TRUTH DECAY
IN EUROPE
Exploring the role of facts and analysis in European public life
This report presents the findings of a study on the evolution of the role of facts and analysis in public life in Europe. The research is part of the Countering Truth Decay Initiative, a portfolio of projects completed by the RAND Corporation to restore the role of facts and analysis in public life. After the first report in the Truth Decay series, *Truth Decay – An Initial Exploration of the Diminishing Role of Facts and Analysis in American Public Life*, was published in 2018, exploring the Truth Decay phenomenon in the European context was a logical next step for RAND.

The COVID-19 pandemic began while this research was being conducted and it provided many stark examples of the trends characteristic to Truth Decay. In Europe, questions have been raised about access to and the quality of information regarding the pandemic, as well as the use of scientific evidence in policymaking. There has been polarisation in the private and public sphere and news avoidance and disengagement from public debate. This report, however, goes beyond recording the current climate and explores whether the situation is getting worse, i.e. whether the disagreement about facts and data is increasing, whether the volume and resulting influence of opinion (over fact) is growing, and whether trust in formerly respected sources of information is declining.

The study was undertaken by researchers from RAND Europe, a not-for-profit research organisation dedicated to helping improve policy and decision making through research and analysis.

Funding for this research was provided by unrestricted gifts from RAND supporters and income from operations.
Summary

The role of facts and evidence in public life in Europe

The evolving, uncertain and emotional context of the COVID-19 pandemic has highlighted the need for accurate and reliable information to make sound decisions in both private and public spheres.

Better access to facts and data should logically translate into sound, weighed decisions. Yet, more information does not necessarily mean better or more reliable information. Having access to more information can even make it more difficult for people to decide what to believe and what not to believe – regardless of the underlying accuracy of the information.

While attention has increased on access to, and the role of, information in decision making – with its resultant challenges such as disinformation, the role of information technology and an increasingly complex information environment – the role of facts and analysis in public life appears to be changing. Yet, empirical data that allows us to assess the extent, scope, and nature of these changes is lacking.

RAND has explored this issue, starting with the United States context. In a 2018 study, Kavanagh and Rich examined the diminishing role of facts and analysis in American public life, a phenomenon they describe as ‘Truth Decay’. According to this study, Truth Decay in the United States is characterised by disagreement about facts and objective data, blurring of the line between fact and opinion, the increasing relative volume of opinion compared to facts and declining trust in institutions previously considered sources of objective information. The authors surveyed empirical evidence and developed a conceptual framework to explore Truth Decay in the United States as a system incorporating drivers, trends, and consequences. They concluded their study with a research agenda to help improve the understanding of Truth Decay and identify solutions to address it.

One of the research streams Kavanagh and Rich recommend is to examine the extent to which the Truth Decay framework, developed specifically for the United States context, applies to ‘international analogues’ (i.e. in countries outside of the United States). This
report takes up this charge, examining the extent to which there is evidence for the trends, drivers and agents, and consequences of Truth Decay in Europe, and whether the conceptual framework would apply to Europe as well. Given the policy context in Europe at the wake of the 2020s – in particular the COVID-19 pandemic and its sanitary, social and political consequences – the authors aim for this report to be a launching pad for informing a wider set of debates about European democracy.

Looking at Truth Decay in the European context

We examined the different elements of the Truth Decay framework developed by Kavanagh and Rich (‘trends’, ‘drivers’, ‘agents’ and ‘consequences’) to structure the discussion about Truth Decay in the European context. The starting hypothesis was that, for the most part, these trends would also likely be relevant in the European context. For each element of the framework, we looked for empirical evidence in Europe and examined how this evidence compared with what was found for the United States. We also looked at whether the evidence applied across Europe as a whole, or if there are differences within Europe. Based on the findings of this research, we discuss the extent to which the original Truth Decay framework applies to the European context and recommend areas for further investigation in order to better understand and tackle Truth Decay in Europe.

The first stage of research was an in-depth literature review. Given the thematic scope of the research, we focused on existing academic studies published in English. The search strategy focused around the four trends identified in the 2018 Truth Decay report, namely: (1) an increased disagreement about facts and data; (2) a blurring of the line between opinion and fact; (3) an increasing relative volume and resulting influence of opinion over fact; and (4) a declining trust in institutions previously looked to as sources of factual information. Once we collected a sufficient research base around the trends, we looked for and undertook additional targeted searches for indicators across all four trends, to complement the data collected through the literature review. We then examined evidence for the drivers and consequences of Truth Decay.

Evidence for the trends of Truth Decay in Europe

Overall, we found evidence of the occurrence of all of the four trends of Truth Decay in Europe, although the evidence is not as overwhelming nor are the trends as pronounced as in the United States and there is a lot of diversity across sectors.

We found evidence of increasing disagreement about facts and data in Europe. In some countries we see growing misperceptions about levels of migration and increasing vaccine scepticism, particularly in France and Italy. In addition, misperceptions on the extent of migration have increased in a number of countries such as Spain, Germany, the Netherlands, France and Poland. Further, while most of the literature suggests that Europeans seem increasingly concerned with climate change, these developments manifest themselves differently in different parts of the continent. There is thus clear evidence of disagreement about facts and data and misperceptions on these issues are widespread. There is also evidence that this disagreement is, at least in some European countries, increasing. Yet, with limited pan-European research available on this matter, it is difficult to say whether this trend is consistent across the continent.
We also found evidence of a blurring of the line between opinion and fact, as illustrated by an increasing prevalence of interpretive journalism and advertorial content intertwined with news reporting. We do find evidence of this trend in Europe. The line, however, has blurred more in some countries than in others. There appears to be a north-south divide in Europe, where news reporting appears to be more neutral in Nordic countries, Germany and Switzerland, while reporting in southern European countries tends to be more integrated with commentary and opinion. Furthermore, we found that interpretative journalism has become more prominent in some countries. The evidence presented, however, does not show whether interpretative journalism has increased in Europe overall.

We found evidence of an increasing relative volume and resulting influence of opinion over fact, as illustrated by the explosion of the availability of online news outlets, including the emergence of niche media that cater for a select audience that shares similar beliefs. Moreover, as with the rising global popularity of social media platforms, it has become possible for everyone to access and share commentary and opinions on contemporary topics with the rest of the world. As this trend has been a global one, the European media landscape has also become inundated with opinion-based content from millions of social media users. There are also some early indications that the voice of alternative opinionated media is ‘louder’ than the voice of traditional media, suggesting that the relative influence of such opinion-based news could be exacerbated by the rise of social media.

We also looked for evidence of declining trust in institutions previously looked to as sources of factual information. We found evidence that trust in political institutions in Europe did decline in the late 1990s and early 2000s, but this trend seems to have reversed since the end of the financial crisis. Trust in the media in Europe has been declining gradually over the last two decades. A review of relevant data shows the largest decline in the levels of trust in Slovenia, the Netherlands, Czechia and Poland. Over this period, confidence in the press has increased only in Finland. One of the reasons for this trend could be that Europeans have a decreasing confidence in the reliability of online sources of information. This is despite an increased reliance on sources such as the Internet and social media for news consumption. Trust, however, in the traditional press has remained remarkably stable across Europe, but these sources are used less and less.

Evidence for the drivers of Truth Decay in Europe

We were also able to show the existence of the drivers and agents of Truth Decay in Europe – highlighting relevant differences between the European and United States contexts. Yet, we have not always found evidence of the role of these drivers and agents in driving and exacerbating Truth Decay.

Cognitive biases are hard-wired in the human brain, and they affect the way in which we process information and make decisions. Therefore, they affect decision making with regard to information processing in the same way across the globe. Research from both sides of the Atlantic has shown, for instance, that humans tend to seek out information that confirms our pre-existing beliefs and hence extends to our prejudices. While these biases have always played a role in decision making, they can act as a catalyst for other drivers of Truth Decay. Cognitive biases can be particularly exacerbated by changes in the media ecosystem. Algorithms on social media, for instance, are designed to take advantage of cognitive biases by prioritising content that is more prone to spread quickly.
Another universal driver concerns new information and communication tools, in particular social media, which have increased people’s exposure to information. People are no longer just news consumers. Rather, everyone is now potentially a creator and distributor of news and content as well. Social media have democratised the media landscape across the globe. Yet, it has become a profitable business model to distribute eye-catching news items and attractive content on social media. New media outlets, whether they are clickbait farms, Twitter trolls or electronic news clipping services, do not necessarily abide by the same quality standards as the traditional gatekeepers, such as governments or the traditional news media. While revenue models for media companies in Europe appear fundamentally more stable than in the United States, many traditional European news outlets have been struggling too. Not only have these changes in the media landscape contributed to an exponential growth in the sheer volume of news content, the relative volume of content that meets journalistic standards of multiple verifiable sources has shrunk. Moreover, the demarcation between verifiable facts on the one hand and opinion, commentary or speculation on the other has become increasingly blurred.

While changes in the information system have been global phenomena, national context matters in the extent to which they affect Truth Decay. Europe has a heterogeneous media landscape with a patchwork of differences in the newspaper industry, political parallelism, professionalism and the role of the state. We conclude that in European countries such as Denmark, Germany, Netherlands, Norway, Sweden or Switzerland, the effects of the changes in the information system on Truth Decay have been mitigated by press subsidies (with press-freedom protection) and strong public service broadcasting. Other contextual differences, such as the journalistic tradition of the media system may also mitigate or exacerbate the effects on Truth Decay. For instance, Italy has a relatively strong tradition of partisan media and commentary-based journalism in comparison to France.

The education systems across Europe differ from those in the United States, making these perhaps less prone to being a driver of Truth Decay, but rather a possible part of its solution. Fostering critical thinking skills and providing civic education to students have been part of traditional school curricula in most European countries, although there have been considerable variations across education systems. The jury is still out as to whether the inclusion of these media literacy interventions in the formal education system has been effective in addressing the challenges related to the changing information system. Yet there is evidence that media literacy education can be effective in school settings. It seems that the role of European education systems and the competing pressures on these systems have not been as prominent in Europe in driving Truth Decay as it has been in the United States. European education systems appear to have recognised the importance of critical thinking skills and civic education for a future generation of media consumers and participants in their democratic societies.

We also found that the role of polarisation is crucial in explaining the differences between Truth Decay in the United States and Europe. In recent decades, American society has become increasingly polarised along partisan political lines, but also along socio-economic ones: people tend to surround themselves
with those who think or look alike. Such increased sorting creates groups with similar characteristics who can become insular in their thinking and communication, creating a closed environment in which opinions or even false information can proliferate.

We found evidence for several trends of Truth Decay in countries or settings where political views or ideologies were characterised by polarisation. In combination with other drivers, such as cognitive biases and changes in the information system, polarisation may exacerbate Truth Decay. In particular, polarisation has been found to be associated with decreasing trust in institutions formerly respected for their objective information. A recent RAND study has addressed the crucial role of trust in the analytical framework for Truth Decay. Other evidence also suggests some association between perceived political bias and distrust in the media. In countries that are characterised by higher level of political polarisation, the trust gap between groups that hold different political views in terms of their trust in the media also tends to be larger. This causal mechanism was illustrated by the Brexit referendum, when overall trust in the media throughout the United Kingdom dropped considerably in the aftermath of the intense referendum campaign. As another example, Poland has experienced an increasing animosity between the supporters of the right-of-centre liberal Platforma Obywatelska (PO) and the right-wing conservative Prawo i Sprawiedliwość (PiS). Empirical data for affective polarisation support this thesis. Other indicators also suggest that Poland has polarised from a socio-demographic and economic perspective. The various indicators show a steady trend of rising income inequality in Poland since the end of communism. This situation has become a fertile breeding ground for Truth Decay. In Poland, trust in public institutions is at its lowest level, trust in the media is declining and audiences’ trust of news outlets is particularly polarised, certainly in comparison with other European countries.

There is evidence that polarisation across different dimensions has been increasing in Europe. This trend is not visible in all European countries, and it is nowhere near the level identified in the United States. This may be one of the explanations of why we do not find as much evidence of the processes of Truth Decay across Europe thus far. Polarisation in the United States has shown to act as a major catalyst for especially a declining trust in sources of objective information. Yet, where and when European geographic settings or timeframes are characterised by polarisation, there appears to be more evidence of Truth Decay.

Evidence for the consequences of Truth Decay in Europe

We also found examples in Europe of most of the consequences of Truth Decay as presented by Kavanagh and Rich and some evidence, though weaker, that these consequences stem from the trends of Truth Decay. In the European setting, the consequences of Truth Decay differ from what is seen in the United States. This may be due to wider societal differences, such as political systems or that instances of Truth Decay are less prevalent or consequential. In addition, although we found some evidence of the consequences described by Kavanagh and

4 Kavanagh et al. (2020).
5 Brzezinski et al. (2013); Bukowski & Novokmet (2018).
Rich, we found little direct evidence of a link to Truth Decay.

Civil discourse in multiple European fora is far from being always informed, honest, open-minded and constructive. This may be due to a number of factors that facilitate the production and dissemination of discourse — including those identified as drivers of Truth Decay — cognitive bias, changes in the information system and the media business model, and politicians and media as agents of Truth Decay. An eroded civil discourse is also closely linked to Truth Decay trends: it is tied to increasing disagreement about facts, is interlinked with the trust of formerly respected institutions and tends to alter this trust at least as much as it is driven by it. While we can document specific instances of the decline of civil discourse, without data tracking this issue over time we cannot assess the extent and scope of any ‘decline’ in civil discourse.

We did not find evidence of a link between political paralysis and Truth Decay largely because we did not find clear instances of political paralysis leading to institutional paralysis in the European context. While we can argue that disagreements about facts and data, driven by political polarisation and changes in the information systems can affect trust in institutions in Europe, political paralysis does not seem to affect the functioning of institutions to the same extent as it does in the United States. We attribute the institutional effects of political paralysis to differences in the institutional systems, with European political systems having more safeguards against the implications of political paralysis on institutions than the United States.

We found evidence of pockets of civic disengagement in Europe. Participation in elections has been declining in Europe in the last decades, although it did appear to increase in recent years. There is also evidence of news avoidance, another manifestation of dissatisfaction and alienation, that is driven by some of the same trends that characterise Truth Decay. Some of this shift, however, may be a shift in forms of participation. Europeans increasingly find ways to express dissatisfaction and participate outside of traditional channels, including online. Overall, we can say that the trends of Truth Decay do seem to contribute to alienation and disengagement in Europe, but not in the same way or extent, and are evident primarily in terms of news consumption behaviour and not political expression.

We found evidence of uncertainty in Europe and some evidence that this uncertainty was driven by disinformation and the trends of Truth Decay. This evidence was apparent in economic uncertainty as well as government policy uncertainty. We also observed uncertainty in science communication driven by low trust. It does appear that some of this uncertainty is a consequence of trends and drivers of Truth Decay, particularly in situations such as the run-up to and the aftermath of the Brexit referendum or in the political discourse in Poland in recent years. Some of the uncertainty, however, is due to the difficulty in accurately predicting future events, and dealing with unknown situations generally (for example, the 2007 financial crisis, or the first months of the COVID-19 pandemic).

Conclusions and recommendations

In light of the evidence we found, we recommend that policymakers in Europe should be vigilant of the drivers, trends and consequences of Truth Decay. Beyond acknowledging the importance of this phenomenon, we recommend the scale and scope of Truth Decay should be monitored and assessed in Europe. The drivers of Truth Decay should be tackled in order to prevent that these
trends follow a similar trajectory as they have in the United States.

Considering the evidence for the drivers, agents, and consequences of Truth Decay, we offer some pointers towards what we believe should be the highest priorities for policymakers in Europe in order to slow the pace and mitigate the implications of Truth Decay:

1. **Ensure that whatever drives Truth Decay, citizens are equipped to play their part as actors of democracy in Europe and to avoid becoming agents of Truth Decay themselves.** For instance, investing in media literacy skills would help people address their cognitive bias towards processing information and make people less vulnerable to disinformation when accessing various forms of media, particularly online social media. It would also make it easier for them to distinguish fact and opinion.

2. **Provide news organisations with a business model that guards against incentives to contribute to Truth Decay, even unintentionally.** Ensuring that the news media do not rely on advertising alone or on sensational content to optimise viewer- or readership and revenues would contribute to fighting Truth Decay. When support comes from public funds, this financial support could come with something in return: for example, a pledge towards quality and concrete actions to (re)gain trust from the public.

3. **Introduce measures that help elevate the political debate to serve the quality of democracy in Europe.** In addition to funding investigative journalism, measures to promote honesty and clarity in political communication could include systematically fact-checking political debates and/or having non-partisan research institutions estimate the (economic) impact of electoral programmes. Reinforcing rules for electoral campaigns (e.g. reporting or prohibiting private donations) and protecting whistle-blowers effectively would support the quality of democracy in Europe.

4. **It may be unrealistic to expect that private enterprises who benefit from some of the elements of the Truth Decay framework (e.g. social media) abandon their profitable business model. It may, however, be possible for social media to mitigate their contribution to Truth Decay by demanding easier and wider access to their (anonymised) user data for independent researchers.** Research findings can be used as an opportunity to build a more socially sustainable, yet profitable, business.

5. **This study pertains to Europe as a whole. One area for future research would be to examine the extent to which the framework applies to different national or regional contexts.** Other areas for future research include: (1) in-depth examination of specific aspects of the framework, such as disinformation as a trend of Truth Decay in Europe; and (2) setting-up more longitudinal studies focused on the issues raised by Truth Decay overall.

The research community should take up the challenges and opportunities that both this report and the wider Truth Decay research agenda represent, and enrich the current knowledge base with further research on parts or all of the Truth Decay framework, particularly in relation to the hotspots of Truth Decay that we have identified in Europe.
Overall, we found that Truth Decay is real in Europe, but it does not happen at the same scale as in the United States. This sends a hopeful message that there is still time to act and room for intervening and slowing down or countering the trends of Truth Decay in Europe.

**What’s next?**

Overall, this research shows evidence that Truth Decay occurs in Europe. The phenomenon, however, is less prevalent than in the United States, at least for the time being. This signifies that perhaps Truth Decay in Europe is at a less advanced stage than in the United States, indicating that there is time remaining to act, or that there are specific factors in Europe that help prevent or slow Truth Decay.

This research pertains to the European context as a whole. One area for future research would be to examine the extent to which the framework applies at national levels. Other areas for future research include examining specific aspects of the framework in greater depth, such as disinformation as a trend of Truth Decay in Europe and setting-up more longitudinal studies focused on the issues raised by Truth Decay overall.

The Table below summarises findings from our research on Truth Decay in Europe and compares them to findings from the Truth Decay framework defined by Kavanagh and Rich.6

<table>
<thead>
<tr>
<th>Truth Decay framework elements</th>
<th>Evidence of Truth Decay in Europe</th>
<th>Comparison with Truth Decay in the United States7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increasing disagreement about facts and data</td>
<td>We found evidence of increasing disagreement about facts and data in Europe, illustrated with several examples across Europe</td>
<td>This trend is not as pronounced in Europe as in the United States (earlier stage of Truth Decay)</td>
</tr>
<tr>
<td>A blurring of the line between opinion and fact</td>
<td>We found evidence of a blurring of the line between opinion and fact, as illustrated by an increasing prevalence of interpretive journalism and advertorial content intertwined with news reporting</td>
<td>This trend is not as pronounced in Europe as in the United States (earlier stage of Truth Decay)</td>
</tr>
<tr>
<td>The increasing relative volume and resulting influence of opinion over fact</td>
<td>We found evidence of an increasing relative volume and resulting influence of opinion over fact, as illustrated by an explosion of the availability of online news outlets, including the emergence of niche media that cater for a select audience that shares similar beliefs</td>
<td>This trend is not as pronounced in Europe as in the United States (earlier stage of Truth Decay)</td>
</tr>
</tbody>
</table>

---

<table>
<thead>
<tr>
<th>Truth Decay framework elements</th>
<th>Evidence of Truth Decay in Europe</th>
<th>Comparison with Truth Decay in the United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Declining trust in formerly respected sources of factual information</td>
<td>We found evidence that trust in political institutions in Europe did decline in the late 1990s and early 2000s, but this trend seems to have reversed since the end of the financial crisis. Trust in the media in Europe has been declining gradually over the last two decades.</td>
<td>This trend is not as pronounced in Europe as in the United States (earlier stage of Truth Decay).</td>
</tr>
<tr>
<td>Cognitive processing and cognitive bias</td>
<td>Cognitive bias affects decision making the same way in Europe as in the United States. While these biases have always played a role in decision making, they can act as a catalyst for other drivers of Truth Decay.</td>
<td>Similar driving role in Europe as in the United States.</td>
</tr>
<tr>
<td>Changes in the information system</td>
<td>We found that changes in the information system drive Truth Decay the same way in Europe as in the United States.</td>
<td>Europe is at an earlier stage of changes in the media business model and the use and influence of social media (in particular in Eastern Europe), therefore the role of this driver was not as prominent in Europe as in the United States and varies across countries.</td>
</tr>
<tr>
<td>Competing demands on the educational system</td>
<td>Education systems in Europe were more ‘ready’ to address challenges linked to Truth Decay, therefore the role of this driver is not as prominent in Europe as in the United States.</td>
<td>The education systems across Europe differ from those in the United States, making these perhaps less prone to being a driver of Truth Decay, but rather a possible part of its solution.</td>
</tr>
<tr>
<td>Polarisation</td>
<td>We found that polarisation drives Truth Decay, but it operates in a different way than in the United States.</td>
<td>We also found that the role of polarisation is crucial in explaining the differences between Truth Decay in the United States and Europe: the way polarisation operates in Europe is more complex than in the United States - this is because both social, economic and political polarisation present many different gradients in Europe.</td>
</tr>
<tr>
<td>Truth Decay framework elements</td>
<td>Evidence of Truth Decay in Europe</td>
<td>Comparison with Truth Decay in the United States</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----------------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td><strong>Agents of Truth Decay</strong></td>
<td>We found evidence of the agency</td>
<td>The role of agents seems less prevalent than in the United States - this is linked to differences in institutional systems (e.g. polarisation) and a different stage of change in the information system.</td>
</tr>
<tr>
<td></td>
<td>of the media, and academia and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>research organisations in the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>European context</td>
<td></td>
</tr>
<tr>
<td><strong>Erosion of civil discourse</strong></td>
<td>We found that civil discourse is eroded in Europe, but no evidence that this is a new phenomenon nor that it is increasingly eroding.</td>
<td>Erosion of civil discourse is less prevalent in Europe than in the United States.</td>
</tr>
<tr>
<td><strong>Political paralysis</strong></td>
<td>We found that there is political paralysis in Europe as in the United States, but this political paralysis does not necessarily affect the functioning of institutions the way it does in the United States.</td>
<td>Political paralysis has to do with institutional systems. In Europe there are multiple systems, strong administration and civil service (which do not change with political changes) and institutional processes, which mitigate the potential consequences of Truth Decay. Therefore Europe seems less ‘vulnerable’ to political paralysis than the United States.</td>
</tr>
<tr>
<td><strong>Alienation and disengagement</strong></td>
<td>We found evidence that alienation and disengagement are happening in Europe but there are notable exceptions - there are groups (e.g. youth and the green) that are actually more engaged, both in traditional and non-traditional ways.</td>
<td>This consequence is not observed as much in Europe as in the United States.</td>
</tr>
<tr>
<td><strong>Uncertainty</strong></td>
<td>We found evidence that there is uncertainty in Europe but not necessarily a link with Truth Decay.</td>
<td>Compared to what was found in the United States, we see uncertainty in Europe as a ‘consequence of consequences’, with a less direct link with Truth Decay than other consequences.</td>
</tr>
</tbody>
</table>
Table of contents

Preface III
Summary V
Figures XVII
Tables XIX
Boxes XX
Abbreviations XXII
Acknowledgements XXIII

1. Introduction 1
   1.1. Why research Truth Decay in Europe? 1
   1.2. Scope and objectives 3
   1.3. Methodology 3
   1.4. Structure of this report 4

2. Truth Decay represented as a system 5
   2.1. The four trends of Truth Decay 5
   2.2. Drivers and agents of Truth Decay 8
   2.3. The consequences of Truth Decay 9
   2.4. Summary 10

3. Trends of Truth Decay in Europe 11
   3.1. Increasing disagreement about facts and data in Europe? 11
   3.2. A blurring of the line between opinion and fact? 26
   3.3. An increasing relative volume and resulting influence of opinion over fact? 29
   3.4. Declining trust in formerly respected sources of factual information? 33
   3.5. Summary 45

4. Drivers of Truth Decay in Europe 47
   4.1. Cognitive processing and cognitive biases 47
   4.2. Changes in the information system 51
   4.3. Competing demands on the educational system 65
   4.4. Polarisation 74
   4.5. Summary 94
5. Agents of Truth Decay
5.1. The media
5.2. Academia and research organisations
5.3. Corporate agents and lobbies
5.4. Politicians
5.5. Foreign state and non-state actors
5.6. Summary

6. Consequences of Truth Decay in Europe
6.1. Erosion of civil discourse
6.2. Political paralysis
6.3. Alienation and disengagement
6.4. Uncertainty

7. Conclusions and next steps
7.1. Implications for the application of the Truth Decay trends framework in Europe
7.2. Areas for further investigation

References

Annex A. Literature review search strategy
Annex B. Data tables
<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 2.1</td>
<td>Truth Decay framework based on the United States context</td>
<td>6</td>
</tr>
<tr>
<td>Figure 3.1</td>
<td>Difference between perceived and actual levels of migration in selected countries</td>
<td>13</td>
</tr>
<tr>
<td>Figure 3.2</td>
<td>Overestimation of the share of foreign-born population and the trend between 2013 and 2018</td>
<td>14</td>
</tr>
<tr>
<td>Figure 3.3</td>
<td>Vaccination rate, measles</td>
<td>18</td>
</tr>
<tr>
<td>Figure 3.4</td>
<td>Vaccination rate, diphtheria, tetanus, pertussis</td>
<td>19</td>
</tr>
<tr>
<td>Figure 3.5</td>
<td>Proportions of survey respondents considering climate change to be a ‘threat’ between 2007-08 and 2010 in different regions of the world</td>
<td>25</td>
</tr>
<tr>
<td>Figure 3.6</td>
<td>Trust in the EU, the national government and the national parliament – EU average</td>
<td>36</td>
</tr>
<tr>
<td>Figure 3.7</td>
<td>Levels of trust in public institutions in Germany, France, Italy, Switzerland and the United Kingdom</td>
<td>38</td>
</tr>
<tr>
<td>Figure 3.8</td>
<td>Trust in the media in European countries</td>
<td>41</td>
</tr>
<tr>
<td>Figure 3.9</td>
<td>Europeans’ trust in media (%) (2011–2018)</td>
<td>42</td>
</tr>
<tr>
<td>Figure 3.10</td>
<td>Media use in the EU – at least once a week (2010–2017)</td>
<td>43</td>
</tr>
<tr>
<td>Figure 4.1</td>
<td>The share of EU respondents who indicate these sources as their primary or secondary source of national news</td>
<td>56</td>
</tr>
<tr>
<td>Figure 4.2</td>
<td>Percentage daily Internet use in European countries, in 2009 and 2019</td>
<td>58</td>
</tr>
<tr>
<td>Figure 4.3</td>
<td>Proportion of social media users in eight European countries who use each platform most for news</td>
<td>60</td>
</tr>
<tr>
<td>Figure 4.4</td>
<td>Citizenship education provision in Europe (number of compulsory learning hours)</td>
<td>69</td>
</tr>
<tr>
<td>Figure 4.5</td>
<td>Self-positioning of voters from 1995 to 2019 (%)</td>
<td>79</td>
</tr>
</tbody>
</table>
Figure 4.6: A) European Parliament seats held by right-wing, centric and left-wing parties (1979–2019); B) National Parliament seats held by right-wing, centric and left-wing parties in EU countries (1980–2019)

Figure 4.7: The level of online news audience polarisation among news outlets in selected countries

Figure 6.1: Satisfaction about the way democracy works in the EU

Figure 6.2: Respondents ‘not at all satisfied’ with the way democracy works in the EU per country: November 2019

Figure 6.3: Voting behaviours in France

Figure 6.4: Mentions of economic policy uncertainty in major national newspapers in Belgium, France, Italy, Spain, Sweden and the United Kingdom, 2000–2020

Figure 6.5: Mentions of economic policy uncertainty in major national newspapers in the United Kingdom in 2016

Figure 6.6: How often have you worn a face mask outside your home to protect yourself or others from coronavirus (COVID-19)? As of 18 October 2020

Figure 7.1: Search results
Tables

Table 4.1: Differences between US and European media systems 53
Table 4.2: ‘Populist radical right parties’ (PRRPs) in Western Europe and party systems 84
Table 4.3: Polarisation of European election results in the EU-15, EU-13, non-EU European countries and non-European countries over the past four decades 85
Table 7.1: Summary of key insights 137
Table A.1: Search terms 179
Table A.2: Inclusion and exclusion criteria 180
Table B.1: Child vaccination rates – measles 183
Table B.2: Child vaccination rates – diphtheria, tetanus and pertussis 184
Table B.3: Levels of trust towards political parties in Europe 185
Table B.4: Trust in political institutions, Germany 185
Table B.5: Trust in political institutions, France 186
Table B.6: Trust in political institutions, Italy 186
Table B.7: Trust in political institutions, Switzerland 186
Table B.8: Trust in political institutions, United Kingdom 187
Table B.9: Trust in political institutions in Europe 187
Boxes

Box 3.1: Examples of distorted perceptions of social issues in the United Kingdom
Box 3.2: Specificities of vaccine hesitancy in the context of the H1N1 vaccine – the case of France
Box 3.3: Specificities of vaccine hesitancy in the context of the COVID-19 vaccine – the case of France
Box 3.4: Increasing vaccine hesitancy and anti-vaccine movements in France, Italy and the United Kingdom
Box 3.5: Declining trust in institutions and increasing disagreement about fact and data in the Netherlands: The RIVM and the farmers’ protests
Box 3.6: Trust in institutions in Norway
Box 3.7: Trust in the media in Romania
Box 4.1: Alternative business models for online journalism: De Correspondent
Box 4.2: COVID-19 disinformation in Romania
Box 4.3: Fighting disinformation at the level of the European Union
Box 4.4: Trust in media and media literacy – Norway
Box 4.5: Social Star
Box 4.6: The Toolbox Media Education
Box 4.7: An evaluation of media literacy intervention: ’Bad News’: The Fake News Game
Box 4.8: Increased polarisation in Switzerland
Box 4.9: Political polarisation in Poland
Box 5.1: Conflicts of interest between media and politics: Czechia
Box 5.2: Agents: Academia and scientific misconduct in the Netherlands
Box 5.3: Russian disinformation in Central and Eastern Europe
Box 6.1: Example of policy reversal in Poland
<table>
<thead>
<tr>
<th>Box 6.2</th>
<th>Shifting recommendations about mask wearing in Belgium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Box 7.1</td>
<td>Search strings</td>
</tr>
<tr>
<td>Box 7.2</td>
<td>Targeted search strings on trends</td>
</tr>
</tbody>
</table>
## Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARD</td>
<td>Arbeitsgemeinschaft der öffentlich-rechtlichen Rundfunkanstalten der Bundesrepublik Deutschland</td>
</tr>
<tr>
<td>BBC</td>
<td>British Broadcasting Corporation</td>
</tr>
<tr>
<td>CEE</td>
<td>Central and Eastern Europe</td>
</tr>
<tr>
<td>CNN</td>
<td>Cable News Network</td>
</tr>
<tr>
<td>COVID-19</td>
<td>Coronavirus disease 2019</td>
</tr>
<tr>
<td>CPB</td>
<td>Centraal Planbureau</td>
</tr>
<tr>
<td>DTP</td>
<td>Diphtheria, Tetanus and Pertussis</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>MMR</td>
<td>Measles, Mumps and Rubella</td>
</tr>
<tr>
<td>NATO</td>
<td>North Atlantic Treaty Organization</td>
</tr>
<tr>
<td>NOS</td>
<td>Nederlandse Omroep Stichting</td>
</tr>
<tr>
<td>NPO</td>
<td>Nederlandse Publieke Omroep</td>
</tr>
<tr>
<td>NPR</td>
<td>National Public Radio</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>PBS</td>
<td>Public Broadcasting Service</td>
</tr>
<tr>
<td>PiS</td>
<td>Prawo i Sprawiedliwość</td>
</tr>
<tr>
<td>PO</td>
<td>Platforma Obywatelska</td>
</tr>
<tr>
<td>PRRP</td>
<td>Populist Radical Right Party</td>
</tr>
<tr>
<td>SVT</td>
<td>Sveriges Television</td>
</tr>
<tr>
<td>TVP</td>
<td>Telewizja Polska</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
</tbody>
</table>
Acknowledgements

We are grateful to Michael D. Rich for trusting us with this research and thankful to Dr Jennifer Kavanagh and Hans Pung for their guidance, interest, reviews and feedback. We also thank Dr Chris Paul (RAND Corporation) and Dr Richard Youngs (Carnegie Europe) for their reviews and insightful comments, which undoubtedly improved the report.

Thanks go to those who contributed to the research, in particular Diana Dascalu, Silvia Galimberti, Emily Ryen Gloinson, Joanna Hofman, Victoria Jordan, Linda Kunertova, Tuure-Eerik Niemi and Jirka Taylor. Thanks to Lynne Saylor, Cat McShane, Jess Plumridge, Richard Gilbert and Kristin J. Leuschner for their editorial support. Thanks also go to Colin Ridgway-Cole for supporting the project.
Introduction

1.1. Why research Truth Decay in Europe?

Access to accurate and reliable information is essential to making sound decisions. Individuals must make decisions every day about health and wellbeing (what to eat?) or democratic participation (whether to vote and for whom?). Similarly, businesses make decisions about how best to ensure the future profitability and sustainability of their organisation. At the same time, access to data has never been as easy as it is now – for anyone, anywhere and at any time. Digital technologies have also radically changed the business model of information production and dissemination, creating the impression that everyone has free access to facts and the evidence that stems from their analysis.

Better access to facts and data should logically translate into sound, evidence-based decisions – both in the private and public spheres. More information, however, does not necessarily mean better or more reliable information.

Having access to more information can make it even more difficult for people to decide what, and what not, to believe – regardless of the underlying accuracy of the information. Equally, bad information can lead to bad decisions.

In recent years, there has been growing attention in Europe around issues such as ‘fake news’ and disinformation, particularly in light of the prevalence of Internet availability and the generalised use of social media. This culminated in ‘fake news’ becoming the Collins Dictionary word of the year in 2017. There has been increased attention to the spread of disinformation at the global level due to a number of prominent events. These range from the rise of vaccine-preventable diseases such as measles, which has been linked to the increased reach of the anti-vaccine movement (as something independent from the COVID-19 outbreak and the COVID-19 vaccination debate), to allegations of electoral interference, including the 2016 United Kingdom European Union membership referendum, the 2016 United Kingdom European Union membership referendum.
States presidential elections, and the 2017 French presidential elections. More recently, in the context of the COVID-19 pandemic, commentators have drawn a parallel between the rapid and broad spread of the virus and the spread of disinformation, a phenomenon now widely referred to as the ‘disinfodemic’.12

These trends have prompted concern among governments and international organisations. In March 2017, several regional and international organisations, including the United Nations (UN) and the Organization for Security and Co-operation in Europe, adopted a Joint Declaration on ‘Freedom of Expression and “Fake News”, Disinformation and Propaganda’, which highlighted the growing concern around the possible impact of disinformation and similar issues, including threats to the media.13 In April 2020, the UN launched a new Communications Response Initiative ‘to flood the Internet with facts and science’, while countering the growing scourge of misinformation.14 At the European Union (EU) level, the European Commission launched an Action Plan against Disinformation in 2018.15

Despite this increase in attention to disinformation and the challenges it brings, there has been a lack of empirical data around the extent to which the role of facts and analysis in public life is changing. While disinformation in itself is worrying, it is only a symptom of a much more problematic question, namely: what is the role in public life of facts, data and the evidence generated from their analysis? To examine this issue from the US perspective, Jennifer Kavanagh and Michael Rich of the RAND Corporation conducted a study, published in 2018, that examined the diminishing role of facts and analysis in American public life, a phenomenon they describe as ‘Truth Decay’.16 According to Kavanagh and Rich, Truth Decay in the United States not only describes the spread of disinformation, but is also characterised by disagreement about facts and objective data, the increasing relative volume of opinion compared to facts, and declining trust in institutions previously considered sources of objective information. The authors surveyed empirical evidence and developed a conceptual framework to explore Truth Decay in the United States as a system incorporating drivers, trends, and consequences.17 They concluded their study with a research agenda to help improve understanding of Truth Decay and find solutions to address it.

One of the research streams Kavanagh and Rich recommend is to examine the extent to which the Truth Decay framework applies to ‘international analogues’ in countries outside of the United States. This report takes up this charge, examining the extent to which there is evidence for the trends, drivers, agents and consequences of Truth Decay in Europe, and whether the conceptual framework would apply to Europe as well.

