



European
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Robert Schuman Centre for Advanced Studies



Internet Voting in Estonia

A Comparative Analysis of Four Elections since 2005

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Florence, Italy

March 5, 2011
Riigikogu, Tallinn, Estonia

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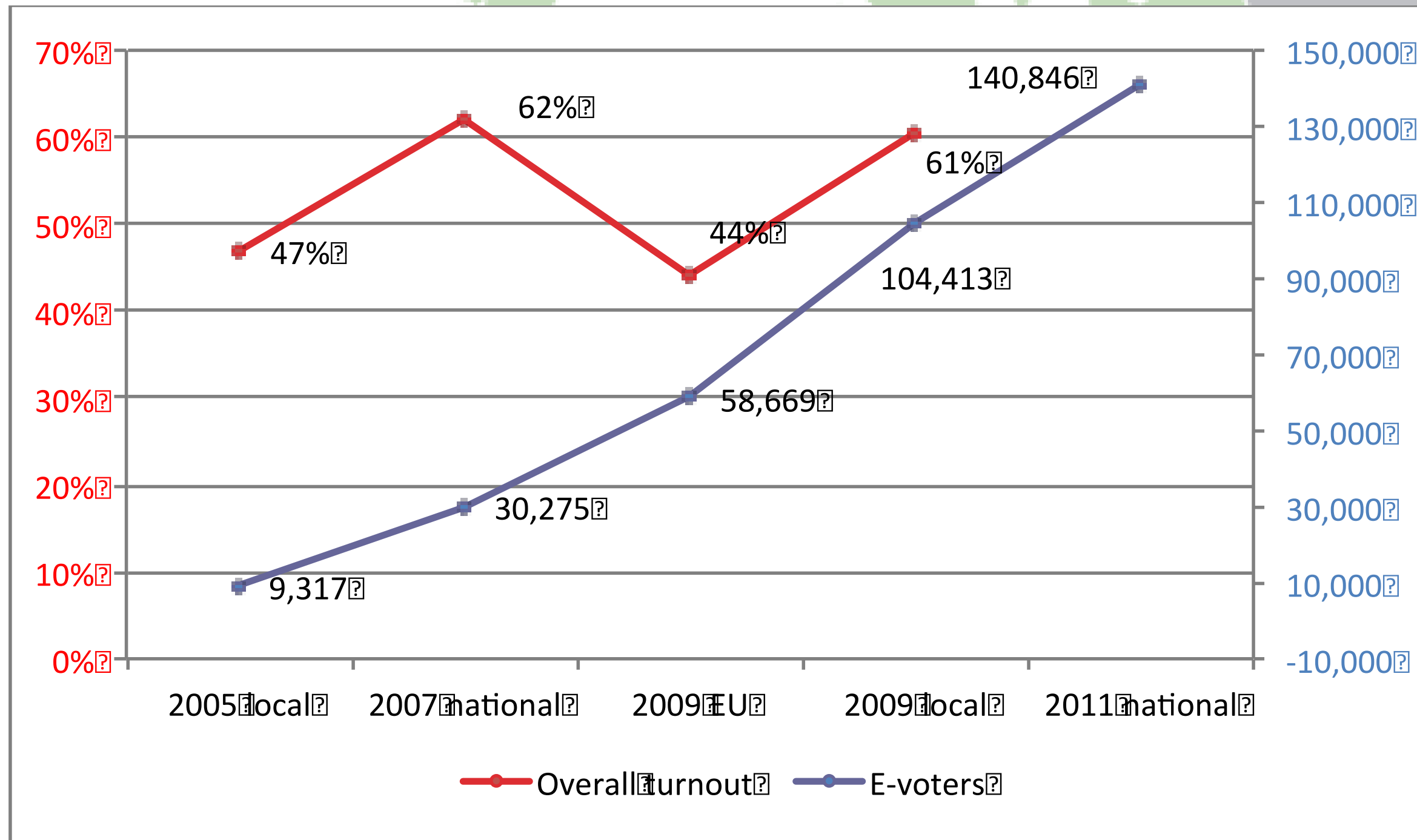
Turnout

