

Household Debt and Social Stratification in Late Life

Noah Lewin-Epstein
Moshe Semyonov
Tel-Aviv University

**Presentation at the SHARE user conference, Liège Belgium, 28-
29 November 2013**

Democratizing Access to Credit and Household Debt

➤ “Taking the waiting out of the wanting”

- Change in the institutional environment
- Extension of “consumer society” to lower classes

➤ Growing household debt

Both, the proportion and the amount

Aging and Household Debt

- Cohort studies show growing debt
- Living longer (after retirement)
- Growing preference for better living
- Risk of large (health) expenses

Hypotheses

- Debt is widespread and not systematically related to economic standing;
- Controlling for economic standing debt is affected by need (e.g., poor health, children);
- Intergenerational support substitutes for debt;
- *Ceteris paribus* higher education is associated with greater debt.

Cross National Considerations

- **Credit institutions and regulations**

(~~home loans~~, personal loans, credit cards)

- **Welfare system and safety net**

- **Differences in consumer culture**

Hypotheses Regarding Context

- **Large country differences in likelihood of indebtedness and size of household debt;**
- **Weaker association between economic standing and debt in countries with more flexible credit markets;**
- **Public health and social expenditure moderates the relationship between needs and debt.**

Data

▪SHARE

The Survey of Health, Aging and Retirement in Europe

- Data for 13 countries were obtained from the 2006-2007 (wave II for European countries), and 2009-2010 (wave II for Israel)
- Full probability sample, nationally representative of populations 50+ (N = 23,783 households)
- Analysis is conducted at the household level

Figure 1: Percent of Households Reporting Financial Debt and the Percent of Household with Negative or Zero Net Worth, By Country

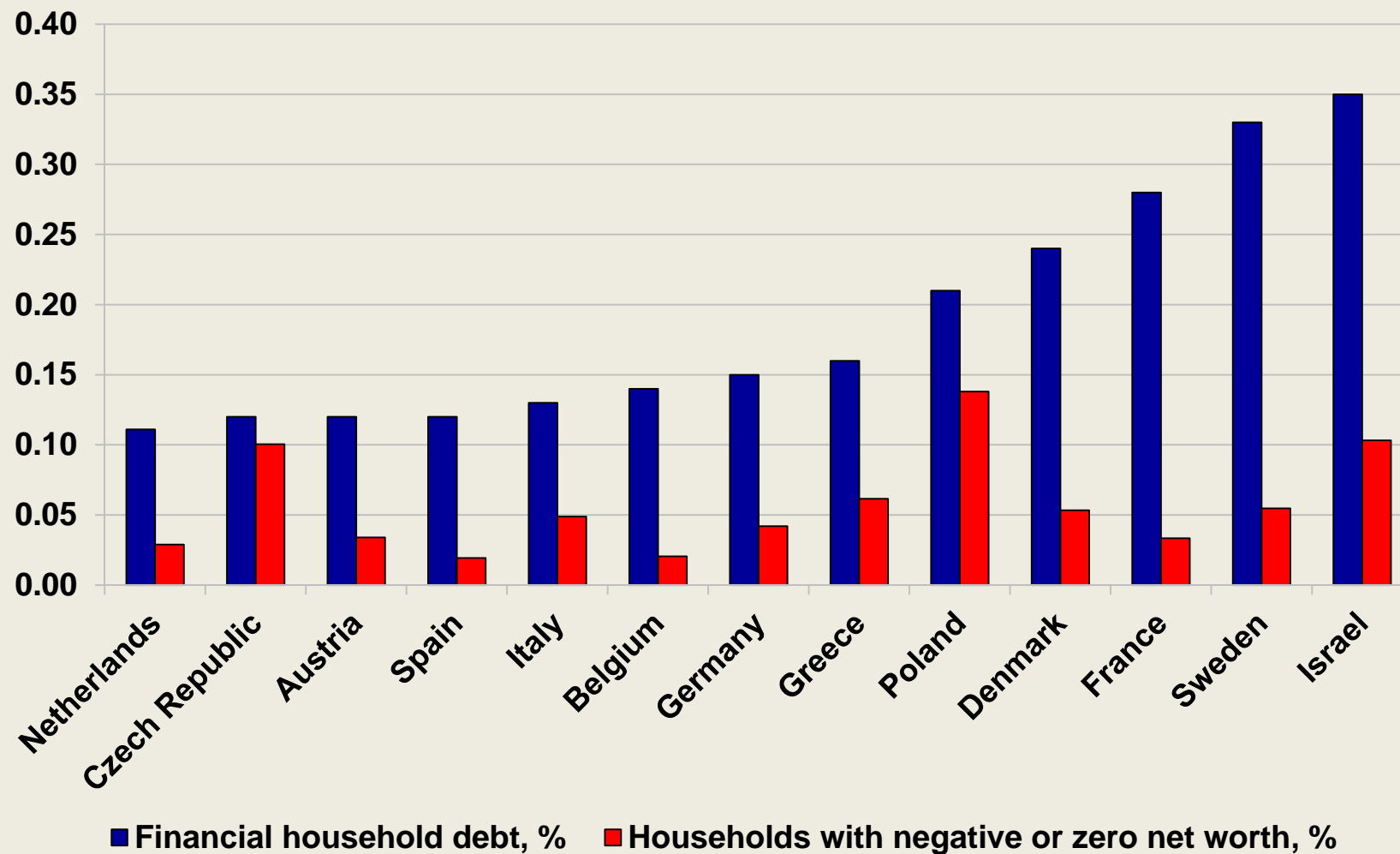


Figure 2: The Ratio of Financial Debt to Annual Household Income: Median Values by Country (For Households with Financial Debt)