12 Devaux (2020); Posetti & Bontcheva (2020).
13 OAS et al. (2017).
14 UN (2020).
17 Huguet et al. (2019).
1.2. Scope and objectives

The objective of this research was to examine the trends, drivers and agents, and consequences of Truth Decay in the European context, using the Truth Decay framework developed by Kavanagh and Rich to structure the discussion. Our research was guided by four questions derived from the framework:

1. What is the empirical evidence for the trends, drivers, agents and consequences of Truth Decay in Europe? How does that compare with what was found for the United States?

2. To what extent does this evidence apply across Europe as a whole, or are there differences within Europe in the empirical evidence of trends, drivers, agents and consequences of Truth Decay?

3. What are the implications of applying the Truth Decay conceptual framework developed for the United States in Europe?

4. Which areas need to be further investigated in order to tackle Truth Decay in Europe?

Our responses to these questions are presented in Chapters 3, 4, 5 and 6 respectively, and summarised in Chapter 7.

In this report, we define the European context as the geographical limits of Europe, including all European countries (irrespective of whether they are part of the European Union), but excluding Russia and Turkey. As the aim of the research was not to undertake a historic analysis of Truth Decay in Europe, we focused on data sources from 2000 until 2020 that pertained to the trends, drivers, and consequences of Truth Decay across Europe as a whole as well as within individual European countries.

We note that this study focused on using the framework developed by Kavanagh and Rich as a lens through which to examine Truth Decay in Europe. We did not, however, look for additional trends and characteristics of Truth Decay besides those covered in the original study. Although we present evidence across Europe when available, and discuss individual countries as relevant, we did not attempt to make an extensive comparison between European countries.

1.3. Methodology

In order to answer these research questions, we conducted an in-depth literature review in English. The literature review protocol is provided in Annex A. In brief, the search strategy focused around the four trends identified in the 2018 Truth Decay report, which will be discussed in further detail together with other components of the Truth Decay framework in Chapter 2, namely:

1. Increased disagreement about facts and data
2. A blurring of the line between opinion and fact
3. The increasing relative volume and resulting influence of opinion over fact
4. Declining trust in institutions previously looked to as sources of factual information.

The starting hypothesis was that, for the most part, these trends would also likely be relevant in the European context. Once we collected a sufficient research base around

---

19 Russia and Turkey were excluded due to their geographic placement in both Asia and Europe. Further information on the inclusion and exclusion criteria is found in Annex A.
the trends, we looked for and undertook additional targeted searches for indicators across all four trends, to complement the data collected through the literature review. We then examined evidence for the drivers and consequences of Truth Decay.

Our research approach focused on finding evidence of Truth Decay across Europe as a whole, with a view to comparing the situation in Europe to the one in the United States. We did not focus on any specific European country. Rather, we took a pan-European approach and supplemented it with targeted country insights and examples. As such, the discussion around the trends and the drivers are not necessarily specific to one or several countries. A consequence of this pan-European approach is that statements about the extent to which the situation differs across European countries or clusters of countries are illustrative and do not allow conclusions on the extent of Truth Decay at the level of individual countries. To the extent that our review of literature and data points to differences in the way the Truth Decay framework applies in one country or another, we report on these. Our report, however, is not intended to constitute an in-depth analysis of individual countries.

1.4. Structure of this report

The remainder of this report consists of five chapters and one annex:

- Chapter 2 provides a contextual understanding of Truth Decay, describing in more detail how Truth Decay can be represented as a system of drivers, trends, consequences and feedback loops.
- Chapters 3, 4, 5 and 6, respectively, discuss the findings pertaining to trends, drivers, agents, and consequences of Truth Decay in the European context.
- Chapter 7 concludes the report and presents our recommendations for further research.

---

21 At a future stage of the project we may also undertake deep dives, which would be an in-depth review of a number of countries. Further detail will be added on this if the work goes ahead.
2 Truth Decay represented as a system

This report examines the extent to which the Truth Decay framework (trends, drivers and agents, and consequences), which was developed specifically for the United States context applies to Europe. This chapter presents the components of the Truth Decay framework developed by Kavanagh and Rich and discusses the context in which it was developed. The chapter provides a foundation for the examination of Truth Decay in the European context that follows in subsequent chapters.

The Truth Decay framework resulted from an effort to define the phenomenon and identify the drivers and consequences of this phenomenon. Kavanagh and Rich first identified four trends related to Truth Decay, and then identified the drivers, agents and consequences of that phenomenon. The drivers, trends, and consequences of Truth Decay do not operate separately from one another – rather, they influence and reinforce each other, as illustrated in Figure 2.1.

‘Trends’ refer to the factors that characterise Truth Decay. The trends often operate together – while each trend is important in its own right, it is closely interlinked with the others. ‘Drivers’ refer to potential causes of Truth Decay, creating the setting in which the trends occur and helping them ‘thrive’. Alongside drivers, ‘agents’ refer to institutions, groups or events that can ‘play an intentional or unintentional role’ in driving Truth Decay. Finally, ‘consequences’ refer to the threats posed by the Truth Decay phenomenon to democracy and society as a whole, both at the collective and at the individual levels.

Although these elements are presented separately, they work as a system, in that the elements both influence, and are influenced by, each other. The feedback mechanisms shown in the figure below illustrate the extent to which each element serves to intensify the challenges posed by Truth Decay.

2.1. The four trends of Truth Decay

Kavanagh and Rich identified four related trends that characterise Truth Decay in the United States:

- Increasing disagreement about facts and analytical interpretations of facts and data
- A blurring of the line between opinion and fact
- The increasing relative volume, and resulting influence of, opinion and personal experience over fact
- Declining trust in formerly respected sources of factual information.

---

Figure 2.1: Truth Decay framework based on the United States context

**DRIVERS**
- Cognitive processing and cognitive biases
- Changes in the information system
- Competing demands on the educational system
- Polarization

**AGENTS OF TRUTH DECAY**
- Transformation of conventional media
- Internet and social media
- Spread of disinformation
- Political polarization
- Sociodemographic and economic polarization
- Media
- Academia and research organizations
- Political actors and the government
- Foreign actors

**TRUTH DECAY’S FOUR TRENDS**
- Increasing disagreement about facts and data
- A blurring of the line between opinion and fact
- The increasing relative volume and resulting influence of opinion over fact
- Declining trust in formerly respected sources of factual information

**CONSEQUENCES**
- Erosion of civil discourse
- Political paralysis
- Alienation and disengagement
- Uncertainty

The first trend - increasing disagreement about facts and analytical interpretations of facts and data - refers to divergence on what constitutes objective, fact-based information and about the interpretation and understanding of this information. According to Kavanagh and Rich, the increasing disagreement about facts and their interpretations refers to a loss of consensus where interpretations are 'widely supported by data and evidence but disagreement nonetheless appears to be increasing.'

Areas in which there is an increasing amount of disagreement about facts and their interpretation include vaccine hesitancy in the United States, and concerns around the safety of eating genetically modified foods. Kavanagh and Rich also discuss how many Americans’ perceptions are out of touch with the scientific data, using the example of violent crime. Even though the rates of violent crime have been decreasing in the United States since 1993, ‘an increased number of people reported that they perceived more crime in the United States.’

They use this paradox as an example of how an ‘increased number of respondents question existing data on trends in crime even as data collection and documentation methods become more advanced.’

Regarding the second trend, Kavanagh and Rich warn that the blurring of the line between opinion and fact might contribute to individuals’ acceptance of opinions as facts, even when data and analysis suggest otherwise. To illustrate how easily one might confuse the two types of information, Kavanagh and Rich point to specific types of journalism, for example ‘news analysis’ that mixes opinion and fact, thus making it difficult for the reader to differentiate between the two. Other examples relating to this trend include ‘sponsored content’ that is not clearly labelled as such for the reader.

The third trend – an increasing relative volume and resulting influence of opinion and personal experience over fact – is closely tied to the second. Kavanagh and Rich point out that the shift to a 24-hour news cycle and increase in the length of news broadcasts in the United States has not led to an increase in fact-based reporting. Rather, they found that the additional time is now ‘filled with opinions and commentary.’ As with the second trend, the sheer volume of information available is overwhelming, with individuals unable to absorb this much information.

The fourth trend identified by Kavanagh and Rich relates to declining trust in formerly respected sources of factual information. They use public opinion data to show that there has been a decrease in trust in institutions such as the government and traditional media. For example, they cite Pew research showing that a decreasing share of United States citizens trust the government ‘to do what is right.’ Whereas, in 1964, the vast majority of United States respondents (77 per cent) were certain that the government would do what is right, in 2017 only ‘about 20 per
The second facet of the trend is the diminishing trust towards established media outlets. Drawing from data presented by Gallup, Kavanagh and Rich show that ‘aggregate trust in media was about half as strong in 2016 as in 1973.’ The second facet of the trend is the diminishing trust towards established media outlets. Drawing from data presented by Gallup, Kavanagh and Rich show that ‘aggregate trust in media was about half as strong in 2016 as in 1973.’ Kavanagh and Rich note that declining trust in these institutions also shapes the ways in which people perceive the information and resulting analysis produced from it, further eroding the role of facts and analysis in public life.

These four trends are closely tied to one another, and the occurrence of one trend is often linked to that of another trend. We will discuss this further in Chapter 3.

2.2. Drivers and agents of Truth Decay

In the United States context, drivers refer to ‘circumstances and changes that appear to contribute to Truth Decay in contemporary society.’ The framework developed for the US context differentiates between two types of drivers: the first are ‘unintentional’, in that they occur circumstantially; the second are more purposeful, accelerating the trends that make up Truth Decay, and in that sense are better described as being ‘agents’. As such, the framework identifies four drivers, in addition to the agents of Truth Decay:

- Cognitive processing and cognitive biases
- Changes in the information system
- Competing demands on the educational system
- Polarisation.

The first driver – cognitive processing and cognitive biases – pertains to how people process information, form opinions and make decisions. For example, human beings tend to seek out information that proves them to be right and privilege information that confirms their expectations. Kavanagh and Rich argue that this driver alone cannot explain Truth Decay because it is not new; however, cognitive processing and cognitive biases contribute to Truth Decay by magnifying and exacerbating the effects caused by the other drivers. As a result, people may be highly susceptible to targeted disinformation, which is ever more available online and on social media, and very resistant to changing their minds if proven wrong. In this way, cognitive bias magnifies trends and changes in the current media environment.

The second driver relates to how the information system has changed due to the availability of news through the Internet and social media and the economic incentives that drive the decision making of media organisations. Kavanagh and Rich discuss how the 24-hour news cycle has become more established, increasing the need for filler content, including commentary and opinions. Related to this is the media companies’ focus on increasing profits, with some turning mainly to sensationalised stories to draw an audience. Kavanagh and Rich also point to the increase in openly partisan news sources, as well as to changes in news consumption, with a move away from newspaper consumption towards cable television. They also note increased use of the Internet and social media platforms to

---

access and read news, as well as the filters and algorithms used by social media platforms and search engines that can bias the types of information sought.

The third driver described by Kavanagh and Rich is the extent to which competing demands on the US education system prevent it from sufficiently equipping students with appropriate critical thinking and media literacy skills, thus leaving them susceptible to Truth Decay.

The fourth driver, polarisation, refers to divides within society that create two or more insular groups with opposing views and little space for compromise between them. The Truth Decay framework includes both political and socio-demographic polarisation. Kavanagh and Rich argue that polarisation is a driver of Truth Decay, and that it is also reinforced by other drivers (e.g. cognitive bias) and, reflexively, exacerbated by Truth Decay as part of a vicious cycle where increased polarisation continues to feed itself, affecting trust in public institutions.

Finally, there are agents of Truth Decay, which refer to the institutions, groups or events that use and propagate Truth Decay, or one of the four trends of Truth Decay, for their own gain. Agents include the media, research organisations (including academia), political actors and foreign actors, who can exploit the natural drivers and increase the speed at which Truth Decay occurs. For example, media organisations may choose certain types of programming or stories to attract certain partisan audiences and increase their own economic benefits. Kavanagh and Rich also describe how politicians or government officials can be incentivised through increased polarisation to blur the line between opinion and fact in order to advance specific interests.

2.3. The consequences of Truth Decay

Both the trends and the drivers combine and result in a set of economic, political and diplomatic consequences. We have already discussed how Truth Decay trends, drivers and agents can activate and mutually reinforce each other (e.g. cognitive bias, when combined with changes in the information system, can contribute to polarisation). According to Kavanagh and Rich, the ultimate consequence of Truth Decay is the threat it poses to democracy and democratic processes: as Truth Decay leads to an erosion of civil discourse and lack of meaningful discourse, good policy solutions become difficult to achieve, or proposed solutions are not based on facts, thereby making it difficult to have meaningful debates and arrive at fact-based policy solutions that address the key issues at hand. Kavanagh and Rich explored the following, four overarching consequences of Truth Decay, which, while not providing an exhaustive list, were identified in the US context and apply to Europe:

• Erosion of civil discourse – the quality of the discourse about policy issues and topics related to public wellbeing, which Kavanagh and Rich argue should be informed and honest, open-minded and constructive. It also includes the ability to have meaningful discussions across party lines.

---

• **Political paralysis** – illustrated by the political stalemate situation in the United States political system referred to by Kavanagh and Rich.39

• **Alienation and disengagement** – defined in Truth Decay as detachment from, rejection of and disaffection from major institutions, processes and social norms.

• **Uncertainty** – in particular, policy uncertainty at the national and international levels, which can be closely linked to political paralysis and exacerbated by polarisation.

### 2.4. Summary

The framework developed by Kavanagh and Rich depicts the trends of Truth Decay in the United States context, the drivers of those trends, the agents who facilitate them and Truth Decay’s implications at the personal, community, national and international levels. In addition to presenting the different components of Truth Decay, the framework shows how these different components influence and reinforce each other, with consequences of Truth Decay (e.g. uncertainty) themselves interacting with drivers (e.g. cognitive processing and cognitive biases and changes in the information system) and all contributing to a decline in trust in formerly respected sources of factual information.

The following chapters explore the extent to which and the ways in which the framework applies to the European context. Note that, while Kavanagh and Rich built their framework from the ground up based on an analysis of the phenomenon of Truth Decay and its components in the US context, we are not seeking in this report to build a parallel Truth Decay framework for the European context. Instead, we are examining how well the various parts of the existing US framework ‘fit’ to the European context. Our analysis of each component is presented in the following chapters: Chapter 3 (Trends), Chapter 4 (Drivers), Chapter 5 (Agents) and Chapter 6 (Consequences).

This chapter provides an overview of Truth Decay trends in the European context. We started from the four trends identified and analysed in the United States and explored whether, and to what extent, they are occurring in Europe. These trends are as follows:

- Increasing disagreement about facts and analytical interpretations of facts and data
- A blurring of the line between opinion and fact
- The increasing relative volume, and resulting influence of, opinion and personal experience over fact
- Declining trust in formerly respected sources of factual information.

This analysis will help illustrate how the phenomenon of Truth Decay compares in the United States and European contexts. We remind readers that the scope of this work did not include identification of additional trends, besides the four listed above, for the European context.

### 3.1. Increasing disagreement about facts and data in Europe?

An increase in disagreement about facts and data contributes to the wider fragmentation of the public sphere, overall. This is because information that has formed the basis of policy intervention is no longer universally accepted and becomes the subject of public contention.

A useful example for considering the extent to which there are disagreements about facts and data is the discrepancy between public perceptions on key issues and official statistics or verifiable facts. These are illustrated through several examples in the United Kingdom in Box 3.1.
Box 3.1: Examples of distorted perceptions of social issues in the United Kingdom

Hopkin and Rosamund show that public perceptions of benefit fraud in the United Kingdom are exaggerated. Their research demonstrates that, overall, people believe that £24 per £100 is claimed fraudulently as part of welfare benefits, when official estimates place the number at £0.70 per £100. This misperception may be fostered by claims from United Kingdom politicians on the matter, which serve to build up a ‘myth’ around unemployment and benefit fraud. Other examples in the United Kingdom where public perceptions do not match official data include teenage pregnancy (people believe that 15 per cent of girls under 16 get pregnant every year, whereas the actual number is 0.6 per cent), crime (51 per cent of respondents believe that violent crime is rising whereas it has fallen by 500,000 incidents from 2006/2007 to 2012), and religion (for example, respondents stated that 24 per cent of the population in England and Wales are Muslim, when the official figure stands at five per cent).

In this section we consider whether disagreement about facts and data is increasing in Europe using examples that have historically been instrumentalised in political campaigns: the misperception of data on migration flows, vaccine hesitancy and climate change. We then examine the extent to which the increasing disagreement about facts and data observed in the US context can also be observed in Europe, and what the empirical evidence tells us.

The literature we reviewed highlighted several issues that relate to disagreement about facts and data and its implications. To summarise our findings on this topic, while there certainly are disagreements about facts and data and areas where misperceptions lead to conflicting beliefs, there is limited evidence that these disagreements are worsening.

3.1.1. Misperceptions of immigration

Misperception related to immigration, including estimates of the percentage of the population who are foreign-born, has been an area of particular interest among social researchers. The results of a 2014 Ipsos MORI study on perceptions and reality indicate that people from all European countries included in the survey overestimate the number of migrants living in their country. Slovakia (nine per cent versus four per cent) and Sweden (18 per cent versus 15 per cent) were the only countries where the difference between estimated and actual foreign-born population was less than five percentage points. The European country with the widest discrepancy in this sample was Portugal, where respondents overestimated the share of the immigrant population by an average of 28 percentage points. This, however, was still lower than the average overestimation of the foreign-born population among

---

41 Nadeau et al. (1993); Semyonov et al. (2004); Sides & Citrin (2007a; 2007b); Sigelman & Niemi (2001).
respondents in the United States, where it was 29 percentage points (see Figure 3.2).\textsuperscript{43}

In a working paper looking at six countries, Harvard researchers Alesina et al. draw similar conclusions.\textsuperscript{44} They found overestimates of the foreign-born population among American respondents (13 per cent versus 36 per cent), followed by respondents in the United Kingdom (13 per cent versus 32 per cent), Italy (10 per cent versus 27 per cent), France (12 per cent versus 29 per cent), Germany (15 per cent versus 30 per cent) and Sweden (13 per cent versus 27 per cent). Alesina et al. also disaggregated the results by socio-demographic characteristics, and found the largest misperceptions among the least educated, workers in low-skill occupations that employ large numbers of immigrants, and those who hold political views at the right of the political spectrum.\textsuperscript{45} These subgroups also tend to underestimate immigrants’ education and overestimate both their poverty rate and their dependence on welfare.

A follow-up study showed that Europeans and Americans continued to overestimate the number of migrants living in their country.\textsuperscript{46} The extent, however, of overestimation appears to have changed between 2013 and 2018. In the countries with the largest gap between actual and estimated migration in 2013 (the United Kingdom and the United States), the gap had narrowed by 2018. The opposite trend

\textsuperscript{43} The report notes that the figures for Portugal and the United States are something of an anomaly in this particular study: in previous surveys the mean estimate in Portugal was 21 per cent and in the United States it was similar to the United Kingdom. See Sides & Citrin (2007a; 2007b).

\textsuperscript{44} Alesina et al. (2018).

\textsuperscript{45} Alesina et al. (2018).

\textsuperscript{46} Skinner (2018).
happened in the countries that showed the smallest discrepancy in 2013 (such as Spain and Germany), which exhibited wider gaps in 2018. Figure 3.2 shows these trends. Notably, at least in this snapshot, those countries experiencing an increase in misperceptions (e.g. Spain and Germany) or no change in misperceptions are on the European continent, while these misperceptions seem to have decreased in the United States and the United Kingdom. This may be some evidence of convergence between Europe and the United States in misperceiving migration and of an increasing misperception in the European context, though the extent of that increase varies across countries.

While other factors should be accounted for, multiple authors identify the lack of correct information as central to these misperceptions of migration. Increasing exposure to print media coverage about migration could reduce these misperceptions. For example, Herda finds that newspaper exposure results in a more accurate perception of immigrant

---

47 Flynn et al. (2017); Hopkin & Rosamond (2018); Sides & Citrin (2007a; 2007b); Ylä-Anttila (2018).
population size.\textsuperscript{48} Television viewing, on the other hand, does not necessarily reduce misperceptions of migration. Based on data from the European Social Survey (ESS), Herda finds that television news exposure results in an overestimation of the number of immigrants among the public.\textsuperscript{49} Similarly, analysing the 2002–2003 wave of the ESS and an American replication, Aalberg and Strabac find that television viewing in general is associated with lower levels of knowledge of migration, and citizens who watch a large amount of television news do not necessarily learn much more about immigration.\textsuperscript{50}

### 3.1.2. Vaccine hesitancy in Europe

Vaccine hesitancy is another good illustration of disagreement about facts and data. Vaccination is widely recognised as the most effective and efficient public health measure and tool to prevent contagious diseases.

Yet, vaccine hesitancy is a reality in Europe, and the COVID-19 pandemic showed how the debate about vaccines can be heated, in particular when it concerns relatively new areas (a new disease, new vaccine techniques, limited knowledge about long-term effects of the vaccine). Some studies highlight that levels of hesitancy are different in relation to vaccines that have been part of the national immunisation programmes for longer periods of time. Newer vaccines, such as the ones against the flu, the H1N1 influenza, or papillomaviruses, tend to be significantly less trusted than vaccines against measles, for example\textsuperscript{51} – a vaccine that has been in use for over 60 years, and that the World Health Organisation (WHO) considers as ‘safe, effective and inexpensive’.\textsuperscript{52,53}

In this section we explore the extent to which the COVID-19 pandemic generated evidence of increasing vaccine hesitancy in Europe. We also explore whether there is evidence that the resurgence of vaccine-preventable diseases in Europe is a consequence of increasing vaccine hesitancy in Europe.

**Vaccine hesitancy in the context of the COVID-19 pandemic**

Expressions of hesitancy about the COVID-19 vaccines led to claims that vaccine hesitancy is increasing worldwide. While there is evidence about vaccine hesitancy in the context of COVID-19, as illustrated in Box 3.3 below, the evidence that vaccine hesitancy is increasing in this context is scarce.

One issue that we encountered in using the COVID-19 vaccination campaigns as a source of information about vaccine hesitancy increasing in Europe is that this vaccination campaign cannot easily be compared to any others. Comparing vaccine hesitancy in the context of COVID-19 with vaccine hesitancy about other vaccines, with the view to understand whether vaccine hesitancy increased over time, would be misleading. This is because the COVID-19 pandemic was the first of its kind. Unlike other vaccines for which data about usefulness, effectiveness and safety of the vaccine has been known for many years, the COVID-19 vaccines have been perceived by many as a rapid (yet necessary) response to a new and unknown threat.

\begin{itemize}
    \item \textsuperscript{48} Herda (2010).
    \item \textsuperscript{49} Herda (2010).
    \item \textsuperscript{50} Aalberg & Strabac (2010).
    \item \textsuperscript{51} Collange et al. (2016); Larson & Schulz (2015, 27-28).
    \item \textsuperscript{52} WHO (2019) estimates that it costs one US$ to immunise a child against measles.
    \item \textsuperscript{53} See WHO (2019).
\end{itemize}
Even those who accepted to be vaccinated acknowledge that little is known about the long-term effects of the vaccine.

One possible comparator with COVID-19 vaccine hesitancy is hesitancy about the H1N1 vaccine in 2009. Specificities of the vaccine hesitancy in the context of H1N1 are illustrated in Box 3.2 below.

**Box 3.2: Specificities of vaccine hesitancy in the context of the H1N1 vaccine – the case of France**

In 2010, a study explored the level and distribution of vaccination acceptance against the 2009 H1N1 influenza virus during the peak of the epidemic in France.54 At the end of the vaccination campaign in January 2010, ten per cent of the population was vaccinated while the target was 80 per cent. The study explored determinants for vaccine acceptance. The patterns of self-reported reasons for vaccine acceptance could be broadly divided into three groups related to: (1) the mental representation of the threat, particularly in relation to their beliefs associated with the severity and their personal vulnerability to the illness; (2) the perception of efficacy and safety of the vaccine; and (3) trust/distrust toward those advocating the vaccine.

Interestingly, it found that social and cognitive determinants of vaccine acceptance among French adults were relatively similar to those identified by previous studies for acceptance of seasonal influenza vaccine.

**Box 3.3: Specificities of vaccine hesitancy in the context of the COVID-19 vaccine – the case of France**

At the beginning of the COVID-19 pandemic, a survey of French adults conducted in the early days of the lockdown in France (end of March 2020) already suggested that over a quarter of respondents would refuse a vaccine against COVID-19 if available.55 More recently, reports of COVID vaccination centres vandalised in France reinforced this image.56 In terms of vaccine uptake, however, after a slow start France had caught up with its plan and, by the end of September 2021, had fully vaccinated (two shots) two thirds of their population and started delivering vaccine boosters.57

To better understand the reality and determinants of vaccine hesitancy, one study has explored different aspects of COVID-19 vaccine hesitancy in France, distinguishing vaccine hesitancy (i.e. acceptance depending on vaccine characteristics) from outright vaccine refusal (i.e. serial refusal of vaccines regardless of vaccine characteristics), and specifying which vaccine characteristics respondents were hesitant about (e.g. efficacy, risk of serious side effects, location of manufacture, and place of administration).58 This study found that COVID-19 vaccine acceptance depends on the characteristics of the new vaccines proposed and on how the priority of the national vaccination strategy is presented, with a higher acceptance for vaccines manufactured in the EU, with a low risk of serious side effects and high efficacy.59

---

54 Raude et al. (2010).
55 Peretti-Watel et al. (2020).
56 As reported, for instance, by the BBC (2021).
57 As reported in the New York Times, Zimmer et al. (2021).
58 Schwarzinger et al. (2021).
59 Schwarzinger et al. (2021).
hesitancy was lower when herd immunity benefits were communicated and in working versus non-working individuals, and among those with experience of COVID-19 (had symptoms or knew someone with COVID-19).

While disentangling vaccine hesitancy from outright vaccine refusal was not new, this same study unveiled interesting findings about what distinguished the two.\(^6\) It also shed light on a new dimension of vaccine hesitancy: the type of vaccine, its location of manufacture and the vaccination technique used, which is a novelty of COVID-19 vaccine hesitancy. This does not necessarily mean a change in vaccine hesitancy, since these determinants of vaccine hesitancy had not been explored to this extent in previous studies. This study, however, informs about what triggers vaccine hesitancy and what could facilitate an effective vaccination campaign in the context of COVID-19.

COVID-19 and H1N1 vaccine hesitancy provide illustrations about the state of vaccine hesitancy in a country or in Europe, but do not provide useful evidence about the increase of vaccine hesitancy and an increasing disagreement about facts and data in Europe.

Vaccine hesitancy and the resurgence of vaccine-preventable diseases in Europe – vaccination rates and public perception about vaccines

Vaccine hesitancy is not new in Europe. The resurgence of vaccine-preventable diseases in Europe and changes in overall levels of vaccine confidence observed in Europe suggest an increase in disagreements about facts and data around vaccines in Europe. We examined this issue using both data about vaccination rates as well as survey data on people's perceptions of vaccines. We recognise that using vaccination coverage as a proxy for vaccine hesitancy can be problematic, as the rates of coverage may be affected by delays and supply chain issues or mandates requiring individuals to be vaccinated that are independent of people's attitudes towards immunisation.\(^6\) Nevertheless, we felt that these data would contribute to the overall picture of vaccine hesitancy in Europe by indicating whether or not people are actually getting immunised, regardless of their expressed opinions on the value of vaccines.

The Organisation for Economic Co-operation and Development (OECD) has observed that ‘vaccine-preventable diseases have resurged in some parts of Europe in recent years.’\(^6\) Outbreaks of measles\(^6\) have been reported in Romania, Italy and Greece.\(^4\) The number of measles cases reported in Europe in 2018 was three times greater than in the previous year.\(^5\) Similarly, the BBC reported that ‘there has been a sharp increase in cases of mumps’ in England.
in 2019. The European Commission attributes this phenomenon to vaccine hesitancy. In 2018, a report prepared as part of the Vaccine Confidence Project asserted that in different parts of Europe, ‘vaccine delays and refusals are contributing to declining immunisation rates in a number of countries and are leading to increases in disease outbreaks.’

Multiple studies have concentrated on issues relating to vaccination coverage in Europe. Contrary to the assumption that vaccination coverage would be dramatically declining, research shows that vaccination levels for measles (Figure 3.3) were greater in 2018 than in 2008 in twelve European countries – in most cases by one to three percentage points, with a higher increase in the United Kingdom, Denmark and Austria (six, seven and eleven percentage points respectively). For ten countries, the vaccination rate remained the same or decreased by three percentage points at most. The vaccination coverage declined by five percentage points or more in only a handful of countries: Lithuania and Poland (both decreased by five percentage points) and Estonia, where the vaccination rate decreased by eight percentage points down to 87 per cent.

---

66 Roxby (2019).

67 The Vaccine Confidence Project is an academic research group based at the London School of Hygiene and Tropical Medicine. See Vaccine Confidence Project (2021a).

68 Larson et al. (2018, 6).

69 Kennedy (2019); Larson et al. (2011); Poland & Spier (2010); Roozenbeek & Van Der Linden (2019).

70 Austria, Belgium, Denmark, France, Germany, Ireland, Italy, Latvia, Luxembourg, Norway, Portugal, Sweden and the United Kingdom.

71 Czechia (formerly Czech Republic), Finland, Greece, Hungary, Iceland, Netherlands, Slovakia, Slovenia, Spain and Turkey.
in 2018, which was the lowest vaccination rate for measles in Europe in 2018.

The vaccination rate for diphtheria, tetanus and pertussis (DTP) (Figure 3.4) decreased in 16 European countries (the highest decrease being Finland from 99 per cent in 2008 to 91 per cent in 2018) but remains above 90 per cent in all but one country. In Austria, while the vaccination rate has increased between 2008 and 2018 (two percentage points), it culminated at 98 per cent in 2014 and dropped afterwards. Finland also presents an interesting evolution, with a constant fall from 2008 until 2017 (from 99 per cent down to 89 per cent) and a slight increase afterwards.

The vaccination rate is an imperfect proxy because it does not provide information into why children are not vaccinated and what pushes parents to decide not to vaccinate. In the absence of large-scale studies that concentrate on the development of public attitudes towards vaccination, the evidence on the extent to which vaccine hesitancy has increased remains inconclusive.

There have been some initiatives, such as the Vaccine Confidence Project, that conduct periodical examinations of people’s opinions towards vaccines, surveying perceptions of vaccine importance for children, safety, effectiveness, and religious compatibility among over 65,000 individuals across 67 countries (including 22 European countries). Their 2016 survey found that ‘vaccine-safety related sentiment is particularly negative in the European region.’ Respondents from France and Italy were the most sceptical towards vaccines in Europe, as a significant minority of Italians did not consider vaccinations ‘important for children to have’ (15.4 per cent) or ‘effective’ (18.7 per cent), and a large percentage of French respondents thought they were ‘unsafe’ (45.2 per cent). Box 3.4 provides a more in-depth view around this trend in France, Italy and the United Kingdom.

---

72 The Vaccine Confidence Project is presented at Vaccine Confidence Project (2021b).
73 Larson et al. (2016, 259).
74 Larson et al. (2016, 297).
Box 3.4: Increasing vaccine hesitancy and anti-vaccine movements in France, Italy and the United Kingdom

France's child vaccination rate for measles has traditionally been low compared to other European countries. Since 2010, only four countries had a lower vaccination rate than France (Austria, Estonia, Iceland and Italy). In 2018, all European countries except Estonia (87 per cent) and France (90 per cent) had measles vaccination rates over 90 per cent.

The anti-vaccine trend in France has been attributed, by the medical community and the media, to the now retracted 1998 Wakefield article, which associated measles with autism. This paper is believed to have inspired anti-vaccine movements worldwide, including in France and Italy.

In France, social epidemiologist Jocelyn Raude identifies three streams in the anti-vaccine movement: (1) those who suffer from health conditions that are falsely attributed to vaccines and believe that the vaccines caused their condition, despite the absence of evidence; (2) those who promote alternative medicine and who believe that natural immunisation is a better option than vaccination in terms of risks and benefits; and (3) political movements – mainly extreme right and extreme ecological movements. In addition, this sensationalist discourse generates a lot of traffic online. The most popular disinformation site in France is a health media outlet, with an estimated reach of over three per cent of the French population (around 1.5 million people).

A survey of French adults conducted in the early days of the lockdown in France (end of March 2020) suggests that a quarter of respondents would refuse a vaccine against COVID-19 if available.

In Italy, in March 2012, the Court of Rimini granted compensation to a family after a court affirmed that the measles, mumps and rubella (MMR) vaccine caused their child’s autism. It was the first time that an official body formally recognised a causal link between the MMR vaccine and autism. The decision was initially covered by the most read national newspapers (e.g. La Repubblica and Il Corriere della Sera) and people’s concerns about the side effects of the vaccine subsequently proliferated on the Internet. Disinformation about vaccines, now supported by a judge, went viral. This event has been indicated as a probable trigger event leading to a reduction of vaccine confidence in Italy.

During the period 2010–2015, MMR vaccination coverage in Italy decreased by 5.4 per cent, from 90.6 to 85.2 per cent. Vaccination coverage decreased only 0.6 percentage points between 2010 and 2012, while the significant decreasing trend started in 2013, when the greatest decrease of national coverage data (−1.7 percentage points) was registered and the decrease continued in 2014 and 2015.

---

75 Measured based on the average per year in each country.
76 OECD Healthcare Database. See OECD (2021).
77 Wakefield et al. (1998).
78 Le Figaro (2020).
79 As reported in Les Echos (2016) or Le Figaro, see Sugy (2018).
80 Santé+ Magazine is reported to be the most influential disinformation site by the fact-check service from Le Monde’s ‘Les Decodeurs’. See Le Monde (2020).
81 Peretti-Watel et al. (2020).
82 Carrieri et al. (2019).
In 2017 a decree of the Gentiloni government reintroduced mandatory vaccinations for school enrolments for children up to six years old and, in addition to the standard vaccinations (DTP and hepatitis B), the decree made compulsory vaccination for measles, mumps and rubella (MMR), haemophilus B, chickenpox and meningococcus B and C. Several doctors (including Roberto Gava, Dario Miedico and Gabriella Lesmo) were expelled from the medical professional board due to their critical positions on the use of vaccines. On 13 July 2018, in Italy, the first sentence was issued against an activist of the No vax movement for disinformation – about news arguing that 21,658 children have been harmed by vaccines in 2014–2016.

According to Pearce et al., 92 per cent of children living in the United Kingdom were immunised with the MMR vaccine in 1992. In 2003, the immunisation level had decreased to 79 per cent, only to slightly recover to 85 per cent in 2007. Vaccinations finally recovered to the pre-1998 levels in 2012. Nevertheless, there is perhaps no clear causality between increased safety concerns and vaccination uptake, as the 2019 Special Eurobarometer on Europeans’ attitudes towards vaccination found that only three per cent of the British respondents had not taken a vaccine for that reason.

The Vaccine Confidence Project’s 2018 survey showed that a large majority of respondents (90 per cent) felt that vaccines were important for children to have, safe (82.6 per cent), and/or effective (87.6 per cent). Results per country, for those countries covered by the 2015 and the 2018 surveys, show an overall increase in vaccine confidence, including in France and Italy. Vaccine confidence decreased only in Poland, Czechia (formerly Czech Republic), Finland and Sweden. The survey authors also discussed some socio-economic variables that may influence an individual’s attitude towards vaccines. In general, younger respondents and people with low levels of education are ‘less likely than older groups to have positive vaccination views. Further, Eastern Orthodox and Muslim respondents were less likely to consider that vaccines are important, effective or safe.

The following year, a public opinion survey in the EU from the series ‘Eurobarometer’ examined public attitudes towards vaccines. Their findings are concordant with those of the Vaccine Confidence Project. Nine per cent of the respondents thought that ‘vaccines are not safe and they can have side effects.’ There were some significant regional differences: while only three per cent of respondents from Denmark and the United Kingdom questioned

---

83 Pearce et al. (2008, 1).
84 Pearce et al. (2008, 1).
91 Eurobarometer measures public opinion in the European Union (face to face or phone interviews) on recurring topics (time series since 1974) and special topics (e.g. vaccines, disinformation). See European Commission (2021b).
the safety of vaccines, 22 per cent of French and 15 per cent of Belgian and Latvian respondents did.\textsuperscript{93} Similarly to the Vaccine Confidence Project, the Eurobarometer found that respondents that tended to have a higher degree of education thought that vaccines are effective. Using education leaving age as a proxy of education level, 59 per cent of the respondents who ended their studies at the age of 20 or older were certain that vaccines are effective. This was 11 percentage points higher than with respondents who finished their schooling at the ages of 16 to 19.\textsuperscript{94} The data, however, also suggest that attitudes towards vaccines are complex. For example, in Denmark, 72.7 per cent of the respondents believe that the vaccine against seasonal influenza is ‘safe’, but only 42.6 per cent consider it important.\textsuperscript{95} Further, attitudes towards the seasonal influenza vaccine do not seem to be shaped by similar socio-economic determinants as confidence in other vaccines. The 2018 Vaccine Confidence Project survey found that the youngest respondents (18 to 24 years old) and the oldest respondents (aged 65 or higher) had ‘similar levels of agreement towards seasonal influenza vaccine.’\textsuperscript{96} They did not find a correlation between education level and ‘the likelihood of agreeing that the seasonal influenza vaccine is important.’\textsuperscript{97}

While we identified evidence of several cases of vaccine hesitancy in Europe, we have not identified surveys similar to the Vaccine Confidence Project or the Special Eurobarometer which would allow us to explore how public attitudes have changed over time. As a consequence, it remains unclear if vaccine hesitancy has been increasing in a consistent pattern in Europe with the trends characterising Truth Decay in the United States.