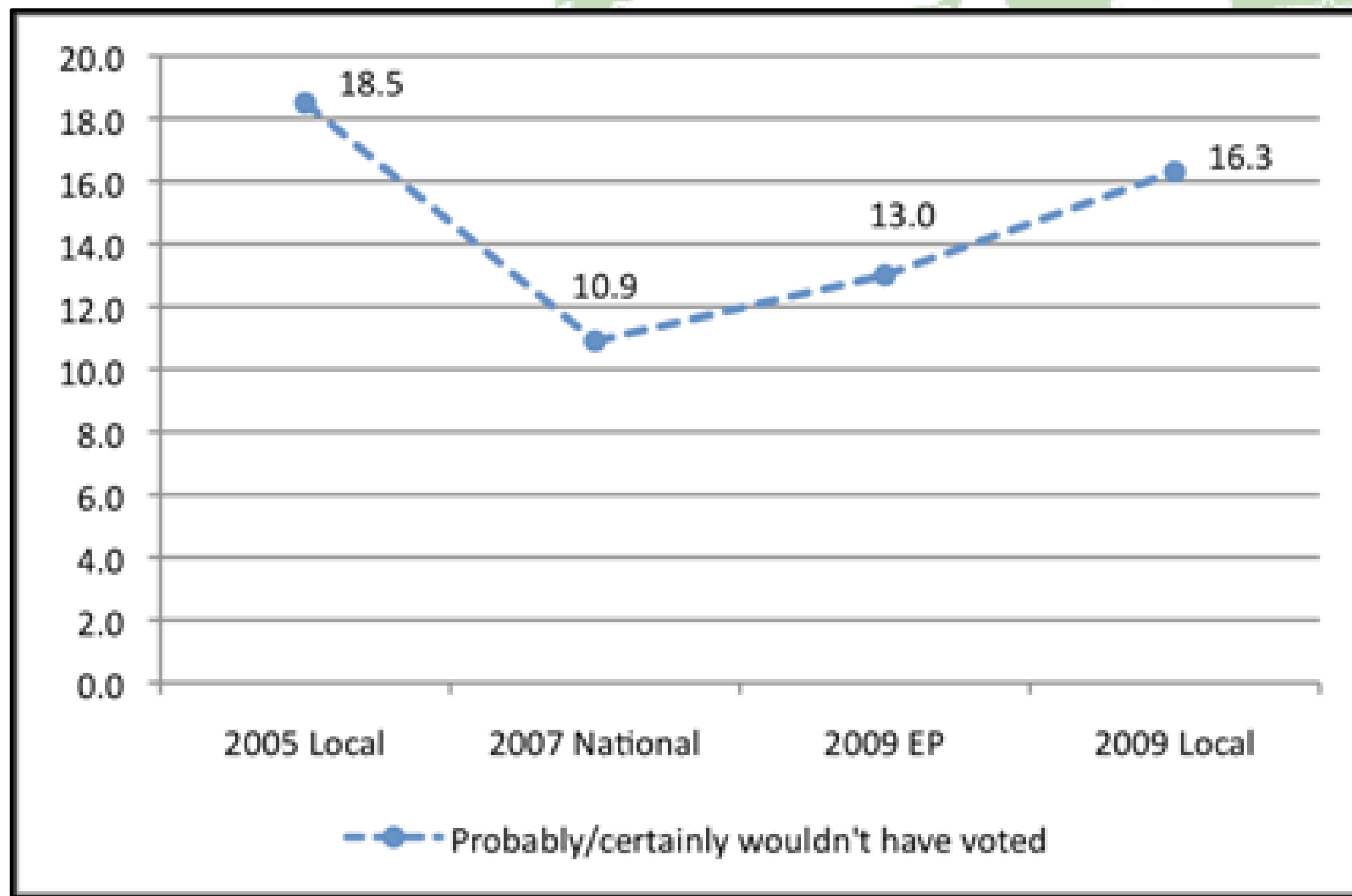
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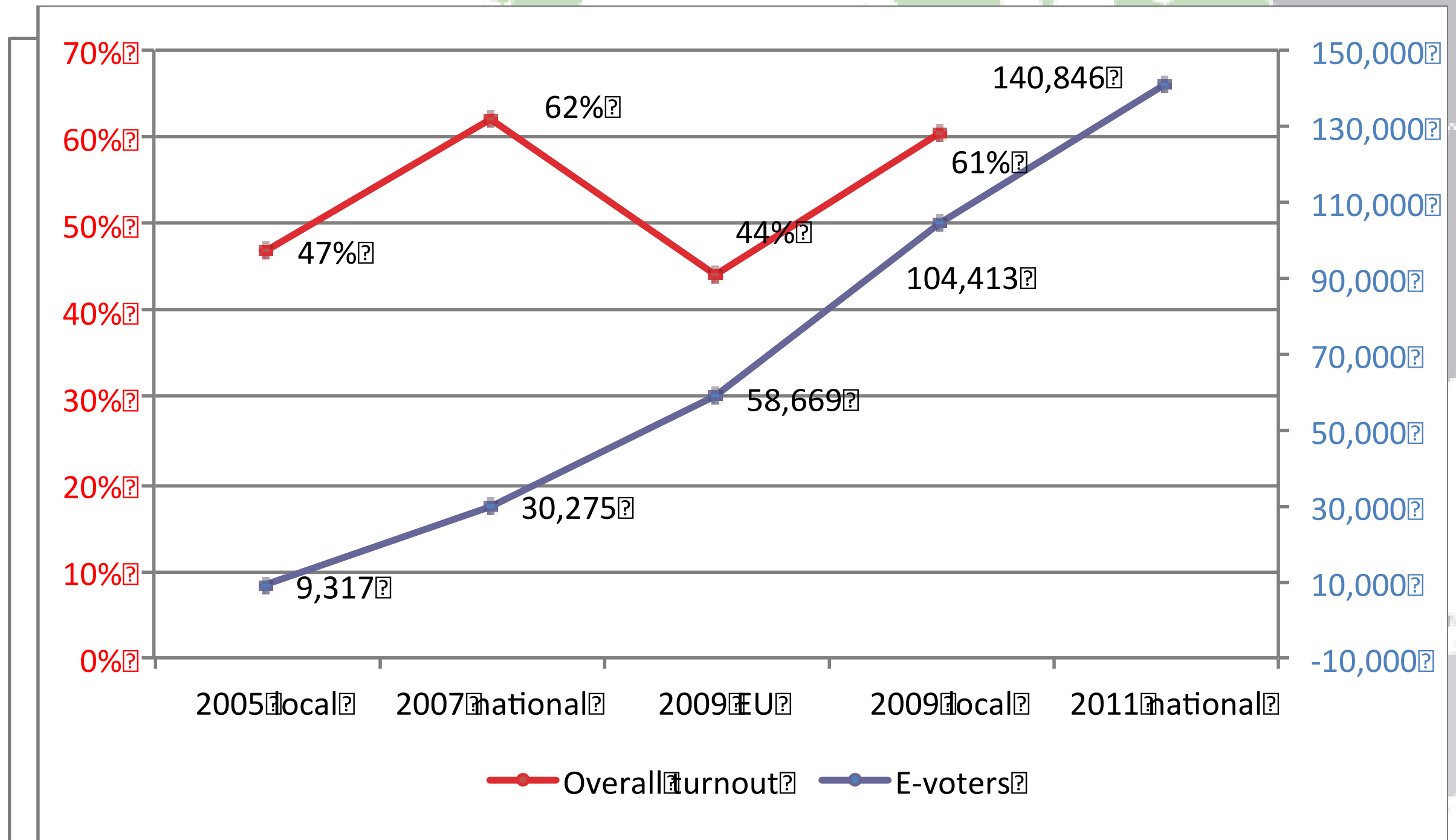
Setup of the studies

