The Relationship between the Use of the Internet and the Approval of Government Bodies in the Russian Federation

Eugenia Tarnikova

eatarnikova@edu.hse.ru

Academic Advisor: Dina Rosenberg, PhD
Reviewer: Aleksey Turobov, Lecturer, Doctoral Student

June 3, 2021

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Theoretical background

- Confidence in government bodies plays an important role in gaining public support and establishing popular legitimacy (Miller, 2016).

- The question of the relationship between the Internet and confidence in government bodies has been at the center of public discourse in recent years
  - ▷ Internet as *"liberation technology"* can expose weakness of the regime and lead to less approval of regime
  - ▷ Internet as *"misinformation technology"* can be used as a tool for surveillance, propaganda and dissemination of fake news. According to this view, it can lead to the greater approval of the regime

Research problem:

There is an unclear relationship between the spread of the Internet and people's approval of government bodies in Russian regions

Research question:

What is the nature of the relationship between Internet use intensity and the approval of the government bodies in the Russian regions?

Aim and objectives of the study

Aim of the study:

To reveal political consequences of the expansion of the Internet in Russian regions related to attitudes towards Russian government

Objectives:

1. To propose a theoretical explanation for the effect of the Internet and social media on public approval
2. To identify the main concepts of the study: *public approval, government bodies, Internet use intensity*
3. To identify the nature of the relationship between these concepts by the use of regression analysis
4. To perform robustness checks

Focus on Russia

- Most studies on the topic come from democracies $\Rightarrow$ it is interesting to unlock this relationship in a non-democratic regime
- One of the first studies on this topic conducted in Russia
- Focus on within-country analysis eliminates cross-country cultural differences and other unobservables

Literature review

Internet can affect voting behaviour, public attitudes, protest activity, polarization of society and other outcomes. With regard to government approval, the results are mixed:

- Higher Internet use intensity $\Rightarrow$ less government approval (e.g. Amorim et al., 2018; Im et al., 2014; Steinert-Threlkeld et al., 2015):
  - ▷ The more citizens become informed about government performance, the more they become dissatisfied with their governments
  - ▷ Increased access to political information might undermine the willingness to vote for the ruling party
- Higher Internet use intensity $\Rightarrow$ greater government approval (e.g. Lu et al., 2020) or no effect at all (Jennings Zeitner, 2003; Morgeson III et al.,2010)
  - ▷ Non-democratic context: the government can delete information that has a negative impact on its image
  - ▷ Good experience with e-government $\Rightarrow$ satisfaction

Conceptualization of main terms

- **Public approval** (support/confidence): citizens' perceptions regarding the performance, integrity and ability of a particular agency providing the services

- **Government bodies**: a government body can be defined as an entity (on a national or subnational level) that is authorized by law to perform executive, legislative or regulatory functions

- **Intensity of Internet use**: frequency of Internet use or time spent on the Internet by citizens

What is special about the Internet?

- It is reasonable to assume that the Internet and social media are likely to mirror the effects of old media

- A set of distinctive features: low entry barrier, reliance on user-generated content (Zhuravskaya et al., 2020)

- It is particularly interesting to understand the effects of those characteristics and to build up a comprehensive picture of how they shape modern politics

- Gurri (2018): *"governments have worked hard to control the stories told about the status quo"*
- Higher Internet penetration rates imply "preventing any single agent from monopolizing information"
- Dissemination of messages, pictures and videos exposing corruption and cases of the misgovernment represents one of the reasons for the significant decline in the approval of governments around the world (Guriev et al., 2020)
- Dissemination of news and ideas is important, but what is more important is access to online conversation

Hypotheses of the research

H_1: Higher intensity of Internet use is negatively associated with the approval of government bodies

H_2: Usage of the internet with the purpose to communicate with other people online is negatively associated with the approval of government bodies

H_3: In contrast with Facebook and Twitter, usage of VK and Odnoklassniki social networks is positively associated with approval of Government bodies

- Fixed-effects regression modelling
- Dependent variables involve the aggregated measures of attitudes (share of positive attitudes and first PC) as well as attitudes towards particular government bodies at the national level (the President, the Government, the State Duma, the Prime Minister) and at the regional level (the Regional Governor)
- Independent variables include the intensity of Internet use, purpose of Internet use, social media variables and a set of control variables: age, age squared, gender, marital status, education, occupation, urban status, individual income, etc

Sources of data:

1. Data at the individual level: the results of repeated surveys "Courier" published by the research organization Levada Center
2. Data at the regional level: fedstat.ru

Database:

The resulting database contains data from surveys of citizens in the Russian regions for the period 2009-2019, as well as regional statistical indicators

Table: Approval of Government Bodies: Share of positive attitudes

	(1)	(2)	(3)	(4)
		Share of positive attitudes		
Internet Use Intensity	-0.016^{***}			
	(0.004)			
Online News		-0.007	-0.015	-0.011
		(0.017)	(0.018)	(0.018)
Online communication			-0.049^{***}	-0.047^{**}
			(0.019)	(0.019)
VK			0.038^{**}	0.043^{**}
			(0.019)	(0.019)
Odnoklassniki			0.067^{***}	0.068^{***}
			(0.018)	(0.018)
Facebook				-0.021
				(0.030)
Twitter				-0.071^{*}
				(0.040)
Year FE	Y	Y	Y	Y
Controls	Y	Y	Y	Y
Observations	7,064	5,586	5,586	5,586

Notes: *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Results

- Variable of interest - Internet use intensity - has a robust negative relationship with the variable indicating the presence of approval of government bodies. The relationship is stable and significant in all models that include:
    1. particular government bodies on the national level: President, National Government, State Duma, Prime Minister
    2. first principal component of all measures
    3. share of positive responses

- Indeed, given the ascending scaling of the main dependent variable, more frequent use of the Internet decreases levels of approval of government bodies

Results

- A set of models shows that the usage of online communication services decreases approval of government bodies. This result is in line with the argument of Shirky (2011), who stated: *"Access to information is far less important, politically, than access to communication"*
  - ◇ Most of the models show that reading news online does not affect approval

- The usage of homegrown social networks increases approval of the government bodies.

- Facebook and Twitter decrease approval of the government bodies
  - ◇ However, the results are not uniform for all government bodies

Conclusion

- Supporting the optimistic paradigm, this research represents an attempt to investigate how the decrease of state control over information flows impacts the public approval of the government bodies

- The inclusion of variables indicating purpose of internet use and usage of particular social networks served to revealing possible mechanisms at work

- Future research is needed to disentangle possible explanations for the dissimilarities in the effects with regard to different government bodies. Moreover, the research could have been enriched if the data had valid instrumental variables for Internet use to derive a causal relationship

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The regression equation for the general fixed effects model looks as follows:

$$Approval_{it} = \beta_0 + \beta_1 Internet Intensity_{it} + X'_{it} + \epsilon_{it} \qquad (1)$$

and the regression equation for the extended model with additional media variables is the following:

$$Approval_{it} = \beta_0 + \sum \beta Internet Purpose_{it} + \\ \sum \beta Social Media Variables_{it} + X'_{it} + \epsilon_{it}, \qquad (2)$$

Table: Approval of Government Bodies: President

	Approval of the President			
	(1)	(2)	(3)	(4)
Internet Use Intensity	−0.059***			
	(0.020)			
Online News		0.022	−0.016	−0.005
		(0.082)	(0.086)	(0.087)
Online communication			−0.094	−0.088
			(0.094)	(0.094)
VK			0.035	0.049
			(0.093)	(0.094)
Odnoklassniki			0.272***	0.274***
			(0.088)	(0.088)
Facebook				−0.136
				(0.145)
Twitter				−0.083
				(0.198)
Constant	0.790	0.609	0.394	0.372
	(0.508)	(0.621)	(0.627)	(0.627)
Year FE	Y	Y	Y	Y
Controls	Y	Y	Y	Y
Observations	9,666	5,737	5,737	5,737
Log Likelihood	−5,492.59	−3,605.82	−3,602.20	−3,601.57
Akaike Inf. Crit.	11,019.18	7,239.64	7,238.40	7,241.14

Table: Approval of Government Bodies: National Government

	Approval of the Government			
	(1)	(2)	(3)	(4)
Internet Use Intensity	-0.081^{***}			
	(0.018)			
Online News		-0.199^{***}	-0.217^{***}	-0.197^{***}
		(0.069)	(0.072)	(0.073)
Online communication			-0.215^{***}	-0.202^{***}
			(0.078)	(0.078)
VK			0.160^{**}	0.183^{**}
			(0.078)	(0.078)
Odnoklassniki			0.202^{***}	0.207^{***}
			(0.073)	(0.073)
Facebook				-0.227^{*}
				(0.125)
Twitter				-0.206
				(0.169)
Constant	2.129^{***}	1.098^{***}	0.924^{***}	0.944^{***}
	(0.212)	(0.221)	(0.241)	(0.241)
Year FE	Y	Y	Y	Y
Controls	Y	Y	Y	Y
Observations	9,766	6,805	6,805	6,805
Log Likelihood	$-6,518.02$	$-4,577.84$	$-4,571.11$	$-4,567.46$
Akaike Inf. Crit.	13,068.03	9,183.68	9,176.22	9,172.91

