



Research Article

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Received: 21 August 2023 / Accepted: 19 December 2023 / Published: 5 January 2024

Techniques for Manipulating Public Opinion in the Online Space During an Election Campaign as a Hybrid Threat

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DOI: <https://doi.org/10.36941/ajis-2024-0002>

Abstract

A characteristic element of democratic society is the right of citizens to express their will in free elections. Fears about the future lower the credibility of public institutions and make it easier to interfere in electoral processes, which motivates many calculated attempts to fragment political debates. The present study points to tools that can be used to influence public opinion in the online space. Emphasis is put on the EU 27 countries, where an analysis of the development of Internet use was carried out. The goal of the paper is to point out other methods of manipulation available in the online environment, such as disinformation, defamation of a specific candidate, and artificial intelligence, which are employed and misused to massively influence public opinion. Regulation in this area is questionable, because restricting freedom of expression of a political nature directly affects a democracy, for which the widest freedom of expression is crucial. The article points out new legislative changes taking place in the EU which are focused on tightening the rules of political advertising.

Keywords: hybrid threats, techniques of manipulation, electoral law perception, public opinion, Internet use, effective checks

1. Introduction

Among the important attributes of a democratic society is free access to information. The Internet has in this regard become an unrivalled broad-spectrum source of information, the quantity of which is such that not only do questions of its quality and credibility come rightly into question, but also the ability of an individual to evaluate the content. The assessment of the received information also varies greatly from person to person due to individual abilities and experience. In terms of the internal security of a state, we can consider marketing-oriented information, the primary aim of which is to influence people's consumption based on collecting information about their habits, interests and needs, as so-called low-risk. The development and reach of mass communication resources has a major impact on many fundamental processes in society. As (Becker, J. 2021), (Edelson et al, 2017) and (Ivančík, R., Andrassy. V. 2023) point out, a negative impact of mass communication is the deliberate spreading of various false, misleading information or conspiracy theories with the intention of misinforming the public. Today it is already obvious that conspiracy theories gained a wider space for their search, communication, and dissemination with the

development of the Internet and social networks (Ivančík, R., Andrassy. V. 2023). The goal of this paper is to call attention to the possibilities of shaping public opinion, influencing the thinking and attitudes of voters during election campaigns in the online space and creating regulatory tools for eliminating misleading information.

2. Methods

The aim of the contribution is to create a well-rounded and realistic view of ways of influencing public opinion in the Internet environment. Stress is placed on manipulative techniques related to an election campaign. Prior to carrying out the empirical study, an analysis of the existing literature was conducted and relevant statistical indicators at the EU27 level were searched for in connection with the use of the Internet as a source of information. The research comprised several sub-steps: searching for relevant articles, an in-depth analysis of current statistical data from Eurostat, linear regression, pointing to experience from the election campaign for the elections to the National Council of the Slovak Republic in September 2023.

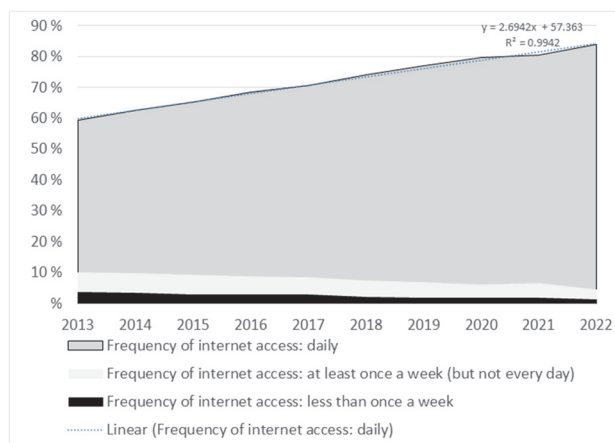
3. Research Questions

Q1 The frequency of Internet use in EU 27 countries stabilised after cancellation of measures adopted during the pandemic to limit physical meetings of people as a means to prevent the spread of COVID-19.

Q2 The agency of third parties is eliminated in the election campaign on the basis of the publication of expenses through transparent accounts.

4. Internet Usage Trends in EU Countries

The online space has become the main source of information for many citizens. Due mainly to the high number of users, the public presentation of opinions and views has never been more accessible than in the Internet environment, and with the advent of the Internet, online media has become the most widespread source of information. Graph no. 1 shows the development of the number of Internet users in the E27 countries over the last 10 years.