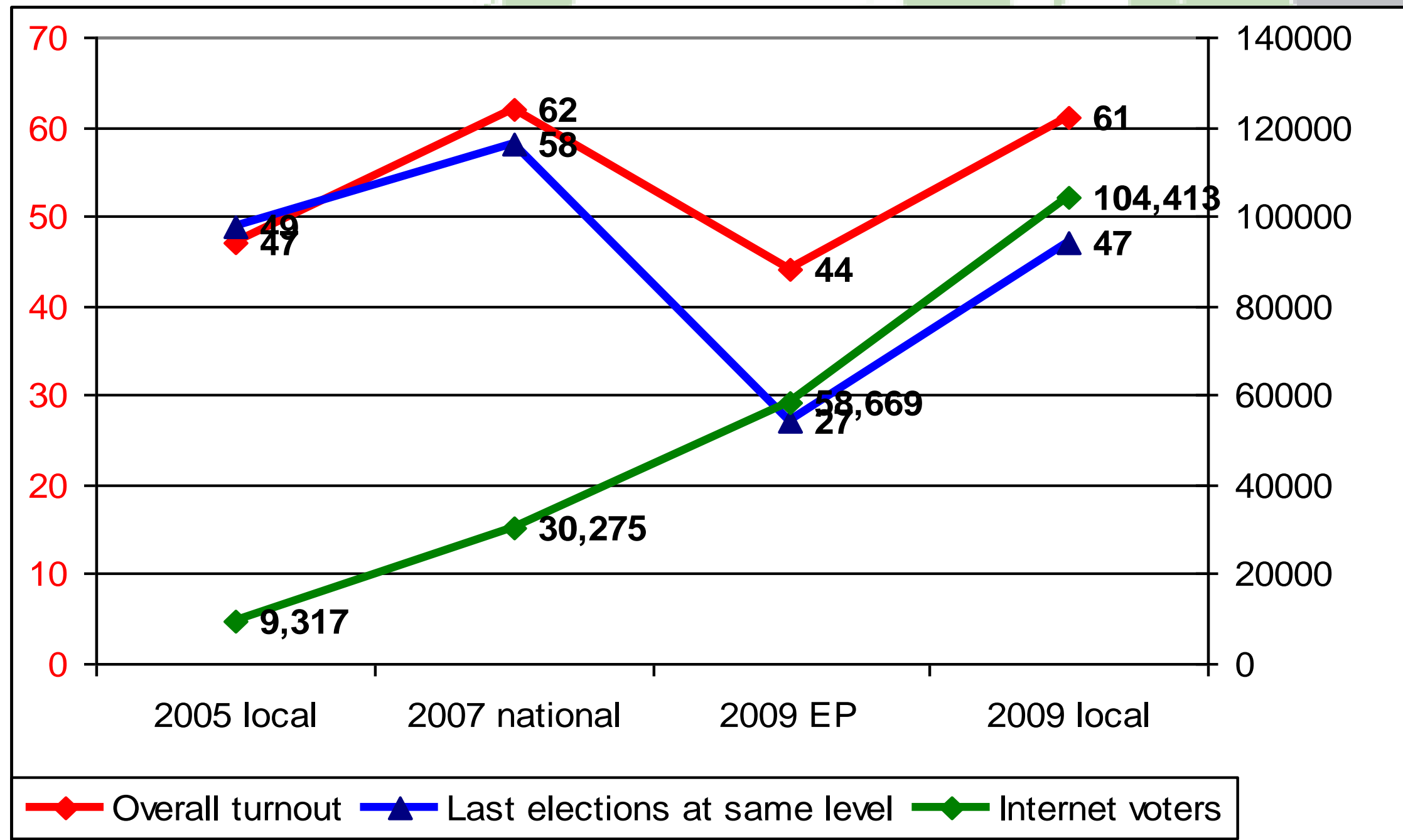
3

Main findings









2

Setup of the study

Partnerships

- European Union Democracy Observatory, Florence
- Council of Europe, Strasbourg
- e-Governance Academy, Tallinn
- Estonian Electoral Committee, Tallinn
- California Institute of Technology, Pasadena
- University of Utah, Salt Lake City
- Ifo, Munich

Why some choose to vote by Internet while others don't?