As, however, already suggested by results from individual countries, the trend may be manifesting itself in dissimilar ways in different European countries. We identified some literature that discussed the development of vaccine hesitancy in select European countries, especially Italy, France and the United Kingdom.\textsuperscript{98}

There is limited evidence that disagreement about the safety of vaccines is clearly increasing or decreasing. In the light of this evidence, we find that while there is evidence of several occurrences of increased vaccine hesitancy in Europe, this evidence remains scarce and inconclusive on the extent to which increase in vaccine hesitancy is a widespread and consistent trend in Europe.

3.1.3. Climate change

Research on the role of facts and analysis in policymaking and public discourse also highlights trends relating to public attitudes on, and assumptions towards, climate change. During the past few decades, the body of evidence on the extent to which the climate is changing, as well as on the effect that human activity has on it, has gradually accumulated. Already in 2004, Oreskes argued that ‘without

\begin{itemize}
\item \textsuperscript{93} Data.Europa (2019c).
\item \textsuperscript{94} Data.Europa (2019a).
\item \textsuperscript{95} Data.Europa (2018a, 42).
\item \textsuperscript{96} Data.Europa (2018a, 43).
\item \textsuperscript{97} Data.Europa (2018a, 25).
\item \textsuperscript{98} Brown (2012); Collange et al. (2016); Pearce et al. (2008, 1).
\end{itemize}
substantial disagreement, scientists find human activities heating the Earth's surface.99 Similarly, Lorenzoni and Pidgeon argue that ‘there is almost global consensus among the scientific community that there exists a causal relationship between human activities and climate change.’100 In August 2021, the United Nations body for assessing the science related to climate change Intergovernmental Panel on Climate Change (IPCC) published a report that concludes that climate change happens faster than what experts previously forecast and that natural disasters should multiply even if global warming slowed down.101

Our hypothesis is that an increase in public opinion contesting the occurrence of climate change could be linked to an increase in the disagreement about facts and data. Further, we could argue that, given the growing body of evidence about climate change, levels of concern about climate change should have increased too (despite disinformation from climate-science deniers). The literature we reviewed shows that Europeans’ concerns about climate have changed over time. They seem increasingly concerned with climate change in the last ten years, which is in line with the growth of the body of evidence about climate change. This suggests that climate change does not illustrate a trend towards increasing disagreement about data and facts in Europe.

Capstick et al. conducted a systematic review of studies investigating international trends in public perceptions of climate change.102 They identified a large body of studies and surveys on climate change perceptions (33 publications examining public perceptions of climate change). Overall, they found that a trend of polarisation of public views on climate change gathered pace in the United States in the late 2000s. They also observed wide regional and global variations in public opinion trends: ‘both with respect to the perceived risk arising from climate change, and the recognition of an anthropogenic component.’103 They identified four indicative time periods, namely: (1) the 1980s and early 1990s, showing increases in knowledge and awareness; (2) the mid-1990s to the mid-2000s, a period marked by growing public concern but also variability in opinion; (3) the mid- to late-2000s, showing declining public concern and increasing scepticism in some nations (including Western Europe), with polarisation of viewpoints within and between nations; and (4) the 2010s, which suggest possible stabilisation of public concern about climate change.

Five Eurobarometer surveys focused on public attitudes on climate change in Europe, over the fourth indicative time period identified by Capstick et al. (2011 until 2019).104 Respondents were asked how ‘serious’ a problem they consider climate change to be. The share of respondents who consider climate change as a ‘very serious problem’ has increased over time, from 68 per cent in 2011 to 79 per cent in 2019.105 In most countries, concern over climate change has increased

---

100 Lorenzoni & Pidgeon (2006, 73).
101 Masson-Delmotte et al. (2021).
102 Capstick et al. (2015).
103 Capstick et al. (2015).
substantively from the level recorded in a Eurobarometer survey conducted in 2011. In 2019, 75 per cent of respondents from the United Kingdom (an increase of 26 percentage points), 83 per cent of the respondents from Denmark (an increase of 24 percentage points) and 76 per cent of respondents from Finland (an increase of 22 percentage points) thought that climate change was a ‘very serious problem’.

Further, the vast majority of Europeans agree with the claim that climate change is caused by human activity. A 2018 Special Eurobarometer explored public opinion about the causes of climate change and found that 93 per cent of Europeans thought that ‘climate change is due to human activity’. None of the previous Eurobarometer surveys studied the extent to which respondents agreed with the statement. Although not comparable due to different sampling methodologies, the 2016 European Social Survey found that only 41 per cent of the respondents thought that climate change was caused ‘mainly’ or ‘entirely’ by human activity. The modal response, at 43.1 per cent, was belief that climate change is caused ‘about equally by natural processes and human activity’. Only 0.8 per cent of the respondents believed that climate change is not taking place. Due, however, to the lack of data on the longitudinal development of people’s beliefs towards the causes of climate, it remains unclear if this would constitute an increase or decrease in the level of public agreement with facts and data.

We also found evidence of what public opinion about climate change looked like in the third period of time identified by Capstick et al. (the mid to late 2000s). Other survey findings from the mid-2000s pointed to an increase in public doubts about the basic reality of climate change. Whereas only four per cent of people in 2005 were of the view that the world’s climate is not changing, this had risen to more than one in seven people (15 per cent) by 2010, with the perceived risk from climate change also decreasing over this time period. Ratter et al. observe a similar trend in Germany between 2008 and 2011, in several measures of public perception of risk from climate change in Hamburg, Germany. For instance, the authors find that the proportion of respondents considering climate change to be a ‘serious threat’ in this period had decreased from 17 per cent to nine per cent.

A public opinion poll by Gallup, for instance, showed how these trends vary across 111 countries in the late 2000s. The results showed a sharp decline between 2007/2008 and 2010 in the proportion of respondents viewing climate change as either a ‘somewhat serious’ or ‘very serious’ threat (see Figure 3.5 below) in the United States and Western Europe, a more moderate drop in developed Asia, Southern and Eastern Europe, and an increase in other parts of the world.

Findings of these kinds suggest that the changing attitudes towards climate change may illustrate a disagreement about facts and data, but the evidence is less conclusive about whether the observed data signal an

---

108 European Social Survey (2021).
109 European Social Survey (2021).
110 Corner et al. (2011); Spence et al. (2010).
111 Ratter et al. (2012).
Looking into what can trigger scepticism about climate change, we also identified some public opinion data relating to the role of expert opinion and knowledge on climate change. A study conducted in 2007 observed that 40 per cent ‘of the British public (supported) the idea that the climate system is too complex and uncertain for scientists to make useful forecasts.’ Similar findings were observed in the first five editions of the European Social Survey. Data collected until 2010 show an upward trend in citizens’ belief that ‘modern science can be relied on to solve environmental problems.’ In 2016, questions related to climate change were again included in the survey. Correlating various social and political beliefs with those relating to climate change, the scientists found that ‘views on climate change appear to have become politicised: In the UK, “politically conservative and disengaged groups are more likely to express a climate sceptical view and less likely to support action on climate change”.’

Evidence presented in this section shows examples of disagreement about fact and data in Europe on topics as varied as migration (misperception of migration), health (clusters of hesitancy about non-controversial vaccines) and to some extent climate change. The evidence reviewed suggests that those

---

Figure 3.5: Proportions of survey respondents considering climate change to be a ‘threat’ between 2007-08 and 2010 in different regions of the world

Source: Gallup (2011)

---

increase of this trend over time, in particular in recent years.

113 European Social Survey (2021).
114 European Social Survey (2017).
who contest non-controversial facts are not necessarily the majority. Their voice, however, may be louder (e.g. increased media coverage) than the voice of verified fact and evidence, and their message can have a detrimental and long-lasting effect. We will explore this in Chapter 4 (drivers), Chapter 5 (Agents) and Chapter 6 (consequences) of this report.

3.1.4. Summary

Overall, the evidence of increasing disagreement between facts and data in Europe is not overwhelming. This suggests that this trend does not manifest in Europe as a whole at the same extent and pace as in the United States and is rather limited to clusters of disagreement around given topics (e.g. vaccine hesitancy in France and the United Kingdom).

3.2. A blurring of the line between opinion and fact?

The second trend characterising Truth Decay is a blurring of the line between opinion and fact that makes it increasingly difficult to distinguish between the two. This section outlines the different manifestations of this trend in the European media landscape. We consider two aspects of this trend: the increasing use of journalistic stories that combine commentary and interpretation with fact and the use of sponsored content in journalism. This trend is closely linked with another trend, namely: the increasing volume of opinion over fact, which we will present and discuss in Section 3.3 below.

3.2.1. Use of commentary and interpretation in journalism

The first manifestation of this trend is an increasing reliance on commentary in journalism, an area traditionally heavily fact-based. Our hypothesis is that the use of interpretation in contexts where readers and viewers would expect to find fact can also contribute to the blurring of the line between fact and opinion. News stories presenting an individual perspective on a given topic or combining opinion and fact without clearly distinguishing them creates an ambiguity between a given opinion and the facts it is based on, which can lead opinions to be perceived as facts. Salgado et al. define interpretative journalism as ‘opposed to, or going beyond descriptive, fact-focused and source-driven journalism’, and identified a number of different aspects of it. These include: (1) story types (editorials, columns, analytical commentaries feature stories, interviews), which lead the audience to expect some interpretation; (2) explanations that go beyond factual descriptions without stating it; (3) prospective speculations; and (4) overt commentary. While interpretive journalism can bring news and alternative perspectives to readers and viewers and thus help improve the quality of the political discourse, a combination of low-quality interpretive journalism and confusion about what is verified fact versus speculation poses a threat to the quality of the political discourse.

---

116 Salgado et al. (2016, 154).
117 Salgado et al. (2016). The countries analysed include 14 European countries (Austria, Belgium, Denmark, France, Germany, Greece, Italy, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom), Israel and the United States.
Different journalistic traditions exist in Europe

When discussing the prevalence of commentary and interpretation, it is necessary to consider different journalistic traditions in different parts of Europe. Nordic countries such as Denmark or Norway, along with central European countries like Germany and Switzerland, traditionally produce objective and neutral journalistic content that may be ‘moderately politicised’. On the other hand, countries like France and Italy have a tradition rooted in literature and shaped by readership, in which journalists adopt a more partisan approach. Regarding the United Kingdom and Ireland, research suggests that journalism follows the liberal model often seen in the United States. This model is rooted in a fact-centred tradition, yet is also increasingly entertainment-oriented, due to the increased commercial pressures and a lower level of media subsidies. Changes in the media landscape and their contribution to driving Truth Decay will be discussed in Section 4.2.1 below.

Prevalence of commentary and journalistic interpretation in European media

We found evidence of the prevalence of interpretative journalism in some European countries.

An analysis of political news stories across six countries between 1960 and 2013 found that 27 per cent of a sample of French newspaper articles were opinionated, compared to 23 per cent in Italy, and 16 per cent in the United Kingdom.

A comparative content analysis by Salgado et al. investigated the prevalence of interpretative journalism across 16 countries in print, television and online news. Their analysis showed that, across all countries, 35 per cent of all political stories and 29 per cent of regular news stories included journalistic interpretations. In France, almost half of regular stories included interpretive journalism, while in Spain or Portugal these stories represented less than 20 per cent. The variety of results within and across countries shows that the prevalence of interpretive journalism (and of each type of interpretation) depends on journalistic tradition as well as on media type. The study concluded that, overall, interpretive journalism is more common in commercial television news than in public service television, and that it is more common in newspapers than on public service television.

Evolution of the use of commentary and journalistic interpretation in European media

We found evidence that interpretative journalism has increased in some countries.

A study found that interpretive journalism across France, Germany, Great Britain, Italy, Switzerland and the United States has become more prevalent in the past four decades, with an increasing reliance on news analyses and commentaries. The study attributes this
evolution to changes in journalism practices and diffusion of practices across countries, led by American journalism.

Studies looked at the evolution of the use of commentary and journalistic interpretation in European media over time. For instance, a study of newspaper coverage of the negotiations for a government coalition in Belgium over almost 30 years (1985–2014) shows a ‘remarkably strong, almost linear increase in the amount of interpretation in newspaper articles’: the share of articles containing journalistic evaluation increased by almost 30 percentage points in three decades (from 11 per cent in 1985 to 39 per cent in 2014) while the share of articles containing journalistic speculation and journalistic explanation increased by around 30 percentage points (from 32 per cent in 1985 to 68 per cent in 2014, and from 9 per cent in 1985 to 48 per cent in 2014 respectively) over the same period.124

Overall, the prominence of opinion columns that blur the line between opinion and fact has evolved with journalistic traditions across the continent and their orientation towards factual reporting, entertainment or partisan commentary.

3.2.2. Advertising and sponsored content

The blurring of the line between fact and opinion also manifests itself in the use of advertising or sponsored content in news publications, which are not easily identifiable as such, a process called ‘native advertising’. The Reuters Institute’s 2018 Digital News Report shows that the difficulty distinguishing between some advertising and news in digital media is a cause of concern across the world: 34 per cent of respondents in 37 countries (of which 23 were European) reported that they personally came across ‘advertisements that look like news stories’ in the last week, while 43 per cent expressed concern about it.125 A study focused on Estonia found that ‘the border between journalism and advertising in contemporary Estonian media is being increasingly blurred as a consequence of rapid commercialisation’,126 although the blurring of the lines appeared to fluctuate depending on the type of media. For example, the study found that special supplements and consumer-oriented programmes were most likely to include advertising content. It is, however, difficult to assess whether there is an increase in advertising and sponsored content in Europe, given the lack of longitudinal data on this topic.

Nonetheless, across the EU, concern about knowing whether or not the content being read is sponsored has translated into demands for regulating this practice online: a 2018 Flash Eurobarometer found that 81 per cent of respondents were ‘in favour of online social networks and other Internet platforms making clear what content and publications were online advertisements and who is paying for them.’127

3.2.3. Summary

Overall, there is evidence that the line between facts and other content such as commentary, opinion and even sponsored content and advertisement is blurring in Europe, making it increasingly difficult to distinguish between the two. This section outlines two manifestations

124 Soontjens (2019).
of this trend in the European media landscape: the increasing use of journalistic stories that combine commentary and interpretation with fact and the use of sponsored content in journalism.

We found evidence that interpretative journalism has increased in some countries (Belgium, France, Germany, Great Britain, Italy and Switzerland) and in relation to specific topics. The prominence of opinion columns that blur the line between opinion and fact has evolved with journalistic traditions across the continent and their orientation towards factual reporting, entertainment or partisan commentary. We also found evidence that the line between facts and sponsored content and advertisement is blurring in Europe.

3.3. An increasing relative volume and resulting influence of opinion over fact?

The third trend is the increasing relative volume, and resulting influence, of opinion and personal experience over fact. This trend is closely linked to the second trend (‘blurring of the line between opinion and fact’) as both trends interact with and affect each other. Changes in the media landscape, with an increase in media platforms and therefore an increase in opportunities for expression, are central to this growth in the volume of subjective content relative to factual information. While Section 3.2.1 discussed the use of commentary and opinion in mainstream journalism, in this section we explore two areas that grew in the last decade and around which we find an illustration of the increase in volume of opinion relative to the volume of fact: the production of news content in ‘alternative’ news sites and blogs, and the proliferation of news on social media.

3.3.1. An increased number of alternative news sites and blogs

One manifestation of this trend is an increase in the use of alternative (as opposed to mainstream or traditional) and partisan blogs and news sites. A study looking into the impact of media development in Sweden shows that the increase in the number of media and media platforms has translated into an increase in the supply of information. This increase in media choices means that they can be more focused on a particular political inclination, for example, and the study shows that media consumption in Sweden has become increasingly fragmented, due to readers having more choice in what they read. Strömbäck states that this growth in so-called ‘niche media’ is happening in parallel with the shrinkage of traditional mass media. The increase in the number of media and media platforms can also be observed in Germany, where data show that only five newspapers were available online in 1995, compared to nearly 700 news sites available in 2016. In France, while the number of opinion pieces decreased in the second half of the 20th century, it has increased again in the last few years, especially since 2016, the year preceding the 2017 presidential elections. According to media sociologist Jean-Marie Charon, this is due to a fragmentation of the readership and a decline of mass media, freeing up space for ‘engaged’ media offers to

---

130 Koptyug (2019).
flourish. Others attribute this to a decline in trust in traditional media.

Research shows that an increasing number of alternative news sites have emerged in recent years, and some of these are partisan and attract a distinct audience who share their ideology. Examples include the left-wing site ‘The Canary’ and the Brexit supporting ‘Westmonster’ in the United Kingdom, the far-right ‘Unzensiert’ in Austria and the right-wing ‘Politically Incorrect’ in Germany. The Reuters Digital News Report shows that these sites do not always split along political lines, but rather focus on a given message such as anti-immigration reporting; in Germany and Austria, for instance, these websites focus specifically on providing alternative perspectives on migration. Similarly, another study points to the website ‘Fdesouche’ in France and the online forum ‘Hommaforum.org’ in Finland as outlets that have greatly contributed to the popularity of anti-immigration messaging.

On the topic of immigration in particular, findings show that audiences’ motivation to seek out alternative perspectives results from their perception of traditional media and especially public service broadcasters as ‘deliberately concealing the truth’. This therefore also interacts with the last trend of Truth Decay: as the volume and influence of opinion increases, trust in formerly respected institutions as sources of information decreases.

An increase in the number of media outlets in several parts of Europe does not necessarily correlate with the increasing influence of opinion over fact. The extent to which alternative news sites are used varies across Europe: awareness and usage are higher in Spain, Poland, Czechia and Sweden, and are lower in Austria, Finland, Germany and the United Kingdom. Fletcher et al. explored the use of disinformation websites compared to mainstream news sites in France and Italy – based on how fact-checkers rated them. They found that the reach of news disinformation sites was minimal compared to established news sites: ‘None of the false news websites […] considered had an average monthly reach of over 3.5% in 2017, with most reaching less than 1% of the online population in both France and Italy. By comparison, the most popular news websites in France (Le Figaro) and Italy (La Repubblica) had an average monthly reach of 22.3% and 50.9%, respectively.’ Fletcher et al. also explored the time spent on disinformation sites and compared it with the time spent on mainstream news sites. They reported that the cumulative time spent on disinformation websites is much lower than the time spent on a single mainstream website in each of the two countries covered by the study: ‘the total time spent with false news websites each month is lower than the time spent with news websites. The most popular false news websites in

131 As reported in Le Figaro, Sugy (2018).
132 See, for instance, France Inter (2016).
133 Mourao et al. (2015); Newman et al. (2018).
137 Mourao et al. (2015); Newman et al. (2018).
138 Fletcher et al. (2018).
139 Fletcher et al. (2018,1).
France were viewed for around 10 million minutes per month, and for 7.5 million minutes in Italy. People spent an average of 178 million minutes per month with *Le Monde*, and 443 million minutes with *La Repubblica*—more than the combined time spent with all 20 false news sites in each sample. Depending, however, on the number of disinformation news sites and whether they reach the same audience or not, the cumulative reach of disinformation websites could potentially be underestimated by these figures. Data about the time spent on disinformation websites compared to mainstream websites gives a better indication of the update of disinformation sites compared to mainstream sites.

A large share of the alternative news sites that have emerged in recent years have catered to a partisan audience who share their ideology. As a result, they do seem to contain a good deal of opinion-based content. While this suggests an increased relative volume of opinionated content, also relative to facts, evidence of the influence of this opinionated content over factual content is scarce.

### 3.3.2. Social media

Another manifestation of the increasing volume of content and of opinion being created is observable on social media, which provides unprecedented opportunities to express opinion and increases exposure to opinionated content by individuals. This and the role of user participation could amplify the relative influence of opinion over fact.

A 2015 study based on evidence from Germany, Spain and the United States outlines the key role of social media in the increase in the volume of information users are exposed to. Other studies also emphasise the speed, scale and proliferation of information on social media, and in particular of false, biased or partisan content.

While Fletcher et al. reported that the uptake of disinformation sites in France and Italy is minimal in comparison with mainstream established news sites such as *Le Monde*, *Le Figaro* or *La Repubblica*, the voice of disinformation sites is louder on social media than on alternative news sites on the Internet: ‘the level of Facebook interaction (defined as the total number of comments, shares, and reactions) generated by a small number of false news outlets matched or exceeded that produced by the most popular news brands.’ For example, they report that one disinformation outlet in France generated an average of over 11 million interactions per month on social media, which is as many interactions as four top mainstream outlets (*Le Figaro, Le Monde, France TV Info* and *20 Minutes*) combined. In most cases, however, in both France and Italy, disinformation outlets do not generate as many interactions as established news brands.

Exposure to such content is closely linked with user participation on social media. As users become ‘at the same time, producers, consumers and distributors of the content’, they are an integral part of the increase in volume of opinion and its influence over fact.

140 Newman et al. (2018, 1).
142 Humprecht, (2019); Van Dijck and Poell (2013); Waisbord (2018).
144 KhosraviNik (2017).
The topic of immigration is again a relevant example in the European context. A recent report focusing on Italian social media users’ vulnerabilities to disinformation investigated the composition of the most shared news related to migration in the 2018 presidential election campaign. The analysis shows that 25.7 per cent of these news items were simply false, 37.8 per cent were considered ‘problematic’ (i.e. half-truths, oversimplified or misleading content for partisan purposes) and 36.5 per cent were factual. The fact that over 60 per cent of the most shared news stories were not grounded in facts is further evidence of the increasing volume of opinions, and of the role of social media users in this trend.

Linked with the misperceptions of migration exhibited in Italy as mentioned in the trend above (the blurring of lines between opinion and fact), this also shows the strong influence of these opinions. An analysis of European opinions on immigration suggests that negative opinions and hostility towards immigrants would diminish if correct and factual information reached the general public. This indicates the volume of opinion and its resulting influence can also have important consequences in terms of public attitude and therefore policy decisions.

### 3.3.3. Summary

While we found evidence of an increasing volume of opinionated content, both in terms of the number of news websites and on social media, the evidence of the increasing relative influence of this content over factual content is scarce. As we will see in Section 3.4.2, it is concerning to see that while Europeans do not necessarily trust these new sources of information, they use them, and similarly, they tend to use less the more traditional sources that they trust.

While we have not found evidence of a causal link, migration provides a good illustration of how the Truth Decay framework operates: this increase of relative volume of opinionated content related to migration on social media, combined with disinformation (see Section 4.2.3) could contribute to the misperceptions on migration exhibited in Section 3.1.1 (e.g. in Italy). This would be an example of increased influence of opinion over facts.

---

145 Flore et al. (2019).
3.4. Declining trust in formerly respected sources of factual information?

The final trend of Truth Decay is a declining trust in institutions formerly respected as sources of factual information, data and analysis. These institutions include public institutions, such as international, national, regional or local governments, as well as elected representative bodies such as national assemblies or the European Parliament. Other institutions traditionally respected as sources of factual information may include media organisations and academia or research institutions. This section reviews the evidence for trends of trust in these institutions in Europe.

3.4.1. Trust in public institutions

Trust in political institutions is central to the legitimacy of a political system.\textsuperscript{147} Political trust is defined as the ratio of a people’s evaluation of government performance relative to their expectation (normatively) of how the government should perform.\textsuperscript{148} Low trust in single actors in a political system is not necessarily a problem. If, however, there is a lack of trust in central political institutions or the fundamental principles that govern the political system, the consequences can be more severe.\textsuperscript{149} Public opinion data in the United States show a clear downward trend in public confidence in major institutions, such as government, media and academia over the past two decades.

In recent years, analyses claim that there are decreasing levels of trust towards public institutions in Europe. For example, Hopkin and Rosamond note that there has been 'a decline of trust in political parties and other collective institutions.'\textsuperscript{150} Others, such as Frewer, observe that there have been emerging levels of mistrust towards 'processes of science and in scientific and regulatory institutions.'\textsuperscript{151} Similarly, Lorenzoni and Pidgeon find that 'national governments are not necessarily considered reliable and credible in diffusing information or taking decisions' about complex public policy challenges, such as climate change.\textsuperscript{152} Yet, as the examples below demonstrate, there is variation regarding trust in public institutions between different countries. Examples from the Netherlands (Box 3.5) and Norway (Box 3.6) illustrate that even in two countries that demonstrate relatively high levels of trust in public institutions there are signs of Truth Decay.

\textsuperscript{147} Haugsgjerd & Seegard (2020); Kleven (2016).
\textsuperscript{148} Hetherington & Husser (2012).
\textsuperscript{149} Haugsgjerd & Seegard (2020).
\textsuperscript{150} Hopkin & Rosamond (2018, 646).
\textsuperscript{151} Frewer (2003, 319).
\textsuperscript{152} Lorenzoni & Pidgeon (2006, 88).
Box 3.5: Declining trust in institutions and increasing disagreement about fact and data in the Netherlands: The RIVM and the farmers’ protests

Since 1909, the Dutch National Institute for Public Health and the Environment (RIVM) has used independent scientific research to promote public health and safeguard a healthy environment in the Netherlands. The RIVM’s analyses inform the Dutch government’s policies. For example, the government uses the RIVM’s measurements, calculations and analyses of the emission of pollutants, including ammonia and nitrogen, to decide whether permits can be issued, e.g. for building roads or the extension of a farm.

In May 2019 the Dutch Council of State found that the Dutch policies on nitrogen emission were not in line with the EU Directive on ambient air quality (2008). Subsequently, the Dutch government asked a commission to analyse how the emissions could be lowered. One of the Commission’s recommendations, using data from the RIVM and other sources, was that the Dutch agricultural sector would have to adjust. In October 2019, the government said, therefore, that it would buy out some farmers and support other farmers with investing in new technologies to lower emissions.

On 16 October 2019, however, a protest group under the name of ‘Farmers Defence Force’ (FDF), which aimed to protect the interests of people working in the agricultural sector, organised a protest in front of the RIVM, because they strongly disagreed with the RIVM’s calculations on ammonia emissions that informed the government’s policies. The FDF accused the RIVM of using shady methods to name farmers as the greatest polluter. Additionally, the FDF indicated that farmers felt marginalised because of RIVM’s calculations and the subsequent policies. The farmers’ protests in the Netherlands were joined by German farmers, who also felt they lived in a farmer-unfriendly society.

This example also demonstrates the interlinkages between the trends: the dispute about the calculations of the RIVM relates not only to the declining trust in formally respected institutions and the dissatisfaction with these institutions, but also to the increasing disagreement about data. Furthermore, we see in this case that this disagreement leads to public contention about the policy intervention proposed by the Dutch government.
Trust in politicians and political institutions in Norway is high compared to other countries in Europe. According to the European Social Survey, Norwegians have the highest level of trust in their national parliament (75 per cent) and only in the Netherlands (57 per cent) and Switzerland (50 per cent) do people have more trust in their politicians.\textsuperscript{162} Norway also has one of the highest voter turnouts of the Western world. The high level of trust has been attributed to long democratic traditions, a strong economy, a generous welfare state, and a flexible multi-party political system that can accommodate dissent amongst the electorate.\textsuperscript{163}

A study, however, by Haugsgjerd et al. showed that there has been a slight decrease in political trust since 2011.\textsuperscript{164} They reported that average trust in all types of political institutions and actors was lower in 2019 compared to 2007.\textsuperscript{165} The only exception is trust in political parties, which has remained relatively stable at a level of 5.0 on a ten-point scale. The decline in trust is more significant at national than at local level. National politicians, the national government and the political parties received the lowest average trust scores in 2019 (5.0) compared to the mayor and local government that received the highest score (5.8 and 5.7 respectively).

The authors argue that the decline in political trust can be attributed to permanent abstainers in elections and increased political polarisation. Those who abstain from voting are often younger, more likely to be male, have a low income and socio-economic status. For instance, approximately 20 per cent of those who have not completed education beyond primary and lower secondary school abstained in all the last four elections. The most represented group among abstainers are the voters who come from minority backgrounds, where approximately one in four do not vote. The largest decline in trust since 2007 has also been more significant in groups with a lower socio-economic status.

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{162} As measured by a score of six or higher to the question: on a score of 0-10 how much you personally trust... "politicians" and ",[country]'s parliament?" See European Social Survey (2018).
\item \textsuperscript{163} Haugsgjerd et al. (2020).
\item \textsuperscript{164} Haugsgjerd et al. (2020).
\item \textsuperscript{165} The Norwegian government report measured trust in the following institutions and actors: the political parties, national government administration, local government/municipal administration, the government, the mayor, national politicians, local/municipal politicians, the Storting (Norwegian parliament), and the municipal council.
\end{itemize}
\end{footnotesize}
Data from the European Values Study show that, between the beginning of the 1980s and the second half of the 2000s, people’s confidence in the judicial system, religious institutions, parliament and civil service in all the considered countries has been declining. In particular, confidence in political institutions has been declining across almost all of Europe in this period. Sarracino and Mikucka show that between 1990 and 2012 the most negative trends were recorded among Eastern European countries, in particular Poland, Bulgaria, Czechia (formerly Czech Republic), and Hungary. These countries have experienced systemic transformations in the post-communist era, and it may take time to develop confidence in the relatively young political institutions. Positive trends were identified across the board for confidence in the armed forces and police and in public services. The authors speculate that these positive trends may be the result of improvements of institutional functioning, control of corruption and widening freedom and locus of control.

Figure 3.6: Trust in the EU, the national government and the national parliament – EU average

Trust in the European Union, national parliament and national government – EU average. Source: Eurobarometer 2004–2018

166 Sarracino (2010).
168 European Commission (2021b).
More recently, however, and in contrast to the findings for the United States, the public opinion data for Europe (the Eurobarometer and the European Social Survey) show that citizens’ trust towards public institutions may actually be improving. For example, drawing from the Eurobarometer data, we observed that the levels of trust towards the EU, national government and national parliament have increased from 2011, after a period of decline since 2007 (see Figure 3.6 above). Further, drawing from Eurobarometer data, we also observed a slight increase in Europeans’ trust towards political parties in recent years.\(^{169}\)

These findings are echoed by the results from the European Social Survey on levels of trust that respondents had towards the parliament and politicians of their country, in addition to voting turnout (see Figure 3.7). Although there was a clear downward trend on trust levels in the early 2000s, these levels started recovering around 2010. The levels of voting turnout, although self-reported, have remained relatively stable, suggesting that trust is not necessarily a prerequisite for democratic participation. Boda and Medve-Bálint arrive at a similar conclusion but find considerable differences within Europe.\(^{170}\) Based on data from the Eurobarometer and the European Quality of Life surveys, political participation is still relatively high (over 40 per cent) in the Nordic countries (e.g. Denmark, Finland and Sweden), and Western European EU Member States (Belgium, the Netherlands and the United Kingdom) among citizens with low trust in political institutions. Countries from Central, Eastern and Southern Europe occupy the positions below the median (e.g. Slovakia at 23 per cent). Remarkably, at the aggregate level, in almost all countries (apart from Sweden) the share of non-active people is higher than those who are active.

\(^{169}\) See Annex B.

While, on average, European citizens gradually appear to have gained trust in institutions since the end of the financial crisis, the surveys show considerable differences in country-level developments. For example, in Germany, trust towards the country's parliament increased by 17.5 percentage points since 2002. Considerable increases in trust levels could also be found in Switzerland. In Italy, however, trust in parliament had decreased by 19 percentage points. These findings (summarised in Figure 3.7, above) suggest that developments in public attitudes towards political institutions differ across European countries.\textsuperscript{172}

Ipsos MORI measured public confidence in seven institutions in 21 countries around the world in 2016 and 2018, including governments, the media, the justice system and political parties.\textsuperscript{173} The survey company

\textsuperscript{171} European Social Survey (2021).
\textsuperscript{172} See Annex B.
\textsuperscript{173} Skinner (2019).
finds that, on aggregate, confidence in most institutions had only changed marginally over the two years. There were, however, a small number of more positive country developments – particularly in Spain and Germany.

These regional or country-specific differences are also illustrated by Jackson et al., who studied the extent to which Europeans show ‘trust in justice’, which they define as ‘the belief that police and criminal courts can be relied upon to act competently, to wield their authority in ways that are procedurally fair, and to provide equal justice and protection across society.’ Their findings show that trust in key institutions in the justice and home affairs sector varies greatly across Europe. Whereas in Denmark, Spain and Finland, only around ten per cent of the respondents thought the police do not ‘often make fair and impartial decisions’, the corresponding results were over 40 per cent for Bulgaria and Czechia (formerly Czech Republic) and around 35 per cent for Hungary. Public opinion on the trustworthiness of the police and the judicial sector seems to be moderately associated. In Bulgaria, Czechia (formerly Czech Republic) and Hungary, respondents claimed that both their police and judges often took bribes, but in Finland, Norway and Denmark the findings indicated exactly the opposite. While these figures suggest that levels of trust in law enforcement institutions vary considerably within Europe, the trend seems to be mainly positive across Europe. Sarracino and Mikucka analysed data from the World and European Values Survey (WVS-EVS) from 1990 to 2012 to describe the trends in trust in 30 Western and Eastern European countries. They find that the only countries showing declining trends in trust in the armed forces and police are Ireland, Norway, Czechia (formerly Czech Republic), Hungary, Bulgaria and Romania. In all other countries, people’s confidence in the armed forces and police increased. In particular, the three Baltic states, Estonia, Latvia and Lithuania, as well as Malta and Portugal experienced the strongest increase.

Consequently, while there are still considerable differences within Europe in the levels and trends of trust in public institutions of government and law enforcement, these findings suggest that most European countries experienced a downward trend in trust on these dimensions until the end of the financial crisis around 2012. Since then, and in contrast to the United States, public trust in political, law enforcement and government institutions seems to have improved though not to the level of the early 2000s.

3.4.2. Trust towards media

Well-functioning societies and democracies are dependent on a trusted and diverse media landscape offering access to verifiable information, which allows citizens to debate and form their own opinions on various political issues. A declining trust in the reliability of the information produced and published by different media may challenge the role

174 Jackson et al. (2011, 3).
175 Jackson et al. (2011, 3).
176 Jackson et al. (2011, 6).
177 Jackson et al. (2011, 10).
178 Jackson et al. (2011, 10).
180 Christians et al. (2009).
of the media in holding decision makers to account and informing the public about core public issues. As introduced in Section 3.2, and further discussed in Section 4.2 below, the communications landscape has been recast in recent years, with the advent of ‘alternative news sites’ and ‘countermedia’, and increased dissemination of dis- and misinformation as well as the proliferation of fact-checking platforms. All of these changes may have contributed to declining levels of trust towards legacy media, as observed in the United States. Gronke and Cook argue that this trend holds true in most developed democracies.

This trend can also be observed for Europe. Data from the European Values Study show a decline in the levels of trust in the media for most countries in the sample over the past two decades (see Figure 3.8). Slovenia (29 percentage points), Netherlands (20 percentage points), Czechia (formerly Czech Republic) (19 percentage points) and Poland (22 percentage points) exhibit the largest drops in confidence levels. Of the EU countries, only Finland has seen an increased confidence in the press over this period.

There are several competing explanations for changes in media trust. Institutional theories suggest that trust in the media is a consequence of (perceptions of) its performance. Indeed, some authors show that an increasing antipathy toward the press can be explained by game-framed news or tabloid. Brants et al. illustrate the role of politicians in creating antipathy toward the media when they disagree with their reporting.

Cultural theories argue that media trust is exogenous and can be explained by general social trust learned earlier in life. Tsfati and Ariely, for instance, find evidence for this hypothesis and show that people tend to trust the media more when they trust others in general. By this notion, levels of trust in different institutions can be expected to correlate. Indeed, both Hanitzsch et al. and Ariely find a robust association between media trust and political trust in 53 countries and 32 European countries respectively.

