Comparison of knowledge and behaviour in managing personal finances in Estonia, Latvia, Finland and Norway

Leonore Riitsalu

Estonian Business School, Department of Marketing and Communication
University of Tartu, Institute of Social Studies
non-profit Rahatarkus ("money wisdom")
consultant for the OECD in Azerbaijan

Financial literacy is knowledge and understanding of financial concepts and risks, and the skills, <u>motivation and confidence</u> to apply such knowledge and understanding in order to **make** effective decisions across a range of financial contexts, to improve the financial well-being of individuals and society, and to enable participation in economic life.

(OECD 2014)

Good knowledge leads to wise behaviour?

In the first OECD financial literacy survey, Estonia ranked 2nd in knowledge but last in behaviour.

(Atkinson and Messy, 2012)



Illustration: Tõnis Kenkmaa

In PISA 2012, students of Estonia ranked 3rd

	Mean score
OECD average-13	500
Shanghai-China	603
Flemish Community (Belgium)	541
Estonia	529
Australia	526
New Zealand	520
Czech Republic	513
Poland	510
Latvia	501
United States	492
Russian Federation	486
France	486
Slovenia	485
Spain	484
Croatia	480
Israel	476
Slovak Republic	470
Italy	466
Colombia	379

BUT:

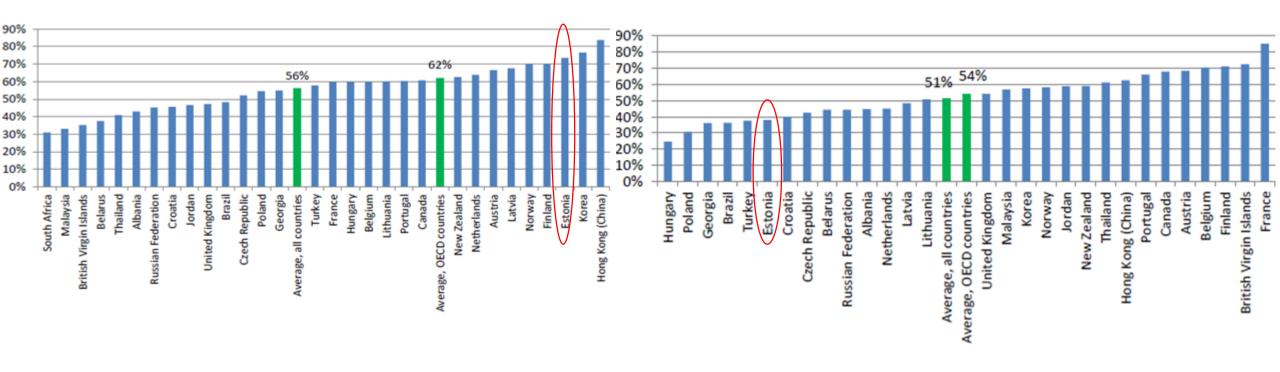
- Financial education was not taught at schools as part of the national curriculum at the time of the test.
 - National strategy for financial education was not yet in force.
 - Large gap between schools with Estonian and Russian language of instruction.
 - The only factor significantly explaining the gap is the number of books at home.

OECD (2016). <u>PISA 2012 Results: Students and Money.</u> Riitsalu & Põder (2016). <u>A glimpse of the complexity of factors that influence financial literacy.</u>

In Estonia, this group was oversampled in 2015

- 40% do not plan their finances at all
- Less than half have any financial goals
- 11% compared the conditions of several mandatory pension funds before enrolling into one of them

OECD 2015 survey, knowledge (min 5/7) and behaviour (min 6/9)



	Knowledge	<u>Attit</u>	udes	Behaviour	
Gender					
Male	0.26	64**	-0.078	-0.284*	
Nationality					
Estonian	0.694	4***	0.272**	-0.167	
Education					
Less than secondary	-0.794	4***	-0.239*	-0.854***	
Secondary	-0.36	65**	0.059	-0.163	
Income					
Less than 300 €	-0.50	04**	-0.081	-0.692***	
301-500 €	-0	.199	-0.030	-0.480**	
Professional status					
Manager/entrepreneur	0.4	494*	0.170	0.320	
Employee	0	.288	0.035	-0.022	
Pensioner/unable to work	-0	.016	-0.051	0.137	
Number of household members					
1	-0	.135	-0.118	-0.882***	
2	-0	.040	-0.077	-0.539**	
3	0.098		-0.049	-0.470*	
Type of municipality					
Capital city	-0.233		0.183	-0.221	
Other towns	0.445**		-0.053	-0.196	
Number of books at home					
0-25 books	-0.753***		-0.186	-0.140	
26-100 books	-0.100		0.027	0.069	
101-200 books	-0.067		0.096	0.049	
Higher level predicted compared with reference category Lower level predicted compared with reference category	* 0.05≤=p<0.1 * 0.05≤=p<0.1	** 0.01≤p<0.05			
No significant differences	0.032-p<0.1	0.012p<0.00	ρνυ.υ1		