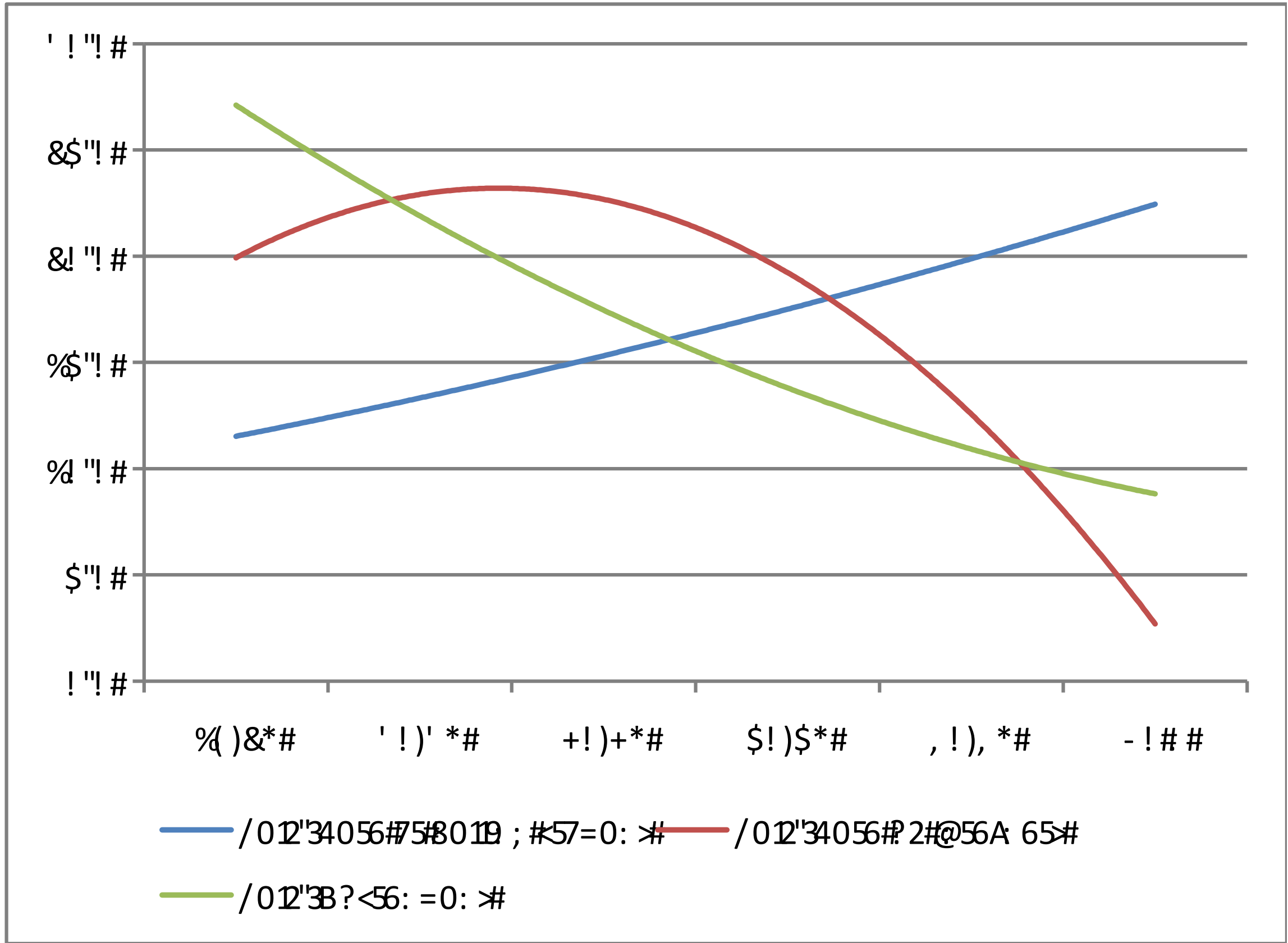
E-voters

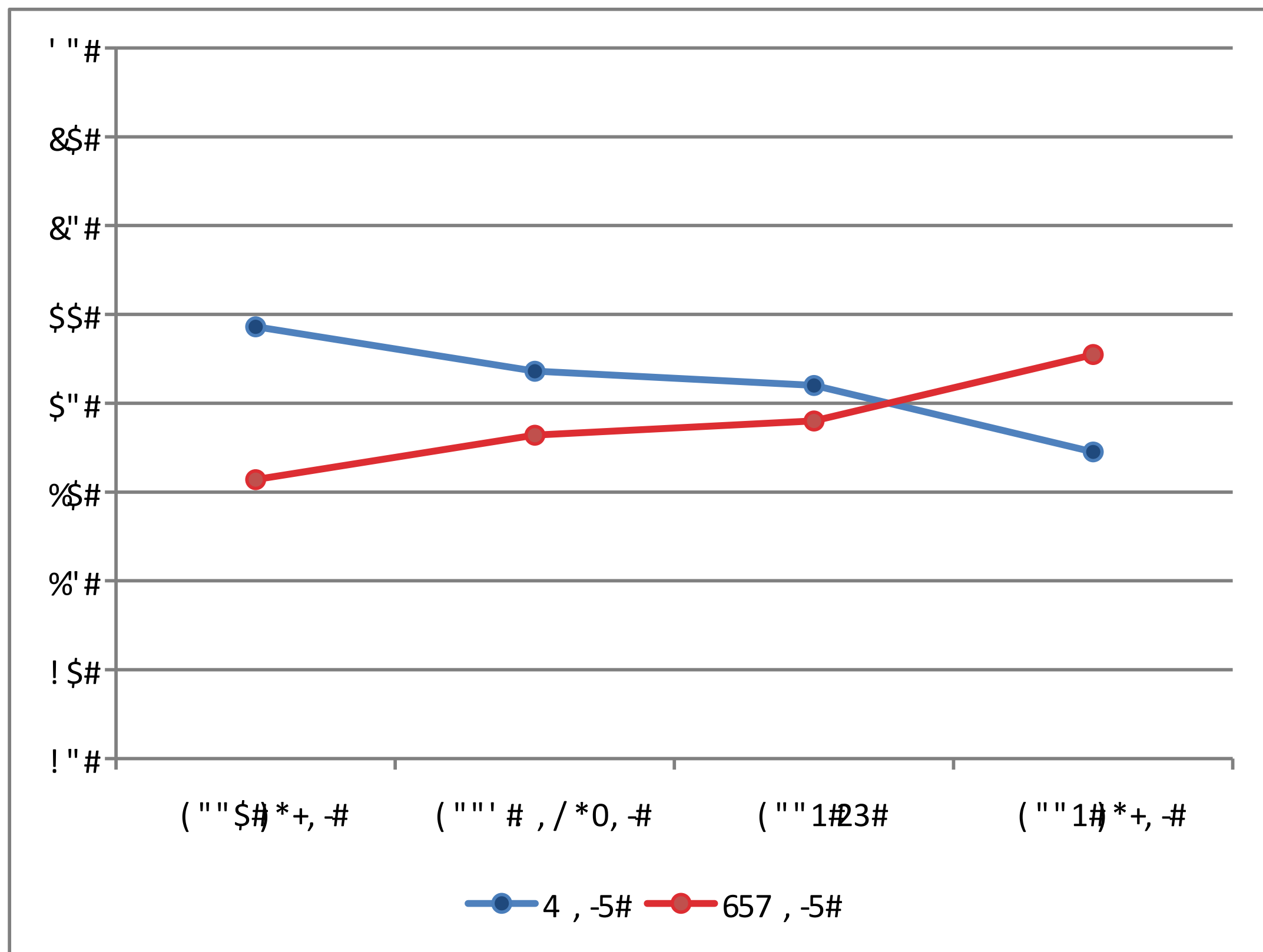
Traditional voters

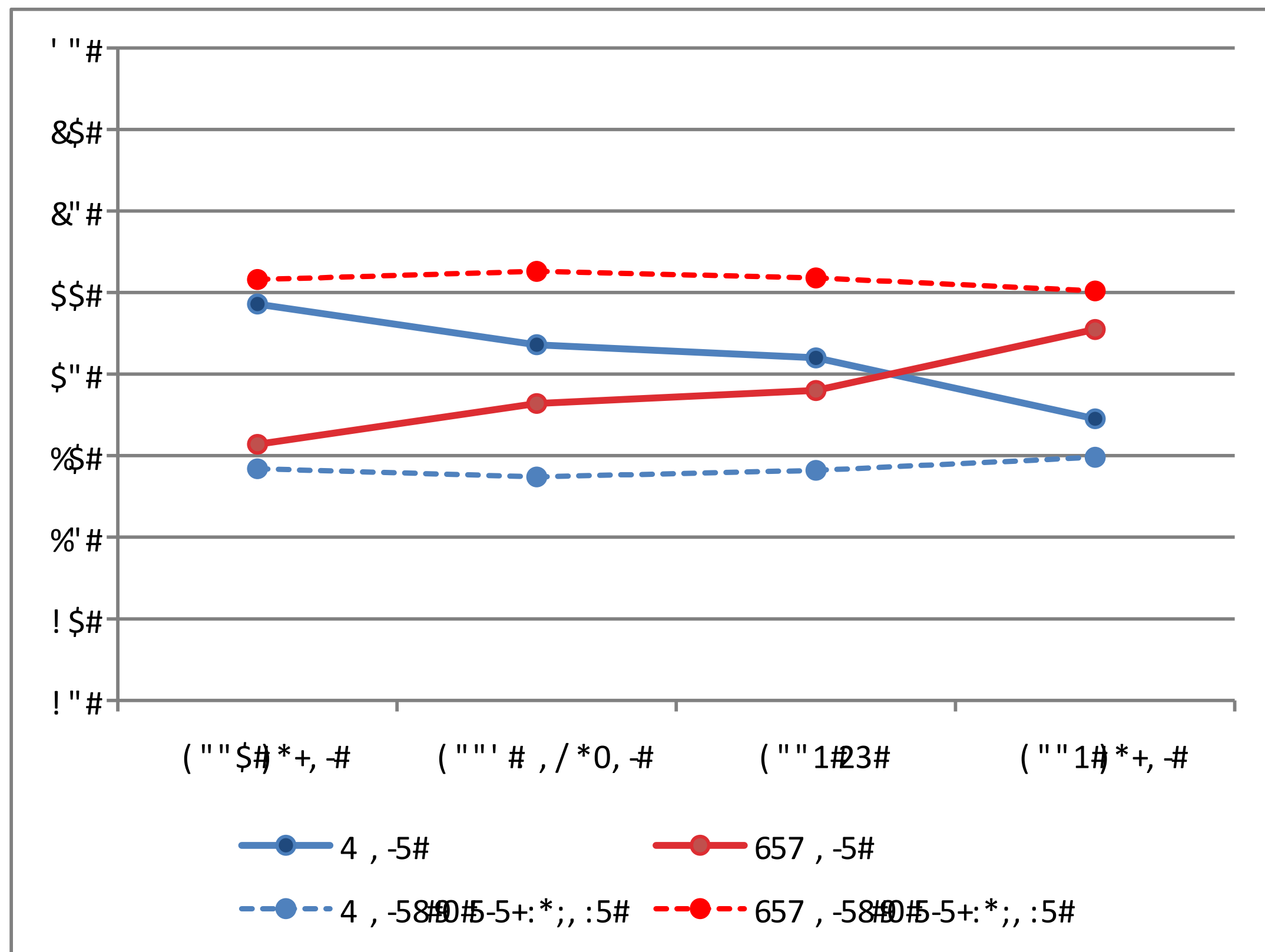