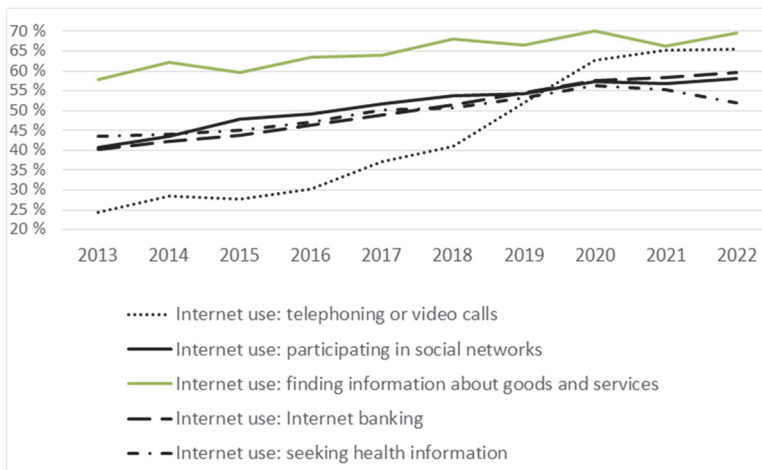


Graph 1: Development of the number of Internet users in E27 countries, 2013–2022

Source: Own processing based on data from: https://ec.europa.eu/eurostat/databrowser/view/ISOC_CI_IFP_FU_custom_7097495/default/table?lang=en

Q1: From the graph showing the frequency of Internet use by the population in general, it is clear that its use has been rising continuously for a long time with no sudden changes, and it is a fair assumption that this will not change in the coming years. In 2021, when anti-pandemic measures were eased, short-term stagnation occurred in the number of Internet users, but a steeper increase can already be seen in 2022. Research question Q₁ was not confirmed by this finding. Daily use of the Internet most often predominates. Despite the fact that time spent on the Internet fluctuates depending on the length and purpose of the connection and whether it is a working day or a free day, the daily periodicity underlines the importance of the Internet in today's way of life. The Internet has become a necessity for most people in Europe, regardless of age and gender, and it is an integral part of people's existence. Growth in the number of daily Internet users takes three major forms. These are mainly new Internet users who found its daily use right from the start, as well as more frequent Internet use among people who previously used it only weekly or several times a month and whose numbers have shown a decrease. The trend line in the graph of regular Internet users shows a clear, ongoing upward linear movement, with positive direction growth of 2.59 and a high reliability coefficient of 0.9442. The current cumulative number of regular Internet users exceeds 85% of the population in the 27 EU countries, thus representing a significant majority of the citizens of these countries. By supplementing the number of Internet users with the purpose of its use, a better image of its utility value for the public is acquired.

In terms of individual Internet use in EU countries, Eurostat collects so-called indicators of the information society, which are related to communication and obtaining information. Graph no. 2 presents the development trend of the average number of individual Internet users for selected monitored activities in EU countries over the last 10 years.



Graph 2: Development trend of the average number of individual Internet users for selected monitored activities in EU countries, 2013-2022

Source: Own processing based on data from ESTAT: ISOC_CI_AC_I https://ec.europa.eu/eurostat/databrowser/view/ISOC_CI_AC_I/default/table?lang=en&category=isoc.isoc_i.isoc_iiu

The most common activity of individual Internet users during the last decade was finding information about goods and services. Use of the Internet for participating in social networks, Internet banking and seeking health information was relatively balanced. The effect of the COVID-19 pandemic on Internet use is most noticeable in the seeking of health information, the intensity of which increased continuously until 2020, when a decrease was recorded, which continued in the following year. The significantly largest increase, more than two-fold, occurred in telephoning or

video calls. The reason for this, aside from affordability, is the increasing mobility of the population worldwide and its migration, and not only within Europe. Further, the internationalisation of companies, enterprises and organisations have played a role, as has remote work, such as the home office, which in several cases proved to be a good alternative during the duration of anti-COVID measures.

We transposed linear trend curves over the individual time series. The equations and their reliability coefficients R^2 can be found in Table 1.

Table 1 Equations of trend lines of Internet use in the EU 27 and their reliability coefficients, 2013–2022

	Equations of trend lines	Reliability coefficients R^2
Internet use: telephoning or video calls	$y=5,285x+14,325$	0,9352
Internet use: participating in social networks (creating user profile, posting messages or other contributions to facebook, twitter, etc.)	$y=1,893x+40,935$	0,9447
Internet use: finding information about goods and services	$y=1,2053x+58,111$	0,7951
Internet use: Internet banking	$y=2,331x+37,481$	0,9885
Internet use: seeking health information	$y=1,384x+42,116$	0,8327

It is evident from the column on the right that the direction of all trend lines are positive and greater than 1, which means that all monitored activities on the Internet show a growing trend over a ten-year period.