Hanitzsch et al. also tested several other hypotheses explaining media trust by analysing the results of the European Values Study. The effects of individual determinants such as education level, age, and gender appeared rather small. Yet, they found that people who have more confidence in the media are more likely to be interested in politics, regularly exposed to media contents, and trusting of other people. Moreover, they found that the relationship between trust in the media and political trust was more pronounced in more strongly polarised societies. This finding corroborates the notion that changes in media trust are also related to the volatility of the political environment, which may explain some of the trends observed in Figure 3.9.
Figure 3.8: Trust in the media in European countries


Note: How much confidence in the press? Proportion of respondents who answered ‘quite a lot’ or ‘a great deal’
When thinking, however, about trust in the media, it is important to note that people have access to a range of different sources, ranging from social media to traditional newspapers. In Section 3.1.1 we presented evidence of how different information channels affect perceptions of migration. Survey data suggest that trust in traditional media has been better able to withstand the trend of the general decline of confidence in the media than newer forms of media, such as social media. According to the Eurobarometer, more than six in ten Europeans say they tend to trust the news they receive from the radio, television and printed press. In fact, the Eurobarometer shows that trust in radio, television and written press among Europeans appears to have increased slightly since 2011. These findings are summarised in Figure 3.9. The most trusted media continues to be the radio, while the greatest rise in trust has been in the written press: up seven percentage points since 2011. On average, across the 29 countries, trust in the Internet has remained fairly stable with a slight drop from 35 per cent in 2011 to 32 per cent in 2018. The proportion, however, of respondents answering ‘don’t know’ has shrunk considerably in favour of those who say they do not trust the Internet. When disaggregating these figures by country, it appears that traditional media sources are trusted more than online sources in every EU Member State. Of the 29 countries included in the Eurobarometer, 22 experienced a decrease in trust in the Internet between 2006 and 2017. Similarly, the Reuters Institute at the University of Oxford has found that respondents have low levels of trust towards news they have found

**Figure 3.9: Europeans’ trust in media (%) (2011–2018)**

![Graph showing trust in media from 2011 to 2018](source: Standard Eurobarometer (2016; 2018))
by using online search engines (33 per cent) and on social media (23 per cent).190

On the other hand, Eurobarometer data show that although levels of trust towards traditional media continue to improve, people use them less and less to inform themselves about current affairs (see Figure 3.10). The Eurobarometer on media use conducted in 2015 found that new platforms, especially those on the Internet, are more frequently used as ‘sources of information on national and European political affairs’.191 For example, while an increasing share of respondents report that they use the Internet and online social networks, the share of Europeans who follow the written press has declined.192 In 2018, 26 per cent of the respondents said that they read written press every day or almost every day – a decrease of 12 percentage points from 2010.193 Instead, 66 per cent of respondents use the Internet daily or almost daily, which is 22 percentage points higher than the results in 2010.194 Simultaneously, the share of respondents who use online social networks daily or almost daily has increased 25 percentage points from 2010, increasing to 43 per cent in 2018.195 Taking these data with those presented above, it appears that, the more familiar Europeans become with

---

190 Newman et al. (2019, 10).
191 European Commission (2016, 2).
192 European Commission (2016).
and use the Internet, the more their trust in it decreases.

These findings are similar to those of the Reuters Institute, which found that there is a clear downward trend in trust people report having in the media sources ‘they themselves use.’ They observed that only 24 per cent of French respondents trust the media they follow. Consequently, it seems that an increasing number of Europeans are informed on current affairs by platforms that do not enjoy higher levels of trust. This could suggest that changing media consumption patterns and the associated levels of trust in the information they provide could also amount to lesser aggregate levels of trust towards media. Box 3.7 provides an illustration of how trust in the media has evolved in Romania.

**Box 3.7: Trust in the media in Romania**

According to the autumn 2019 Eurobarometer, Romanians’ trust in the media increased by eight percentage points (to 33 per cent) since 2018, the highest increase in the EU. Similarly, the percentage of respondents who consider the information provided by the Romanian media to be trustworthy increased by seven percentage points (to 66 per cent). Trust in radio grew by ten percentage points to 61 per cent; trust in television grew by nine percentage points to 60 per cent; in the written press by 12 percentage points to 57 per cent; in the Internet by seven percentage points to 44 per cent; and in online social networks by 11 percentage points to 39 per cent. Furthermore, 71 per cent of respondents claim that they find it easy to identify news or information that is false or misrepresents reality, a percentage that has grown by 12 points since autumn 2018.

At the same time, 82 per cent of respondents use television as the main source of news, the highest national score (along with Portugal and Lithuania). By contrast, however, only 27 per cent of Romanians listen to the radio every day or almost every day, the lowest national score (compared to 66 per cent in Slovenia, the highest national score); only nine per cent read the written press every day or almost every day, the fourth lowest national score (compared to 59 per cent in Sweden, the highest national score); and only 51 per cent use the Internet every day or almost every day, the lowest national score (compared to 92 per cent in the Netherlands, the highest national score). This is consistent with the levels of trust that Romanians report to have in different media sources, with trust in television standing at 60 per cent, overtaken only by one percentage point by trust in the radio (61 per cent). The fact that only 27 per cent of Romanians report listening to the radio every day or almost every day, despite the radio enjoying similar levels of trust as the television, likely indicates that the preference of the public towards television is also related to the ease of media consumption using television, and possibly also the higher entertainment factor offered by the visualisation of news stories.
3.4.3. Summary

Overall, we found mixed evidence about the state and evolution of trust towards institutions in Europe over time. Most notably, trends and levels of trust vary across institutions and countries. There has been a net increase of trust in governance and law enforcement institutions since about 2012. Trust in media is more variable, but it is also interesting that news consumers do not seem to choose news sources based only or primarily on trust. Trust in traditional media appears more robust than trust in the Internet and social media sources, but information consumers increasingly are shifting towards online sources nonetheless. The latter trend is consistent across most European countries and suggests, at an aggregate level, that there is some evidence of a declining trust in the media in Europe as a whole.

3.5. Summary

In this chapter we reviewed the available evidence and data for the four trends of Truth Decay in Europe. We find evidence for all of the four trends in Europe, but the evidence seems considerably less strong than in the United States, and fairly inconsistent across countries. Whilst data and the literature available for the United States do not seem to offer much distinction between different parts of the country, there seem to be considerable differences within Europe.

Increasing disagreement about facts and data in Europe. In some countries we see growing misperceptions about levels of migration and increasing vaccine scepticism, particularly in France and Italy. Misperceptions on the extent of migration have increased in a number of countries, like Spain, Germany, the Netherlands, France and Poland. And while most of the literature suggests that Europeans seem increasingly concerned with climate change, these developments manifest themselves differently in different parts of the continent. Thus, there is clear evidence of disagreement about facts and data and misperceptions on these issues are widespread. There is also evidence that this disagreement is, at least in some European countries, increasing. Yet, with limited pan-European research available on this matter, it is difficult to say whether this trend is consistent across the continent.

A blurring of the line between opinion and fact, as illustrated by an increasing prevalence of interpretive journalism and advertorial content intertwined with news reporting. We do find evidence of this trend in Europe. The line, however, has blurred more in some countries than in others. There appears to be a north-south divide in Europe, where news reporting appears to be more neutral in Nordic countries, Germany and Switzerland, while reporting in southern European countries tends to more integrated with commentary and opinion. Furthermore, we found that interpretative journalism has become more prominent in some countries. Yet, the evidence presented does not show whether interpretative journalism has increased in Europe overall.

An increasing relative volume and resulting influence of opinion over fact, as illustrated by the explosion of the availability of online news outlets, including the emergence of niche media that cater for a select audience that share similar beliefs. Moreover, as with the rising global popularity of social media platforms, it has become possible for everyone to access and share commentary and opinions on contemporary topics with the rest of the world. As this trend has been a global one, the European media landscape has also become inundated with opinion-based content from millions of social media users. There are also some early indications that the voice of alternative opinionated media is ‘louder’ than the voice of traditional media, suggesting that
the relative influence of such opinion-based news could be exacerbated by the rise of social media.

**Declining trust in institutions previously looked to as sources of factual information.** We find evidence that trust in political institutions in Europe did decline in the late 1990s and early 2000s, but this trend seems to have reversed since the end of the financial crisis. Trust in the media in Europe has been declining gradually over the last two decades. A review of relevant data shows the largest decline in the levels of trust in Slovenia, the Netherlands, Czechia (formerly Czech Republic) and Poland. Over this period, confidence in the press has only increased in Finland. One of the reasons for this trend could be that, despite an increased reliance on online sources of information, such as the Internet and social media, for news consumption, Europeans also have a decreasing confidence in their reliability. Trust in the traditional press, however, has remained remarkably stable across Europe, but these sources are less and less used.

Our review in the European context shows that there is evidence for all four trends of Truth Decay. The evidence for these trends in the past two decades is not as overwhelming as it has been for the United States. The reason for this difference is twofold. Firstly, elements of Truth Decay do seem to exist in Europe, but to a different extent and in different ways. The literature and data reviewed in this chapter suggest that there are considerable differences within Europe, where the different trends of Truth Decay are more prevalent in some countries than in others. For example, overestimation of immigration levels has grown notably in Spain, while trust in public institutions and the media has declined particularly in Italy and in a number of Eastern European countries. Secondly, the availability of research and data on the trends of Truth Decay, which cover all parts of Europe or Europe as a whole, is limited. Those studies that are available tend to cover only one or a small number of European countries. Datasets, such as the Eurobarometer or the European Social Study, are rare and often offer limited opportunity for longitudinal analysis.

We remind readers that the scope of our study did not allow us to identify additional trends in Truth Decay relevant to Europe, but instead focused only on the trends discussed for the United States by Kavanagh and Rich. In addition, for some trends, we found only limited data or limited data that focus on all of Europe. We have noted the variations across countries, but additional data covering all European countries would allow us to draw more definitive conclusions on some of the trends. However, the lack of evidence around Truth Decay trends does not mean that they are not happening, just that it is hard to comprehensively document them. With this in mind, there is still merit in exploring other aspects of the Truth Decay framework, and the extent to which it operates in a similar way in Europe. Here, it is useful to look into the causal mechanisms underpinning the processes of Truth Decay. Kavanagh and Rich identified four drivers of Truth Decay and highlighted the role of agents, which may help explain differences in the changing role that facts and evidence play in public life. In the next two chapters we discuss these drivers and actors in more detail.

---

As discussed in Chapter 2, Kavanagh and Rich identified four drivers of Truth Decay in the US context:

- Cognitive processing and cognitive bias
- Changes in the information system
- Competing demands on the educational system
- Polarisation.

In this chapter, we explore the extent to which these drivers are apparent in the European context. On the whole, we find that two of the drivers can be considered truly universal, because they are inherent to human behaviour (cognitive biases) or because they are part of a global transformation (changes in the information system). The scope and impact of the other two drivers on Truth Decay in Europe are more context-dependent, due to systemic differences in educational or political system or due to socio-cultural differences. We explain these findings in more detail throughout the chapter.

4.1. Cognitive processing and cognitive biases

It is now widely accepted that humans make decisions (at least partly) intuitively, based on their pre-existing beliefs, values, social interactions and emotions. It would be unrealistic to think of people as strictly neutral and rational decision makers, who are able to disregard their own bias in their decision-making process.

Kavanagh and Rich define cognitive biases as ways in which a person’s beliefs, attitudes, reasoning, and decisions can deviate from strict rationality due to patterns and tendencies in the way humans process information. This way of processing information and its effect on decision making is not new and has not necessarily changed in the last decades. Kavanagh and Rich also explore how cognitive processing and biases can drive Truth Decay, particularly through interactions with other drivers such as changes in the media and...
4.1.1. Cognitive processing and cognitive biases in the context of Truth Decay

In this section we explain what cognitive biases and pre-existing beliefs are, why they are relevant to the context of Truth Decay and whether and how they materialise in Europe.

Confirmation bias and pre-existing beliefs

Pre-existing beliefs can contribute to cognitive biases that affect decision making. Individuals tend to look for or interpret information in a way that will confirm existing beliefs. Confirmation bias pushes people to search for information that confirms their existing beliefs. It extends to prejudices (which people like to see confirmed) and predictions (which people like to see verified). This makes people reluctant to accept facts that prove them wrong. Resnick et al. suggest that in some cases exposure to alternative or contradictory information can even amplify users’ confirmation bias. Confirmation can have effects beyond the point at which a person makes decisions and can affect the way people justify their decisions, even if facts show that they should have acted otherwise.

In the political context, this translates into people looking for and believing information from the party they support regardless of its basis in fact and even when they are presented with alternatives. Garrett et al. argue that confirmation bias leads individuals to sources of information that are consistent with their ideologies, and thus plays an important role in their exposure to political information.

Confirmation bias can also make people give precedence to information that confirms their beliefs over other elements of the decision-making process, including facts and evidence. In the early 2000s, Morrot et al. investigated the importance of context in the perception of wine, first testing how packaging induces different judgements for the same wine, then tricking oenology students into taking a tainted white wine for a red wine. These experiments show how visuals, colours and odours can undermine all other indicators that should have led students to decide on the features and qualities of the wine that they were tasting. Confirmation bias exposes people’s vulnerability and can, in the political context, be a powerful tool for agents of Truth Decay.

Emotions in decision making

Emotions also play an important role in decision making and can overpower fact. While there is an established body of knowledge about cognitive processing and bias, research about the role of emotions in decision making is somewhat more limited. Recent research from Mair et al. aims to understand citizens’ emotions and how these emotions can inform
It is now accepted by the research community that emotions work alongside rationality and are an integral and desirable part of the decision-making process. In the same vein as research about cognitive bias in decision making, the objective of current research about emotions in decision making is no longer to limit the role of emotions in decision making, but to better use emotions in decision making. Beyond understanding how emotions affect decisions, the European Commission’s research on emotions also explores emotions as a tool to support policymaking and political decision making. Relatedly, Hoffmann and De Vries explored how emotions, and in particular anxiety, were likely to affect the 2019 European elections. The research covered both societal worry and personal economic anxiety and profiled two types of voters: the ‘Hopeful’ and the ‘Fearful’. While the Fearful are, perhaps unsurprisingly, less satisfied about the EU and its policy direction than the Hopeful, they are also the ones who consider EU politics to be too complicated and too distanced from ordinary citizens, and who are more likely to claim that they feel close to populist parties (as opposed to centrist and pro-EU parties) or to deny affiliation to a political party. Unfortunately, this research does not cover how a third type of character, the ‘Furious’, would play out in this scenario. Research about the role of anger in political participation shows that anger triggers partisanship, activism and close-mindedness.

Understanding how these emotions affect political decisions is instrumental to understanding Truth Decay. More research is needed, for instance on how emotions are used in decision making in uncertainty. Other aspects of cognitive processing affect the way people make decisions in uncertain times, for instance their values.

Values, personality and relationships

Personal and group identities, whether social or political, as well as the values that they defend, can affect the way people make decisions. In the context of Truth Decay, understanding how values and identity influence decision making is an important element of understanding how cognitive processing works and how bias can contribute to Truth Decay.

Personality

Personality can play a role in political affiliation. The relationship between personality traits and party choice remains unexplored in Europe, and evidence mainly comes from the United States. Mair et al. explore how personality types shape political identity, reporting that open-minded types of personalities are associated with liberal/progressive political parties, while closed-minded personalities are associated with political conservatism. More research is needed about the relationship between personality traits and party choice, especially in multi-party (as opposed to two-party) systems.

Values

While we could not find evidence about how values shape political choices specifically within the European context, there is a large body of research about the role of values in

209 Mair et al. (2019).
210 Mair et al. (2019).
211 Hoffmann & De Vries (2019).
212 Greifeneder et al. (2011).
213 Mair et al. (2019).
Europe, in which the EU’s approach to the EU Fundamental Values plays a key role. Respect of the EU Fundamental Values, as enshrined in Article 2 of the Treaty on European Union (TEU), is essential for the correct functioning of democracy both at Member State and Union levels. Many analysts agree that a homogeneous acceptance of EU fundamental values across the Member States of the Union is necessary for maintaining its legal order and has the potential to undermine both the coherence of its identity and its ability to speak with one voice as a normative power. A recent Eurobarometer study shows that the three values that matter most to Europeans personally are peace, human rights and respect for human life.

Solidarity is one of the values that has been explored as a way to better understand Europe’s contemporary problems and to identify solutions. Grimmel and Giang analyse the relevance of this fundamental value in relation to contemporary problems in Europe, such as the immigrant and refugee crisis, the euro area crisis, Brexit, and nationalist-secessionist movements, and the challenges the solidarity value is facing.

Social and political belonging
The importance of identity in society and the effect group belonging has on political participation and voting has been researched for decades. In the late 1970s, Badie and Gerstlé explored the political behaviour of French voters and what influenced their attitudes. They found the need to belong to the group and to follow the lead of a ‘paternal’ figure (these included e.g. the local mayor, teacher, doctor, family and the Church) as drivers of political participation and voting. Nowadays the disappearance of these paternal figures made room for other authority figures, which can potentially include agents of Truth Decay.

4.1.2. Summary
Cognitive biases affect the way that people process information and make decisions. These biases include confirmation bias, which makes people prefer information that confirms their pre-existing beliefs. These biases also include emotions, which – alongside rationality – are an integral part of the decision-making process. It is also now accepted that people’s values, identity and relationships influence their decisions, including political ones.

This is not a new phenomenon, and it affects human brains the same way across the globe. While bias has traditionally played a role in decision making, Kavanagh and Rich argue that, in the US context, these biases magnify other drivers, thus contributing to Truth Decay to a greater extent. A good example of the way in which bias magnifies the effects of other drivers involves changes in the media ecosystem, where cognitive biases may exacerbate the ability of the media to spread false information or to push people into isolated viewpoints (see Section 4.2). As such, it is arguably the case that cognitive biases contribute to Truth Decay.

215 Mader (2019); Oshri & Shenhav (2018).
217 Grimmel & Giang (2017).
218 Badie & Gerstlé (1979).
4.2. Changes in the information system

Changes in the information system that drive Truth Decay in the United States context are linked to the changes in the nature, speed, and scope of the information system and media landscape. In this section we explore the extent to which the same changes have been occurring in Europe, and whether these changes contribute to Truth Decay in the European context.

In Chapter 3 we discussed changes in the media landscape, which help blur the line between opinion and fact and contribute to the increasing volume and potential influence of opinion over facts. In this section we now outline the factors that drive this change, as well as the role of digitalisation of information and communication in this process. We also discuss how these changes interact with other drivers of Truth Decay.

4.2.1. The changing landscape and business model of the media in Europe

The information and media landscape have changed drastically over the past several decades. In particular, as introduced in Section 3.4.2, the Internet, mobile services and social media platforms have had profound impacts at societal and individual levels and have drastically changed the way in which news is consumed. Traditional media services, such as linear television and print newspapers, have faced increasing competition from newer forms of media, including social media platforms. As a consequence, subscribership has decreased, revenues and profit margins have shrunk or disappeared. This has forced newspapers and network and cable television stations to reduce investment in expensive investigative journalism and focus more on commentary, which is cheaper and appeals to viewers. These changes in the media landscape, Kavanagh and Rich note, have contributed to Truth Decay, as media organisations increasingly have an incentive to cater their coverage to audience biases, essentially providing the types of news stories that people want and agree with, rather than focusing on providing high-quality and objective news coverage.

Although these have been global trends, there are still some notable differences in the use of the Internet and how people consume news across all European countries, with some countries still continuing to consume news largely through more traditional means, including print, radio, or television. Cable television, for instance, has been a major success story in the United States, particularly with the rise of Ted Turner’s Cable News Network (CNN), which by 1992 had reached a global audience of some 53 million viewers in 138 countries and 60 million in the United States. In Europe, public news organisations, rather than private news corporations, remain the dominant source of news on television and radio, such as the BBC in the United Kingdom, Sveriges Television/Radio (SVT/Radio) in Sweden, NOS in the Netherlands or ARD in Germany. About half of British adults (48 per cent) name the BBC as their main source for news, 39 per cent of Swedes name SVT/Radio and 37 per cent of Dutch adults name Nederlandse Publieke Omroep (NPO). Reliance on public news media, such as NP or PBS, is much lower in the United States.

Nonetheless, and similar to what has been found in the United States, traditional
gatekeepers such as publishers and broadcasters have gradually lost influence in Europe. It is also apparent in Europe that any individual can technically become a producer of news and other media content.

Nielsen reviewed the main trends in global media landscape over the first decade of the 21st century and concluded that public service providers in Europe have faced strategic challenges with the increased competition from online media as the United States has, but their revenue models appear fundamentally more stable.\(^{222}\) In Northern Europe, traditional legacy media companies in print and broadcasting have generally managed to maintain market share, while in Southern Europe broadcasters have also held their own, while many traditional print newspapers have been struggling. These companies have become more dependent on support from the private sector or their owners.\(^ {223}\) The vulnerability of traditional media companies is illustrated by the recent COVID-19 crisis, during which numerous reports emerged of local newspapers across the globe struggling to survive due to falling advertising revenues.\(^ {224}\)

Media systems work differently in the United States and Europe, and there are also differences within Europe itself. Fletcher and Jenkins explain how the ‘opportunity structures’, meaning the availability of news and access to the news, are different in Europe when compared to the United States.\(^ {225}\) The differences between these media systems are summarised in Section 3.3. Indeed, when comparing the United States to certain European countries, such as France, some key differences are apparent. These include the subsidies given to the media industry in France as well as media traditions (e.g. the existence of a strong public broadcasting tradition in France). Thus, though information has become more digitised in general, cultural differences still remain and might go some way to explaining the differences in the trends of Truth Decay both between Europe and the United States, and within Europe itself.\(^ {226}\)

---

222 Nielsen (2012).
224 See for instance: BBC Northern Ireland (2020); EU Observer (2020); New Statesman, Jackson (2020); Wall Street Journal (2020).
225 Fletcher & Jenkins (2019).
### Table 4.1: Differences between US and European media systems

<table>
<thead>
<tr>
<th></th>
<th>Mediterranean/polarised pluralist (France, Greece, Italy, Portugal, Spain)</th>
<th>Northern European/democratic corporatist (Austria, Belgium, Denmark, Finland, Germany, Netherlands, Norway, Sweden, Switzerland)</th>
<th>North Atlantic/liberal (United Kingdom, United States, Canada, Ireland)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Newspaper industry</strong></td>
<td>Low newspaper circulation; elite, politically oriented press</td>
<td>High newspaper circulation; early development of mass-circulation press</td>
<td>Medium newspaper circulation; early development of mass-circulation press</td>
</tr>
<tr>
<td><strong>Political parallelism</strong></td>
<td>High; external pluralism, commentary journalism</td>
<td>External pluralism, especially in national press; historically strong party press</td>
<td>Neutral commercial press</td>
</tr>
<tr>
<td><strong>Professionalism</strong></td>
<td>Weaker</td>
<td>Strong; institutionalised, self-regulation</td>
<td>Strong; non-institutionalised, self-regulation</td>
</tr>
<tr>
<td><strong>Role of the state</strong></td>
<td>Strong state intervention; press subsidies in France, Italy</td>
<td>Strong state intervention but with press-freedom protection; press subsidies; strong public service broadcasting</td>
<td>Market dominated; strong public service broadcasting in United Kingdom, Ireland</td>
</tr>
</tbody>
</table>

*Adapted from Fletcher & Jenkins (2019)*

Given the pressure of expanded options and increasing competition, media providers have developed and tested alternative models to improve their financial sustainability. While traditional newspapers initially developed their web-based offer as an additional service to their paper-based publications and as a way to attract and retain customers, the web-based offer has now moved towards a ‘freemium’ model, under which part of the content only is accessible to all web visitors, while full access is reserved to subscribers. This is the case for instance for established media such as *Le Monde* and *Le Figaro* in France. Other media call for donors to support their effort to keep quality journalism, as is the case for *The Guardian* in the United Kingdom.

In addition to paywalls, other alternatives to pay for online content have emerged, such as crowdsourcing initiatives for investigative journalism collectives and online subscription models for quality journalism. Most of these have occurred in the United States, but several innovative models have gained popularity in Europe as well (see for example Box 4.1 below). The 2020 Reuters Institute *Digital News Report* reported that during the COVID-19 pandemic, more publishers started charging for content or tightening paywalls and this is beginning to have an impact. The proportion of respondents paying for online news has increased considerably across most countries surveyed. About one in five people in the United States pays for online news. In Europe, the share of people who pay for online news ranges from seven per cent in the United Kingdom to 42 per cent in Norway. In most countries this percentage is around ten per

---

227 Newman et al. (2020).
cent (e.g. France, Germany, Italy and Spain) or 20 per cent (Denmark and Sweden).

Not all of these additional revenue streams are necessarily viable. Research by Myllylahti suggests that online news paywalls in Europe create additional income for news corporations, but they currently only constitute a relatively small share of revenues, which means they do not offer a viable business model in the short term.\(^{228}\) Myllylahti observes that several European newspapers have started reducing prices for their online content and offering package discounts to boost subscription numbers, but these efforts are unlikely to offset the downward trend in revenues. Moreover, it seems primarily big national brands, such as Bild (423,000 digital subscribers) and Zeit (105,000 subscribers) in Germany have been somewhat successful in charging for online news. Yet, few local or regional publishers report success with digital subscription models with some exceptions in the Nordic countries and France.\(^{229}\)

**Box 4.1: Alternative business models for online journalism: De Correspondent**

Having had a first-hand experience of the perils of the traditional newspaper business, the editor-in-chief of the Dutch national daily *nrc.next*, Rob Wijnberg, decided to launch a new online platform for quality journalism in 2013. In a primetime talk show on national television, he announced that he would need 15,000 people each to donate €60 to start a subscription-based model free of advertising. Within eight days, he raised over €1 million and *De Correspondent* launched on 30 September 2013 with about 30,000 subscribers.\(^{230}\) *De Correspondent* claims to distinguish itself by steering clear of hype and the daily news cycle but focusing instead on journalistic content led by individual correspondents who specialise in specific themes. By September 2020, *De Correspondent* had 120,000 paying subscribers, which would be equivalent to the subscription levels of the *New York Times* if corrected for the market-size of a Dutch language publication. *De Correspondent*’s website abides by its ten principles, which include, among others: no soundbites, stereotypes, and clichés; transparency in journalistic choices; involvement of members in the journalistic process; no ads; no target groups; and no profit maximisation.\(^{231}\) In addition to its membership fees, the platform generates revenues through publication of books, fundraising campaigns, speakers’ fees and donations.\(^{232}\)

An effort to scale the online platform internationally was less successful. *The Correspondent* raised $2.6 million in 2018 during an international crowdfunding campaign endorsed by several American celebrities. Yet, the English language newsroom of *The Correspondent* shut down on 31 December 2020 as, according to the founders, it was no longer financially viable due to two primary reasons: ‘poor conversion and retention of members, especially with only 27 per cent of founding members renewed for the 2021 fiscal year, as well as readers’ demand for more immediate news in light of the COVID-19 pandemic that ran contrary to the outlet’s concept of “unbreaking news”’.\(^{233}\)

---

228 Myllylahti (2014).
229 Newman et al. (2019).
231 De Correspondent (2021).
233 Pfauth & Wijnberg (2020).
A silver lining is that in both the United States and in Europe, people continue to be willing to pay for news, online or in print. Using survey data from the Reuters Institute *Digital News Report*, Fletcher and Nielsen show that people who already pay for printed news are also more likely to be willing to pay for online news.\(^{234}\) Second, they find that those who consume free online news from public service media are not necessarily less willing to pay for online news. Finally, younger people in Germany, France, the United States, and the United Kingdom who are currently not paying for online content are more willing to pay in the future.\(^{235}\)

Overall, these changes in the media landscape explain why the media needs to increase their audience and diversify their revenue streams. This is done by providing the types of news stories that people want and agree with, often at the expense of providing high-quality and objective news coverage, and thus contributing to blurring the line between opinion and fact and affecting trust in the media institutions.

### 4.2.2. The rise of social media and online news consumption

As in the US context, the main change in the information system in Europe is related to the increased use of new technologies, such as the Internet and online platforms, which have changed the speed and scale at which information is consumed. The 2017 Eurobarometer shows that 65 per cent of respondents from the EU use the Internet every day or almost every day. There is, however, a wide fluctuation between different countries. For example, while 91 per cent of respondents from the Netherlands state that they use the Internet every day or almost every day, only 42 per cent of respondents from Romania say the same.\(^{236}\)

Martens et al. state that the digitalisation of communication has facilitated the sharing of information, due to the perceived decrease in costs for the consumer: for example, there is no longer the need to print or transport physical newspapers, with consumers able to access information online.\(^{237}\) This change, however, has to be considered in the wider context of the digitalisation of society and the way the race for data changed the business model of organisations in several sectors beyond the media environment. Social media play a prominent role in this change, as noted by van Dijck and Poell, who observe that social media have permeated every aspect of communication, from the personal to the professional, 'affecting people’s informal interactions, as well as institutional structures and professional routines.'\(^{238}\)

In this section, we first explore the prevalence of social media as a source of information, considering whether and why people choose to use sources of information that they claim they do not necessarily trust (as seen in Section 3.4.2). We then examine how algorithms influence users’ experiences, beyond their conscious choices. Finally, we look into one consequence of these two aspects of the rise of social media: the spread of disinformation.

---

238 Van Dijck & Poell (2013, 3).
As shown in Section 3.3.2, the use of online social networks has been rising steadily. While 33 per cent of respondents claimed to be using online social networks almost every day in the 2010 Eurobarometer, in 2017, slightly less than half the respondents (42 per cent) said that they use online social networks on a daily basis.239 As with Internet use, however, differences exist between countries: while around 60 per cent of respondents in Sweden, Denmark and Malta claim to use social networks every day or almost every day, only 32 per cent of respondents in Czechia (formerly Czech Republic) and Germany say the same.240

As regards sources of information, as introduced in Section 3.4.2, although television is still the preferred source of news on national political matters in EU countries, and radio and the printed press continue to be among the main sources of news for a large minority of Europeans, the Internet continues to gain ground as a preferred source of national news (see Figure 4.1). As noted above, in the 2017 Eurobarometer 42 per cent of respondents indicate that they get most of their news from the Internet.241 More specifically, the role of online news websites continues to rise (35

---

per cent in 2017), whereas the role of online social networks as the main source of news has remained relatively stable since 2016 (16 per cent in 2017). Within Europe, however, there are considerable differences in the sources of news consumption. Luxembourg, for instance, continues to be the only country with a preference for the printed press (58 per cent versus 52 per cent preferring television). While the Internet has gained importance as a source for news on national political matters across the EU, notably in Malta (63 per cent, an increase of eight percentage points since 2016), Cyprus (53 per cent, an increase of eight percentage points), Poland (53 per cent, an increase of seven percentage points) and Spain (40 per cent, an increase of seven percentage points), its role varies considerably with 31 per cent in Portugal to 64 per cent in Latvia. These trends should not necessarily be interpreted as a shift away from traditional media organisations. Traditional public (e.g. the BBC, SVT/Radio, NOS, ARD, etc.) and private broadcasting organisations (e.g. RTL, ITV, Mediaset, etc.) as well as newspapers (e.g. The Guardian, Bild, Le Monde, El Pais, La Repubblica, etc.) all have popular online and social media channels through which they share (or sell) their content.

Despite the overall trend pointing to the increased digitalisation of information – and the more rapid way in which it is produced and shared – this driver appears to have more traction in certain countries where the level of connectivity to the Internet and the use of social media networks is higher; and within these countries to a certain type of demographic, namely younger, more educated, and those with higher economic status, as evidenced below. According to data from Eurostat, an average of 83 per cent of individuals in Europe have used the Internet over the last three months, based on 2018 data.242 In Europe, there is a general trend whereby the countries with the highest level of Internet use are generally located in Western Europe, while countries with the lowest level of Internet use are generally located in Eastern Europe. Greece, Italy and Portugal are the main exceptions, with Internet use at 72, 74 and 75 per cent respectively (see Figure 4.2).243

---

An increased volume of content and shifting roles of content curators

The rise of the Internet over the past three decades has also allowed for more content to be created and distributed. Flore et al. note that the shift towards online media has changed, and even removed, the role of gatekeepers who would have previously helped control the distribution of information. The change around gatekeepers has also meant that people, such as politicians, are now able to ‘communicate directly with the electorate’. The digitalisation of information has also served to lower the ‘entry costs into the news market on the supply side and facilitated entry for many more newcomers, from edited online-only newspapers to bloggers, vloggers, social media “influencers”’. Additionally, prior to the
use of the Internet, it took longer to build an audience and gain readers’ trust, generating another expense. Flore et al. explain that, with such high costs and fewer players, print communication activities were more easily self-regulated as well. The flipside to this situation is that the digitalisation of information can lead to an increase in the amount of false content produced and distributed, since anyone is able to distribute news, and gatekeepers are lacking.

**An increased speed of access to information**

The other change brought forth by the increased digitalisation of information is the fact that news and other information can be accessed at almost any time and place. Indeed, the move away from print media to increasingly digital content has ‘enabled a continuous production cycle’. Here, news providers are in competition to report breaking news as quickly as possible, rather than the following day, as they would have done when the schedule was imposed by the printing of newspapers. The consequence of this faster news production cycle, as explained by Martens et al., is that it leaves ‘little time for fact-checking and quality control’. When combined with publication on the Internet, where news can be shared in just a click, the production of unchecked or lower-quality items can have a substantial impact, as evidenced by the trends presented in Chapter 3, in particular the trend pertaining to the blurring of lines between facts and opinion.

In addition to the digitalisation of information, the Internet and social media platforms have radically changed the speed with which information (including online news) is accessed and shared, as well as its reach. Facebook is by far the most used social media site for news. Research by the Pew Research Centre shows that in eight European countries, at least 60 per cent of social media news consumers cite Facebook as the social network from which they source news most often. Twitter is a distant second, with only four to 21 per cent of adults in eight European countries citing it as the social media platform they use most often for news.
The speed, however, at which information is shared can hamper, or in some instances prevent, the vetting of information, unlike the process that governs conventional news organisations. While the ‘data democracy,’ as termed by Dooley et al. – enables easier and faster sharing of information, it also increases the probability of sharing information that may be false. Indeed, the increased use of the Internet as a platform of communication has opened up a wider range of sources producing content. The rapid sharing of information often precludes fact-checking. KhosraviNik highlights how, in these circumstances, the news with the highest visibility or popularity may therefore be equated to being credible.

Overall, the rise of social media and online news consumption affected both the volume of information available online (including both fact and opinion, irrespective of reliability and/or quality) and the speed at which this information is accessed and spreads. This environment facilitates the activation of cognitive bias and potentially reinforces polarisation.

---

258 KhosraviNik (2017).
The role of algorithms in creating ‘echo chambers’

Whereas in earlier eras printed content was curated by editors, digital newspaper content and overall online content is curated and managed by ‘algorithmic distribution channels’. Algorithms shape the types of content that different people see, serving to ‘customise and personalise the user’s online experience’ based on where they live and what types of content they have used in the past. This can, however, create ‘filter bubbles’, where the material the user is reading gradually matches previous consumption – thereby placing individuals in ‘echo chambers of [their] own beliefs’. Echo chambers are the result of selecting a set of like-minded people and information that adhere to one’s system of beliefs, thereby forming polarised groups. While surrounding oneself with people and information that conforms to one’s own belief is not a new phenomenon, it has gained attention in the online environment, combined with the use of algorithms in social media. Echo chambers are often assimilated with filter bubbles, which result from algorithms creating ‘a unique universe of information for each of us which fundamentally alters the way we encounter ideas and information’. In addition, algorithms have been noted, sometimes inadvertently, to spread false information and aid in its diffusion.

There are several studies on the existence of echo chambers in specific segments of the European population. In 2016, Del Vicario et al. explored echo chambers in Italian social media, focusing on two communities: ‘conspiracy’ and ‘science’. The study concluded that, in the Italian context, social media provides fertile soil for the emergence of polarised communities and echo chambers. It has, however, been argued that, while algorithms may alter the range of information users consume, the act of gathering information through social media platforms may actually reduce the echo chamber and polarisation effect, due to

259 Martens et al. (2018).
261 Del Vicario et al. (2016).
262 Pariser (2011).
263 Flore et al. (2019).
264 The Google search algorithm which serves to classify webpages is an example of this.
265 Del Vicario et al. (2016).
social network sharing of varied views and messages. The 2017 Reuters Digital News Report looked into echo chambers in Europe and the United States and concluded that, while echo chambers and filter bubbles exist in social media, these social media increase users’ exposure to diverse content. Similar findings emerged from several studies in the Dutch context. For instance, Moeller and Helberger noted in 2017 that at that time there was insufficient empirical evidence of an echo chamber effect in the Netherlands. Another study undertaken across three countries, Germany, Spain, and the United States, showed that interaction on social media platforms can increase ‘exposure to messages […] which are more likely to provide novel information.’ Another study focusing on Norway – a distinctive Northern European information environment (as noted in Section 4.2.1) – and undertaken with Facebook users, also shows that discussions do occur between people holding opposing political views, emphasising the message that not all online discussions occur in echo chambers.

These findings suggest that, while echo chambers exist, the role of social media and algorithms in driving them is not as prominent. We conclude that growth of social media is not necessarily the main driver for the emergence of echo chambers, which existed before social media and continue to do so outside the social media environment.

4.2.3. Spread of disinformation

Kavanagh and Rich define disinformation as intentionally misleading or false information proliferated in order to achieve an economic or political goal. The COVID-19 crisis illustrates well how disinformation spreads virally, as demonstrated in Box 4.2 below with regard to Romania.

266 Barberá (2014).
268 Moeller et al. (2016).
270 Barberá (2014).
271 Karlsen et al. (2017).
Box 4.2: COVID-19 disinformation in Romania

In Romania, fears surrounding the virus and its unknown consequences on the normal way of life, combined with low levels of trust in the government and authorities, led to rising disinformation as the pandemic started to spread through Europe in March and April 2020. In turn, this resulted in several instances where Romanians failed to adhere to government-mandated rules, including individuals arriving from abroad and not disclosing where they had travelled from; or not respecting curfews or quarantine, which resulted in some people being placed into institutionalised quarantine and gathering to protest lockdown. On 16 March, Romanian President Klaus Iohannis signed a decree instituting a state of emergency and enabling the National Authority for Administration and Regulation in Communication to enforce the removal of news reports containing disinformation with reference to COVID-19.