Non-voters

3

Main findings (a):
Age and gender







3

Main findings (b): Multivariate models

Socio-economic

Political

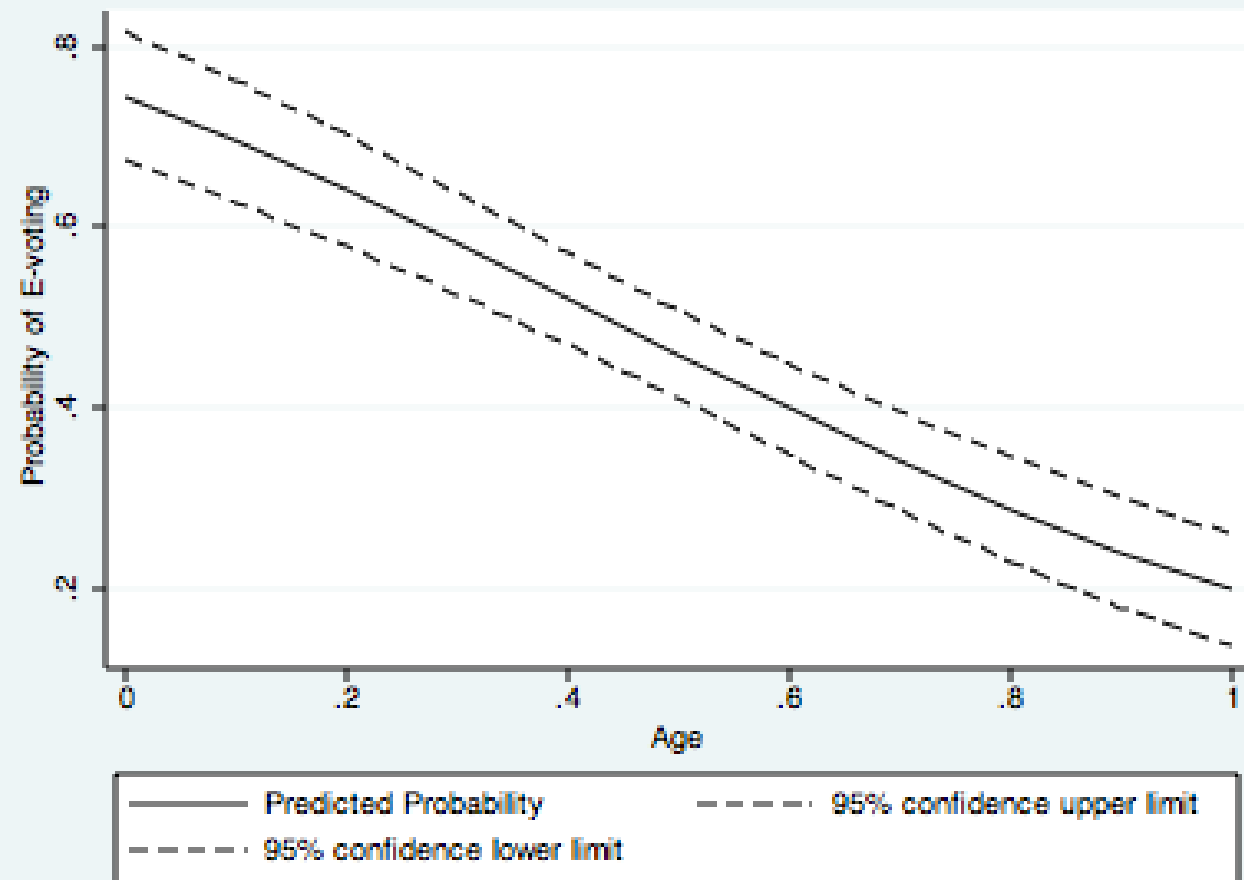
ICT

Global

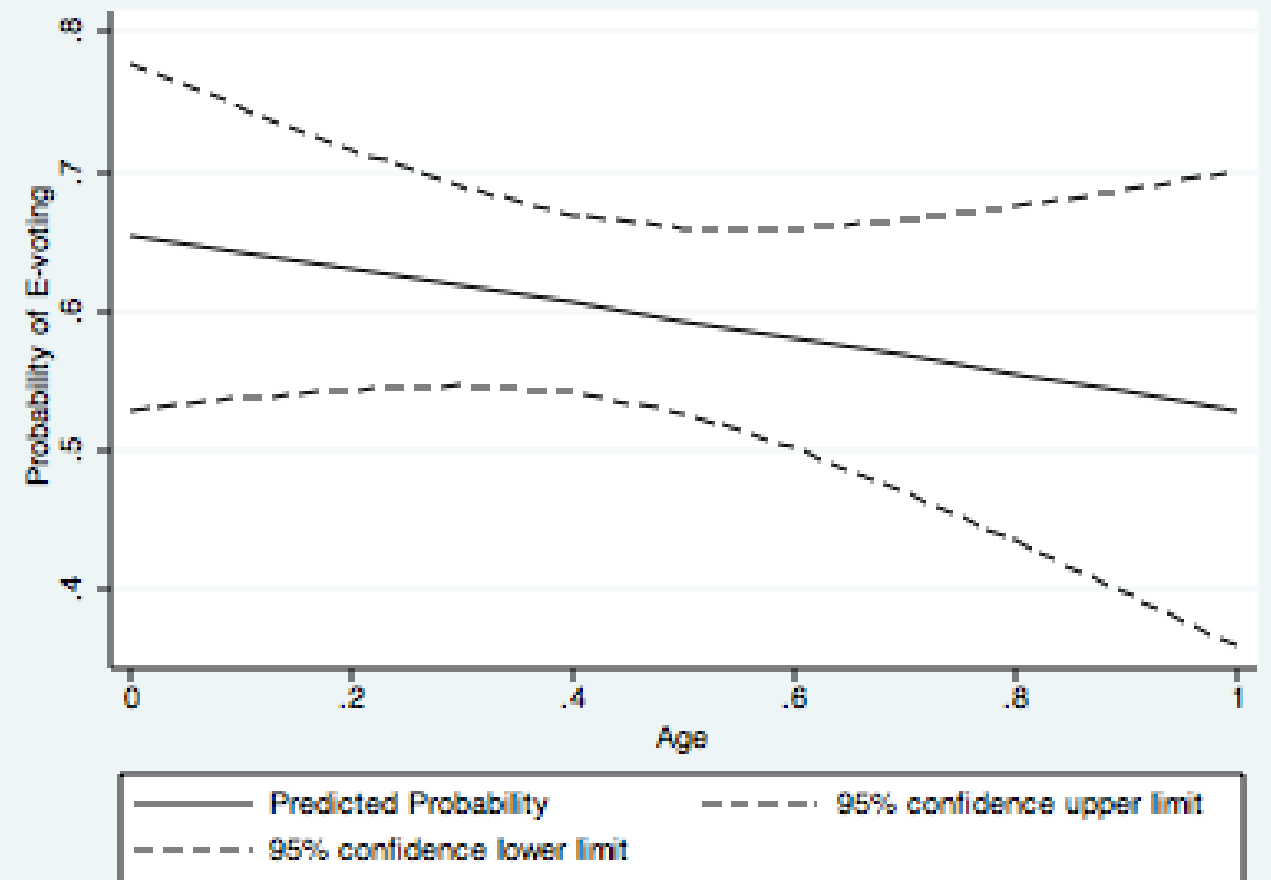
Predicting e-voting
over traditional voting

