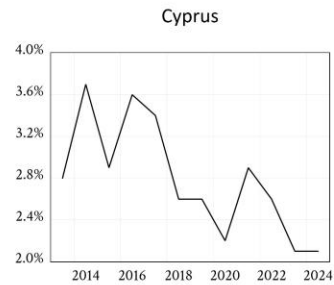
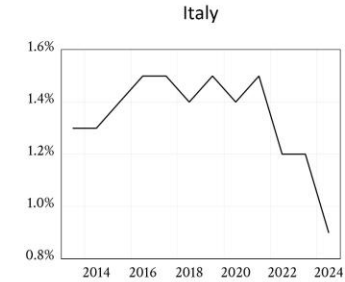
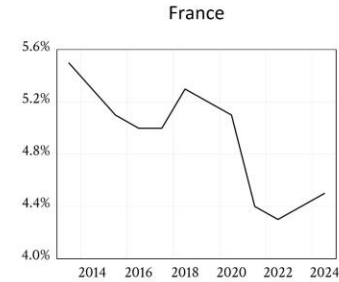
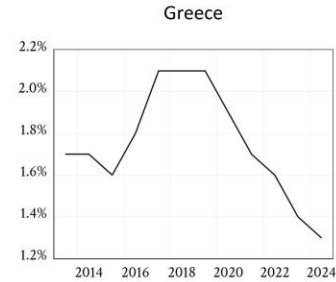
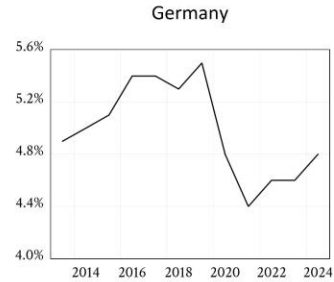
- Household debt + unemployment → expected results & robust
- Inflation → overall expected results, but less consistent
- Human capital → inconsistent (pull factor no macro level role)

Next steps: Micro-level causal (EU-LFS; PSID) → debt relief schemes

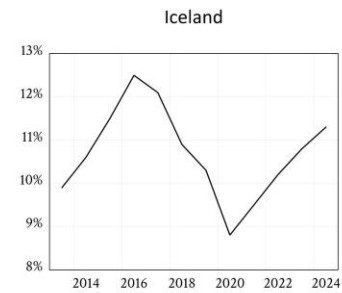
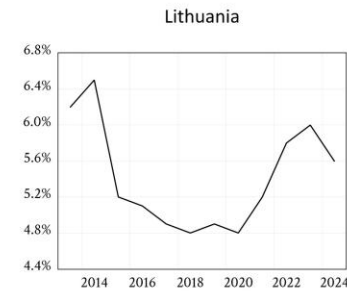
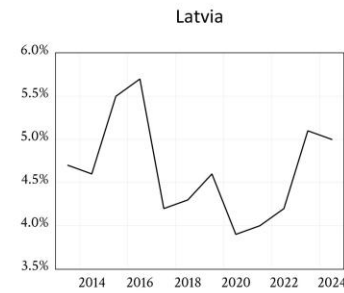
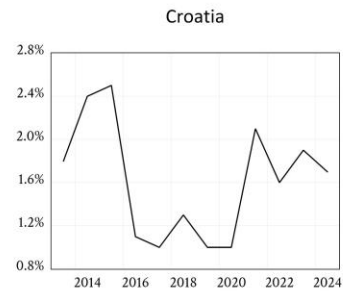
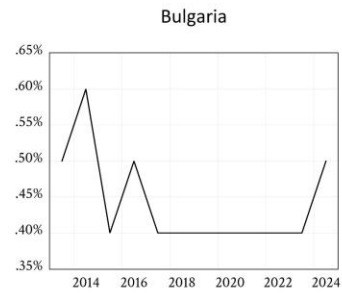
Appendix



Appendix



Appendix



Appendix

Table A2: Determinants of Multiple Jobholding – Arellano–Bond (1991) GMM

	(1)	(2)
<i>Multiple Jobholding</i> $t-1$	0.082 (0.471)	0.314 (0.082)
<i>Household Debt</i>	0.002 (0.931)	
<i>Household Debt</i> $t-1$		0.005 (0.842)
<i>Labor Share</i>	0.073*** (0.000)	
<i>Labor Share</i> $t-1$		-0.001 (0.978)
<i>Human Capital Index</i>	8.698** (0.015)	
<i>Human Capital Index</i> $t-1$		1.674 (0.699)
<i>Unemployment</i>	0.059 (0.479)	
<i>Unemployment</i> $t-1$		-0.114 (0.287)
<i>CPI</i>	0.052 (0.245)	
<i>CPI</i> $t-1$		-0.007 (0.734)
<i>Cross-Sections</i>	33	33
<i>Time Periods</i>	8	8
<i>Observations</i>	259	258
<i>Hansen-Sargan J-Stat.</i>	17.078 (0.599)	98.572 (0.000)
<i>Instrument Rank</i>	33	70

Notes: *, **, and *** denote statistical significance at the 5%, 1%, and 0.1% levels, respectively. P-values reported in parentheses. The dependent variable is the multiple jobholding rate, i.e., the percentage of persons with more than one job as a share of all persons in employment. The equations are estimated using the dynamic panel Arellano–Bond (1991) GMM estimation of MJH using with first-differenced cross-section effects and period fixed effects. The standard errors are White period-clustered. Instruments include all respective regressors with two additional lags and a constant term.