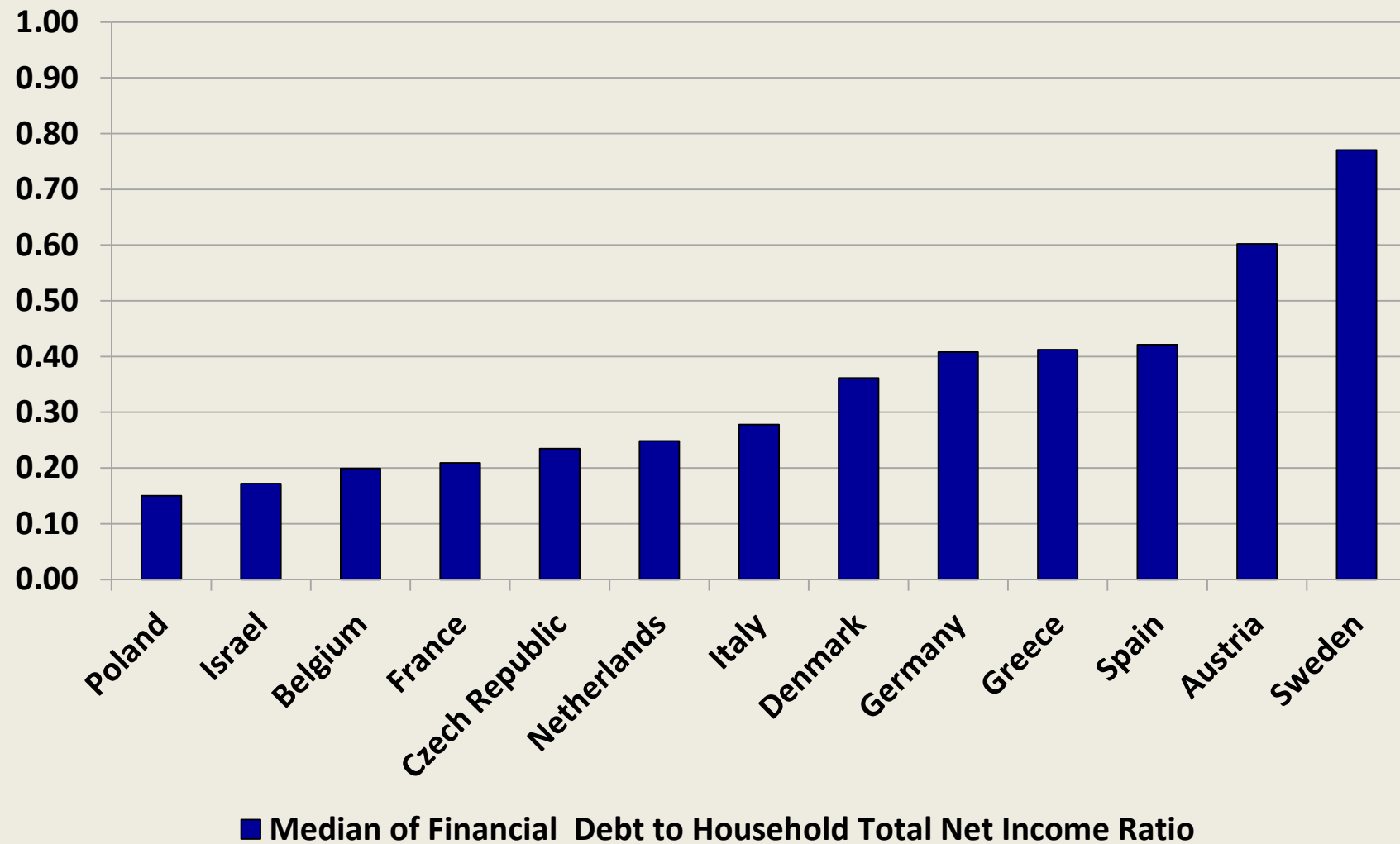


Table: Explanatory Variables – Definitions & Country Means (%)