At the core, the majority of the disinformation focused on minimising the perceived consequences of infection, with claims that COVID-19 is merely a type of flu that can be treated with existing medicine. Russian outlets have been particularly active, publishing and propagating content that questioned both the necessity and the severity of government measures and heightened sentiments of anxiety and outrage, with some news pieces claiming doctors were contracting the virus in hospitals and dying, while others claiming that COVID-19 was a lab-conceived weapon. Disinformation aimed at sowing doubt about government actions and at undermining the state appears to be particularly appealing to the Romanian population, possibly because it aligns with low levels of trust in the government and the authorities. Russia therefore used COVID-19 opportunistically as part of a wider ongoing effort to polarise public opinion, decrease the level of trust in institutions, and destabilise European countries. Disinformation channels ranged from online news sites, to social media, to national television, through the mouthpieces of conspiracy theorists, anti-vaxxers, and people with scientifically unsupported opinions. At the beginning of the crisis, opposition politicians also criticised and argued against preventative measures in order to sow doubt over the government’s handling of the crisis.

Disinformation is a key concern in Europe, and the European Union is at the forefront of action against disinformation. In 2018 the European Commission adopted its Action Plan against Disinformation, which outlined a joint approach to fight disinformation ahead of the 2019 European elections.

273 Levels of trust are only 30 per cent, according to the Standard Eurobarometer 92. See Data.Europa (2020).
274 Gradinaru (2020). Ziare.com is an online news publication generally considered neutral and reliable.
275 The Warsaw Institute Review (2020). The Warsaw Institute Review is a free Polish magazine, and the article cited here is an interview with former National Security Advisor to the President of Romania, George Scutaru.
276 Baltaretu (2020).
277 Presedintele Romaniei (2020).
278 Gradinaru (2020); The Warsaw Institute Review (2020).
279 Gradinaru (2020).
280 Gradinaru (2020).
281 Gherasim (2020); Rosca (2020).
Box 4.3: Fighting disinformation at the level of the European Union

At the EU level, the European Commission launched an ‘Action Plan against Disinformation’ in 2018, which included the launch of the ‘EU versus Disinformation’ campaign to highlight (and debunk) news reports seeking to spread disinformation. In addition, a ‘Code of Practice on Disinformation’ was created in 2018, whereby signatories of the Code voluntarily agreed to ‘self-regulatory standards to fight disinformation’. Signatories include social media platforms such as Facebook and Twitter, and search engines and browsers such as Google Search and Mozilla Firefox. A Rapid Alert System was also set up in 2019, as part of the Action Plan, to strengthen ‘coordinated and joint responses to disinformation’ between EU institutions and Member States. In 2020 an assessment of the EU Code of Practice on Disinformation reviewed achievements after a first year of operations of the Code and identified areas for further improvement. The report highlighted contributions of the Code in facilitating and structuring dialogue among stakeholders. It also revealed that some drawbacks relate to its self-regulatory nature, the lack of uniformity of implementation and the lack of clarity around its scope and some of the key concepts (including basic terminology and definition of key concepts).

Limitations of the Code include the lack of access to data, which are crucial for undertaking any independent evaluation of emerging trends and threats posed by online disinformation (the monitoring framework in place mainly relies on self-reported data and self-assessment).

While concern about disinformation is high, studies suggest that exposure to actual disinformation may be more limited than usually assumed, at least in mainstream journalism. Survey results indicate that concern over ‘stories that are completely made up for commercial or political reasons’ is shared by 66 per cent of respondents in Czechia, 61 per cent in Bulgaria, 59 per cent in Austria and the United Kingdom, and 37 per cent in Norway. While there are variations across countries, these are still considerably higher than self-reported exposure to disinformation, which is found among 26 per cent of respondents across all countries surveyed.

The discrepancy between concern over and actual exposure to disinformation may result from popular perceptions about disinformation and confusion about what is fact and what is not. This concern has led to a proliferation of fact-checkers. On the one hand, these fact-checkers can help identify falsehoods, and aid news consumers in seeking fact-based information. On the other hand, they may call attention to disinformation and lead consumers to overestimate its prevalence. Graves and Cherubini point out that since the

---

284 EUvsDisinfo (2021).
286 EEAS (2019).
287 European Commission (2021a).
mid-2000s, independent fact-checkers have appeared in over 50 countries, including in the United Kingdom, France, and the Netherlands, having first originated in the United States. Nonetheless, differences between fact-checkers are apparent across Europe, with newsroom fact-checkers, associated with the news media (e.g. Le Monde’s ‘Les Décideurs’, the BBC’s ‘Reality Check’, or Die Zeit’s ‘Faktomat’) being more common in Western Europe, whereas NGO-based fact-checkers are more dominant in Eastern Europe.

4.2.4. Summary

Changes in the media landscape and new information and communication tools increase people’s exposure to information – both fact and opinion. This overexposure, combined with a blurring line between fact and opinion, and an increased volume of opinion over fact, makes individuals particularly vulnerable to cognitive bias.

Changes in the media system can activate cognitive biases. In Europe, the opening of the media landscape to social media and alternative news sources forced traditional media to adapt their business model to meet new demands from consumers, thus increasing people’s exposure to content, including both verified factual information, as well as opinion. This context facilitates disinformation, thus threatening democracy. To fight disinformation, several types of interventions have arisen, including fact-checkers.

4.3. Competing demands on the educational system

Kavanagh and Rich argue that competing demands on the US educational system is one of the main drivers of Truth Decay. A long and growing list of responsibilities placed on the education system (including ‘standardized tests, extra-curricular activities, before and after school care, and other services’) combined with budgetary constraints, make it difficult for the US educational system to adapt to the new challenge of preparing students to navigate the information system media landscape. Given the role of education in shaping the future society, the gap between the growing responsibilities on the education system and the means to achieve their objectives not only drives Truth Decay, but perpetuates it in the United States.

While increasing responsibilities of the education system and budgetary constraints can be observed in Europe – as they are in the United States – the role of the education system vis-à-vis Truth Decay differs. This is primarily because the education systems in the United States and in Europe are different in nature. In this section we will explore how this difference affects the role of education in perpetuating (or not) Truth Decay in Europe.

293 Graves & Cherubini (2016).
4.3.1. Specificities of the European education landscape and main differences with the United States

The European education landscape is diverse and counts over 35 different education systems. This includes countries in which there are several different systems (e.g. three systems in Belgium and four in the United Kingdom) and countries that, even if presented as one education system, are decentralised (e.g. Germany, Italy, Spain and Switzerland). Funding, governance and curriculum design are the responsibility of individual countries. This translates into different organisational models, varying uses of school time and different curricula across European countries. The role of the EU is to support European (EU and non-EU associated) countries to both understand what challenges the education sector faces and identify effective ways to address these challenges.

As in the United States, the objective of education in Europe goes beyond preparing students for the labour market. This can be illustrated with reference to the EU strategic framework for education and training, wherein European countries agreed to work together towards common objectives to be met by 2020. These include: learning all life-long (not only as part of the formal education traditional path); facilitating mobility (between different education systems across and within countries); improving the quality and efficiency of education and training; promoting equity, social cohesion, and active citizenship; and enhancing creativity and innovation, including entrepreneurship. Overall, the common goal of education systems in Europe is to shape the citizens who will make tomorrow’s society.

The education ‘business’ model is different in Europe and the United States, but the way these systems are affected by financial constraints is not fundamentally different. Public expenditure on education is similar in Europe and in the United States. Differences in the share of public/private expenditure in education concern mainly tertiary education (with public expenditure representing almost three quarters of total expenditure in tertiary education in Europe, while two thirds of total expenditure in tertiary education in the United States comes from private sources) while public/private expenditure across other levels is around 90 per cent public in both Europe and the United States. The perception, however, of budget constraints is different in Europe and in the United States. While government expenditure on education as share of GDP is similarly high for both Europe and the United States, education represents a lower share of government expenditure on all sectors (e.g. health, education, social services, etc.) in Europe than in the United States. This could point to different education needs, or differences in the efficiency of education delivery. Beyond this, the share of education expenditure as part of government expenditure may leave the education sector with a perception that education is not a priority for European governments, compared to other sectors,
despite the fact that expenditure in education is relatively high in Europe.\textsuperscript{300}

4.3.2. Competing demands affect the educational systems differently in Europe and in the United States

Europe and the United States face the same historical challenges but these affect the education system differently. First, there is less emphasis on standard testing in Europe than in the United States. Assessments are used in Europe, including both formative (used for learning and as a learning tool) and summative (i.e. final) assessments, with more emphasis on the former. Yet, there is not as much emphasis on standard tests and there is no pan-European standardised test. The only test applied at the European scale is the OECD’s Program for International Student Assessment (PISA), which runs every three years and assesses the reading, mathematics and science knowledge and skills of 15-year-old students in OECD participating countries. Standardised tests are not common within European countries, with the exception of the United Kingdom. The absence of standardised testing arguably helps both students and educational institutions focus on their learning rather than succeeding in testing.

Second, there is less emphasis on extra-curricular activities in Europe than in the United States. While the importance of extra-curricular activities is also acknowledged in Europe, organising such activities is usually the responsibility of after-school centres rather than the schools themselves. While they are encouraged to work together, organising extra-curricular activities is not a responsibility of the school system. As such, extra-curricular activities complement and enrich the educational offerings rather than compete with them for resources within the education system.

Education systems in Europe are also exposed to the same ‘new’ challenges as the United States, namely: a ‘responsibility to prepare students to confront a more complicated and challenging information system, to evaluate information and sources and to distinguish between opinion and fact’.\textsuperscript{301} As in the United States, these new challenges only add to existing objectives: help students to acquire (basic) skills (literacy, numeracy, foreign languages), prepare them for life in society (e.g. communication, resilience) and prepare them for the labour market. What drives Truth Decay is not necessarily these ambitious objectives for the education systems but the lack of resources available to reach these ambitious objectives.

4.3.3. Critical thinking training and civic education in Europe

Kavanagh and Rich explore the gap between the skills students need to navigate the new information system and the training that the education system delivers.\textsuperscript{302} While it is also true in the European context that critical thinking training and civic education are more relevant than ever, the education offered in European countries is already rich in these areas, which potentially places Europe in a better position to address challenges linked to the new information system.\textsuperscript{303}

\begin{thebibliography}{9}
\bibitem{300} Roser & Ortiz-Ospina (2020).
\bibitem{301} Kavanagh & Rich (2018, 133).
\bibitem{302} Kavanagh & Rich (2018).
\bibitem{303} European Commission & EACEA (2018).
\end{thebibliography}
Citizenship education – understood as covering both critical thinking and civic education – has traditionally been part of European education systems. Citizenship education is part of the national curriculum of most European countries and broadly covers all competences related to democratic and socially responsible action, critical thinking (including both ‘finding and interpreting information’ and ‘reasoning and exercising judgement’) and interpersonal interaction.\textsuperscript{304} In contrast, Media Literacy Now reports that only 14 states in the United States have taken substantial legislative action for media literacy education.\textsuperscript{305}

In general, the learning objectives are as follows: personal development and interpersonal interactions at primary level; critical thinking at lower secondary level; and how to act democratically at upper secondary level. Several citizenship education delivery modes co-exist in Europe. These include citizenship education as: (1) a separate subject (in a few countries only); (2) integrated as part of broader learning areas (social sciences or language studies); or (3) a cross-curricular objective to be delivered by all teachers in all subjects. Citizenship education is tested for certification purposes in 17 European countries. Eight European countries also use citizenship education tests not to assess students, but instead to assess teachers, schools and the education system as a whole. The European ‘champions’ of citizenship education (in terms of number of compulsory learning hours) are Estonia, Greece, France, Slovakia and Finland, as illustrated in the map below.

\textsuperscript{304} European Commission & EACEA (2018).
\textsuperscript{305} Media Literacy Now (2020).
Evidence, however, is scarce as to whether citizenship education effectively prepares students for challenges linked to participating in public life in the context of the new information system. Critical thinking training applies to media literacy; there are increasing demands on media users as they have to navigate the amount of information that is available to them. Media literacy is defined as an educational response that expands the concept of literacy to the analysis of media and audiences, information and power in mass communication, popular culture, and new technologies. Media literacy and trust are both necessary for media users to safely navigate a reality where users are flooded by information. Trust and media literacy are also needed to develop the knowledge and skills to make informed choices in the media landscape.

People’s confidence in their ability to detect disinformation is an imperfect but interesting illustrative indicator. A recent Eurobarometer (2018) survey focused specifically on media consumption, including Europeans’ perceptions of and experience

---

307 Medietilsynet (2020).
with disinformation. Interestingly, when asked about whether they are confident that they can identify fake news, the champions of citizenship education are not the most confident. In Estonia, 66 per cent were ‘very’ or ‘somewhat’ confident in their ability to identify fake news; in France, this figure was 73 per cent; and in Sweden, it was 73 per cent. In Croatia and Cyprus (where confidence levels are 82 and 78 per cent respectively), both countries recommend a short citizenship education taught time in their curriculum. Finland is consistent in its high provision of citizenship education and people’s high confidence in their ability to spot fake news (72 per cent). Spain, on the other hand, is consistent in its low provision of citizenship education and low confidence (55 per cent).

Reviews of evidence about the effectiveness of media literacy interventions in the European context show that there is evidence that some citizenship education interventions focusing on media literacy in the formal school context have proved effective to lessen the vulnerability of children to disinformation. A recent RAND Europe study, however, into the role of media literacy in tackling online disinformation showed that the evidence for effectiveness of these interventions is limited and that more research is needed in this area, in particular outside the formal school system. Media literacy in Europe is illustrated with reference to a Norwegian example in Box 4.4.

Box 4.4: Trust in media and media literacy – Norway

The general trust in traditional media sources is high in Norway. When asked, 83 per cent of Norwegians claim that they trust traditional sources compared to only eight per cent who trust sources such as Facebook. Four out of ten Norwegians (43 per cent) also have high media literacy, whilst 28 per cent have a medium understanding of digital media and 20 per cent have a medium understanding of analogue media. Young people’s (16 to 20-year-olds) understanding of online media is generally better than that of older people. Young people are more likely to know how to maintain their privacy online, how product placement works, and how algorithms affect the media reality. Based on assessments, however, they have lower media literacy than the rest of the population. The same percentage of young people have high media literacy (21 per cent) as low media literacy. Young people are twice as likely as the national average to use social media as their primary news source, and primarily use online newspapers, television and social media as their news source. For instance, three times as many young people use YouTube daily compared to the

---

309 McDougall et al. (2018).
310 Devaux et al. (2019).
311 Medietilsynet (2020a).
312 Medietilsynet (2020a).
313 Medietilsynet (2020b).
314 Medietilsynet (2020c).
315 Young people were asked what their most important news sources are and said: free online newspapers (65 per cent), social media (51 per cent), television (33 per cent), online newspapers with a subscription (27 per cent).
While it has been part of the school curriculum in most European countries, improving the provision of citizenship education is still high on the national and European political agenda in Europe. For instance, citizenship education recently became a separate compulsory subject in the French-speaking part of Belgium, and Greece and Finland recently expanded the provision of citizenship education to more grades. The European Union has also translated this policy priority of its Members States into a non-binding piece of legislation on promoting

316 Medietilsynet (2020d).
317 Forty-eight per cent of young people are interested in news on home affairs compared to 79 per cent in the rest of the population. Forty-seven per cent of young people are interested in local news compared to 67 per cent of the population. In comparison, 45 per cent of young people are interested in celebrity news compared to 30 per cent of the rest of the population. See Medietilsynet (2020d).
318 Barneombudet (2020).
319 Utdanningsdirektoratet (2021).
321 Medietilsynet (2020e).
322 Medietilsynet (2020f).
323 Medietilsynet (2020g).
common values, inclusive education, and the European dimension of teaching.\textsuperscript{324} Despite existing citizenship education provision as part of the formal education system, media literacy interventions have flourished outside the formal education system, in part to address the challenges linked to cognitive bias combined with changes in the information system. Notable examples include Social Star (Denmark), ToolboxMedia Education (The Netherlands).

**Box 4.5: Social Star**

‘Social Star’ is a programme under which the Danish Competition and Consumer Authority, the Danish Media Council for Children and Young People and the Danish Consumer Ombudsman developed educational material to help children learn about hidden advertising on social media.\textsuperscript{325} Social Star targets primary school pupils (at the age when children actively start engaging with social media) and focuses on critical thinking. The programme includes video material with the Consumer Ombudsman and young bloggers, as well as other interactive activities. For example, students are asked to analyse different situations related to online (hidden) advertising on social media. Some pupils take the part of advertisers, while others play the role of interest groups defending children.

**Box 4.6: The Toolbox Media Education**

The ‘Toolbox Media Education’ (Toolbox Mediaopvoeding) is an online programme that provides information on media education to parents in the Netherlands.\textsuperscript{326} It was created on the basis of findings from the Netherlands Youth Institute (NJI) that revealed gaps in existing media education information available online in the Dutch language. The NJI found that this information lacked coherence, scientific basis, and tackled the matter rather from a preventative perspective. The Toolbox Media Education addresses these issues and provides practical ready-to-use tools for parents and educators.

\textsuperscript{324} Council of the European Union (2018).
\textsuperscript{325} Konkurrence og Forbrugerstyrelsen (2018).
\textsuperscript{326} Devaux et al. (2019); Nederlands Jeugdinstuut (2021).
One could argue that these interventions have flourished to meet a need that the formal education system was failing to meet. One obvious element to support this argument is that citizenship education provision in the formal school systems targets school-age children who are part of the education system and leaves aside those who are not. This concerns adults who have left the education system but are not less vulnerable to disinformation, but also those young people who are not in education, employment, or training (NEETs), who represented as much as 16.5 per cent of the 20- to 34-year-olds in the EU in 2018.\textsuperscript{327}

In rare cases, media literacy interventions outside the formal education system have been evaluated and evidence of their effectiveness is available. This is the case, for instance, with the fake news game ‘Bad News’.

\textbf{Box 4.7: An evaluation of media literacy intervention: ‘Bad News’: The Fake News Game}

Researchers at the University of Cambridge created a ‘Fake News Game’ in which participants are asked to create a news article, in this case, about the European refugee crisis, using misleading and emotive tactics.\textsuperscript{328} The intention was to help users better recognise misleading news constructs, in line with the ‘inoculation theory’\textsuperscript{329} according to which people whose attitudes and beliefs are attacked develop resistance and defences against future attacks to these attitudes and beliefs.

The intervention was piloted in an ‘exploratory’ randomised study involving 95 students aged 16–19 from a Dutch public school. Participants in the intervention group were split into groups of two to four and assigned a ‘character’ with a distinct viewpoint: the alarmist, the denier, the clickbait monger and the conspiracy theorist. Participants were then asked to construct a news article to present the issue from that character’s perspective. The game lasted for 30 minutes and was followed by a reading task. The control group watched an unrelated presentation during this time.

Following the intervention, both the treatment (n=57) and control (n=38) groups were asked to read an article about the same issue that used emotive or misleading tactics to present the issue from an ideological viewpoint. Directly following the intervention, a seven-point Likert scale was then used to measure attitudes of participants towards the article’s reliability, familiarity, and persuasiveness and participants’ personal agreement. The treatment group rated the reliability (p<0.05) and persuasiveness (p=0.16) of the article as lower than the control group and indicated less personal agreement (p=0.22). A secondary mediation analysis estimated that the reduction in persuasiveness was an indirect result of reduced judgement of reliability. No longer-term follow-up was conducted.

\textsuperscript{327} Eurostat (2020).
\textsuperscript{328} Devaux et al. (2019); Roozenbeek & van der Linden (2019).
\textsuperscript{329} See McGuire (1964).
Evidence, however, of relevance and effectiveness of these interventions outside the formal education system is generally missing. First, these interventions have often been developed to respond to a need perceived as pressing (both important and urgent) by its promoters, who did not necessarily take the time to develop proper needs assessments. Second, these interventions have often been developed without a clear theory of change. While a theory of change can in most cases be re-constructed a posteriori, the absence of theory of change often means the absence of any framework that would guide monitoring and evaluation of the interventions. Third, even for those interventions for which there would have been a needs assessment, a clear theory of change and a monitoring and evaluation plan, it is often too early to see the effects of the intervention, particularly in the long run.

4.3.4. Summary

While the challenges faced by education systems in Europe and the United States are similar in the areas of citizenship and media literacy education (in particular challenges linked to participation in democratic life in the context of the new information system), education systems in Europe and the United States start from different places. In addition to differences in business models and structures, the education systems in Europe and the United States face slightly different constraints and have slightly different priorities. While it is worth noting that these differences exist, they do not fundamentally affect the educational challenges that Europe and the United States face. These differences, however, might suggest different tools to address consequences of Truth Decay.

Citizenship education that provides both critical thinking skills and civic education to students, has traditionally been part of the school curriculum in European countries – with great variation across education systems. There is evidence of the effectiveness of media literacy interventions as part of the formal education system, in particular in primary and secondary education. Yet, the extent to which, and how, citizenship education positively affects citizens’ preparedness to address challenges linked to participating in public life in the context of the new information system is still to be explored.

Overall, while it is clear that there is room for improvement in people’s media literacy and preparedness to make a judgement about information they find and use to form an opinion and make decisions, the role of the education system in driving Truth Decay is not as prominent in Europe as it is in the United States. European educational systems also seem to have made more progress towards leveraging the education system as a tool against Truth Decay. Yet, it also worth noting that education is likely to be only one piece of the response to Truth Decay; changes on the information supply side will also be required.

4.4. Polarisation

Political polarisation comes to the fore in different ways: by increasing ideological differences between voting groups, a bigger divide in perceptions of important singular issues, and leading to strong negative perceptions of other voting groups (affective polarisation). Political polarisation and the significant minority of voters who do not participate in elections create social imbalances in the power and influence of
different social groups. According to Kavanagh and Rich, polarisation creates ‘opposing sides, each with its own narrative, worldview and facts’, consequently epitomising the erosion of consensuses and compromises that underpin a stable society. Polarisation not only contributes to Truth Decay but is also exacerbated by it: increased levels of polarisation cause heightened degrees of disagreement about facts and data and escalate the blurring of the line between opinion and fact. In turn, these trends of Truth Decay can increase polarisation, driving the different factions of the society even further apart. For Kavanagh and Rich, this perpetual cycle can lead to ‘political inaction and dysfunction at all levels of government’ and ‘reduce the efficiency and quality of legislative processes and undermine both trust in government and the efficacy of checks and balances more generally’.

Kavanagh and Rich identify three dimensions of polarisation: political, economic and socio-demographic. They use a variety of evidence to illustrate polarisation in the United States, including the ideological distance between lawmakers, voting patterns and data on housing and income inequality. Polarisation can help explain how people are ‘rarely exposed to new ideas and become increasingly insulated from, and even fearful of, anything that is new and different’, providing a breeding ground for Truth Decay. In the following sections, we will explore the extent to which the three types of polarisation identified by Kavanagh and Rich are found in the European context.

4.4.1. Political polarisation

Political polarisation refers to the divergence of political attitudes to ideological extremes. This phenomenon may manifest itself at two levels: first, in the values system of the population or public opinion on policy issues; and second, in the opinions of elected leaders or the positions of their parties on the political spectrum.

Values or ideological polarisation

Polarisation may be seen in ideologies or values systems when there is increasing divergence in public opinion over time. Similar to the United States, Europe is characterised by great socio-demographic diversity along different dimensions, such as language, religious affiliation, ethnicity or education level. Whilst these dimensions may explain the heterogeneity of views and preferences across a population to some extent, we cannot assume that these groups are homogenous and that all their members share the same views.

The measurement and mapping of values within and across populations has been a field of extensive scholarship. Most of this research finds that the United States stands
out for its increase in polarisation among citizens. Based on data of the Comparative Study of Electoral Systems, Harteveld measured ideological polarisation at the citizen level as the standard deviation in left-right positions of respondents. He found that, at an aggregate level, North America has steadily become more ideologically polarised over the past three decades, as has Southern Europe. East-Central Europe saw a spike in ideological polarisation in the 2000s, followed by a drop in the 2010s, while Western Europe has remained relatively stable.

A recent paper used data in the World Values Survey to investigate the extent of values polarisation and its change over time. The authors use four main ideology types to label citizens across the globe in the dataset on the left-right scale: Liberal Centrist, Conservative Centrist, Left Anarchist, and Right Anarchist. They use the structure of these ideologies to analyse, with an unsupervised machine-learning algorithm, variation of ideologies across countries and time periods. The authors found evidence of a “disappearing centre” in a sub-group of countries with citizens shifting away from centrist ideologies into anti-establishment “anarchist” ideologies over time. Between Wave 2 (1989–1993) of the World Values Survey and Wave 5 (2005–2009), Draca and Schwarz also observe that the trend of values polarisation is most pronounced in Denmark, followed by Iceland, Malta, Belgium and Italy. These findings show that there is not much consistency between individual studies on polarisation. This may be partly due to the differences in the way ideological polarisation is measured, for example: a disappearing centre versus the standard deviation in left-right positions.

The relation between public values or opinions on policy issues on the one hand and positions of political parties on these issues is complex. Democratic theory suggests a causal connection running from public opinion to party competition for the electorate’s vote. Others, however, have demonstrated that the relation could be the reverse: for example, a change in party position on a policy issue can be expected to have an effect on the positions of both the party supporters and the general public. Kavanagh and Rich argue that the widening divide between Republicans and Democrats at the popular level in the United States could be due to party sorting rather than an actual shift in attitudes. Down and Wilson find a potential driver of this causal relationship, and a possible explanation for the difference between Europe and the United States. They explore the case of support for the EU to show that changes in the distribution of party positions on the EU cause change in the distribution of public opinion in six of 11 Member States. They find that the presence of small, often Eurosceptic,
parties is central to this relationship: it seems that, in the absence of such small parties, inter-party competition is not causally related to public opinion polarisation; and in those countries with the smallest parties they do observe a causal relationship.

While the United States has seen an unequivocal trend of increasing divergence in ideologies or values systems, the trends in Europe are less clear. Depending on how it is measured, some studies show an uptick in ideological and values polarisation in certain European countries, creating fertile ground for Truth Decay, while others show a stagnant trend in recent years. The observation that European society is not split into two rivalling political ideologies, as is the case in the United States, may explain the inconsistent trends of Truth Decay observed across Europe.

Party identification and ‘affective polarisation’

Kavanagh and Rich discuss data on party identification and partisan voting in the United States, arguing that ‘over the past 20 years, the percentage of voters expressing views that are consistently liberal or conservative has more than doubled.’ Partisanship is especially a relevant component of identity in countries with a two-party system (United States) and may be of less relevance in multi-party settings (e.g. the Netherlands).

Applied to party identification in the United States, this process of social differentiation has been labelled ‘affective polarisation’. Iyengar and Westwood define affective polarisation as the process by which people identifying as Democrats or Republicans evaluate co-partisans positively and partisans of the opposed party negatively. Although this interpretation of polarisation through bi-partisanship is fairly unique to the United States, studies by Hameleers and Bankert et al. show that similar developments of social categorisation could be observed in politics and public life in Europe too. Party identification will likely be weaker though if multiple parties exist that are ideologically close, and therefore, a partisan in-group is not opposed to every possible partisan outgroup to the same extent.

A recent study normalised and compared polling data about trends in affective polarisation across nine OECD countries and came to similar conclusions. They found that the United States experienced the largest increase in polarisation over the past four decades. Switzerland, as illustrated in Box 4.8, also experienced an increase in polarisation, but not as steeply as in the United States. Other European countries, such as the United Kingdom, Norway, Sweden and Germany, experienced a decrease in polarisation. Boxell et al. also look into variables that are thought to correlate with polarisation to understand what drives the deviation in these trends. They find that factors that tend to be more distinctive for the United States (such as changing party composition, growing racial divisions and the emergence of partisan cable news) better explain the differences than more universal developments (such as the emergence of the Internet and rising economic inequality).
Reiljan studied the concept of affective polarisation across European party systems.\textsuperscript{353} The author introduces the Affective Polarisation Index (API) and applied it to 22 European democracies and the United States between 2005 and 2016. He showed that affective polarisation is acutely present in European party systems. His results indicate that partisans in Central Eastern and Southern Europe are particularly hostile towards competing parties, even more so than in the United States, while Northwestern European countries are more moderate in terms of partisan feelings. Reiljan finds that the party system in the Netherlands is the least affectively polarised, followed by Germany, Finland and Iceland. This is perhaps not surprising given the consensual political culture and broad-based coalition governments in these countries. The author describes additional trends in affective polarisation across Europe, highlighting an increase in Greece between 2009 and 2012, and in Poland between 2005 and 2011, where his results suggest an increasing animosity between the supporters of the two main parties: the right-of-centre liberal Platforma Obywatelska (PO) and the right-wing conservative Prawo i Sprawiedliwość (PiS). The opposite trend was observed in Switzerland, which had the most affectively polarised elections in 2007 among Western-European countries, to a level similar to that of Nordic countries and Germany in 2011. Box 4.8 provides an overview of the levels of polarisation in terms of voter self-positioning in Switzerland, as opposed to election outcomes.

\textsuperscript{353} Reiljan (2020).
Switzerland practises direct democracy, whereby citizens vote directly on policy issues. Additionally, Switzerland also combines this with representative democracy at both the cantonal and federal levels, to determine representatives within the Swiss Federal Assembly. Switzerland has a multi-party system, with five major parties, but 12 parties in total represented within the current Federal Assembly. Despite the multi-party system, polarisation has increased over the recent years, as shown in the figures below.354

Figure 4.5. Self-positioning of voters from 1995 to 2019 (%)

As shown above, the voters for the right-wing parties (the Swiss People's Party and the Liberals) have shifted over more to the right, with the same trend, although less pronounced, for left-wing voters towards the left.355 It is unclear what may have prompted this shift. Possible explanations include the fact that the Swiss People's Party and the Liberals have greater campaign funds enabling them to undertake a national rather than a cantonal campaign, as is the case for other Swiss parties.356 More generally, the increased polarisation of the electorate reflects the fast growth of the right-wing party, the Swiss People's Party, which began taking more radical views on topics such as immigration and the European Union.357

354 Bochsler et al. (2016).
355 Tresch et al. (2020).
356 Bochsler et al. (2016).
357 Mombelli (2017).
These findings are similar to those of Harteveld.\textsuperscript{358} Using the data from the Comparative Study of Electoral Systems from the 1990s to the 2010s, he finds that Southern Europe and East-Central Europe show the highest scores of affective polarisation (especially in later years), followed by North America (the United States more so than Canada) and Oceania.\textsuperscript{359} Western Europe has somewhat lower levels. Across the board, there is a weak trend of increasing affective polarisation across the entire period. Yet, in East-Central Europe, affective polarisation appears to have been stronger in the 2010s than in recent years. Box 4.9 provides an overview on the increase in affective polarisation in Poland in recent years.

Box 4.9: Political polarisation in Poland

As Reiljan demonstrated, affective polarisation increased in Poland between 2005 and 2011,\textsuperscript{360} where hostility was on the rise between the supporters of the two main parties (both established in 2001): the right-of-centre liberal Platforma Obywatelska (PO, ‘Civic Platform’ in English) and the right-wing conservative Prawo i Sprawiedliwość (PiS, ‘Law and Justice’). This trend continued after 2011, with some attributing this to a divisive rhetoric of the political elites and the leader of the PiS party in particular, Lech Kaczyński,\textsuperscript{361} and hate speech present in media after the Smolensk plane crash in 2010.\textsuperscript{362} A recent survey of a representative sample of 1,000 adults in Poland showed that supporters of the opposition parties\textsuperscript{363} are more hostile towards PiS supporters than PiS supporters towards supporters of the opposition parties.\textsuperscript{364} The opposition followers consider themselves as being less respected\textsuperscript{365} by PiS supporters and had less contact with PiS supporters. The study found that the more frequent the contact of PiS supporters with opposition voters, the warmer the feelings towards this group, the bigger the trust and the higher the respect towards them.\textsuperscript{366}

The most dramatic illustration of the polarised climate in Poland was the assassination of the president of Gdansk (Pawel Adamowicz), who was stabbed during a charity concert in 2019, two years after a nationalist organisation published his fake ‘public death certificate’ – an act of hate speech not investigated by the public prosecution office.\textsuperscript{367} After the stabbing, the assassin claimed false imprisonment and torture at the hands of the previous PO government, and he was later diagnosed with a mental health condition. The event was attributed to the hate speech and divisive narrative between the main parties and condemned across the Polish media.\textsuperscript{368}

\begin{itemize}
\item \textsuperscript{358} Harteveld (2019).
\item \textsuperscript{359} Harteveld (2019).
\item \textsuperscript{360} Reiljan (2019).
\item \textsuperscript{361} Kępka (2017); Nahata, (2019); Tworzecki, (2019).
\item \textsuperscript{362} Werra (2019). In the crash on 10 April 2010, 96 people lost their lives, including the presidential couple (Lech and Maria Kaczyński), members of the military, the government and the parliament.
\item \textsuperscript{363} The opposition parties in the survey are defined as: Nowoczesna (or ‘Modern’), PO, Polskie Stronnictwo Ludowe (PSL, ‘Polish People’s Party’), Sojusz Lewicy Demokratycznej (SLD, Democratic Left Alliance) and Partia Razem (‘Together Party’).
\item \textsuperscript{364} Górńska (2019).
\item \textsuperscript{365} The original source uses the word ‘dehumanising’ translated here in terms of the level of respect to others.
\item \textsuperscript{366} Górńska (2019).
\item \textsuperscript{367} Buras (2019).
\item \textsuperscript{368} Sarna & Tyc (2020).
\end{itemize}
The case of the United Kingdom illustrates that ‘affective polarisation’ does not necessarily have to follow party lines. Following the referendum on membership of the European Union in June 2016, the development of political identities around a ‘pro-Leave’ partisan camp versus a ‘pro-Remain’ camp have proven to be salient. These findings are echoed by Hobolt et al., who examined social identities formed amidst the 2016 Brexit referendum, by analysing existing survey data, various surveys and experiments with a combined 18,329 respondents to measure the intensity of partisan and Brexit-related affective polarisation. Their results show that Brexit identities cut across traditional party lines and ‘generate affective polarisation in terms of stereotyping, prejudice and various evaluative biases, convincingly demonstrating that affective polarisation can emerge from identities beyond partisanship.

Several scholars have started studying the causal mechanisms behind affective polarisation. Firstly, not surprisingly, the extent of ideological polarisation among citizens seems to play a role. Harteveld observes that ideological polarisation and affective polarisation often co-occur; the more people disagree about issues, the more likely they are to dislike their opponents. Hameleers investigated the extent to which a societal divide is constructed by the media and citizens in the United States, the United Kingdom and the Netherlands. He concluded that the construction of ‘affective polarisation’ was most clearly expressed in the US media. While his results observe the construction of affective polarisation in all three contexts, Americans appear to be more likely to articulate a divide between ‘us’ and ‘them’.

Party politics and political polarisation

A key contextual difference affecting the ways in which political polarisation manifests itself in Europe and in the United States is related to the characteristics of the countries’ representative systems. Whereas the United States has a two-party system, all European countries, except the United Kingdom and Malta, operate multi-party systems. Further, European countries have also adopted different electoral systems. While some countries use a five percent winning margin, others do not impose any; in some countries parliamentary elections are carried in closed lists, in others by preferential voting or single transferable vote. Due to this institutional variance across the continent, the dynamics related to polarisation may express themselves dissimilarly in different European countries.

When looking at the extent of polarisation in election results, we need to consider the position of parties on the political spectrum. Using the ParlGov database, which collates national and European election results in all EU and most OECD countries since the beginning...
of the 20th century, Döring and Manow include an indicator ranging from zero to ten for party positions on the traditional left to right scale, based on party expert surveys (where parties closer to zero are more left-wing, and parties closer to ten are more right-wing).\(^{376}\) Whilst this metric is somewhat arbitrary and the left-right scale is only one of the different dimensions of polarisation, it is useful for tracking developments over time.

Over time, the election results of both national parliaments and the EU parliament tend to be remarkably stable. Although there are some temporal jumps to the left or the right, most results oscillate around the centre. As argued above, however, left-right-polarisation is about the shape of the distribution of these left- or right-wing votes. Groskopf clustered political parties according to their left-right scores and divided them into three categories: far-left, centre and far-right.\(^{377}\) The results show that in many countries, political parties at the ends of the left-right spectrum (especially those on the right) have been relatively successful over the past decades at the expense of the political centre (see Figures 4.6 A & B).

**Figure 4.6: A) European Parliament seats held by right-wing, centric and left-wing parties (1979–2019); B) National Parliament seats held by right-wing, centric and left-wing parties in EU countries (1980–2019)**

*Source: Parliaments and governments database (ParlGov), 2019\(^{378}\)*

Note: Left-wing parties are those with a score below 3 on the left-right scale, right-wing parties have a score above 7, and centre parties have a score between 3 and 7.

---

\(^{376}\) Döring & Manow (2019).

\(^{377}\) Groskopf (2016).