Table: Approval of Government Bodies: The State Duma

	Approval of Gosduma			
	(1)	(2)	(3)	(4)
Internet Use Intensity	−0.101***			
	(0.019)			
Online News		−0.033	−0.017	−0.003
		(0.069)	(0.072)	(0.073)
Online communication			−0.199**	−0.191**
			(0.078)	(0.078)
VK			0.113	0.129*
			(0.077)	(0.078)
Odnoklassniki			0.051	0.056
			(0.073)	(0.073)
Facebook				−0.125
				(0.126)
Twitter				−0.198
				(0.170)
Constant	1.793***	1.019***	0.932***	0.945***
	(0.252)	(0.221)	(0.241)	(0.241)
Year FE	Y	Y	Y	Y
Controls	Y	Y	Y	Y
Observations	8,191	6,782	6,782	6,782
Log Likelihood	−5,435.92	−4,553.16	−4,548.22	−4,546.26
Akaike Inf. Crit.	10,901.84	9,134.31	9,130.45	9,130.50

Table: Approval of Government Bodies: Prime Minister

	Approval of the Prime Minister			
	(1)	(2)	(3)	(4)
Internet Use Intensity	−0.079***			
	(0.017)			
Online News		0.003	−0.025	−0.025
		(0.071)	(0.075)	(0.075)
Online communication			−0.102	−0.102
			(0.080)	(0.080)
VK			0.045	0.045
			(0.081)	(0.081)
Odnoklassniki			−0.029	−0.029
			(0.128)	(0.128)
Facebook			−0.083	−0.083
			(0.173)	(0.173)
Twitter			0.264***	0.264***
			(0.076)	(0.076)
Constant	3.172***	1.841***	1.644***	1.644***
	(0.217)	(0.229)	(0.249)	(0.249)
Year FE	Y	Y	Y	Y
Controls	Y	Y	Y	Y
Observations	11,060	6,791	6,791	6,791
Log Likelihood	−6,894.14	−4,407.47	−4,400.69	−4,400.69
Akaike Inf. Crit.	13,822.28	8,842.94	8,839.38	8,839.38

Table: Approval of Government Bodies: Regional Governor

	Approval of the Regional Governor			
	(1)	(2)	(3)	(4)
Internet Use Intensity	−0.018			
	(0.018)			
Online News		−0.014	−0.027	−0.000
		(0.070)	(0.073)	(0.074)
Online communication			0.045	0.060
			(0.079)	(0.079)
VK			0.081	0.113
			(0.079)	(0.079)
Odnoklassniki			−0.065	−0.056
			(0.074)	(0.074)
Facebook				−0.150
				(0.126)
Twitter				−0.483***
				(0.168)
Constant	1.149***	0.993***	0.860***	0.875***
	(0.214)	(0.225)	(0.245)	(0.245)
Year FE	Y	Y	Y	Y
Controls	Y	Y	Y	Y
Observations	9,757	6,801	6,801	6,801
Log Likelihood	−6,424.62	−4,490.65	−4,488.62	−4,482.77
Akaike Inf. Crit.	12,881.25	9,009.30	9,011.23	9,003.54

Table: Model with Interaction Terms: GRP per capita

	Gosduma	President	Government	Prime Minister	Regional Governor
	(1)	(2)	(3)	(4)	(5)
Internet Use Intensity * ln GRP per capita	−0.034	−0.106***	−0.061***	−0.063***	−0.016
	(0.005)	(0.025)	(0.022)	(0.022)	(0.022)
Constant	3.065**	−1.226	1.170	2.283**	0.238
	(1.344)	(1.296)	(1.112)	(1.135)	(1.129)
Year FE	Y	Y	Y	Y	Y
Controls	Y	Y	Y	Y	Y
Observations	7,351	10,194	8,948	10,145	8,934

Relationship between Internet Use Intensity and Approval of the President for different levels of GRP