Variable	Definition	Min	Max
Total household net worth	Household's net worth in Euro, ppp-adjusted: sum of real and net financial assets	98,700	462,901
Total household income	Household's non asset annual income in Euro ppp-adjusted	11,313	42,145
Employed in household	At least one household member is employed=1	16.0	45.0
Self-employed in household	At least one household member is self-employed=1	4.0	17.0
Received gift or inheritance	At least someone in household received gift or inheritance (5000€ or more)=1	14.0	45.0
Illness in the household	At least one household member has fair or poor health=1	21.0	69.0
Number of children	Number of children	1.9	3.2
Lower education	Household respondent's education level: Lower education=1	16.0	82.0
Higher education	Household respondent's education level: Higher education=1	6.0	35.0
Household size	Number of persons in the household	1.8	2.9
Widowed	Marital Status: Widowed=1	3.0	28.0
Divorced	Marital Status: Divorced=1	0.0	15.0
Age of oldest person in household	In years	65.3	70.0

Table: Tobit Regression Models Predicting the Value of (ln) Financial Debt, Controlling for Country-FEs

	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)	Model (6)
Total household net worth (ln)	-	-1.13	-1.47	-1.47	-1.48	-1.48
Total household income (ln)	-	0.04	-0.03	-0.03	-0.04	-0.03
Employed in household	-	-	1.26**	1.26**	1.24**	1.24**
Self-employed in household	-	-	1.02**	1.03**	1.02**	1.06**
Received gift or inheritance	-	-	-0.58*	-0.59*	-0.58*	-0.58*
Illness in the household	-	-	1.46**	1.46**	1.45**	0.01
Number of children	-	-	0.60**	0.60**	0.60**	0.60**
Lower education	-	-	-0.10	-0.55	-0.10	-0.11
Higher education	-	-	0.76*	0.88	0.74*	0.74*
Household size	-	-	0.44**	0.44**	-0.66	0.44**
Widowed	-	-	-0.89	-0.89	-0.90	-0.89
Divorced	-	-	2.31**	2.31**	2.32**	2.29**
Oldest person in household	-	-0.49**	-0.44**	-0.44**	-0.44**	-0.45**

Table (cont.): Tobit Regression Models Predicting the Value of (ln) Financial Debt, Controlling for Country-FEs: Cross-Level Interactions

	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)	Model (6)
GINI * Lower education	-	-	-	0.02	-	-
GINI * Higher education	-	-	-	-0.00	-	-
Public Social Expenditure*Household size	-	-	-	-	0.05*	-
Illness in the household*Household out-of- pocket expenditure on health	-	-	-	-	-	0.09*
Constant	-12.44**	37.96*	37.81*	37.78*	37.56*	38.31*
Sigma	12.76**	11.82**	11.73**	11.73**	11.73**	11.73**
Pseudo R2	0.019	0.054	0.059	0.059	0.059	0.059
Log-Likelihood	-23,763	-22,907	-22,252	-22,252	-22,250	-22,249

Summary - household level

	Consumer
Total household net worth (ln)	
Total household income (ln)	
Employed in household	+
Self-employed in household	+
Received gift or inheritance	-
Illness in the household	+
Number of children	+
Higher Education	+
Household size	+
Widowed	
Divorced	+
Age	-

The relationship is weaker in countries with higher public health expenditure

The relationship is stronger in countries with higher public social expenditure

“Take Home”

- **Household debt is not an insignificant phenomenon in late life.**
- **While some families in debt are likely to be asset-poor, in general debt is only weakly related to economic position.**
- **“need” plays a role. Ill-health and offspring are prime factors in household debt .**
- **The prevalence of household debt and its relationship to higher education suggest a strong cultural leading to emulative consumption.**
- **Country context produces variation in the debt and also moderates household level relationships.**

Thank you!

Appendix 1: Macro Level Characteristics by Country

	Public Social Expenditure in percentage of GDP¹	Private households out- of-pocket total exp. on health, % total expenditure on health²	GINI³
Austria	27.1	16.8	26.0
Germany	27.3	12.2	26.0
Sweden	29.1	16.7	23.0
Netherlands	20.7	7.5	27.0
Spain	21.1	22.1	33.4
Italy	24.9	19.9	33.0
France	30.1	7.0	28.0
Denmark	27.7	14.0	24.0
Greece	21.1	28.0	33.0
Belgium	26.5	18.8	28.0
Israel	15.5	24.3	38.9
Czech Republic	18.7	10.7	27.0
Poland	21.0	26.1	36.0

Source: ^{1, 2} Organization for Economic Co-operation and Development (OECD) statistics database, 2005 (2008 for Israel); ³ World Institute for Development Economics Research (WIID2C) database, 2005 (2001 for Israel).

Appendix 2: Detailed Debt Statistics by Country

	Financial household debt, %	Financial household debt, mean (std. d.)
Austria	12	30,023
		(36,002)
Germany	15	32,878
		(53,397)
Sweden	33	39,940
		(55,577)
Netherlands	11	29,303
		(56,033)
Spain	12	17,454
		(24,556)
Italy	13	14,403
		(29,907)
France	28	26,916
		(62,154)
Denmark	24	36,631
		(139,707)
Greece	16	28,905
		(196,268)
Belgium	14	19,002
		(62,077)
Israel	35	13,875
		(37,615)
Czech Republic	12	5,820
		(7,497)
Poland	21	3,405
		(7,798)