Appendix (2)

Table A3: Determinants of Multiple Jobholding – Period Fixed Effects

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<i>Household Debt</i>	0.053**** (0.000)	0.054**** (0.000)	0.051**** (0.000)	0.051**** (0.000)	0.055**** (0.000)	0.051**** (0.000)	0.052**** (0.000)	0.056**** (0.000)	0.051**** (0.000)	0.054**** (0.000)	0.054**** (0.000)	0.053**** (0.000)
<i>Labor Share</i>		-0.003 (0.910)				-0.004 (0.897)	-0.006 (0.813)	-0.001 (0.972)	-0.001 (0.984)	-0.002 (0.942)	-0.004 (0.874)	0.001 (0.980)
<i>Human Capital Index</i>			0.677 (0.522)			0.709 (0.526)			-0.799 (0.493)	0.918 (0.411)		-0.610 (0.602)
<i>Unemployment</i>				-0.214**** (0.000)			-0.216**** (0.000)		-0.251**** (0.000)		-0.217**** (0.000)	-0.245**** (0.000)
<i>CPI</i>					0.045 (0.107)			0.053 (0.158)		0.067 (0.009)	0.056** (0.002)	0.048 (0.073)
<i>Constant Term</i>	1.425* (0.035)	0.155 (0.315)	-0.764 (0.818)	3.098 (0.000)	1.161 (0.114)	-0.675 (0.832)	3.402 (0.033)	1.161 (0.468)	6.033 (0.090)	-1.809 (0.583)	2.993 (0.057)	5.044 (0.167)
<i>Adjusted R²</i>	0.371	0.369	0.371	0.472	0.378	0.370	0.470	0.374	0.483	0.382	0.479	0.489
<i>Unadj. R²</i>	0.390	0.388	0.392	0.489	0.398	0.393	0.489	0.397	0.503	0.406	0.499	0.510
<i>Cross-Sections</i>	33	33	33	33	33	33	33	33	33	33	33	33
<i>Time Periods</i>	12	12	11	12	12	11	11	12	11	11	12	11
<i>Observations</i>	390	385	359	390	390	358	385	385	358	358	385	358
<i>Durbin-Watson Stat.</i>	0.063	0.063	0.065	0.080	0.069	0.065	0.081	0.071	0.086	0.079	0.092	0.095

Notes: *, **, and **** denote statistical significance at the 5%, 1%, and 0.1% levels, respectively. P-values reported in parentheses. The dependent variable is the multiple jobholding rate, i.e., the percentage of persons with more than one job as a share of all persons in employment. The equations are estimated using period (year) fixed effects and White period (cross-section cluster) standard errors.

Appendix (3)

Table A4: Determinants of Multiple Jobholding – Two-Way Fixed Effects

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<i>Household Debt</i>	0.002 (0.866)	0.001 (0.941)	0.002 (0.878)	0.001 (0.936)	0.002 (0.856)	0.000 (0.961)	0.000 (0.984)	0.001 (0.932)	0.001 (0.919)	0.001 (0.964)	-0.000 (0.988)	0.001 (0.917)
<i>Labor Share</i>		0.005 (0.808)				0.007 (0.729)	0.006 (0.785)	0.005 (0.799)	0.006 (0.734)	0.007 (0.717)	0.006 (0.775)	0.007 (0.719)
<i>Human Capital Index</i>			-1.110 (0.450)			-1.114 (0.449)			-1.228 (0.285)	-0.965 (0.520)		-1.057 (0.478)
<i>Unemployment</i>				0.009 (0.850)			0.010 (0.811)		-0.009 (0.823)		0.011 (0.802)	-0.007 (0.867)
<i>CPI</i>					-0.007 (0.359)			-0.012 (0.190)		-0.009 (0.305)	-0.012 (0.198)	-0.009 (0.349)
<i>Constant Term</i>	4.295*** (0.000)	4.035*** (0.000)	7.999 (0.109)	4.285*** (0.000)	4.309*** (0.000)	7.695 (0.144)	4.001*** (0.000)	4.051*** (0.001)	8.107 (0.102)	7.199 (0.175)	4.015*** (0.000)	7.531 (0.143)
<i>Adjusted R²</i>	0.938	0.938	0.943	0.938	0.938	0.943	0.937	0.938	0.943	0.943	0.937	0.943
<i>Unadj. R²</i>	0.945	0.945	0.950	0.945	0.945	0.950	0.945	0.945	0.950	0.950	0.945	0.950
<i>Cross-Sections</i>	33	33	33	33	33	33	33	33	33	33	33	33
<i>Time Periods</i>	12	12	12	12	12	12	12	12	11	11	12	11
<i>Observations</i>	390	385	359	390	390	358	385	385	358	358	385	358
<i>Durbin-Watson Stat.</i>	0.634	0.637	0.726	0.634	0.637	0.727	0.637	0.643	0.727	0.732	0.647	0.732

Notes: *, **, and *** denote statistical significance at the 5%, 1%, and 0.1% levels, respectively. P-values reported in parentheses. The dependent variable is the multiple jobholding rate, i.e., the percentage of persons with more than one job as a share of all persons in employment. The equations are estimated using two-way (country and year) fixed effects and White period (cross-section cluster) standard errors.