\(^{378}\) Döring & Manow (2019).
Many scholars have tried to explain this gradual shift away from the political centre in Western Europe. As Berman notes, the continent’s political systems were characterised by ‘catch all’ parties, relying on ‘broad, cross-class [constituencies]’, serving the purpose of mitigating divisions in society. Nevertheless, during the past decades, the dynamics of party competition have changed. As political participation is no longer structured through the centrist mass parties, European countries have witnessed the emergence of party platforms that seek to represent and cater to the specific interests of a given group in the constituency (see Table 4.2 below). Empirical studies suggest that the emergence and prominence of such niche parties may have contributed to the level of political polarisation in the European landscape. While mainstream parties try to appeal to the median voter position to optimise their vote shares, niche parties use the median voter within their own electorate as a benchmark for potential shifts in position. For example, niche parties tend to be less responsive to shifts in public opinion than their mainstream competitors. In fact, Adams et al. show that niche parties are substantially punished by voters for moderating their party programmes, hence creating an incentive for them to continue running on platforms that appeal to the political extremes. Even if these changes lead to a more pluralistic and diverse political landscape, there is also an increased risk of political decision making becoming increasingly hostile, contributing to further polarisation, and thus Truth Decay.

Political parties on the far right of the political spectrum have been the most successful parties to have emerged in both Western and Eastern Europe over the last few decades. Although they are not necessarily niche parties, as defined above, most have predominantly campaigned on an anti-migration or anti-Islam agenda. Mudde, however, argues that the role of ‘populist radical right parties’ (PRRPs) has thus far been rather modest in European politics. Even on immigration, mainstream right-wing parties have generally had a more important role. On the whole, Mudde shows that, in 2014, only three of 16 Western European countries (19 per cent) have strong PRRPs together with a two-bloc polarised party system (see Table 4.2 below). While their rise has changed the identity of some of the political parties in some of the party systems of Western Europe, Mudde shows that PRRPs have hardly changed the systemic interactions between the relevant political parties within most countries. He concludes, however, that party politics – and, assumedly, patterns of polarisation – play out dissimilarly in different countries in the continent, perhaps connected to broader historical and social differences.

---

379 Berman (2019, 3).
380 Bischof (2017); Ezrow et al. (2011).
381 Adams et al. (2006).
382 Mudde (2014).
384 Mudde (2014).
385 Mudde (2014).
The standard deviation $\sigma$ (sigma) is the square root of the variance of the ideology scores ($X_i$). In this analysis, we calculated the square root of the average value of $(X_i - \mu)^2$ – where $X_i$ is the left-right ideology score for party $i$ – weighted by the election results. $\mu$ is the mean of the ideology scores for all parties participating in an election weighted by the election results.
Table 4.3: Polarisation of European election results in the EU-15, EU-13, non-EU European countries and non-European countries over the past four decades

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EU-15</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Austria</td>
<td>1.66</td>
<td>1.96</td>
<td>1.99</td>
<td>2.05</td>
</tr>
<tr>
<td>Belgium</td>
<td>1.82</td>
<td>2.14</td>
<td>2.24</td>
<td>2.18</td>
</tr>
<tr>
<td>Germany</td>
<td>1.47</td>
<td>1.71</td>
<td>1.82</td>
<td>2.10</td>
</tr>
<tr>
<td>Denmark</td>
<td>2.17</td>
<td>2.10</td>
<td>2.12</td>
<td>2.28</td>
</tr>
<tr>
<td>Spain</td>
<td>1.92</td>
<td>2.08</td>
<td>1.97</td>
<td>2.29</td>
</tr>
<tr>
<td>Finland</td>
<td>1.86</td>
<td>1.72</td>
<td>1.75</td>
<td>1.68</td>
</tr>
<tr>
<td>France</td>
<td>2.40</td>
<td>2.71</td>
<td>2.47</td>
<td>2.59</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>1.59</td>
<td>1.54</td>
<td>1.57</td>
<td>1.70</td>
</tr>
<tr>
<td>Greece</td>
<td>1.58</td>
<td>1.53</td>
<td>1.74</td>
<td>2.30</td>
</tr>
<tr>
<td>Ireland</td>
<td>1.24</td>
<td>1.45</td>
<td>1.46</td>
<td>1.70</td>
</tr>
<tr>
<td>Italy</td>
<td>2.17</td>
<td>2.09</td>
<td>2.31</td>
<td>2.40</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>1.96</td>
<td>2.11</td>
<td>2.11</td>
<td>2.19</td>
</tr>
<tr>
<td>Netherlands</td>
<td>1.77</td>
<td>1.90</td>
<td>2.16</td>
<td>2.35</td>
</tr>
<tr>
<td>Portugal</td>
<td>1.91</td>
<td>1.61</td>
<td>1.77</td>
<td>1.80</td>
</tr>
<tr>
<td>Sweden</td>
<td>1.98</td>
<td>2.18</td>
<td>2.12</td>
<td>2.33</td>
</tr>
<tr>
<td><strong>EU-13</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulgaria</td>
<td>1.66</td>
<td>1.59</td>
<td></td>
<td>2.05</td>
</tr>
<tr>
<td>Cyprus</td>
<td>3.10</td>
<td>3.24</td>
<td>3.19</td>
<td>3.16</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>2.42</td>
<td>2.37</td>
<td>2.34</td>
<td></td>
</tr>
<tr>
<td>Estonia</td>
<td>2.00</td>
<td>2.12</td>
<td></td>
<td>2.00</td>
</tr>
<tr>
<td>Croatia</td>
<td>2.32</td>
<td>2.07</td>
<td>2.09</td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td>1.88</td>
<td>2.33</td>
<td>2.07</td>
<td></td>
</tr>
<tr>
<td>Latvia</td>
<td>1.95</td>
<td>1.75</td>
<td></td>
<td>1.97</td>
</tr>
<tr>
<td>Lithuania</td>
<td>0.75</td>
<td>0.76</td>
<td>0.76</td>
<td>0.75</td>
</tr>
<tr>
<td>Malta</td>
<td>1.83</td>
<td>1.92</td>
<td></td>
<td>1.56</td>
</tr>
<tr>
<td>Poland</td>
<td>1.26</td>
<td>1.40</td>
<td></td>
<td>1.44</td>
</tr>
<tr>
<td>Romania</td>
<td>1.62</td>
<td>1.96</td>
<td></td>
<td>1.87</td>
</tr>
<tr>
<td>Slovakia</td>
<td>1.91</td>
<td>1.78</td>
<td></td>
<td>1.93</td>
</tr>
<tr>
<td><strong>Non-EU European countries</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Switzerland</td>
<td>2.25</td>
<td>2.38</td>
<td>2.38</td>
<td>2.34</td>
</tr>
<tr>
<td>Iceland</td>
<td>2.09</td>
<td>2.00</td>
<td>2.10</td>
<td>2.32</td>
</tr>
<tr>
<td>Turkey</td>
<td>1.86</td>
<td>1.98</td>
<td>1.92</td>
<td>2.31</td>
</tr>
<tr>
<td>Norway</td>
<td>2.28</td>
<td>2.23</td>
<td>2.52</td>
<td>2.45</td>
</tr>
<tr>
<td><strong>Non-European countries</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>1.79</td>
<td>1.87</td>
<td>2.01</td>
<td>2.00</td>
</tr>
<tr>
<td>Canada</td>
<td>1.60</td>
<td>2.00</td>
<td>2.43</td>
<td>2.59</td>
</tr>
<tr>
<td>Israel</td>
<td>1.99</td>
<td>2.24</td>
<td>2.24</td>
<td>1.96</td>
</tr>
<tr>
<td>Japan</td>
<td>2.54</td>
<td>2.54</td>
<td>2.02</td>
<td>2.10</td>
</tr>
<tr>
<td>New Zealand</td>
<td>1.02</td>
<td>1.69</td>
<td>1.58</td>
<td>1.58</td>
</tr>
</tbody>
</table>

Source: Authors’ calculations, from Parliaments and governments database (ParlGov), 2019

Notes: The value represents an indicator for the extent of political polarisation, measured by the standard deviation of left-right ideology scores weighted by the election results. A higher value implies more polarisation. The election results are clustered and averaged per decade. The arrow indicates an increase or decrease of polarisation compared to the previous decade. EU-15 refers to the Member States that had joined the European Union prior to 2004, while EU-13 refers to those Member States that joined after 2004.
The effect of political polarisation on Truth Decay

The 2020 US presidential elections illustrated how Truth Decay may proliferate in a deeply politically polarised society. Polarisation along partisan lines or political views may contribute to a decreasing probability of interactions with people that share different views. In these silos of like-minded people there is a risk that each side has its own narrative and even its own version of the facts. The interplay with other drivers could exacerbate this effect. Confirmation biases, for instance, act as a disincentive to interact with people with different political views, as they push us to search for information that confirms our beliefs and proves us right. It extends to our prejudices. This could lead to the formation of echo chambers that blur the line between opinion and fact, erode areas of agreement about facts and analytical interpretations of those facts, and even reduce trust in certain institutions. Not only would these trends result in a less constructive public debate, but also lead to a society where people ‘hold overwhelmingly positive views of their own co-partisans, and highly negative views of those on the other side of the political spectrum’.387

The impact of polarisation and selective exposure on news consumption depends on the characteristics of the media landscape. In the United Kingdom, with its prominent tabloid press, left-right preferences appear to be relatively important to people when deciding what news outlets to use. In Germany, however, news media are generally reluctant to adopt partisan positions, and therefore, there is a much more mixed readership of news outlets.388

Another phenomenon, related to selective exposure, described by media researchers is that of ‘political parallelism’, which describes the degree to which the media system mimics the political system within a given country, or more specifically, how well news coverage aligns with general political attitudes.389 As part of the 2017 Digital News Report, Newman et al. measured news audience polarisation in a number of countries.390 They calculated a political leaning score for each news outlet based on the difference between the average political leaning of the population and the outlet’s audience average political leaning. The extent to which online news audiences are polarised is then expressed by weighted standard deviation of these scores for each outlet. Figure 4.7 illustrates that there are a number of parallels between the level of online news audience polarisation and the level of political polarisation in these countries. The United States stands out in this overview, but news outlet audiences are relatively polarised in Poland, Spain and Italy.

387 Gentzkow (2016).
388 Newman et al. (2019).
389 Fletcher & Jenkins (2019).
Figure 4.7: The level of online news audience polarisation among news outlets in selected countries


Note: Online news media polarisation score for each country is the mean of the polarisation score for each of the top 15 online media brands multiplied by their weekly reach.

Polarisation has also been found to be associated with decreasing trust in institutions formerly respected for their facts. For instance, there tends to be a strong association between perceived political bias and distrust in the media. This is particularly true in countries with high levels of political polarisation. According to the results of the 2017 Digital Media Report, respondents in the United States are more likely to trust news sources they regularly use (53 per cent) than the news in general (38 per cent). In the United Kingdom, overall trust in the media dropped seven percentage points from 50 per cent to 43 per cent in the aftermath of the Brexit referendum in June 2016. Similarly, there is also empirical evidence for an association between polarisation and concerns about dis- or misinformation. Concern tends to be higher in more polarised environments, such as

---

392 For example, Newman et al. (2020).
the United States than in less political polarised countries, such as the Netherlands.

In addition, the increased availability and consumption of partisan news may further exacerbate polarisation. Although research on this phenomenon in Europe has been sparse, several American authors observed a relationship between frequent use of partisan news and information sharing on the one hand and more polarised opinions or extreme attitudes on the other.\footnote{For example, Hollander (2008); Tewksbury & Riles (2015); Tsfati et al. (2014).} The evidence, however, for this impact appears to be mixed. Analysis of exposure to television interviews of Swedish party leaders ahead of the 2010 elections, led Skovsgaard et al. to conclude that, although political ideology mattered, political interest was more important for understanding whether individuals tuned in or not.\footnote{Skovsgaard et al. (2016).} Davis and Dunaway conclude that the increased availability of partisan news via expanding media choice may not translate into mass effects beyond those highly interested in politics.\footnote{Davis & Dunaway (2016).}

### 4.4.2. Socio-demographic and economic polarisation

As explained above, the increased sorting of the population along partisan lines or ideological views may lead to a deterioration of the quality of public discourse. Such population sorting may also occur along other dimensions, such as demographic, cultural or socio-economic characteristics. Kavanagh and Rich define this dimension of polarisation as the ‘gradual segregation [that occurs] [...] as people move to live near people with whom they share traits of race, age, economic background, occupation, beliefs and partisanship.’\footnote{Kavanagh & Rich (2018, 166).} These developments create the geography of Truth Decay, as increased local political homogeneity limits citizens’ opportunity of being exposed to different political views in their daily life.

#### Socio-demographic polarisation

**There is some evidence of a growing segregation along demographic characteristics in Europe.** For example, Martori and Apparicio show that only some aspects of the segregation of migrants are increasing, while others are declining.\footnote{Martori & Apparicio (2011).} Malmberg et al. show that a considerable growth in the non-European population in Sweden combined with high levels of segregation have further increased the proportion of non-European migrants living in neighbourhoods that already have high concentrations of non-European migrants.\footnote{Malmberg et al. (2018).} Furthermore, there are regions in Europe that are ageing faster than average, due to disproportional emigration of young people to regions or countries with higher employment.\footnote{For example, Martinez-Fernandez et al. (2016); Ubarevičienė et al. (2016); Van der Gaag & De Beer (2015).}

The evidence for polarisation along other demographic dimensions in Europe is fairly limited. This may in part be due to differences in electoral systems. Gerrymandering, for instance, the practice of redrawing district lines to achieve partisan or other advantage, is much less common in Europe than it is in the United...
States. Not surprisingly, countries with a proportional representation system and large or single national districts, such as the Netherlands and Norway, show the lowest degree of gerrymandering. The United Kingdom, which has a majoritarian system, is also more prone to gerrymandering than other European nations. Several countries with proportional representation systems, including Romania, Hungary, Turkey, Slovenia and Belgium, also scored higher than the European average.

Some researchers, however, have shown that for some European countries the voting behaviour of individuals can be mediated by where they live; meaning that localised, rather than general, analyses of what shapes participation levels may be more successful in accounting for variation. This has been confirmed in British, Irish and Italian elections, which all use spatial statistical models to investigate the presence of geographic variability in the processes that lead to election outcomes.

Income inequality
Economic polarisation can be expressed through the changing shape of the distribution of economic outcomes for citizens, such as income. Income inequality, therefore, as measured by the Gini coefficient, can be a useful indicator of economic polarisation.

Across the EU there has been a sharp increase in inequality from the early 1990s. After 1994, income inequality in the EU28 was at a level similar to inequality in other parts of the world and has remained relatively stable since then. Yet, when income levels are corrected for taxes and transfers, net inequality is much lower in the EU than elsewhere in the world. As a consequence, net inequality in the EU declined from between the mid-1990s and 2008, the start of the financial crisis, after which it remained relatively stable. In the United States, by contrast, inequality has risen almost continuously between 1970 and 2013. The improvement in Europe has been driven largely by the convergence of average incomes in the EU: incomes in poorer regions of the EU increased faster than those in richer regions.

Darvas showed that, similar to the trends of political polarisation (see Section 4.4.1), since 2008, the older Member States in the EU-15 show a different pattern than the newer Member States. The demise of the communist regimes in Central and Eastern Europe was followed by a rapid increase in income inequality. The slow economic recovery in Southern Europe compared to Western European and the Nordic countries implied a divergence in income inequality within this group, whereas inequality in the group of 13 newer EU countries continued to converge in this period. Within-country inequalities generally increased in this period. Darvas reports that, since 2016, within-country income inequalities have decreased across most parts of the EU. In some countries, such as Italy, within-country inequality continued to grow.

400 Cox & Katz (2002).
401 Martinez i Coma & Lago (2018), using a metric based on expert judgement expressing the extent to which electoral district lines were defined impartially.
403 Kavanagh (2006); Kavanagh et al. (2006); Mansley and Demšar (2015); Shin & Agnew (2011).
404 On definition and origins of the Gini coefficient, see Ceriani & Verme (2012).
405 Darvas (2018).
Social-spatial inequalities
While trends in income inequality refer to the extent to which income is becoming distributed more or less evenly across the population, polarisation is a situation in which ‘the extremes of a distribution are growing, and where there is a missing or shrinking “middle”’.

Similar to the trend in the United States, several scholars have observed a trend of rising social-spatial inequalities in Europe. Since the mid-1970s, many of Europe’s older industrial regions, which were the forerunners of the industrial revolution, have experienced economic decline and rising unemployment. In particular, so-called ‘rust belt’ regions that specialised in industries such as coal, iron and steel, heavy engineering, textiles and shipbuilding have been hard hit by industrial decline. Scholars have attributed this trend to the decline of industry sectors due to automation and off-shoring, accompanied by the restructuring of welfare states, globalisation, growing levels of liberalisation and globalisation of capital and labour flows.

Whilst technology and international trade have reduced differences between countries, the consensus among economists is that they have widened the gap between the rich and the poor within countries. In Europe, these changes have impacted on labour markets and even in those European countries with the strongest welfare states they have increased wage inequalities. This has been demonstrated for many cities, such as Stockholm, London, Paris, Rome and Istanbul.

In the context of social-spatial polarisation, a country, region or city may be polarising when certain parts are becoming more homogenous along socio-economic dimensions. As in many other parts of the world, there is an increasing discrepancy between dynamic large urban agglomerations and decaying traditional industrialised and remote regions. Many of these peripheral regions have seen a gradual yet persistent long-term economic slump in terms of employment and competitiveness, whilst the urban metropolitan regions have accumulated the greatest share of high-skilled jobs. Van Ham et al. show that levels of socio-economic segregation in European cities are still relatively modest compared to some other parts of the world, but that the spatial gap between poor and rich is widening in all capital cities across Europe. Dijkstra et al., however, show that capital regions have struggled most during the crisis years following 2008, particularly those in the countries that have been hardest hit, such as Greece, Spain and Italy. Some rural and intermediate regions by contrast have displayed more resilience.
Tammaru et al. show that socio-economic segregation has increased in many European cities since 2001. Yet, segregation in European cities is still relatively low compared to cities in North America. The authors conclude that the riots in Paris (2005), London (2011) and Stockholm (2013) ‘cannot be seen separate from high concentrations of poverty in these cities, often in combination with high levels of ethnic segregation.’

Cassiers and Kesteloot argue that the overall geospatial layout of cities may have an important role to play in the development of social inequalities. They show that there is considerable variation in the socio-spatial structure of European cities: where Southern and Northern European cities tend to have a rich centre and poorer peripheries, many Western European cities have a poorer centre with wealthier suburbs.

The rise of anti-establishment parties and Euroscepticism in recent years has been linked to this trend of socio-spatial polarisation. For instance, analysis of the 2016 United Kingdom referendum by Goodwin and Heath showed that the public vote for Brexit was delivered primarily by the ‘left behind’, with the Leave vote prevailing in parts of the country with an overrepresentation of ‘pensioners, low-skilled and less well-educated blue-collar workers and citizens who have been pushed to the margins not only by the economic transformation of the country over recent decades but also by the values that have come to dominate a more socially liberal media and political class.’

In addition to globalisation, technology and welfare regimes, Tammaru et al. also identified housing regimes as an important structural factor that could help understand levels of socio-economic segregation. For example, in most Eastern European countries, housing was supported by state patronage under socialism, but during the 1990s more than 90 per cent of the housing stock was privatised as states withdrew from the costly housing sector. Whatever the causal mechanism, these changes have impacted on occupational structures and have led to wage inequalities even in the most egalitarian parts of Europe.

The effects of socio-demographic and economic polarisation on Truth Decay

Polarisation along geographic, social, or economic dimensions may contribute to Truth Decay when it leads to silos in which people are rarely exposed to new ideas and become increasingly insulated from individuals with different socio-economic, demographic or cultural characteristics. Such increased sorting of the population leads to more homogenous neighbourhoods, clubs, schools, and other locations or fora with fewer opportunities of encountering or interacting with diverse individuals. Similar to ideological and political polarisation, the risk of socio-demographic and economic polarisation
is that it creates closed environments – an environment in which people only encounter beliefs or views that coincide with their own. While there is relatively little evidence on the effects of such polarisation on the proliferation of opinions at the expense of facts, most available research has focused on the effects on trust in other individuals or institutions outside these homogenous groups. In particular, various studies show that, at national or group level, increasing inequality or social segregation is associated with declining trust in institutions, including those respected for their factual information.

At a group level, it is not surprising that researchers find that the social groups that are most severely affected by economic hardship lose a great deal of trust in others. There is a broad consensus in the literature that trust, both in other people and in public institutions, tends to erode when economic conditions worsen. Trust, however, in political institutions appears to be more strongly linked to a general perception of the economy than to an individual’s personal economic situation. Moreover, an increasing body of research suggests that when inequality rises, trust deteriorates.

Torrente et al., for instance, used a simultaneous equations model to jointly examine interpersonal and institutional effects during the financial crisis in Spain. They found that rising inequalities have a direct impact on the institutional trust of certain social groups and deteriorate a lot interpersonal confidence among the most disadvantaged. The authors also find that trust in the country’s parliament fell among the self-employed, but increased among pensioners.

Several studies find a positive correlation between macro-economic indicators of inequality and levels of trust. Anderson and Singer find a negative correlation between income inequality and trust in public institutions. They differentiate between different individual political ideologies and find that trust among people on the left is more sensitive to changes in income inequality than it is among right-wing people. Belabed and Hake looked at several indicators for income inequality in a number of Central and Eastern European countries, and find that regional and country-level income inequality is negatively correlated with trust in national governments. The negative correlation between income inequality and trust in national governments appears to be particularly pronounced in the non-EU countries in their sample, such as Albania, Bosnia and Serbia. Focusing on Western European countries, Schäfer also shows that widespread mistrust in politics prevails in countries with large discrepancies in income, using data from the European Social Survey. More worryingly, Schäfer also shows that a strong correlation exists between social inequality and how citizens evaluate democracy: the more

427 For example, Dotti Sani & Magistro (2016); Polavieja (2013); Torrente et al. (2019).
428 Torrente et al. (2019).
429 Anderson & Singer (2008); Bauer & Morisi (2020); Belabed & Hake (2018); Dotti Sani & Magistro (2016); Medve-Bálint & Boda (2014); Schäfer (2012).
431 Bulgaria, Czechia (formerly Czech Republic), Croatia, Hungary, Poland, Romania, Albania, Bosnia and Herzegovina, FYR Macedonia and Serbia.
433 Schäfer (2012).
unequally income is distributed in a given
country, the more dissatisfied citizens become
with the way in which democracy functions and
the less they trust political institutions.434

Social segregation is strongly linked to
income inequality, and is therefore also
believed to be associated with declining trust
in institutions. There is a body of literature
that suggests that diversity – people of
different backgrounds, whether racial, ethnic,
religious, or national origin – leads to lower
levels of generalised trust.435 Uslaner, however,
shows that it is not diversity per se, but rather
inequality and segregation have been linked to
a wide range of negative outcomes.436 Living in
integrated neighbourhoods and having diverse
friendship networks is associated with higher
levels of trust in others. Other variables that
have been found in the empirical literature
to be correlated with trust include individual
characteristics such as age, education, race,
gender or religion.437

4.4.3. Summary

Kavanagh and Rich argue that, as a
consequence of polarisation, groups with
similar characteristics can become insular in
their thinking and communication, creating a
closed environment in which opinions or even
false information can proliferate.438 Polarisation
not only contributes to an eroding role of
facts and evidence in the public debate, but
Truth Decay may also exacerbate polarisation,
potentially creating a vicious circle of Truth
Decay. Moreover, research has suggested that
various trends in polarisation (political, social
and economic) may exacerbate one another.

We find that across these different dimensions,
the evidence for polarisation in Europe is
weaker than in the United States. The United
States is traditionally characterised by more
economic inequality and social segregation
than most European countries, and in recent
decades the gap between the United States
and Europe has widened. Notwithstanding the
differences with the United States, in-country
inequality has risen in Europe, particularly
since the advent of the financial crisis in
2008.

The political dimension of polarisation shows
a similar picture. Values and ideologies in
Europe are less heterogeneous and polarised
than in the United States. This means that the
extent of disagreement on different political
themes is slightly weaker than in the United
States. Furthermore, in terms of party politics,
Europe has seen a 'hollowing out' of the
political centre. Niche parties, such as green
parties and anti-EU parties have emerged and
contributed to a polarisation of party positions
in Europe. It is, however, the phenomenon of
affective polarisation that is particularly strong
in the United States. Over the past decades the
affiliation with political parties has deepened
in the United States, strengthening a feeling
of 'us versus them', whereas the trend in most
European countries has gone in the opposite
direction. Direct representation electoral
systems and multi-party systems in Europe
may have mitigated this trend.

In Europe, the political landscape appears to
be more complex and multi-dimensional than
it is in the United States. Populist views, for
instance, characterised by a shared aversion

434 Schäfer (2012).
435 For example, Putnam (2007).
437 Alesina & Ferrera (2002); Algan et al. (2017); Dustmann et al. (2017).
against the ‘elite’, which can be prevalent among people at both ends of the political left-right spectrum, seem to play a role in polarisation in Europe. Early research results suggest that polarisation along the populist scale is a better predictor of trust in institutions than polarisation on the left-right scale.

Yet, there is evidence that polarisation across different dimensions has been increasing in Europe, though not across the board and it is nowhere near the level of polarisation in the United States. This may be one of the reasons why we do not find as much evidence of the processes of Truth Decay across Europe as a whole thus far. Polarisation in the United States has been shown to serve as a major catalyst for declining trust in sources of objective information. We note that, in European geographic settings or timeframes that are characterised by polarisation, there appears to be more evidence of Truth Decay than in Europe as a whole.

4.5. Summary

In this chapter we reviewed the extent to which the four drivers of Truth Decay can be observed in Europe, and whether there is evidence that these have led to the manifestation of one or more of the four trends of Truth Decay in Europe.

4.5.1. Cognitive biases exacerbate the effect of other drivers

Cognitive biases are hard-wired in the human brain, and they affect the way in which we process information and make decisions. Therefore, they affect decision making with regard to information processing in the same way across the globe. Research from both sides of the Atlantic has shown, for instance, that humans tend to seek out information that confirms our pre-existing beliefs and hence extends to our prejudices. While these biases have always played a role in decision making, they can act as a catalyst for other drivers of Truth Decay. Cognitive biases can be particularly exacerbated by changes in the media ecosystem. Algorithms on social media, for instance, are designed to take advantage of cognitive biases by prioritising content that is more prone to spreading quickly.

4.5.2. Changes in the information system are global, but their effects on Truth Decay can be mitigated by the national context

Another universal driver concerns the new information and communication tools, and social media in particular, that have increased people’s exposure to information. People are no longer just news consumers, everyone is potentially a creator and distributor of news and content as well. Social media have democratised the media landscape across the globe. Yet, it has become a profitable business model to distribute eye-catching news items and attractive content on social media. New media outlets, whether they are clickbait farms, Twitter trolls or electronic news clipping services, do not necessarily abide by the same quality standards as the traditional gatekeepers of news and information, such as the government or traditional news media. While revenue models for media companies in Europe appear fundamentally more stable than in the United States, many traditional European news outlets have been struggling too. Not only have these changes in the media landscape contributed to an exponential growth in the sheer volume of news content, the relative volume of content that meets journalistic standards of multiple verifiable sources has shrunk. Moreover, the demarcation between verifiable facts on the one hand and opinion, commentary or speculation on the other has become increasingly blurred.
While changes in the information system have been global phenomena, national context matters in the extent to which they affect Truth Decay. Europe has a heterogeneous media landscape with a patchwork of differences in the newspaper industry, political parallelism, professionalism and the role of the state. We conclude that in European countries such as Denmark, Germany, Netherlands, Norway, Sweden and Switzerland, the effects of the changes in the information system on Truth Decay have been mitigated by press subsidies (with press-freedom protection) and strong public service broadcasting. Other contextual differences, such as the journalistic tradition of the media system may also mitigate or exacerbate the effects on Truth Decay. For instance, Italy has a relatively strong tradition of partisan media and commentary-based journalism, in comparison to France.

4.5.3. The effects of competing demands on European education systems on Truth Decay have been limited

While Kavanagh and Rich cited pressures on the education system as an important driver of Truth Decay in the United States, Section 4.3 explained that the education system does not affect Truth Decay in Europe in the same way. The education systems in the United States and in Europe are different: critical thinking skills and civic education for students have traditionally been part of school curricula in most European countries, although there has been considerable variation across education systems. The jury is still out as to whether these media literacy interventions as part of the formal education system have been effective in addressing the challenges related to the changing information system. Yet, there is evidence that media literacy education can be effective in school settings. It seems that the role of European education systems and the competing pressures on these systems have not been as prominent in Europe in driving Truth Decay as they have been in the United States. European education systems appear to have recognised the importance of critical thinking skills and civic education for a future generation of media consumers and participants of their democratic societies.

4.5.4. The role of polarisation is crucial in explaining the differences between Truth Decay in the United States and Europe

Finally, we concluded that the role of polarisation is crucial in explaining the differences between Truth Decay in the United States and Europe. In recent decades, American society has become increasingly polarised along partisan political lines, but also along socio-economic ones: people tend to surround themselves with those who think or look alike. Such increased sorting creates groups with similar characteristics who can become insular in their thinking and communication, creating a closed environment in which opinions or even false information can proliferate.

We found evidence for several trends of Truth Decay in countries or settings where political views or ideologies were characterised by polarisation. In combination with other drivers, such as cognitive biases and changes in the information system, polarisation may exacerbate Truth Decay. In particular, polarisation has been found to be associated with decreasing trust in institutions formerly respected for their objective information. A
recent RAND study addressed the crucial role of trust in the analytical framework for Truth Decay.\footnote{Kavanagh et al. (2020).} Other evidence also suggests some association between perceived political bias and distrust in the media. In countries that are characterised by higher levels of political polarisation, the trust gap between groups that hold different political views in terms of their trust in the media also tends to be larger. This causal mechanism was illustrated by the Brexit referendum, when overall trust in the media among the British public dropped considerably in the aftermath of an intense referendum campaign. In Poland, increasing animosity was seen between the supporters of the right-of-centre liberal PO and the right-wing conservative PiS (see Box 4.9). Empirical data for affective polarisation support this thesis. Other indicators also suggest that Poland has polarised from a socio-demographic and economic perspective. The various indicators show a steady trend of rising income inequality in Poland since the end of communism.\footnote{Brzezinski et al. (2013); Bukowski & Novokmet (2018).} This situation has become a fertile breeding ground for Truth Decay. Trust in public institutions in Poland is among the lowest in Europe, trust towards Polish media has been declining and audiences of news outlets are particularly polarised in Poland, compared to other European countries.

There is evidence that polarisation across different dimensions has been increasing in Europe. This trend is not visible in all European countries and it is nowhere near the level of the United States. This may be one of the explanations as to why we do not find as much evidence of the processes of the Truth Decay across Europe thus far. Polarisation in the United States has been shown to act as a major catalyst, especially for a decline in trust in the sources of objective information. Yet, where and when European geographic settings or timeframes are characterised by polarisation, there appears to be more evidence of Truth Decay.
Agents of Truth Decay

Beside the drivers of Truth Decay, which are general conditions or changes that appear to be causing Truth Decay, people and organisations can also contribute to one or more of the four trends of Truth Decay. These ‘agents’ can be defined as those entities that use and propagate Truth Decay, or one of its four trends, for their own gain – including political and economic. Agents differ from the drivers in the sense that they bring a ‘human’ factor into the equation, and their contribution to Truth Decay can be intentional or unintentional. Agents may include many different types of people or organisations. Often, agents and their methods are interlinked. For example, lobbying group strategies may leverage research conducted with political motivations.

In this chapter we focus on media organisations, research organisations, commercial actors and lobbies, political actors and foreign actors, who can exploit the natural drivers and increase the speed at which Truth Decay occurs. In addition, we explore the role of consumers in perpetuating Truth Decay. While we find some evidence of the role of agents in supporting Truth Decay in the European context, their role appears to be somewhat different, and less prominent, than in the US context.

5.1. The media

As highlighted in Section 3.2 and 3.3 (on trends) and in Section 4.2 (on drivers) changes in the information system contributed to driving at least two trends of Truth Decay: the blurring of the line between opinion and fact and the increasing relative volume and resulting influence of opinion over fact.

The media ecosystem in Europe is different from that in the United States. As explained in Section 4.2.1, partisan news media exist in Europe and are becoming more prominent, particularly online. Partisan news production, consumption and polarisation varies across European countries and overall, is not as prominent as in the United States. In addition, the political landscape in Europe is more complex than the two-party system of the United States (as discussed in Section 4.4). Yet, the landscape also varies considerably across different geographic areas within Europe.

In this section we examine how media can be an agent of Truth Decay especially when independence from the political power is not clear. Lack of independence is likely to affect public perception of media and trust in the information coming from media sources, thus contributing to Truth Decay.

Box 5.1 describes how the media landscape in Czechia has shifted over the years, and how interests among agents in the media and politics have become intertwined.
Box 5.1: Conflicts of interest between media and politics: Czechia

The Czech media landscape has gone through a major transition since the end of communism. From a centralised system with few television and radio channels, the number of media providers in the country grew exponentially as the market opened. Today, the provision of news is no longer an exclusively public service: 90.3 per cent of news broadcasting comes from private media and the entire written press is owned by private entities. The privatisation of the Czech media scene has led to a proliferation of sources of information but simultaneously also to the concentration of the market in the hands of a small number of well-connected individuals. Chief among them is the current prime minister, Andrej Babis, which – according to Transparency International – is a substantial conflict of interest.

Babis’ acquisition of one of the largest media outlets significantly changed the dynamics of the Czech news sector, as his portfolio includes the first and the third most-read daily non-tabloid newspapers as well as the number one radio broadcasting station. This is complemented by the fact that the rest of the newspaper market is heavily concentrated in the holdings of other local business magnates. There is an increasing concern about the independence of written press in the country.

In the most recent Monitoring Pluralism Media study, commercial and owner influence over editorial content has been flagged as the riskiest factor to media plurality in the Czech news. Alongside undue editorial control by politically connected media owners, and similarly to other countries, the Czech media market has also seen a rise in the number of (predominantly web-based) media outlets actively spreading disinformation, some of which have also been found to be connected to Czech political parties and figures as well as to foreign entities. One example is Senator Ivo Valenta, who owns one of the most-read news platforms in Czechia that combines publishing news from trustworthy sources as well as news of untraceable origin, and in turn reaches readership comparable to some of the long-established online journals.

Financial pressures on the media (as introduced in Section 4.2.1) also contribute to making the media less independent and more prone to contribute to Truth Decay. The media ecosystem in Europe, as in the United States, endures pressure to deliver more content faster in order to satisfy the needs created by the 24-hour news-cycle model. While most established traditional media stick to their business ethics (e.g. publishing news only once it has been verified by several reliable sources, even if it means publishing after their competitors), newer media may prefer to take the risk of publishing plausible but not verified stories (and then potentially retract the story) than being criticised for not being fast

443 Calculation based on figures for total number of hours of news broadcasting on television and radio in 2018 from the Czech Statistical Office (2021).
445 MediaGuru (2020).
446 Brogi et al. (2020).
448 Česká Televize (2019).
enough and losing audience. This phenomenon has been coined in France as ‘BFMisation’ of media, after the television news channel BFM TV, which, since its start in 2005, has changed the French news landscape and imposed the 24-hour instantaneous and sensationalised news model to traditional media.\(^450\) This is true for television-based news but the effect is even more visible on paper-based media, which had to adapt to the rise of (and demand for) Internet-based media. A survey of just over 1,000 media users in France reveals that over 70 per cent are convinced that media (television-based and radio) are biased towards reporting on sensational news and violence.\(^451\) This can be explained by a perception that media are close to a political party. Media sensationalise their content to attract readers and viewers. Several media have reported about how over 100 websites were traced publishing sensationalist, often false, stories from a small town in North Macedonia during the 2016 American presidential elections.\(^452\) These stories were either fabricated or copied and pasted from other sources, packaged under a catchy new headline, and shared on Facebook with a target US-audience. The primary incentive was not to influence the elections, but rather to make a profit, primarily from advertising services such as Google’s AdSense. Each click generates a small amount of revenue for the content creator.

### 5.2. Academia and research organisations

Much of what is described by Kavanagh and Rich with regard to academia and research organisations in the United States applies to Europe.\(^453\) This includes the pressure on academics to publish, the challenge of addressing errors and retractions in academic journals, and the tendency to publish certain types of findings rather than others or non-findings.\(^454\) Box 5.2 provides an example of when academia has contributed to, or is suspected of having contributed to, Truth Decay.

---

450 Sanchez (2017).
451 L’Express (2019).
452 Davey-Attlee (2017); Subramanian (2017)
Box 5.2: Agents: Academia and scientific misconduct in the Netherlands

In the summer of 2011, a renowned professor in social psychology made the headlines in Dutch newspapers when inquiry committees from several Dutch universities found that the professor had committed research misconduct that went back to at least 2004 and involved the manipulation of data and fabrication of experiments.\(^{455}\) The data were said to have been used in at least 30 published and peer-reviewed articles.\(^{456}\) The professor admitted that he had fabricated and manipulated data for his studies.