5. The Essence and Techniques of Electoral Manipulation

With the constant frequency of Internet use, it takes a maximum of just a few days for information to reach Internet users. The reach of traditional media has become marginal when compared to the availability of the online environment, including political advertising, paid published advertising and sponsored posts on social networking sites. For the reasons given, the Internet has also become an influential platform for political campaigns and public discussions. This has occurred despite the general lack of regulation of the online environment. Proven processes usually ensure a solid result; however, victory cannot be achieved without invention and tactics that address a wide spectrum of voters. Because there is no single correct way to run a campaign, every political party creates its own method of doing so, from the positive to the aggressive. A typical sign of a positive campaign is concentration on activities, solutions and expertise, while negative strategies are characterised by attacks on political opponents and their unsuccessful or negatively perceived activities. For the voter, it is important that the campaign is understandable. The online space allows citizens to communicate with candidates and exchange opinions on a daily basis before a wide audience, which is an advantage compared to print media.

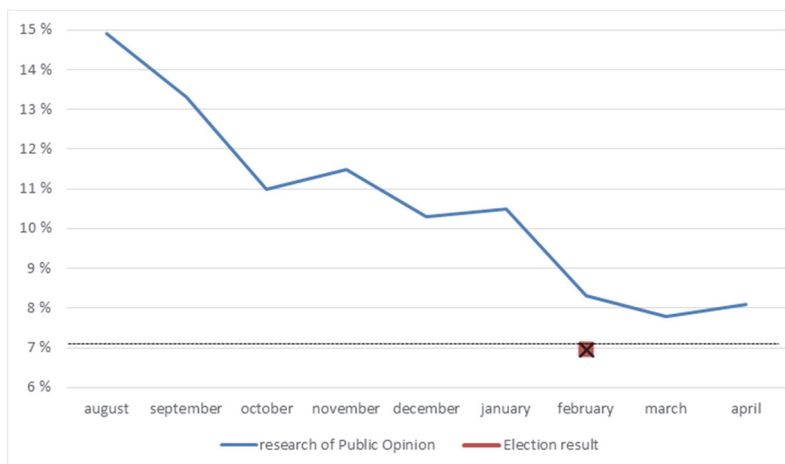
As (Aral, S. et al. 2019), (Jones, J. J. et al. 2017) and (Levy, R. 2020) state, online media as such have a profound effect on society in various areas, including marketing, shopping, finance, health and politics. They have become not only the most widespread source of information but also a key means of shaping opinion (Schmidt, A. L. et al. 2017).

Personal interaction can often be emotionally intense, with the impact limited to a smaller number of participants in a relatively small space. In contrast, indirect online interaction can occur continuously in front of a very large audience, which is the biggest difference versus personal interaction and the reasons for its great popularity. Social interactions, as such, have a strong effect on individual behaviour, influencing and simplifying the acquisition of beliefs and preferences of others, regardless of the type of interaction. Election campaigns are (de)formed by a great many inputs. A seemingly trivial and apparently harmless or unrelated event may have a significant

influence on election results. In the effort to convince voters, a common denominator is often the manipulating of opinion, which may or may not consist of spreading disinformation or denigrating a specific candidate.

Several studies have long shown that people adapt to the perception of others (Asch, S. E. & Asch, A. E. 1956), to attractiveness ratings (Klucharev, V. et al. 2009) (Zaki, J. et al, 2011) and to political opinion (Bond, R. M. et al. 2012). For these reasons, the effort to influence people's perceptions is a proven and popular technique for manipulating decision-making, and not only that of hesitant individuals. Several manipulative techniques represent a tolerated method of running a political campaign, be it online or offline. The spreading of campaigns into the online space did not change the practices of the pre-election campaign, as the scope, speed and efficiency of conscious influence on public opinion has significantly increased. We will mention two examples from practice of very tight results from an election fight, which, however, uncompromisingly relegated the actors among the losers. The more well-known of the two is the case of the last presidential election in 2020 in the United States, where roughly 100,000 votes decided the race in favour of Joe Biden over Donald Trump, thus about 0.06% of votes in key localities from among the 158,383,403 valid votes cast. Even during the election campaign, the awareness of an uncertain result provoked the highest voter turnout in the US in the last 100 years. Many voters of the defeated candidate represent dissatisfied, perhaps even frustrated, citizens whose expectations were not fulfilled, which does not contribute to the stability of future development.