Coefficient	2005 Local	2007 National	2009 EP	2009 Local
Age	0.27** (0.12)	0.36*** (0.11)	-0.05 (0.12)	-0.10 (0.11)
Gender	0.41 (0.29)	-0.06 (0.26)	-0.43 (0.30)	0.08 (0.28)
Settlement	0.36 (0.32)	-0.01 (0.27)	0.30 (0.31)	0.56* (0.31)
Education	0.29 (0.18)	0.03 (0.15)	0.31* (0.19)	0.23 (0.17)
Income	-0.17 (0.14)	0.12 (0.12)	0.10 (0.11)	0.16 (0.10)
Language	-1.38*** (0.55)	-2.35*** (0.65)	-2.30*** (0.72)	-1.25*** (0.48)
Left-right scale	-0.01 (0.07)	-0.06 (0.07)	0.04 (0.08)	-0.08 (0.07)
Political discussions	0.27* (0.16)	-0.08 (0.16)	0.19 (0.17)	-0.15 (0.17)
Trust in Parliament/ government	0.27 (0.34)	-0.21 (0.34)	-0.92*** (0.33)	0.24 (0.29)
Trust in politicians	-0.19 (0.32)	0.85** (0.34)	0.63** (0.29)	-0.16 (0.28)
Trust in the State	-0.52* (0.28)	0.10 (0.26)	-0.70*** (0.28)	-0.16 (0.23)
Computing knowledge	0.41** (0.18)	0.65*** (0.17)	0.04 (0.19)	0.34** (0.17)
Frequency of Internet usage	0.15* (0.08)	0.19*** (0.06)	0.18*** (0.07)	0.07 (0.08)
Location of Internet access	0.25 (0.17)	-0.10 (0.10)	0.23 (0.19)	0.16 (0.19)
Trust in transactions on the Internet	0.32 (0.23)	0.16 (0.21)	0.29 (0.24)	-0.22 (0.22)
Trust in the procedure of e-voting	1.68*** (0.24)	1.22*** (0.25)	1.48*** (0.28)	1.49*** (0.25)
Constant	1.00 (1.72)	6.34*** (1.75)	0.72 (1.78)	2.21 (1.85)
Observations	399	425	419	374
Pseudo R ²	0.36	0.28	0.35	0.29
Standard errors in parentheses, significant at .1 ** significant at .05 *** significant at .01				

2005



2009



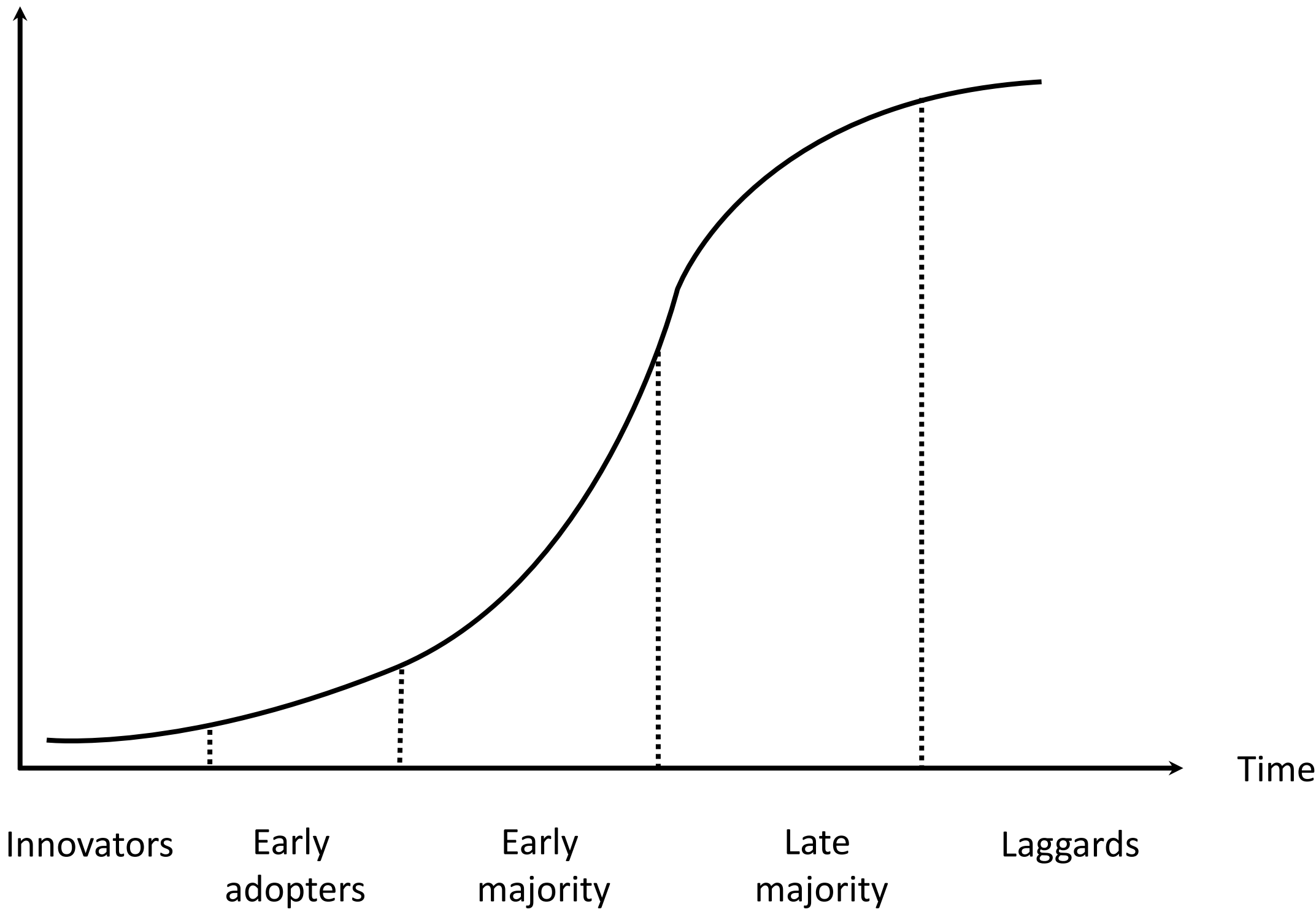
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Summing up