This Dutch professor is not the only academic who committed scientific misconduct, which includes fabrication, falsification and plagiarism,\(^{457}\) in recent years. Examples of rogue academics can be found all over the world.\(^{458}\) Although scholars use different methodologies and sample sizes, most studies find that ‘at least 10 per cent of the scientists in the sample reported having observed scientific misconduct.’\(^{459}\) Furthermore, a meta-analysis on the frequency of data fabrication or falsification by scientists found that 1.97 per cent of the scientists admitted fabricated, falsified or modified data or results at least once and 33.7 per cent admitted other questionable research practices.\(^{460}\) This estimate was thought to be a conservative estimate of the frequency of scientific misconduct.\(^{461}\)

Why is academic misconduct such a prevalent problem? The Dutch professor himself indicated that academia has developed a commercial business model where there is competition for resources and grants. This commercial model can result in a pressure to publish.\(^{462}\) This pressure in turn is strongly and significantly associated with scientific misconduct.\(^{463}\) Academic misconduct, however, can lead to policymakers and professionals making the wrong decisions based on the falsified research. Consequently, scientific misconduct will ‘contribute significantly to the emerging crisis of confidence of the public in the integrity of scientific research.’\(^{464}\)

Additionally, the independence and source of funding for academic and research bodies has come under closer scrutiny. In the United Kingdom, for example, Durham University received donations from the United Arab Emirates for its School of International Affairs, while the Universities of Cambridge and Oxford received donations from Iran and Saudi Arabia.\(^{465}\) A study by Draege and Lestra shows that universities that receive funding from

\(^{455}\) Verfaellie & McGwin (2011).
\(^{457}\) Gross (2016).
\(^{458}\) For instance, in Croatia, South Korea, South Africa, the United Kingdom, Nigeria and Germany. See Abbott (2017); Bhattacharjee (2013); Flisherty (2018); Maugh & Mestel (2011); Okonta and Rossouw (2013); Pupovac et al. (2017); Van Kofschooten (2015).
\(^{459}\) Gross (2016, 693).
\(^{460}\) Fanelli (2009).
\(^{461}\) Fanelli (2009).
\(^{462}\) Van Calmthout (2016).
\(^{463}\) Tijdink et al. (2014).
\(^{464}\) Al-Adawi et al. (2016, 5).
\(^{465}\) EPRS (2019).
Middle Eastern countries tended to publish less research with a ‘focus on democracy and human rights than non-funded comparable institutions’. Links have also been found between Russia and China and academic institutions in Europe. Both countries have used their soft power international organisations – respectively the Russkiy Mir Foundation and Confucius Institutes – to increase their hold on European academic and research organisations. For Russia, this has included making donations to various universities in the United Kingdom, including Durham University, via the Russkiy Mir Foundation, and the establishment in Germany of a think tank by Vladimir Yakunin, the former head of Russian Railways, and a close contact of Putin. With regards to China, possibilities of Chinese interference in European academic matters have been raised, notably in the United Kingdom, where it was noted that pro-China views were being promoted alongside anti-Taiwan views, and pressure placed on freedom of speech about China and sensitive topics (e.g. Taiwan) and the funding of various study schemes.

Indeed, sources of foreign funding may lead to a dependency on such funding or may (indirectly) bias research findings. Even if research organisations could in theory remain independent from their funders and objective in their research, the risk of dependency is likely to affect public perception of research and expertise and trust in expert opinion.

5.3. Corporate agents and lobbies

Commercial or corporate actors, or actors that may stand to gain commercially, also play a role as agents of Truth Decay in Europe. Most examples of such interests in the European context primarily appear to revolve around large industries, such as the tobacco industry. Diethelm and McKee provide examples of such practices in Europe: for example, in the United Kingdom, where a report from the Royal College of Physicians on the harmful effects of smoking took decades to be accepted, and in Germany, where the tobacco industry created complex and influential networks, allowing it to delay the implementation of tobacco control policies for many years. Another more recent industry scandal concerns glyphosate, a chemical used in pesticides, where it was found that a risk assessment commissioned by the European Commission had plagiarised a report by the European Glyphosate Task Force – an industry body led by Monsanto, a company that sells RoundUp, a pesticide using glyphosate. Both studies concluded that glyphosate is not carcinogenic; however, the fact that the EU-commissioned study used identical text as the industry body report, and that this study was used as a basis for a recommendation that the use of glyphosate is safe for public use by the European Food Safety Authority, caused backlash as well as a large plagiarism scandal.
Lobbying in the EU has increased over the last 30 years, and includes groups representing a plethora of areas and industry. The scale of lobbying is such that Brussels is said to have the second largest number of lobbyists after Washington D.C.\textsuperscript{474} This is driven by the increasing level of power afforded to European institutions in setting future policies for EU Member States to adhere to. Lobbying has played a prominent role at the European level, and allegations have been made that lobbyists have diminished ‘transparency of European Union governance and [opened] the door to the possibility that legislation is being written contrary to, or ambivalent towards, the public interest.’\textsuperscript{475}

Indeed, lobby groups may be one of the reasons for increased distrust in the EU political system.\textsuperscript{476} One example was the appointment of José Manuel Barroso, a former European Commission President, as an advisor at Goldman Sachs – effectively showcasing the issue of the ‘revolving door’, where lobbying of previous colleagues takes place.\textsuperscript{477} This particular incident was highlighted as a ‘potential lobbying’ incident where the European Commission had failed its due diligence checks.\textsuperscript{478} The agribusiness lobby in the EU, which outnumbers other lobbyists ‘by four to one on the register’,\textsuperscript{479} often cites scientific reports as a foundation for their claims. Critics, however, have pointed to the fact that this is ‘industry-friendly science’, and disputes regarding academic findings are sometimes made by researchers with a connection to industry.\textsuperscript{480}

An EU Transparency Register was set up by the European Commission in order to increase trust in decision-making processes and provide oversight in the organisations seeking to influence European policy. This, however, is currently non-mandatory and non-binding, and therefore has limited impact.\textsuperscript{481}

5.4. Politicians

The original 2018 Truth Decay study points out that unfulfilled promises and misleading or false information from US politicians and governments have contributed to Truth Decay in the United States.\textsuperscript{482} To some extent, this is also apparent in the European context. The Brexit campaign was particularly prominent in this regard, including communications from the official Leave campaign that presented incorrect facts to voters, including the now infamous claim that exiting the EU would bring £350 million per week to the National Health Service (NHS) due to the fact that the United Kingdom Government would no longer need to pay this money to the EU.\textsuperscript{483} According to a study conducted by Skjeseth, French journalists and fact-checkers noted that there appeared to be an increase in false or unsubstantiated claims by candidates during the 2017 French presidential campaign.\textsuperscript{484}

\textsuperscript{474} Chambers (2016).
\textsuperscript{475} Chambers (2016).
\textsuperscript{476} Dialer & Richter (2018); Youngs et al. (2019).
\textsuperscript{477} Dialer & Richter (2018).
\textsuperscript{478} Rankin (2018).
\textsuperscript{479} Chambers (2016).
\textsuperscript{480} Chambers (2016).
\textsuperscript{481} Năstase & Muurmans (2020).
\textsuperscript{482} Kavanagh & Rich (2018).
\textsuperscript{483} Rose (2017).
\textsuperscript{484} Skjeseth (2017).
These examples are among the most prominent where politicians have been identified as providing misleading or false information – but many others exist. EUFACTCHECK is part of the European Journalism Training Association that identifies statements made by politicians and other prominent individuals such as television hosts and seeks to clarify if a statement is false, misleading, or true. The range of statements that are false or misleading are numerous and varied. These include, for example, a statement by the Italian Prime Minister, Giuseppe Conte, in October 2020, that the first COVID-19 vaccine would start being distributed in early December. Yet, by then it was already known that experimental studies would only conclude towards the end of November, and that the drug would only start to be distributed towards the end of December at the earliest, and more realistically from January 2021.485

Other examples of misleading or false information by politicians include a statement by the Secretary-General of the Spanish far-right-wing party, Javier Ortega-Smith, calling gender violence a ‘lie’.486 Another example is that of the non-acting Vice Mayor of Vienna and head of the city’s far-right Freedom Party, Dominik Nepp, who stated that Austrian small businesses had not received any public funds during the COVID-19 pandemic as of 1 May 2020. This, however, was proved to be false, with fact-checking demonstrating that €121 million had already been paid to businesses.487

More generally, while this cannot be counted as a foreign-state role in driving Truth Decay, politicians in the United States have also played a role – perhaps unwittingly in increasing the pace of Truth Decay in Europe. Indeed, Tucker et al. have pointed out that politicians are ‘also responsible for producing and amplifying disinformation in a variety of contexts’,487 and political rhetoric in the United States and ‘presidency via Twitter’ has enabled a more rapid spread of ideas and opinion (such as on the idea of ‘fake news’ or ‘alternative facts’) that has, possibly inadvertently, amplified the phenomenon of Truth Decay.488 Most examples, however, provide a perception of disinformation occurring at times of momentous policy change, such as elections.

5.5. Foreign state and non-state actors

Foreign state and non-state actors appear to have played an increasingly dominant role in Truth Decay in Europe. This has mainly been prominent around election time, due to the sensitive nature of electoral interference in national and European elections, but occurs at other times as well.489 Examples include the 2017 French presidential elections, where social media bots acting from outside of France took part in ‘numerous disinformation campaigns’490 and the United Kingdom referendum on Brexit, which has been termed as a ‘misinformation campaign’ by Perl et al.491 Bennett and Livingston take this claim further, stating that these strategies are used

---

485 Astazi et al. (2020).
486 Bastarrica (2020).
488 This has also been witnessed in other countries, such as in the United Kingdom, with attacks on the press by then-leader of the UK Independence Party, Nigel Farage. See Flore et al (2019); Ireton & Posetti (2018).
489 Arato (2019); Waisbord (2018).
490 Koulolias et al. (2018).
491 Perl et al. (2018).
to ‘undermine institutional legitimacy and destabilize centre parties, governments and elections’. The disinformation tactics used by foreign state actors have been termed as being a form of hybrid warfare, or even cyber-warfare, due to the strategies deployed to influence public opinion. The problem has become so serious that, in 2019, the European Parliament adopted a report on propaganda against the EU by third parties. The report highlighted the actions taken by not only Russia, but also, in a following Resolution in 2019, those taken by China, Iran and North Korea.

5.5.1. Overview of foreign states and non-state agents

Russia

European sources single out Russia in particular as being one of the main actors driving Truth Decay due to its proximity to Europe, with Russian influence operations taking place on social media, journalistic media (such as Russia Today and Sputnik), and so-called ‘internet trolls’. This was also made clear in a European Parliament recommendation to tackle Russian propaganda ahead of the 2019 European elections.

Recent research on the specificities of Russian propaganda characterised the contemporary Russian model for propaganda as ‘the firehose of falsehood’ given two of its distinctive features: high numbers of channels and messages and a shameless willingness to disseminate partial truths or outright fictions. Russia’s influence on various European countries is known or suspected; for example, it is suspected that Russia attempted to influence the Italian 2016 constitutional referendum, and it is also suspected that Russia used hybrid warfare tactics with regard to the Brexit referendum. Specifically, and as detailed in Box 5.3, Russia used Russian-controlled outlets and other social media platforms to distribute divisive and false narratives, with a particular focus on ethnic Russian and Russian-speaking minorities and individuals of Slavic origin. These narratives tend to focus on specific themes, such as anti-EU or NATO sentiments, and take advantage of spreading disinformation within Europe at vulnerable times, as was the case during COVID-19 or the 2016 migration crisis. Indeed, the European External Action Service’s East StratCom Task Force also found over 6,500 cases of disinformation since 2015, whereby pro-Kremlin messages were disseminated across European media, in 18 different languages. Bots have also been used to exacerbate Truth Decay, both by Russian and other actors. This is discussed in further detail in Section 5.5.2.

---

493 Flore et al. (2019).
495 Flore et al. (2019).
497 Paul & Matthews (2016).
498 Flore et al. (2019).
500 EUvsDisinfo (2021).
Box 5.3: Russian disinformation in Central and Eastern Europe

Russian disinformation is prevalent across Europe, but the Central and Eastern European (CEE) region is considered to be more vulnerable. This is often connected to the existence of public opinion negative/neutral towards the European Union, NATO, and the United States and positive/neural towards Russia; pro-Russian attitudes and behaviours in governments or opposition political parties; media that is considered to not be independent or impartial, and popularity of fringe media outlets prompting disinformation; and inadequate or insufficient countermeasures addressing Russian disinformation and influence activities, both on the part of the government and of civil society. Although not all of these trends are present in all CEE countries to the same extent, they have been recognised as leading to increased vulnerabilities. Furthermore, geographical, historical, and ethno-linguistic factors provide a larger audience base and the potential for greater clout for many Russian disinformation narratives. In this sense, geographic proximity, an interrelated history, and the presence of ethnic Russian and Russian-speaking minorities in various countries in the CEE allow Russia to deploy disinformation narratives focusing on generating perceptions of bonds between ethnic Russian and Russian-speaking minorities and Russia; a common Slavic identity; and nostalgia towards the Soviet Union. These narratives can be applied only to the CEE region (and more broadly in areas neighbouring Russia), and they are used in conjunction with more general narratives meaning to generate negative feelings towards the EU, NATO, the United States and the Western way of life, and to create the impression that all truth and fact is relative. As a result, CEE societies are more vulnerable to disinformation given the number of different narratives that Russia can use to target them.

Russian disinformation is propagated across numerous platforms, including traditional media (e.g. through outlets such as RT, Sputnik) and online and social media (through outlets such as YouTube, Facebook, Telegram, Twitter, and through the Internet Research Agency, the so-called ‘troll factory’ conducting online information operations on behalf of Russia). In general, Russian disinformation strategies and tactics are tailored to specific countries and audiences, while the content is opportunistic in nature, focusing on timely and particularly sensitive and polarising topics. As a result, disinformation campaigns gain high visibility and have a significant impact during periods of societal or political tension, such as the 2015 refugee crisis or the 2020 COVID-19 pandemic. For example, from spring 2015 to autumn 2015, during the 2015 refugee crisis, pro-EU sentiment declined by ten percentage points in Czechia (formerly Czech Republic), seven in Bulgaria, five in Romania, four in Hungary and four in Slovakia, which can be partly attributed to the heightened activity of Russian disinformation during this period.

501 GLOBSEC (2017). The present source is a comparative analysis mapping the vulnerabilities of the Visegrad countries (Poland, Hungary, Czechia (formerly Czech Republic), and Slovakia) to subversive Russian influence, such as disinformation efforts, based on societal and political indicators, the political landscape, structure of the media, state of civil society, and analyses of public opinion.
502 Bokša (2019).
503 Bokša (2019).
504 Legucka (2020).
505 Legucka (2020).
506 Bokša (2019).
507 Dempsey (2020); Dudik (2020).
509 Bokša (2019).
China
Chinese manipulation of information in Europe has taken a different form to that undertaken by Russia. The latter has been mainly focused on media and election influence to the detriment of Western leadership or unity, while China’s focus appears to be mainly on spreading pro-China information as a primary goal (e.g. Chinese media advancing pro-China news that laundered their reputation in terms of COVID-19 response), with a secondary goal of undermining European institutions. While China has not engaged in Truth Decay activities in Europe to the extent it has in the Asian region and the United States, there has nonetheless been an increase in its activities in Europe. This includes an increasingly targeted approach to Central European countries, with a particular view to increase economic relations and even, according to Svárovský et al., upend the liberal, Western international order. Chinese efforts have included inserting pro-China narratives in local media, Chinese ambassadors writing op-eds for European newspapers, buying shares in media groups, and distribution of the news supplement ‘China Watch’ with leading European newspapers – creating what Vilmer et al. call ‘financial dependence and self-censorship in the treatment of news pertaining to China’ by these newspapers.

Iran
Reports show that Iran also conducts activities relevant to Truth Decay, principally in terms of disinformation activities and foreign election interference. Most of the Iranian activity, however, appears to be targeting regional countries with either pro-Iran, anti-United States, and/or anti-Israeli messages, with European countries being a lesser target. Evidence uncovered by Martin and Shapiro shows that Iran’s activities in Europe appear to mainly have focused on the United Kingdom, with influencing activity undertaken around the support of Britain leaving the EU, ahead of the 2016 referendum, and support of the Scottish independence campaign, with the majority of this activity taking place on social media networks such as Facebook and Twitter.

Non-state actors
Non-state actors, while having less access to sophisticated tools and less reach than state actors, are also an agent in driving the phenomenon of Truth Decay. This includes terrorist groups, as part of their recruitment techniques, organisations or companies that do not necessarily openly work for a particular

510 Johnson & Marcellino (2021)
511 As noted by Vilmer et al. (2018).
513 Svárovský et al. (2019).
514 Svárovský et al. (2019).
515 Vilmer et al. (2018, 61).
516 Goel et al. (2019); Stubbs & Bing (2018).
517 Stubbs & Bing (2018); Tucker (2020).
518 Martin & Shapiro (2019).
519 The Islamic State and Al Qaeda are often cited as the primary actors in this space in terms of their activities in conducting smear and disinformation campaigns against the West to bolster their cause and gain followers. See Gerrits (2018).
state, and any individual who could, for example, be undertaking troll-like activities. As highlighted by Bayer et al., however, there is no reliable data available on the prevalence of non-state actors engaged in Truth Decay in the EU.

5.5.2. Means employed by foreign state and non-state actors

The use of bots by foreign state or non-state agents, which are described as ‘social media accounts that automate interaction with other users’, play a role in influencing opinions on social media platforms, such as Twitter. While bots can be harmless (e.g. those used to help automatise news feeds), some have been found to be more malicious, when utilised by malevolent actors. These automated accounts have been found to be active on certain contentious public policy issues, forming networks (called ‘botnets’). A study by Howard and Kollanyi investigated the use of bots during the United Kingdom referendum on EU membership, finding that, while bots played a small role it was nonetheless strategic: the types of hashtags used were more favourable towards Brexit, and less than one per cent of the accounts included in the study sample generated nearly a third of all tweets. Meanwhile, a study by Ferrara focused on the French 2017 presidential elections and specifically the ‘MacronLeaks’ event that sought to reveal so-called sensitive information concerning the then-presidential candidate Emmanuel Macron. Ferrara found that the accounts supporting the ‘MacronLeaks’ were primarily non-French users belonging to the alt-right Twitter community. In addition, other accounts included those that had shown support for then-presidential candidate Donald Trump in November 2016, but that had been inactive since his election, indicating that these accounts were most likely used for destabilising Europe.

The role of foreign state actors as agents of Truth Decay may be to ‘disrupt social cohesion and infiltrate decision-making bodies’; yet, the motivations are not clear. That said, hypotheses do point to the will to reduce Western unity, thus weakening Western countries.

5.6. Summary

In this section we have discussed examples and evidence of agents contributing to Truth Decay in Europe. Many of the agents are similar to those described in the US context, including politicians and foreign state actors. Nonetheless, the role of several of these agents of Truth Decay in Europe appear to be different, and much less prevalent, than in the
US context. This could be due to a number of different factors, including the different media environments in both, and a more polarised political and socio-demographic environment in the United States than in Europe (see Section 4.4).

There is relatively stronger evidence of the role of the media, and academia and research organisations serving as agents of Truth Decay in the European context. This is context-specific: for example, as discussed in Section 4.2.2, the media landscape is very different in the United States compared to most of Europe. Additionally, there are fewer research organisations per European country than within the United States, which perhaps leads to less weight being given to research organisations in Europe. The academic landscape is also dominated by the Anglophone world, with academics generally seeking to publish in English, given the greater possible impact this affords.

---

531 We have not included national governments, given that the focus on this study is observing Truth Decay at the Europe-wide level.

Consequences of Truth Decay in Europe

The 2018 RAND report explored the consequences of Truth Decay at an economic, political and individual level, arguing that Truth Decay and its many manifestations pose a direct threat to democracy and result in real costs for society. Kavanagh and Rich identified four overarching consequences of Truth Decay in the United States: an erosion of the civil discourse, political paralysis, alienation and disengagement, and uncertainty. Although, as we have shown, Truth Decay manifests itself differently in Europe than in the United States, we might still see some similar consequences of Truth Decay in Europe. Specifically, we looked for ways in which Truth Decay affects democracy and democratic processes, including:

• Disagreement about facts and blurring of the line between opinion and fact can contribute to divides between politicians, an erosion of civil discourse, and political paralysis.

• Polarisation and cognitive bias make it more difficult for politicians to overcome political disagreement and find common grounds for institutional solutions. The same occurs with their supporters and voters.

• Low trust in public institutions weakens the authority of governments and strengthens veto players within the institutional system (e.g. amendments overload parliament) or outside the system (e.g. interest groups).

While in previous chapters we aimed to find evidence of a change (e.g. trends) or an influence (e.g. drivers and agents), in this chapter we present European examples of the four consequences of Truth Decay observed in the United States and present our analysis about how (and if) these phenomena relate to Truth Decay. In some cases we discuss how these consequences are influenced by Truth Decay trends and drivers, in others we explain how these consequences can further exacerbate existing trends or drivers (e.g. uncertainty affecting polarisation), and in some cases we discuss how the connection between these phenomena and Truth Decay is tenuous or unknown. We use many examples drawn from European politics and the COVID-19 pandemic because they illustrate the consequences of Truth Decay well. In addition to economic, political and individual consequences, we explore other dimensions such as the social consequences of Truth Decay, which derive from the economic and political consequences, as well
as environmental and health consequences, particularly in the context of the COVID-19 crisis.

### 6.1. Erosion of civil discourse

The erosion of civil discourse refers to the decline in the quality and robustness of public discourse about policy issues and topics related to public wellbeing. Kavanagh and Rich argued that civil discourse should be informed and honest, open-minded and constructive.²³⁴ An honest and constructive civil discourse (whether debate is taking place in town halls, on television, in the written press or on social media) is a good predictor of a healthy democracy in which policy decisions are made based on facts and evidence, and where the public opinion (in favour of, or against a policy) can be formed based on the same facts and evidence. This contributes to better acceptance of policies and better chances to have these implemented in line with the spirit of their objectives.

**Our assessment about the extent to which Truth Decay contributes to an erosion of civil discourse in Europe starts from the following hypothesis: basic agreement on a common set of facts is the starting point for a healthy debate.** If, instead, there is a disagreement about facts, the discussion will focus on this disagreement and the debate on core issues will never start. If the line between facts and opinion is blurred, the terms of the debate will be difficult to frame and the debate itself difficult to scope. The same occurs with the increasing amount of information available to those who are interested in the debate. While trust in institutions that are either sources of information for the debate or which participate in or lead the debate affects the quality of this debate and the civil discourse around it, the (low) quality of the debate will, in return, affect trust in institutions.

#### 6.1.1. How to measure the erosion of the civil discourse

Kavanagh and Rich propose a number of indicators to measure the amount and quality of civil discourse. First, the extent to which political discussion leads to violence (physical altercations, threats, cancellation of events as a consequence of the risk of violence, and so on). Second, the extent to which civil discourse is inclusive of minorities – for instance the extent to which people participating in the debate are ‘representative’ of the population and whether minorities are included.

We did not find evidence in relation to the above in the European context. In addition, we looked for and found research on political speeches and debates, including both lexical research (form) and reviews of fact-checking activities (content). We included these in our analysis in order to see the extent to which they provide evidence of an erosion of civil discourse. We also looked at the quality of civil discourse in the context of the COVID-19 crisis. While this example does not provide evidence of whether the quality of civil discourse is declining, it provides a snapshot of civil discourse as it stands today in the European context. We first looked at contradictions in public discourse in the context of the COVID-19 crisis, and at the effect these contradictions can have on other elements of the Truth Decay framework. We also explored the extent to which efforts to fight disinformation could potentially present a risk for the quality of public discourse. Of particular concern here was how the expression of dissenting views

---

about COVID-19 is approached in a context where fact-checking is developing.

### 6.1.2. Practical examples of eroded civil discourse in Europe and the level of available evidence of the erosion of civil discourse

Analysis of the quality of political debate and the role of fact-checkers

In the political sphere, our analysis found few examples of healthy debate. While lying in the course of political campaigning is not new, there is evidence that political lying occurs more frequently than in the past. A good illustration of this trend concerns lying in political debates. For example, during the debate between candidate Le Pen and candidate Macron for the 2017 presidential election in France, national newspaper *Le Monde*’s fact-checking branch *Les Decodeurs* counted many more occurrences of political lies than in past debates. They reported that they usually fact-check around six claims during a presidential debate, while during the 2017 debate they found not less than 19 occurrences of political lies. While there is a clear political motive for candidates to lie, hoping that those lies will make voters support them, such practice does represent a threat to democracy, as voting decisions are made based on false facts and evidence. If political lies increasingly become part of the political debate, in an environment where fact-checking is increasingly becoming the norm, it suggests that the risk of being exposed by fact-checkers is not considered a serious threat for politicians.

We have also seen evidence of the quality of debates being side-tracked by disinformation and efforts to contest that disinformation.

The 2016 Brexit debate provides several good examples. The most widely reported example is that of the banner on the ‘Leave’ camp’s campaign bus claiming that the (alleged) £350 million sent to the EU per week could be reallocated to fund the NHS if the United Kingdom left the EU. This claim led to rounds of debate over the veracity of this issue and distracted from the core decision about whether or not the United Kingdom should remain part of the EU.

Some countries have responded by creating ‘buffer time’ between the political debate and the election – to allow for voters to make up their mind and, possibly, check information for themselves. This is the case in France, for instance, where candidates and parties have to stop their campaign two weeks before the elections. Changes in the information system, however, make it difficult to apply this rule to political communication on social media, especially when it is generated by intermediaries rather than the parties or the candidates themselves.

### 6.1.3. Summary

The examples mentioned in this chapter indicate that civil discourse in multiple European fora is far from being always informed, honest, open-minded and constructive. This may be due to a number of factors that facilitate the production and dissemination of discourse – including those identified as drivers of Truth Decay. These factors include: cognitive bias, changes in the information system and the media business model, and politicians and media as agents of Truth Decay. An eroded civil discourse is also closely linked to Truth Decay trends: it is tied to increasing disagreement about facts, is

---

536 Dearden (2019).
interlinked with the trust of formerly respected institutions, and tends to alter this trust at least as much as it is driven by it. While we can document instances of the decline of civil discourse, we cannot assess the extent and scope of any ‘decline’ in civil discourse without data tracking this issue over time.

6.2. Political paralysis

Kavanagh and Rich argue that Truth Decay is at least a contributing factor to the political paralysis that is observed in the United States – as illustrated by the political stalemate faced within the US political system. While Truth Decay does not drive political paralysis alone, it worsens paralysis when it appears. The extent of political paralysis in the United States is, as such, a consequence of Truth Decay. The mechanism under which Truth Decay worsens political paralysis is as follows: disagreement about facts and the blurring line between opinion and fact can create a divide between politicians. Disinformation and the erosion of civil discourse worsens this paralysis. Polarisation and cognitive bias make it more difficult for politicians to overcome political disagreement and find common ground for institutional solutions. The same occurs with their supporters and voters. In addition, low trust in public institutions weakens the authority of governments and strengthens veto players both within the institutional system (e.g. amendments overload parliament) and outside the system (e.g. interest groups).

This process also happens in Europe to some extent. Yet, while we found examples of political instability, we also found counter-mechanisms (often institutional) that prevent political disagreements from translating into institutional paralysis. Overall, we found that political paralysis is less prevalent in Europe than in the United States. While we can reasonably assume that the role of Truth Decay in worsening political paralysis is similar in Europe as in the United States, this role is still limited by institutional safeguards. This does not mean that these safeguards will keep playing that role, in particular if the institutional systems are no longer trusted by the people. Exploring this question is therefore relevant and topical for Europe.

6.2.1. How to measure political paralysis

Kavanagh and Rich use filibusters as a metric to measure political paralysis in the United States and the number of pieces of legislation proposed compared to the number actually enacted. This is also relevant for institutional systems in Europe, for instance those employed in France. In addition, Kavanagh and Rich looked at government shutdowns (e.g. when there is no agreement on the government’s budget) and evidence about the effects of shutdowns (e.g. delays in implementing policies and costs) to assess the extent of political paralysis in the United States. In this section we will explore the extent to which political paralysis happens in Europe and whether there is evidence that it is (at least partly) caused by Truth Decay.

---

538 As reported on the United States Senate website: ‘The term filibuster—from a Dutch word meaning “pirate”—became popular in the 1850s, when it was applied to efforts to hold the Senate floor in order to prevent a vote on a bill’. See United States Senate (2021).
6.2.2. Practical examples of political paralysis in Europe and the level of available evidence

The political stalemate observed in the United States as a result of political paralysis is not observed to the same extent in Europe, although European countries present their own types of political paralysis, for instance in the form of the absence of government. In this section we also explore the extent to which the rise of populist parties in Europe leads to political paralysis.

The rise of populist parties in Europe and political paralysis

In Section 4.4.1 we explored political polarisation and how it links with populism and can contribute to Truth Decay (in particular through loss of trust in institutions). Some argue that the rise of populist parties in Europe and their growing representation in national and local governments also contributes to political paralysis. At a national level, populist parties are represented in a large majority of European national parliaments. At the EU level, while the last EU election has not brought the far-right wave that was expected, far-right parties do now hold ten per cent of the seats in the new European parliament (compared with five per cent in the 2014–2019 session) and represent the fifth largest parliamentary group in the European Parliament. Evidence, however, of the influence of populist parties on policymaking or any sort of political paralysis in Europe is scarce. For instance, when looking at the extent to which the increase in support for far-right parties affected coalition formation in the aftermath of the elections, Best found that it is the fragmentation of the system (and the fact that there are multiple parties represented) rather than the rise of the far-right that complicates coalition formation in Europe. In addition, at the European level, given the institutional system in place, ten per cent of MEPs in the European Parliament are not expected to influence the functioning of the EU institutions or policymaking at the EU-level, but a larger far-right or cumulated populist representation could do so. Thus, it does not seem that the rise of populist parties contributes significantly to political paralysis, but this does not rule out the possibility that Truth Decay might contribute to political paranoia in other ways.

Absence of government and the effect of political paralysis on institutional paralysis

An absence of government results from the failure to form a coalition between the parties that won an election. In a multi-party system, and especially in party list proportional representation elections, it can happen that no clear majority emerges from the results of the election and several parties need to rally and form an executive (e.g. appoint a prime minister and ministers in charge of the main policy departments).

In fact, instances of political paralysis of the sort that prevents real policymaking in the United States seem relatively rare in the European context. There have recently been several occurrences of absence of government in European countries both at national level (e.g. Germany in 2005, Belgium in 2010–2011 and 2018–2020) and regional level (e.g. Northern Ireland 2017–2020) in the last decades.

541 As an illustration, in 2019 The Independent reported that Right-wing populists and Eurosceptics were represented in 23 out of 28 EU Member States. See Stone (2019).
542 As reported in The Guardian, for instance. See Rankin (2019).
543 Bergsen (2019).
Political paralysis in Europe, however, does not necessarily mean institutional paralysis. In some cases, institutions keep functioning despite the political paralysis. Institutions enter a functioning mode that is different and can even be surprisingly efficient, finding institutional stability in political instability.

One example of this situation is Belgium, which holds the record for having the longest time without a government in peacetime: 541 days in 2010–2011 following the failure to form a coalition government after an election. A caretaker government was appointed to run the country in the interim period. A similar situation happened after the 2018 election, which resulted in a caretaker government leading the country through the COVID-19 pandemic in 2020. During the 2010 political crisis, some questioned the extent to which Belgium without an elected coalition government was less efficient than with a government. While the 2018–2020 crisis does not provide a response to that, the COVID-19 crisis shows that a caretaker government has the tools to manage a major crisis. The facts and evidence available so far have shown that actions taken by the caretaker government in Belgium were not significantly different from the actions taken by counterpart governments in other European countries, nor those taken by the successor Federal government appointed in October 2020. In this example, political instability does not seem to affect the functioning of institutions the way Kavanagh and Rich reported that it does in the United States.

A second example of how institutional mechanisms may limit paralysis comes from France. If the majority changes between the parliament and head of state elections, there is a risk of paralysis of the political system (due to two opponent parties controlling the legislative and executive branches of government). In France, however, the French Cohabitation system is implemented when the president and the parliament occupy opposing positions on the political spectrum. In such cases, the president appoints a prime minister from the leading party in parliament. The president and prime minister from opposing parties are thereby forced to work together, with a clear division of tasks and responsibilities. Cohabitation, in effect, shifts power from the president (in line with the principles of a presidential system) to the parliament (in line with the principles of a parliamentary system). This makes the French political system a hybrid between presidential (non-cohabitation) and parliamentary (cohabitation). This situation has happened three times in France: the Mitterrand–Chirac period (1986–1988), the Mitterrand–Balladur period (1993–1995) and the Chirac–Jospin period (1997–2002). While it is not possible to assess whether France functions better under Cohabitation, it would be difficult to argue that such a political system paralyses the country. Instead, it has been designed as a tool to overcome political paralysis. While past Cohabitation examples involved the two mainstream parties working together, it is unclear how Cohabitation would work in a more fragmented political landscape of the current environment, with the rise of extreme parties alongside mainstream parties.

Kavanagh and Rich highlighted the relatively high cost of political paralysis in the United

544 IREF Europe (2021).
546 See, for instance, the analysis of Belgium’s reaction to COVID-19 pandemic in turbulent political times in Pornschlegel (2020).
The situation is different in Europe, where there is no evidence that political paralysis has had significant economic effects. Some commentators even claim beneficial effects of political instability on the economy, but were inconclusive on whether the economy grew despite or because of the missing government. Fink and Kappner analysed how GDP evolves in countries or regions without a government. They find that Belgium performed better than other countries in the euro area, despite the absence of government during and after the 2008 financial crisis. The COVID-19 crisis, however, led to a new kind of paralysis in Europe, with dramatic consequences on the economy in addition to the human and health costs. It would be interesting to compare the costs of this paralysis with other kinds of political paralysis and see the extent to which there are lessons from the COVID-19 crisis about how to avoid or overcome political paralysis.

6.2.3. Summary

Overall, we did not find evidence of a link between political paralysis and Truth Decay largely because we did not find clear instances of political paralysis in the European context. While we can argue that disagreements about facts and data, driven by political polarisation and changes in information systems can affect trust in institutions in Europe, political paralysis does not seem to affect the functioning of institutions to the same extent as it does in the United States. We attribute the institutional effects of political paralysis to differences in the institutional systems, with Europe presenting more safeguards against the implications of political paralysis on institutions than in the United States.

6.3. Alienation and disengagement

Kavanagh and Rich define alienation as detachment from, rejection of and disaffection from major institutions, processes and social norms. Alienation in this form represents a threat to democracy. Public engagement is foundational to democracy in that it has a political, social and educational function. It is one of the ways for constituents to communicate with their political representatives and hold these representatives accountable. In addition, public engagement creates communities and social ties, and, as such, has a social function. Public engagement is also part of younger people's journey to become active citizens in society. Alienation has a dual role in the Truth Decay framework, particularly in relation to trust in institutions and polarisation. Alienation can be caused by declining trust and can lead to further decreases in trust in institutions. Similarly, alienation can also lead to polarisation while polarisation can further reinforce alienation.

While we found examples of disengagement in Europe, there is also evidence that Europeans are increasingly engaged. Furthermore, there are many factors that
can affect participation (age, gender, socio-economic factors, education), and even in cases where disengagement does exist, we could not find evidence of a direct link with the Truth Decay trends.

6.3.1. How to measure alienation and disengagement

Alienation and disengagement can be measured in many ways. For instance, Kavanagh and Rich use satisfaction with political parties and the emergence of outsider candidates as two measures of alienation and disengagement. In this section, we propose to look at other measures of engagement and satisfaction with politics and see the extent to which the patterns we observe can be linked to Truth Decay trends. To summarise our findings, while this section presents an overview of the state of engagement and satisfaction in Europe, we did not find evidence that alienation and disengagement in Europe is a consequence of Truth Decay.

We first look at how people perceive the institutional system around them: how they express their satisfaction with public institutions and political parties, as compiled in opinion surveys on political satisfaction; and how people perceive the functioning of the democratic system they live in, as revealed by opinion surveys on perceptions of democracy. We then look at how people express satisfaction during elections: their decision to vote or not (compiled in data about participation in elections and abstention); their decision to use their vote to support a candidate or to express dissatisfaction (e.g. emergence and place of none-of-the-above vote in election results); and finally, when a vote is cast and expressed, the extent to which voters support outsider candidates or mainstream candidates. Finally, we look at the emergence of new forms of engagement, in particular online.

6.3.2. Practical examples of alienation and disengagement

Political satisfaction and engagement

First we consider the extent to which satisfaction and engagement with politics has changed over time and whether this change can be attributed to Truth Decay. Alienation is not a new phenomenon in Europe and can be illustrated with many examples from the past across Europe. In the early 1980s, Lockerbie developed a model to measure political alienation in Western Europe, with a focus on Great Britain, France, Germany (at the time West Germany only) and Italy, and analysed data from European opinion surveys Eurobarometers. The study found a link between economic dissatisfaction and political disengagement in all countries covered, with a great variation between countries – from the ‘most alienated’ to the least: Italy (around 32 per cent), France (around 15–20 per cent), the United Kingdom (around ten per cent) and West Germany (around four per cent).