A less well-known case internationally is that of an even narrower failure of the political coalition of the PS-Spolu parties in the 2020 parliamentary elections in the Slovak Republic. Among the 2,881,511 valid votes cast, the PS-Spolu coalition received a total of 6.96% of the valid votes and was thus a mere 926 votes shy of the amount they needed to get into parliament. Opinion polls are a common part of any election campaign, serving to provide political parties with useful feedback on how they are doing and how favourably they are developing among voters, on the basis of which they can adjust their campaigns. The fact that a negative campaign was conducted against this new political party is evidenced by the development of the survey of its preference among voters, which fell by almost half in 7 months.



Graph 3: Development of the public opinion poll ratings of the PS-Spolu political party in the parliamentary elections in the Slovak Republic, August 2019–April 2020

Source: Own processing based on data from https://sk.wikipedia.org/wiki/Vo%C4%BEby_do_N%C3%A0rodnej_rady_Slovenskej_republiky_v_roku_2020#Prieskumy_verejnej_mienky

The actual election result achieved is shown by the X in the graph. The mentioned polls of pre-election preferences of PS-Spolu damaged the coalition doubly. First, they were overestimated compared to reality and were therefore less alarming to the leaders of the parties than was necessary. Due to the anticipated promising election result, many of the coalition's supporters chose at the last minute to vote for more endangered political parties with a related programme, whose preferences were closer to the limit of electability and existentially needed additional votes. The second factor having a negative impact on voters' decisions was the sharp drop in party preferences in the last months. Such a fall is an indication that something is happening for a reason. Therefore, if a voter does not know the exact reasons for the decline, he or she may doubt the original decision and often times "bounce" at the last moment. Several politicians have objected that opinion polls and polls represent a manipulative tool, justifying this objection with the differences between poll numbers and actual results, as well as the non-transparency of their financing and the ignorance of the pollster. For them, a radical ban on such polls in the form of a moratorium for a certain time before elections is a good solution. A moratorium is a good solution for parties with a strong voter base, which do not have to worry about the political influence of such polls. A moratorium would also reduce the risk of increased popularity of new parties, which would again favour strong parties and take away from the democratic course of an electoral battle.

The online space enables the use of so-called amplification techniques, which have a more intensive impact on the population, and here there are many more opportunities than spreading disinformation or defaming a specific candidate. Compared with the offline environment, the online space offers even more manipulative techniques, for example, in the form of analysis and personal profiling of users based on data that they produce.

Q2: Promotional political activities in the online environment, which can take a variety of forms, can be very effectively carried out by third parties. For example, so-called "influencers" very often operate on social networks, publishing posts that gain them a large number of followers, from tens of thousands to even millions. Although their area of activity tends to be in a specific field, such as acting, sports, singing, opinion formation and the like, during an election campaign they can drag their supporters along with them in favour of the politician or political party they themselves recommend. Legislatively, such activity is acceptable in an election campaign, as long as it is not provided with a financial reward for these services or is transparently recognised as an expense for political advertising. Recently, at the end of September 2023, early elections to the National Council of the Slovak Republic were held in the Slovak Republic, during which we also gained negative experience with the new legislation in the area of conducting an election campaign. Relatively high expectations were placed on the managing of a transparent account, which was supposed to enable public control over expenses and activities associated with the election campaign. The indirect influence of third parties from abroad proved to be still possible by means of donations indirectly through a resident of the Slovak Republic or through anonymous accounts. It is very difficult to prove the free provision of services for the benefit of the election campaign, or if these services are paid for by a third party or a person outside the party's transparent account. In reality, during the last election campaign, the distribution of regional newspapers to citizens with obvious political advertising was detected without the expenses for their publication being recorded on the transparent account of the political party being promoted.

A more harmful instrument for manipulating public opinion is represented by so-called online trolls. These are people who are paid to direct the discussion in favour of the paying customer by means of their posts on the Internet. The lower number of followers compared to influencers is balanced by a more persistent frequency of producing posts, which is their primary activity. They are rewarded based on the number of comments and contributions over a certain time period with content desired by the customer. They are thus supposed to increase through their work the polarization of opinions and provoke ideological conflicts in order to create uncertainty, doubts and mistrust among the population, thereby facilitating their manipulation.