Riitsalu, Murakas & Veeret (forthcoming).
The gap between knowledge and behaviour in managing personal finances.

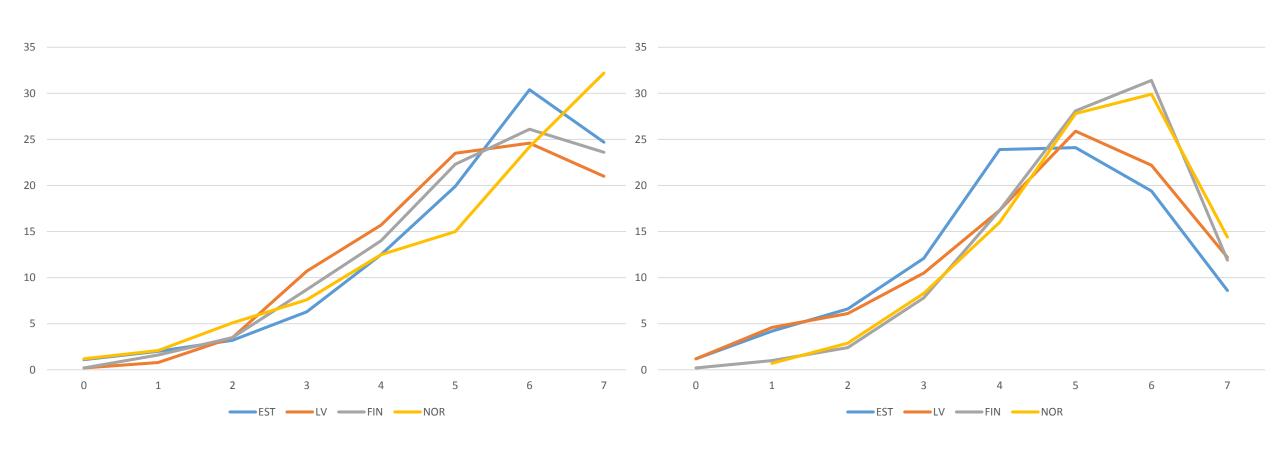
The comparison

Thanks to:

leva Upleja, FCMC Ellen K. Nyhus, University of Agder Panu Kalmi, University of Vaasa Olli-Pekka Ruuskanen, University of Tampere

Sample size	1125	1019	1477	1031
Mean knowledge score on 7 point scale (st.d)	5.317 (0.048)	5.149 (0.046)	5.240 (0.509)	5.310 (0.059)
Mean behaviour score on 7 point scale (st.d)	4.458 (0.050)	4.657 (0.523)	5.102 (0.045)	5.146 (0.045)

Knowledge and behaviour score distribution



Correct answers to **knowledge** questions (%)

Topic of the question	Estonia	Latvia	Finland	Norway
Time-value of money	82.8	74.8	76.5	76.3
Interest paid on a loan	88.9	89.0	97.7	91.4
Calculation of interest plus principle	79.3	71.5	78.9	79.6
Compound interest	43.2	47.9	58.1	58.3
Risk and return	85.2	81.6	88.9	85.8
Definition of inflation	87.6	86.1	58.2	74.0
Diversification	64.8	63.9	65.8	59.2

"sound **behaviours**" based on the OECD categorisation (%)

Topic of the question	Estonia	Latvia	Finland	Norway
Considered purchase	76.3	79.3	85.3	85.2
Timely bill payment	86.7	77.5	94.5	90.9
Keeping watch of financial affairs	76.1	73.3	85.7	75.5
Long term financial goals	40.4	44.1	73.6	44.1
Responsible for household budget	40.9	80.7	25.8	31.6
Active saving	40.4	36.0	60.7	92.7
Borrowing to make ends meet	85.1	74.9	84.8	94.5