Age and other socio-demographic factors gradually lose power -> people “grow into e-voting”

Diffusion of Innovations (Everett Rogers 1962)

Rate of adoption



Summing up (continued)

Age and other socio-demographic factors gradually lose power -> people “grow into e-voting”

Linguistic cleavage remains a problem

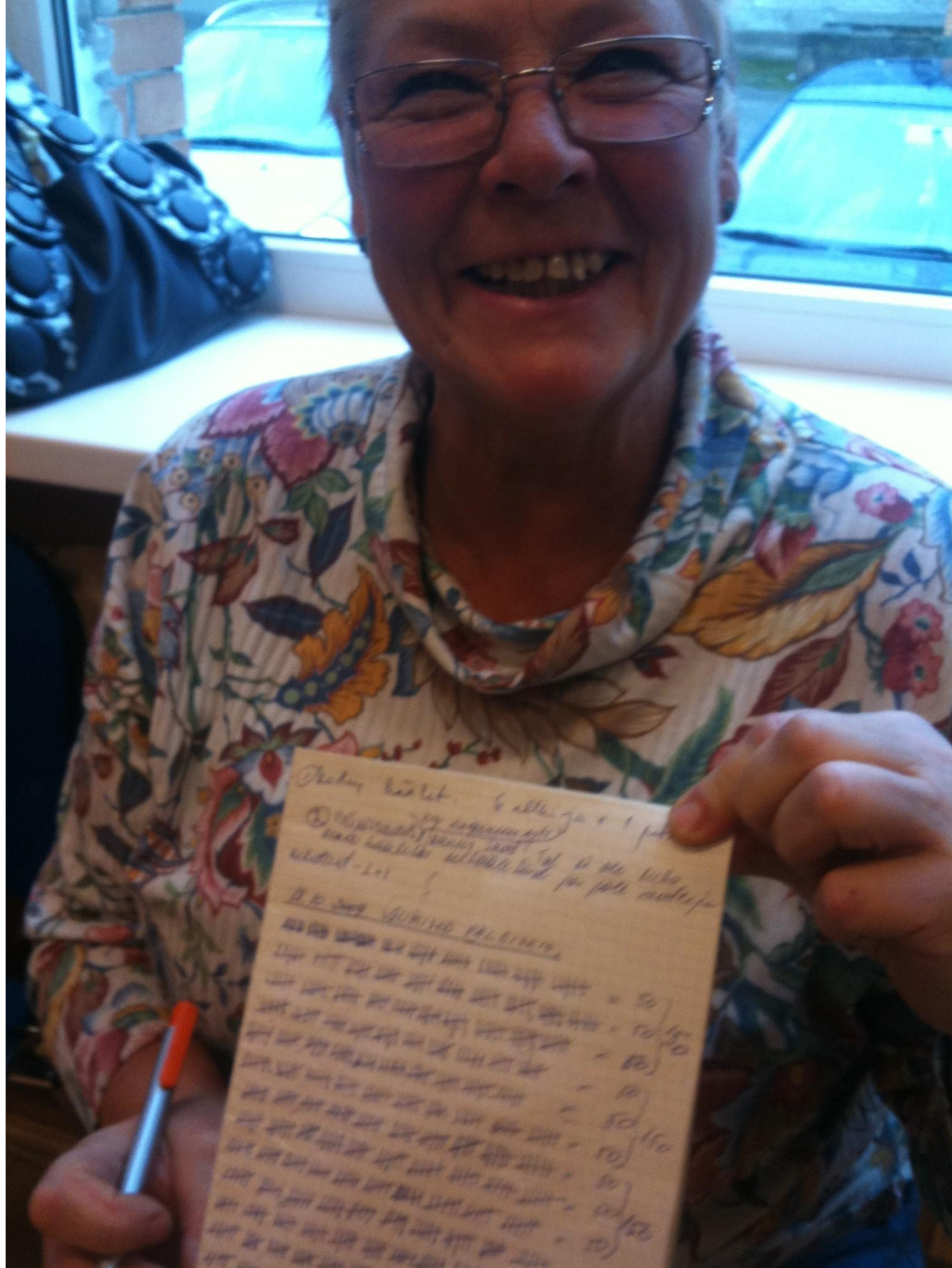
Political and ICT related variables become weaker over time

-> internet voting is predicted by PC-literate Estonians who trust in the procedure of e-voting

Future perspectives / new issues

- ◆ Auditing and Certification?
- ◆ Cyberterrorism?
- ◆ Diffusion?
- ◆ Inversion of security issue?

Paldiski, Local elections 2009



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