6. Artificial Intelligence and the Risks Associated with its Use

The degree of human intelligence is not static; it is developed over time by solving more complex problems. This does not mean only work problems, but everyday tasks, too, which have continuously raised and continue to raise the intelligence of humanity higher. Credit for this goes not only to a narrow group of innovators and inventors who stood out as above-average holders of innovations and patents. The use and control of the provided functionalities continuously affects the cognitive abilities of every user of modern technical devices. The intensive promotion of artificial intelligence in many areas of social life is drawing unmistakable attention to itself. The Resolution of the European Parliament on Artificial Intelligence (Artificial Intelligence Report, 2021) defines artificial intelligence as a system based on software or part of a hardware device that exhibits intelligence-simulating behaviour with a certain degree of autonomy to achieve specific goals. Today, we understand artificial intelligence as a device's ability to perform functions typically associated with human intelligence, such as learning, reasoning or creativity (Artificial Intelligence: Definition and Use, 2022). Artificial intelligence penetrates society in the form of different automated systems which are able to process a huge amount of data with the help of algorithms and evaluate a specific case based on its features, compare it with similar cases in its database and come to a certain conclusion. The creators of such systems promise easier decision-making, as well as greater predictability and impartiality. In short, artificial intelligence represents a turning point for today's world. Its effects could have a long-term and mass impact, much like the printing press, the steam engine or the production of electricity in the past. With its complexity and various forms, it can affect many aspects of society and change the daily lives of individuals. AI currently creates systems capable mainly of performing narrowly specific and rather routine tasks, but the boundaries are rapidly shifting. Multifarious challenges are rapidly arising, in which artificial intelligence could be used everywhere. Specifically, we can mention a very desirable need in terms of safety to replace dangerous or health-damaging activities with technical devices or robots in cases when their fulfilment also demands a certain level of human intelligence.

However, it is also necessary to remain vigilant with the use of artificial intelligence for positive reasons, to not close our eyes and miss the other side of the coin, i.e. the risks involved with its use. There is no doubt that the application of artificial intelligence systems can be extremely beneficial; at the same time, however, it can also have negative impacts of long-term significance. The potential damage can be both material, where we can talk about effects on the safety and health of people (for example, damage to property and health, even the loss of human life), as well as of a non-material nature – expressed, for example, in the loss of privacy, interference with the right to free expression, or human dignity (White Paper on Artificial Intelligence – a European Approach to Excellence and Trust from 19 February 2020). In the short term, the problem of ethics and morality lies in how these systems are increasingly deployed to assess the personal data and requests of individuals, for example, when applying for a job, the provision of electronic services, or the assessing of a loan application. This involves the concentration of a large amount of sensitive data, which could become an attractive target for attackers. Artificial intelligence significantly increases the possibilities of identifying what is apparently anonymous data; i.e. it enables the re-identification of persons. As such, machines are not subject to ethical and moral principles, which could cause fundamental security risks. The European Commission for Effective Justice has also elaborated the basic ethical principles that need to be observed when using artificial intelligence in the judiciary, among which are principles such as transparency, data security and respect for fundamental rights (Cepej, 2019). The issue may be insufficient trust in technology due to the questionable level of transparency in the process of how machines make their automated decisions and the related unpredictability of actions.

7. Artificial Intelligence in the Context of an Election Campaign

With targeted political advertising, messages with different effects on voters of different political

parties can be displayed. Submitters of personalised adverts are capable of selecting the recipients of a specific advertisement based on the criteria prescribed by the submitter. The process of so-called “profiling” is used, i.e. *the classifying of people into categories of groups based on common features, especially for the purposes of analysis or a certain prognosis* (Ufert, F. 2020). This is thus distributed behind the content based on personal preferences, without the user’s decision. Such an assessment is conducted using computer algorithms, the task of which is thorough knowledge of the personality, habits, circle of friends and reactions of the user to various stimuli. As soon as the user’s personality is profiled, he or she can be automatically presented with content and advertisements that match his or her preferences. The artificial intelligence algorithm is able with a high probability to exclude messages that would not interest the user or that are not related to his/her opinion. With such a selection, a person receives only filtered content having the potential to attract his/her attention; what’s more, with the ordering of posts not sorted chronologically by time, but shuffled according to attractiveness. This evokes in the user a false sense that others share the same views. In reality, however, each user works with a different set of content, something that few people realise. For many people, it is easier to give in to the content offered than to painstakingly select information from a huge offer in the database and think over its credibility. As a result, not all the information that reaches voters by means of social media is objective. The sharing of one’s own content by many users, so-called “user-generated content”, thus complicates the possibilities of control over the content of social networks.