Factors behind differences in knowledge

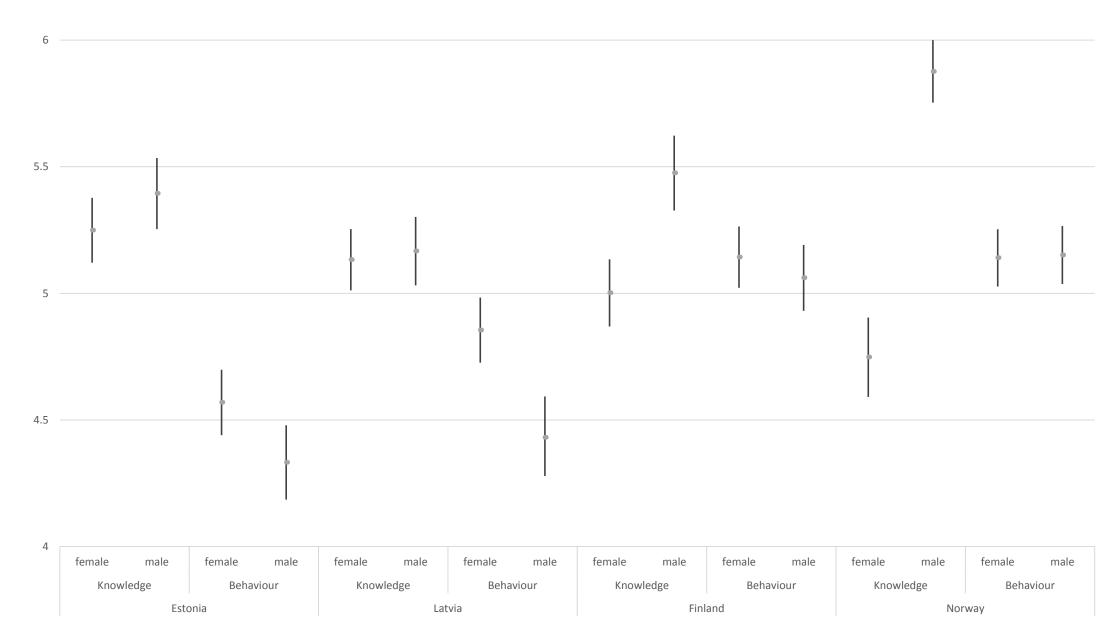
- **Education** predicts knowing simple and compound interest in all four countries.
- In Latvia, education does not predict knowing other topics.
 In Finland, education predicts knowledge in all questions except the one on risk and return.
- Unlike in the Baltic states, **income** predicts knowledge of four questions out of five in the Scandinavian countries.

Factors behind differences in **behaviour**

- **Age** predicts the behavioural differences in most of the questions and countries.
- **Income** is significantly correlated with financial fragility, borrowing to make ends meet and coping with household costs in case of losing main income.
- Education explains only a few behaviours and in only some countries.

Gender differences in knowledge and behaviour,

mean score on 95% CI, max=7

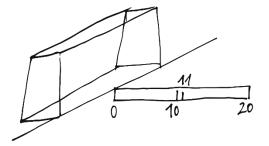


Knowledge predicts behaviour?

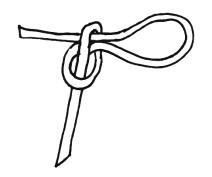
- There is no financial behaviour measured in that study that knowledge would significantly predict in all four countries.
- In Estonia, it predicts timely bill payment, actively saving money and coping with household costs without borrowing.
- In Latvia, it is significantly correlated with setting long term financial goals and being responsible for household budget.
- In Finland, it predicts only active saving, none of the other "sound" behaviours.
- In Norway, it explains timely bill payment, active saving and borrowing to make ends meet.

How to bridge the gap between knowledge and behaviour?

- Behavioural insights in financial education and policy
- Measurement and evaluation, RCT-s
- Digital tools for improving financial behaviours,
 e.g. <u>Think Forward Initiative</u>



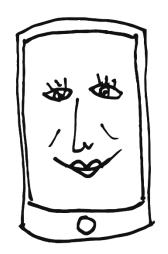
Measurable, personally relevant goals



Commitment



Peer pressure, social norms



Visualizing the future-self

Thank you! Questions, comments, suggestions?

lihtsaltrahast.ee linkedin.com/in/leonoreriitsalu/ leonore.riitsalu@gmail.com