Turnout in Estonian elections

The Estonian population can vote in elections for three main representative bodies - the national parliament, local municipal councils and as of 2004 also the European Parliament. Turnout in all of those three types of elections is shown in Figure 1.



Fig. 1: Voter turnout in Estonia for all elections (Source: www.valimised.ee)

We see that turnout is quite different depending on the election type and slight changes in turnout trends seem at first sight apparent with the introduction of Internet voting in 2005. This is however not sufficient ground to conclude that small increases in turnout for all three election types are down to internet voting being introduced.

Testing Internet voting effect on turnout

Internet voting can have an effect on turnout only when people who previously did not vote now vote over the Internet and they would not have done so without this option being available. Figure 2 shows different use cases that differentiate between ivoting usage and impact on turnout. Only one - case C - has an actual effect of increasing turnout.



Fig. 2: Schematic presentation of use cases: A - no usage of ivoting and impact on turnout; B - usage of ivoting but no impact on turnout; C - usage of ivoting and impact on turnout

As one can see this provides for a rather strict definition of the effect Internet voting can have on turnout and needs individual level survey data to test this hypothesis. The source for the tables and figures shown below is the Estonian Internet voter study (2005-2019).

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High internet vote usage without turnout effects

Table below shows what share of voters reported not to have voted previously and now to have ivoted in the given election. The percentage is small and stays between 2-5%, given participation tends to be slightly over-reported in surveys the actual numbers are bound to be a bit smaller.

	Voters
Election	mobilized by ivoting (%)
2009 EP	3.1
2009 local	5.3
2011 national	4.1
2013 national	2.4
2014 EP	2.3
2015 national	2.4
2017 local	4.7
2019 national	2.8
2019 EP	4.6

It is hard to determine how many of the mobilized voters truly did so because of ivoting. The same survey suggest that between 10 to 20% of these voters who switched from non participation in the previous election into ivoting in the current one, claim that they did so because of ivoting, or that they would not have come out to vote without ivoting being available. When one factors this information in, then Internet voting seems to have a marginal effect on turnout with not more than 0.2 to 0.8 percentage points of turnout increase over the years being attributable to it [3].

This result stands in stark contrast to the actual uptake of internet voting superimposed on turnout in Figure 3.



Fig. 3: Share of Internet votes and voter turnout (2005-2019) [1]

The explanation for the apparent contraction between wide usage of Internet voting and negligible effect on turnout is that most Internet voters in Estonia are of the type B in Figure 1. It means they were already regular voters before Internet voting was introduced or are typical regular voters who came of voting age during the Internet voting period. As a result the same active citizen segment who participated in the past do so through online voting now without a substantial portion of the typical non-voters being mobilized into voting



Bottleneck paradox of turnout and ivoting

Internet voting can affect turnout only in the population segment where there is room to do so, i.e. where turnout is below average. Paradoxically the willingness and ability to use this voting mode to overcome the participation hurdle is also lower in those very same segments. Figure 4 shows voter turnout according to education level in the 2019 parliamentary election, separating also the paper and ivote segment of the total turnout for the three groups.



Fig. 4: Voter turnout according to education in 2019 national elections with ivote and paper share marked

We see that there is clearly more room for turnout increase the lower the education level. At the same time the share that ivotes comprise of the total turnout is also the lowest. Survey data suggest that the ivote turnout alone contributed with 48.2 percentage points to the total turnout of 76.4% within the higher education category in 2019, the equivalent numbers for people with secondary education were 25.8 percentage points to the total turnout of 57.5% and for the basic education category 9.9 percentage points to the total turnout of 41.6%. Internet voting has hence had a limited capacity to help increase turnout and is no fix to low trunout figures. It might however help to keep people voting once they have decided to switch to Internet voting [2].

Contacts

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