Deepfake technology is artificial intelligence used to modify graphic formats, such as images or videos. The name was created by combining the phrase “deep learning” with the word “fake”. Deepfakes first appeared on the Internet at the end of 2017, thanks to the innovative GAN (Generative Adversarial Networks) method. In an election campaign, for example, deepfake technology can be used to generate the faces of famous personalities, which sound and look like the original and which are misused to mislead in a highly sophisticated way. They act as disseminators of disinformation, information taken out of context or other false, or “fake” news related to them or the opposition. This technology provokes a crisis for Internet companies and governments because it has the same effect as fake news in terms of manipulating the statements of politicians, celebrities, and influencers in order to create confusion and spread misinformation, which are major crises for the world today (Khawlah M. Al et al. 2023). The use of deepfake technology for political propaganda, however, is for many a sensitive topic that society is not aware of or sufficiently prepared for.

8. Stricter Rules for Political Advertising in the EU

The problem of political advertising is that the law is often more declaratory and unenforceable in practice. Application issues in this area compel ongoing and often more reactive modifications to existing legal standards. Attempts at new regulations are often criticised as limiting free decision-making, encroaching on constitutional rights and freedom of speech and shaming legal culture or constitutional traditions.

Expectations are that the European regulation adopted by the European Parliament in February 2023 will bring a positive change in this regard. The European Parliament supported a proposal for additional rules to prevent the abuse of political advertising in both online and offline form by creating a single market for political advertising in the EU. The effect of the measures should be evident in the upcoming European Parliament elections in 2024. The main points of the measures could be summarised thus:

- More information about political advertising and its greater transparency for the general and professional public,
- A ban on targeted political advertising at the micro level; i.e. it will not be possible to use consumer and demographic data to identify the interests of specific individuals.
- Sanctions for breaches, suspension of service provision for 15 days in case of serious

infringement and shorter deadlines and strengthened powers of national authorities in case of suspected violations. The European Data Protection Board is competent to take over the investigation of violations and to enforce the rules.

- A ban on non-EU entities financing political advertising in the EU. This not only means the headquarters of the entity, but also the headquarters of the person exercising final control over it.

9. Conclusion

Participation in politics dynamizes the political process and creates prerequisites for the political sphere to accept a wide spectrum of interests that arise in society in a balanced manner. The influence of the Internet on the way of life of EU27 residents has been increasing continuously over the past 10 years, including its use during election campaigns by political parties. In consequence of the intensive development of technology, conventional security threats have been reformed into a completely new dimension with an intensity that is many times higher than in the past. The battle against election manipulation does not mean stopping the activities of criminal actors, but mainly conducting information campaigns with the aim of jointly protecting society from danger. With election processes, it is also important that the public understand as thoroughly as possible the seriousness of the situation, the general uncertainty and the risks of the coming period. We believe that when making a definitive decision, voters should take an interest in and know facts that objectively intermix the priorities of a society and determine the election results, for example, through the financing of the election campaign (publicly provided by Transparency international in the last elections in the Slovak Republic). The democratic legitimacy of a modern state depends more on the existence and effectiveness of control, supervisory and regulatory institutions, as well as on the quality of contact between authorities and citizens, and to a lesser extent on the mandate that representatives receive every few years. A good legislative environment, transparency and effective checks are the main tools against techniques of manipulation. The creation of a single market for political advertising in the EU clearly must be viewed as a positive step. Through additional research, we would like to measure the relationships between the groups of election expenditures and the actual election results. The buying of voters is one of the “standard” cheap vote-getting techniques; however, the affected voters sober up relatively quickly, if too late. Practice will show its practicability, but in view of the many factors that influence election processes and their results, it would be naive to expect it as the ultimate solution. Even unpaid content may harm democracy and undermine freedom of expression, like many other activities mediated by modern technology. It remains to believe that the development of society and clear-headed, responsible thinking will win out over private interests and dominate further decision-making.

10. Acknowledgement

The contribution was created within the national project “Increasing Slovakia’s resilience to hybrid threats by strengthening public administration capacities”, project code ITMS2014+314011CDW7. This project is supported by the European Social Fund.

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