556 Since 1993, Eurobarometer surveys have asked a sample of Europeans once or twice a year (37 times in total at the time this report was prepared) whether they are ‘very satisfied, fairly satisfied, not very satisfied or not at all satisfied with the way democracy works in (their) country and in the European Union’.
The extent, however, to which alienation is gaining ground is not easy to measure, given the lack of data and evidence in this area. Looking at Eurobarometer data over time, and in particular the share of respondents who are ‘not at all satisfied’ with the way democracy works in their country and/or in the EU, and those who do not know whether they are satisfied, it appears that dissatisfaction has not overwhelmingly changed over the last decades – despite the social and economic circumstances (e.g. the 2008 financial crisis). The share of those who are not at all satisfied with the way democracy works in the EU has constantly remained between seven to eight per cent (2004–2010) and 14 per cent (at several points in time between 2013–2016). While the majority of respondents have, unsurprisingly, been ‘fairly satisfied’ (32 per cent in 1997 and 1998, to 49 per cent in 2019) or ‘not very satisfied’ (26 to 28 per cent between 2001 and 2010, to 38 per cent in 1994), the share of respondents who are ‘very satisfied’ has always been between two per cent (1994) and seven per cent (2007).

Looking at data per country, those countries with highest levels of ‘(high) dissatisfaction’ about the way democracy works in their country in the EU ‘nowadays’ (November 2019) are Greece (over 22 per cent) and France (over 17 per cent) followed by the United Kingdom and Italy (both around 14 per cent). It is possible to identify factors that influence dissatisfaction and illustrations of how dissatisfaction affects public life in these countries. The central factor revolves around the economy and social welfare. In Italy, the media report high levels of dissatisfaction linked to: (1) the management of the economic situation in the country (even before the COVID-19 pandemic and its economic consequences); and (2) migration.
issues with Italy being the entry point to the EU for one of the main migratory routes to Europe, the Central Mediterranean Route,\textsuperscript{557} which generated frustrations that migration had not been managed properly by public authorities. In France, dissatisfaction in 2018–2019 was fuelled by feelings of economic injustice by middle- and low-income earners, which translated into the Yellow Vest protests and paralysed the country for one year until the COVID-19 crisis hit France. In Greece, the government debt crisis that started in 2008 affected satisfaction with how democracy works in both the country and in the EU. The proportion of those who responded ‘not at all satisfied’ rose from seven per cent in 2009 to 37 per cent in 2012, falling to 22 per cent in 2019).\textsuperscript{558}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure_6.2}
\caption{Respondents ‘not at all satisfied’ with the way democracy works in the EU per country: November 2019}
\end{figure}

Source: Data.Europa (2019b)

\textsuperscript{557} Frontex (2021).
\textsuperscript{558} Data.Europa (2019b).
Dissatisfaction, however, with the way democracy works in an individual country does not always translate to dissatisfaction with how people perceive the way democracy works in the EU as a whole.\textsuperscript{559} Interestingly, respondents from the United Kingdom have been more dissatisfied with the way democracy works in their country than in the EU. In the wake of the United Kingdom vote to exit the EU in May 2016, Eurobarometer data shows that almost half of respondents in the United Kingdom (48 per cent) were dissatisfied with the way democracy worked in their country, including 17 per cent who were ‘very dissatisfied’, while only 13.5 per cent of United Kingdom respondents were ‘highly dissatisfied’ with the way democracy works in the EU. In 2019, a slightly lower share (less than 45 per cent) of United Kingdom respondents were dissatisfied with the way democracy works in their country including over 14 per cent who were ‘very dissatisfied’, while only ten per cent of UK respondents were highly dissatisfied with the way democracy works in the EU.

Looking at socio-demographic data, it appears that young people (under 24 years old) tend to be more satisfied than older ones, and that those who studied longer (post upper secondary education) and those who are still studying tend to be more satisfied than those who studied less. There is no significant difference between male and female respondents. What we do not find, however, is any evidence that dissatisfaction with politics is linked to the four trends of Truth Decay. There is no evidence, for example, that frustration with a crowded news environment, online disinformation, or a blurred line between facts and opinion is driving dissatisfaction. Nor is there evidence that declining trust in government or media is associated with increased dissatisfaction. Overall, we found that evidence of dissatisfaction with and disengagement in politics is not as overwhelming in Europe as in the US context. In addition, there is a gap in the literature about the link with Truth Decay trends that is not as apparent as in the US context.

**Engagement and elections**

In this section we explore turnout in elections, expression of none-of-the-above votes, and the emergence of outsider candidates as evidence of political dissatisfaction that may be linked to Truth Decay. After exploring and documenting these ways of expressing political dissatisfaction, we consider if there is evidence that they are driven by Truth Decay.

**Turnout in elections**

Another proxy indicator for disengagement with democratic life is participation in the electoral process. **Overall, participation in elections in Europe has decreased in recent decades.** A notable example is participation in European elections, which take place at the same time in all Member States of the EU. While each country organises the election in line with their own voting system, which necessarily implies differences between countries (e.g. whether voting is mandatory, as in Belgium, or the availability of remote-voting options, etc.), these elections provide a good picture of Europe’s electoral landscape at given points in time. Voter turnout in European elections has been steadily decreasing for the past 25 years up to 2014. The 2014 European Parliament elections saw the lowest voter turnout on record at 42.5 per cent, down from 43.0 per cent in 2009 and well below the 62.0 per cent recorded in 1979. This trend is consistent with national elections in European countries. Overall, participation in national elections in

\textsuperscript{559} Data.Europa (2019b).
the 28 Member States of the European Union dropped on average by ten percentage points between 1990 (77.7 per cent), and 2018 (68.0 per cent). The 2019 EU election, however, represented a trend-break with a participation of 50.7 per cent, the highest in 25 years. This peak in voter turnout was attributed to high participation by the young and supporters of green parties and first-time voters. Increasing participation among young people is not limited to the democratic process. A 2017 Eurobarometer on youth participation shows that young people not only increasingly participate in democratic life (youth participation in elections at any level has increased by 18 percentage points from 2014 to 2017), but are also more engaged in organisations such as sports club, youth clubs and leisure-time clubs, as well as in voluntary activities (in particular activities focused on local communities). This suggests that while dissatisfaction exists, engagement in the electoral process is, unlike in the United States, not declining in Europe, and is even rising in clusters of the population. 

None-of-the-above votes

Given the diversity of the electoral systems in European countries, participation in EU elections does not mean the same thing in terms of people’s (dis-)engagement in each country. For instance, participation rates in countries where voting is mandatory cannot be compared with participation in other countries. In Europe, voting is currently mandatory in Belgium, Bulgaria (since 2016), Greece, Luxembourg and parts of Switzerland. It was mandatory in Cyprus until 2017. In Belgium, where voting is mandatory for all registered voters and failure to vote can result in a fine, participation is traditionally high. Yet this does not necessarily mean that those who vote in Belgium are fully ‘engaged’ in the election.

An indicator of disengagement in countries where voting is mandatory is the number of ‘none-of-the-above’ votes in elections. These are votes that are expressed but that cannot be counted because they are expressed in a way that is not in line with the electoral rules (i.e. void or empty ballot, a ballot where more than the maximum number of candidates are selected, etc.). These votes (expressed but not valid) are usually counted together with non-votes (not expressed). There are movements pushing for counting these votes as a way to express interest in the political institutions (expressed in the act of voting) but dissatisfaction with the current political offer (expressed with the refusal to make a choice while voting). In Europe, ‘none-of-the-above’ votes are accounted for to varying extents in Italy, the Netherlands, France, Belgium and Switzerland. In France, ‘none-of-the-above’ votes have been counted together with non-votes (as non-expressed votes) since 2014, but the number of ‘none-of-the-above’ votes is formally communicated as part of the election results. This is a result of an active campaign from the ‘none-of-the-above’ vote support groups (e.g. Le Parti du Vote Blanc), who have advocated for a ‘none-of-the-above’ vote to be recognised as an electoral choice in France. Those who argue that the ‘none-of-the-above’ vote should be recognised as an electoral choice emphasise the difference between expressing dissatisfaction with, or disinterest for the political institutions (non-votes) and

562 IDEA (2021).
dissatisfaction with the current political offer ('none-of-the-above' votes).

‘None-of-the-above’ votes are gaining ground in France, obtaining as much as 11.5 per cent of votes (8.5 per cent of registered voters) in the second round of the 2017 presidential elections (between Marine Le Pen and Emmanuel Macron, both of whom were outsider candidates, in an election where abstention (over 25 per cent) was the highest since 1969 (75 per cent participation instead of traditionally 80 per cent).\textsuperscript{563} In addition, the share of ‘systematic’ voters (those who vote at each election) in 2017 was 35.9 per cent, the lowest since 2002. In parallel, the share of systematic non-voters (those who never vote) rose since 2007 and was in 2017 (13.4 per cent) the highest since 2002, suggesting a trend towards both an increase of systematic disengagement and a decline in systematic engagement.

\textbf{Figure 6.3: Voting behaviours in France}

\begin{figure}[h!]
\centering
\includegraphics[width=\textwidth]{voting_behaviours_in_france.png}
\caption{Voting behaviours in France}
\end{figure}

\textit{Source: L'Institut national de la statistique et des études économiques (Insee)\textsuperscript{564}}

\begin{itemize}
\item[563] Buisson & Penant (2017).
\item[564] Buisson & Penant (2017).
\end{itemize}
Emergence of outsider candidates

Kavanagh and Rich showed evidence of the consequences of alienation and disillusionment with the successful establishment of ‘outsider’ candidates in the United States 2016 presidential election. A parallel can be drawn with France, where the lowest participation rates in presidential elections are associated with the emergence of outsider candidates in a system that was traditionally dominated by two establishment parties. The first time an ‘outsider’ candidate went to the second round of the presidential election was Jean Marie Le Pen in 2002, when abstention was the highest recorded for a first-round presidential election (28.4 per cent) since the start of the Fifth Republic in 1965. The second time an outsider candidate made it to the second round was in 2017, when both candidates were outsiders, keeping the two mainstream parties out of the presidential function for the first time in the Fifth Republic. As we have seen above, abstention in the first round of the 2017 presidential elections was the second highest since 1969 (22.23 per cent). In this case having two outsider candidates running for president also occurred alongside record abstention in the second round of the same election.

While the use of ‘none-of-the-above’ votes and the emergence of outsider candidates have taken a greater role in some major elections in the last few years, the existence of multi-party systems has facilitated this and neither is an entirely new phenomenon in Europe. Rather, these can be viewed as ‘institutional’ ways for Europeans to express dissatisfaction with the establishment. Yet, it is not clear that these ways of expressing political dissatisfaction are linked with Truth Decay, as they do not appear to be new nor to show markedly different directions over the past decade.

Yet, it is not clear that these ways of expressing political dissatisfaction are linked with Truth Decay, as they do not appear to be new nor to show markedly different directions over the past decade.

Rather, we see a measure of consistency. We also did not find evidence that these types of expression of political dissatisfaction were linked to low trust or a response to trends in the information environment.

Emergence of new forms of engagement and how they affect traditional forms of participation

Besides elections, less traditional forms of engagement include online participation (as opposed to in-person). Online participation can include participation in political debate online, as well as participation in online strikes and demonstrations. While we can argue that these new forms of engagement might mean more opportunities for people to engage, there is a risk that online engagement replaces in-person participation without necessarily translating into actions such as voting.

The development of these new ways of participating is linked to changes in the information system. Kavanagh and Rich show evidence that many Americans have replaced in-person participation with online participation. Due to the changes in the information system, opportunities for online democratic participation have flourished, from participation in online debates, or sharing political views on social media. The extent, however, of online democratic participation in Europe is not overwhelming: A 2018 Eurobarometer on democracy and elections explores participation in political debates on online social networks in the context of elections. Less than one third of Internet-using respondents follow or participate in online political debates, with substantial variation across countries.
online discussions of political topics during election periods.\textsuperscript{568} When asked why they do not participate online, the main reason mentioned by respondents for not actively participating in political discussions on social networks was that they do not consider it useful.

In addition, online participation does not necessarily translate into the act of voting. Morozov repurposes the term ‘slacktivism’, to refer to ‘feel-good online activism that has zero political or social impact term’.\textsuperscript{569} Morozov argues that, not only does online activism not necessarily translate into in-person activism, it could actually replace in-person activism. The question raised by Morozov is whether ‘slacktivists’ would move away from an effective form of activism (voting, demonstrating) towards a form of activism that has not proven effective (yet). This question, asked in a context when demonstrations are not possible (e.g. not allowed by authorities due to the COVID-19 pandemic) takes another dimension: while it is potentially a threat to other forms of participation in ‘normal’ circumstances, online participation can be a good (and sometimes the only) way to replace in-person participation when in-person participation is not possible. Lupiáñez-Villanueva et al. also conclude that online means of engagement provide engagement opportunities to disadvantaged young people and could be a way to bridge the participation divide.\textsuperscript{570} In this context, choosing online participation does not necessarily mean disengagement, but can be another form of engagement that complements more traditional forms of engagement rather than replaces them. While the emergence of new forms of engagement can be driven by the same drivers as Truth Decay (e.g. changes in the information system) and influenced by Truth Decay trends (e.g. blurring line between opinion and fact and increasing relative volume and influence of opinion over facts), we have not found evidence that these new forms of engagement were detrimental to traditional forms of engagement such as participating in elections.

News avoidance

After exploring the state of political satisfaction in Europe and the extent to which dissatisfaction necessarily translates into alienation and disengagement, we now look at news avoidance as an indicator of disengagement, not only in politics, but in public and to some extent social life. An example of news avoidance (i.e. people saying that they actively avoid the news) is Brexit-news avoidance. As a consequence of the public’s fatigue for Brexit-related items in the news, the media reacted and came up with a media offer adapted to this new demand from news consumers. In 2019, Sky News Group launched a Brexit-Free pop-up channel in response to Brexit-related news fatigue in the United Kingdom.\textsuperscript{571}

\textbf{Reuters reports an increase in news avoidance of three percentage points since 2017 – from 29 per cent of respondents in the Reuters Institute Digital News Report survey to 32 per cent in 2019.}\textsuperscript{572} In Europe, news avoidance peaks in Croatia, Turkey and Greece, where over half of respondents said that they often actively avoided the news.

\textsuperscript{568} Data.Europa (2020).
\textsuperscript{569} Morozov (2009; 2011).
\textsuperscript{570} Lupiáñez-Villanueva et al. (2018).
\textsuperscript{571} Sky (2019).
\textsuperscript{572} Newman et al. (2018).
(56, 55 and 54 per cent respectively). In the United Kingdom, the share of people reporting frequent news avoidance increased by 11 percentage points, up to 35 per cent in 2019. When asked why they avoided the news, over half of respondents (58 per cent) said that it is because it affects their mood, while 40 per cent responded that it is because they feel powerless and over one third of respondents (34 per cent) said that it is because they do not trust the news, which shows a link with Truth Decay. None of the other possible reasons listed (including that it takes too much time or that it leads to arguments) were picked by more than 11 per cent of respondents.

Skovsgaard distinguishes between intentional and unintentional news avoidance. The reasons listed in the Reuters reports mainly concern intentional news avoidance, as opposed to unintentional news avoidance, which has to do with preferring more entertaining media over news. Regarding intentional news avoidance, Skovsgaard argues that, next to news coverage being too pessimistic and affecting their mood negatively and scepticism toward or lack of trust in the news media, a feeling of news overload causes news avoidance. We can argue that a combination of an increasing volume of information available to news consumers and changes in the information system (e.g. the proliferation of social media) contributes to such a feeling of news overload. This is in line with the research findings of Song et al.

Overall, then, when we measure alienation and disengagement by considering trends in news avoidance, we do find substantial expression of such a sentiment, as a link with trust in the media and a clear connection to many of the changes in the news environment, such as the increased volume of information and the increasingly emotional, exaggerated nature of much online discourse.

6.3.3. Summary

Overall, we found evidence of pockets of disengagement in Europe. In terms of participation in elections, this has been declining in Europe during the last few decades, but seems to have resurfaced in the last few years. One striking example is the turnout for the 2019 European elections. There are clear differences across countries and generations (with young Europeans being in general more satisfied and engaged than older generations). Europeans increasingly find ways to express dissatisfaction with the system in place while voting, for instance when invalidating their vote or choosing outsider parties or outsider candidates beyond the mainstream parties. This, together with the emergence of new forms of participation (including online participation) does not necessarily represent a threat for democracy – these options can actually be beneficial if they mean expanding possibilities for more people to participate. Yet, in these political expressions of dissatisfaction and alienation we do not find evidence of a connection with Truth Decay. On the other hand, there is evidence that news avoidance, another manifestation of dissatisfaction and alienation, is in fact driven by some of the same trends as characterise Truth Decay. Overall, the trends of Truth Decay contribute to alienation and disengagement in Europe, but not in the same way or extent as in the United States. In Europe, this contribution is primarily in terms of news consumption.

573 Skovsgaard (2019).
574 Skovsgaard (2019).
575 Song et al. (2016).
behaviour, and not necessarily an expression of political satisfaction or dissatisfaction.

6.4. Uncertainty

Uncertainty can exist in many forms, but as a consequence of Truth Decay, it is defined as policy uncertainty at both the national and international levels. Policy uncertainty refers to the lack of certainty in making and maintaining government policy as well as the risk of reversal of policies upon a change in government. Kavanagh and Rich argue that two trends drive uncertainty: the blurring of the line between opinion and fact and the decline in trust of formerly respected sources of information. They link policy uncertainty to specific drivers, namely polarisation and disinformation, noting that, when individuals, businesses and foreign actors cannot trust information from government sources, media, or other groups, it can affect their ability to make decisions. This could lead to consequences such as businesses not wishing to make investments, increased stock price volatility and delays in making key decisions. On an international level, policy uncertainty can affect the way in which allies and adversaries react. Uncertainty can also cause stress at an individual level, which can affect the quality of individual decision making and lead to physical and mental health issues.

In this section we will explore the extent to which there is policy uncertainty in Europe and whether there is evidence that it is (at least partly) caused by Truth Decay.

6.4.1. How to measure policy uncertainty

It can be difficult to measure policy uncertainty, given the intangible nature of the phenomenon. In the European context, we found measures of economic policy uncertainty. While these measures are imperfect (since economic uncertainty is dependent on multiple factors – immigration, diseases, and geopolitical risk – that are not necessarily related to Truth Decay), we focus on economic uncertainty as a proxy for policy uncertainty. Mentions of economic uncertainty are drawn from the Economic Policy Uncertainty database. The methodology for deriving uncertainty is based on a review of the major national newspapers, and tallying each time key terms, such as ‘uncertainty’, ‘policy’, ‘tax’ and ‘spending’ are mentioned.

We recognise that mentions of economic policy uncertainty are only a proxy for economic uncertainty itself and that the...
data are limited. To overcome this, we have sought to identify any key co-occurring events alongside periods of high levels of mentions of economic policy uncertainty, to demonstrate actual economic policy uncertainty. In this analysis we focus on six selected countries: Belgium, France, Italy, Spain, Sweden and the United Kingdom. These countries have been selected based on the availability of data. The United Kingdom, France and Italy have illustrated certain aspects of Truth Decay, such as a decrease in vaccination rates (France and Italy) or misperceptions and low trust in institutions (the United Kingdom), whereas the same link is less apparent in Belgium, Spain and Sweden.

To supplement this discussion, we also assessed policy uncertainty with examples of policy reversals and science communication, which we found could be influenced by Truth Decay and also reinforce some of its aspects (e.g. trust in institutions) and drivers (e.g. polarisation).

6.4.2. Practical examples of uncertainty in Europe and the level of available evidence

Economic policy uncertainty

Mentions of economic policy uncertainty reflect uncertainty stemming from a number of external and internal factors – such as immigration, diseases and geopolitical risk. More widely, economic policy uncertainty has multiple impacts, including limited or slow trade growth and increased market volatility,\textsuperscript{582} which, on an individual level, can affect employment and overall economic stability and lead to a decline in spending and consumption.\textsuperscript{583}

Figure 6.4 illustrates the number of mentions of economic policy uncertainty for each of these countries between 2000 and 2020 and shows substantial variation across countries. In 2020, the spikes seen in certain countries such as Belgium, Spain and Italy are probably linked to the COVID-19 pandemic crisis, which is discussed in further detail in the following section.

\textsuperscript{582} Asthana & Kalekar (2020).

\textsuperscript{583} Azqueta-Gavaldón et al. (2020); Ghirelli et al. (2019a).
Looking first at Sweden, the number of mentions of economic policy uncertainty have remained fairly stable, albeit increasing slightly over the years. As Sweden has not appeared to be one of the European countries most affected by Truth Decay, it is not surprising to find little variation in policy uncertainty in this country over recent years.

Figure 6.5 suggests that the peak of mentions of uncertainty in the United Kingdom clearly occurred in 2016, which was the year that the United Kingdom voted to leave the EU. As noted in the sections above, including in Section 4.4 on polarisation, and Section 5.4 on politicians as agents, the evidence suggests that the public discourse showed considerable signs of Truth Decay in the run-up to and aftermath of the Brexit vote. The peak in mentions of economic policy uncertainty in the United Kingdom coincided with the referendum in June 2016 (see Figure 6.5).

Following this rise in mentions of economic uncertainty in 2016, levels fell back again in subsequent years. It should, however, be noted that the levels remain higher than they were prior to Brexit. Indeed, uncertainty – even beyond purely economic policy uncertainty – has remained. This may be due to the delays and uncertainty over the process beyond the vote itself, including the withdrawal from the EU, which was due to occur on 29 March 2019 but instead took place on 31 January 2020, and the lack of knowledge as to whether the United Kingdom would transition with or without a deal throughout the majority of 2020.585 Interestingly, according to these data, mentions of economic policy uncertainty in the United Kingdom coincided with the referendum in June 2016 (see Figure 6.5).

The data for 2020 are based on ten months rather than 12 months for the other years, aside from Sweden, which is based on nine months. There was no data on Belgium in 2000 and 2006.

584 The data for 2020 are based on ten months rather than 12 months for the other years, aside from Sweden, which is based on nine months. There was no data on Belgium in 2000 and 2006.

585 Boffey (2020).
of economic policy uncertainty pertaining to the coronavirus pandemic have so far been limited, and remain much lower than the mentions of economic policy uncertainty that prevailed in 2016. Overall, it does appear that the number of mentions of economic policy uncertainty has increased following the Brexit referendum. The extent, however, to which this uncertainty is linked exclusively to Truth Decay is difficult to assess, given the substantial economic implications of the Brexit decision. The rise of economic policy uncertainty in the years that have followed the Brexit vote has been noted. For example, a Bank of England study notes that over half (55 per cent) of around 3,000 firms surveyed in 2019 cited Brexit as one of their main three ‘current sources of uncertainty’.\textsuperscript{586} Consequences for the United Kingdom include a reduction in investment, fewer large purchases amongst consumers, such as houses and vehicles, and reduced productivity, although as of November 2019 consumer spending had been less affected.\textsuperscript{587}

A number of fluctuations in the number of economic policy uncertainty mentions can also be noted in France. Some of the increases may be linked to presidential election years, which, since the year 2000, have been held in 2002, 2007, 2012 and 2017. Indeed, increases can be noted particularly in 2012 and 2017. Similarly, the increase in 2012, and the increase from 2015 may be linked to a spate of Islamist


\textsuperscript{587} Bank of England (2019).
attacks in France.\textsuperscript{588} It is, however, difficult to link a specific event to the increases, despite some evidence of Truth Decay found in particular regarding the 2017 presidential election (see Section 5.4).

Italy has also seen several peaks in mentions of economic policy uncertainty, notably in 2013, although, interestingly, it also experienced a significant decrease in 2017. The rise in 2013 is likely associated with the fact that 2013 was an election year, and the rise in 2016 is likely due to the constitutional reform seeking to amend the Italian Constitution. Ultimately, this reform was rejected, with the prime minister resigning and being replaced in December 2016. As with France, while aspects of Truth Decay exist in Italy, such as lower vaccination rates (see Section 3.1.2) or lower trust in institutions (see Section 3.4.1), this does not appear to have driven high levels of mentions of economic policy uncertainty, as witnessed in the United Kingdom.

In Spain, a peak in mentions of economic policy uncertainty occurred in 2012, and later in 2020. In 2012, this spike appears to be related to the Spanish request for financial assistance from the EU.\textsuperscript{589} Specifically, Spain requested assistance for its financial sector, during the Spanish financial crisis, after several months of stating that no assistance was needed.\textsuperscript{590} In this instance, the uncertainty seemed to be driven by the Spanish economic situation and the future of the euro area, rather than by Truth Decay.

Policy reversal and uncertainty
Policy reversal is another type of uncertainty. There exist different types of policy reversals, including ones made by the same government in power on their own policies, and ones made by subsequent governments, overturning the policies of their predecessors. Both may be driven by and increase uncertainty. This in turn drives Truth Decay, as facts act as the basis or foundation upon which policies are elaborated and then action. Without facts cementing policies, these could shift more easily as a result of changes in government.

There are relatively few examples of policy reversals by subsequent governments in Europe that can clearly be linked to Truth Decay. In the relatively polarised political environment of the United States, policy reversals are fairly common and changes in the ruling party affect the previous policies undertaken to a large degree. In Europe, however, such examples are comparatively rare. One such example can however be seen in Poland, as described in Box 6.1.

\textsuperscript{588} In 2012, a terrorist went on a three-day rampage, killing seven people; in 2015, the year started and ended with multiple terrorist attacks, including against Charlie Hebdo, a satirical newspaper; and in 2016, several Islamist attacks took place, including the Nice attack.

\textsuperscript{589} Ghirelli et al. (2019a and b).

\textsuperscript{590} Spiegel & Mallet (2012).
Box 6.1: Example of policy reversal in Poland

In Poland the right-wing conservative PiS party (Prawo i Sprawiedliwość) took over governance from the right-of-centre liberal PO party (Platforma Obywatelska, or ‘Civic Platform’) in the 2015 parliamentary elections. Since then, it has won the latest parliamentary, local and presidential elections, despite concerted efforts by a number of opposition parties that joined forces. Bill and Stanley note that PiS engineered a revolt against the ‘liberal consensus’ and shifted towards a regime rooted in populism.\(^{591}\) The authors argue that, instead of operating with the framework of liberal democracy, PiS replaced ‘the post-communist “mono-power” with one of its own’ and considered the opponents of their policies as enemies of Poland and of ‘real’ Poles.\(^{592}\) They conclude that Polish politics is dominated not by disagreements over policy, but over the legitimacy to govern Poland. Some others explain the situation as the ‘politics of revenge’.\(^{593}\) Accordingly, political and personnel changes introduced by PiS are merely attempting to undo what PO did before it lost power in 2015. Dempsey argues that this polarising politics of revenge goes back to the Solidarity movement, which combined the liberal, secular intellectuals aiming to modernise Poland fast and the conservatives and anti-Communists who wanted a clean break with the past. These two factions continue to compete for Poland’s future and argue over Poland’s past.\(^{594}\)

It must nonetheless be caveated that this is still a very contemporary issue, and, as such, the consequence of uncertainty is limited by the fact that PO has not yet returned to power. Should PO return to power and in turn reverse PiS’ policies, this may augment wider uncertainty, as it may create a sense of tit-for-tat political decisions and wider policy unpredictability for the country and population. Therefore, while this is an example of policy reversal by a subsequent government, and elements of Truth Decay have been found to be exploited by PiS, it is currently too soon to be able to highlight this as leading to wider policy uncertainty.

Uncertainty and science communication

This type of uncertainty relates to different interpretations of scientific evidence and the natural course of science in which data and evidence and our understanding of key issues evolve over time. Contradictions in public official messages relate to Truth Decay because they can be detrimental to democracy by affecting trust in institutions – both public institutions and the media. The effect of contradictions can also be amplified on the Internet and social media, exposing users to an increasing volume, and resulting influence, of opinion and personal experience (see Section 4.2 on changes in the information system).

The COVID-19 pandemic has led to a rise in the use of face masks to limit the spread of the virus. While most governments reported data and facts on a daily basis (e.g. press conferences), there were examples of contradictions in public official messages relating to measures to fight the pandemic. The narrative around the use of masks at the start of the pandemic is a good example, although messaging over masks became

591 Bill & Stanley (2020).
592 Bill & Stanley (2020, 390).
593 Dempsey (2016).
594 Dempsey (2016).
clearer over time. In a context of high numbers of infections, under certain conditions mask wearing can help reduce the risk of transmission, especially when coupled with other measures, such as increased frequency of washing hands and social distancing. Interpretations of this evidence have varied by country and over time, and mask wearing fluctuates across Europe, depending on various factors, such as whether it has been made mandatory (such as in Spain, Italy, France, the United Kingdom and Germany) and how badly affected the country has been. Figure 6.6 provides an overview of the levels of mask wearing in a selected number of European countries to illustrate these fluctuations.

Figure 6.6: How often have you worn a face mask outside your home to protect yourself or others from coronavirus (COVID-19)? As of 18 October 2020

Source: Masks in Europe 2020, Statista

---

595 Schünemann et al. (2020).
596 He & Laurent (2020).
597 Stewart (2020).
These data demonstrate how a number of trends and drivers have led to a level of uncertainty amongst people in the policies put forward by their own government. Here, we might cite trends such as the decline in trust in formerly respected sources of factual information, including public institutions (as discussed in Section 3.4) and an increasing relative volume of opinions over facts (see Section 3.3); and drivers such as changes in the information being put out. Inconsistent guidance on the efficacy of masks in preventing COVID-19 spread have been an additional aggravating factor. This can also be coupled with disinformation tactics by foreign actors seeking to create confusion: the European Union notably highlighted disinformation campaigns around COVID-19 run by China and Russia.\textsuperscript{598} This has led to policy uncertainty and a lack of support of the policy by certain segments of the population, including in countries where mask wearing is obligatory.

Advice on mask wearing has not been homogenous across Europe or indeed even in a single country. Examples of the reversal of one’s own policy, or unclear advice exist where various European governments have given contradictory policy advice, though often not intentionally, given the overall lack of knowledge around the virus particularly at the start of the pandemic. For example, in France, government officials maintained, over the course of several weeks at the start of 2020, that it was not necessary to wear face masks. Indeed, government officials stated that they did not see it as necessary for the general population, nor was it recommended.\textsuperscript{599} This was subsequently overturned in April 2020, when the government imposed mask wearing.\textsuperscript{600} A similar situation was seen in the United Kingdom, where mask wearing was imposed in July 2020 after not being mandated for months.\textsuperscript{601} A rise in uncertainty due to this conflicting advice was even noted as a result.\textsuperscript{602} In another example, in Belgium, contradictory advice was given on the amount of times a fabric mask could be reused, and at what temperature to wash them.\textsuperscript{603}

The inconsistent advice on masks, which even included contradictory messages from the WHO,\textsuperscript{604} may have led to some confusion and fed disinformation narratives that were used by anti-mask groups. Box 6.2 illustrates how recommendations about wearing masks changed over time, using Belgium as an example.

\textsuperscript{598} Rankin (2020).
\textsuperscript{599} Feertchak (2020).
\textsuperscript{600} France 24 (2020).
\textsuperscript{601} Mueller (2020).
\textsuperscript{602} Rettman (2020).
\textsuperscript{603} McNally (2020).
\textsuperscript{604} BBC (2020).
With regards to COVID-19, official (public) discourse about whether wearing masks was useful changed over time without a clear narrative about why the official position changed. Uncertainty linked to the pandemic also affected the way in which policy decisions were covered in the media, which initially described mask wearing as ineffective and then as one of the best ways to protect oneself against COVID-19. In Belgium, the website of the public French-speaking radio and television channel (Radio Television Belge Francophone – RTBF) reported at the end of February 2020 that it would be ineffective to wear a mask at all times, saying that masks were only useful for those with coughing or sneezing symptoms (to protect others) and only effective for a short (3–4 hour) period of time. Six months later, the same website promoted masks as a useful (albeit insufficient) measure. While such a shift was justified with evidence from new research, it was rarely presented as such in news reporting. Such a shift could be perceived as arbitrary by the news audience. The most sceptical readers might suspect that the shift was circumstantial rather than evidence based (the objective being initially to discourage people from wearing a mask in order to ensure that there were enough masks for doctors, nurses, pharmacists and other frontliners), with the switch to mandatory mask wearing occurring once there were enough masks for all.

With regards to COVID-19, official (public) discourse about whether wearing masks was useful changed over time without a clear narrative about why the official position changed. Uncertainty linked to the pandemic also affected the way in which policy decisions were covered in the media, which initially described mask wearing as ineffective and then as one of the best ways to protect oneself against COVID-19. In Belgium, the website of the public French-speaking radio and television channel (Radio Television Belge Francophone – RTBF) reported at the end of February 2020 that it would be ineffective to wear a mask at all times, saying that masks were only useful for those with coughing or sneezing symptoms (to protect others) and only effective for a short (3–4 hour) period of time. Six months later, the same website promoted masks as a useful (albeit insufficient) measure. While such a shift was justified with evidence from new research, it was rarely presented as such in news reporting. Such a shift could be perceived as arbitrary by the news audience. The most sceptical readers might suspect that the shift was circumstantial rather than evidence based (the objective being initially to discourage people from wearing a mask in order to ensure that there were enough masks for doctors, nurses, pharmacists and other frontliners), with the switch to mandatory mask wearing occurring once there were enough masks for all.

With regards to COVID-19, official (public) discourse about whether wearing masks was useful changed over time without a clear narrative about why the official position changed. Uncertainty linked to the pandemic also affected the way in which policy decisions were covered in the media, which initially described mask wearing as ineffective and then as one of the best ways to protect oneself against COVID-19. In Belgium, the website of the public French-speaking radio and television channel (Radio Television Belge Francophone – RTBF) reported at the end of February 2020 that it would be ineffective to wear a mask at all times, saying that masks were only useful for those with coughing or sneezing symptoms (to protect others) and only effective for a short (3–4 hour) period of time. Six months later, the same website promoted masks as a useful (albeit insufficient) measure. While such a shift was justified with evidence from new research, it was rarely presented as such in news reporting. Such a shift could be perceived as arbitrary by the news audience. The most sceptical readers might suspect that the shift was circumstantial rather than evidence based (the objective being initially to discourage people from wearing a mask in order to ensure that there were enough masks for doctors, nurses, pharmacists and other frontliners), with the switch to mandatory mask wearing occurring once there were enough masks for all.

Examples include Le Monde’s fact-checking branch ‘Les Decodeurs’, see Sénécat (2020); and Le Figaro, see Bordenave (2020). Brichard (2020). Belga (2020). In ‘Port du masque: Pourquoi le discours a changé?’ several experts explain why the public discourse about masks changed over time. They claim that governments (in Belgium and beyond) preferred telling people that the mask was useless rather than admitting that they did not have enough stock to protect them (Jean Luc Gala, Universiteit Catholique de Louvain) and that they were ‘dressing up a pseudo-scientific message to justify the lack of masks’ (Antoine Flahaut, Director of the Institute of Global Health at the University of Geneva). See LN24 (2020). Bristielle (2020).

For example, six per cent of anti-maskers stated they trust the presidential institution, compared to 34 per cent of the general population. The survey also found that the anti-masker respondents were more likely to believe in conspiracy-type statements. When asked whether the Health Ministry is conspiring with the pharmaceutical industry to hide the fact that vaccines are deadly, 90 per cent of anti-masker respondents agreed with the statement, compared to 43 per cent of the general population.

605 Examples include Le Monde’s fact-checking branch ‘Les Decodeurs’, see Sénécat (2020); and Le Figaro, see Bordenave (2020).

606 Brichard (2020).

607 Belga (2020).

608 In ‘Port du masque: Pourquoi le discours a changé?’ several experts explain why the public discourse about masks changed over time. They claim that governments (in Belgium and beyond) preferred telling people that the mask was useless rather than admitting that they did not have enough stock to protect them (Jean Luc Gala, Universiteit Catholique de Louvain) and that they were ‘dressing up a pseudo-scientific message to justify the lack of masks’ (Antoine Flahaut, Director of the Institute of Global Health at the University of Geneva). See LN24 (2020).

609 Bristielle (2020).

610 Bristielle (2020).
6.4.3. Summary

Overall, we found evidence for uncertainty in Europe, particularly with regard to economic policy uncertainty, and some evidence that this uncertainty was driven by disinformation and the trends of Truth Decay. Other types of uncertainty include government policy uncertainty driven by poor quality data or lack of attention to hard data. We also unfolded specific aspects of uncertainty in the science communication context: how science communication can suffer from low trust in public institutions, and how science communication can also affect trust and other Truth Decay trends. It does appear that some of this uncertainty is a consequence of trends and drivers of Truth Decay, particularly in situations where we find more evidence of the different trends of Truth Decay – such as during the run-up to and the aftermath of the Brexit referendum or in the political discourse in Poland in recent years. Some of the uncertainty, however, is due to the difficulty in accurately predicting future events, and generally dealing with unknown situations such as the 2007 financial crisis, or during the first months of the COVID-19 pandemic. Nonetheless, it is possible to see how this general uncertainty can be exacerbated by drivers of Truth Decay, or as a result of certain trends.
Conclusions and next steps

This report on Truth Decay trends, drivers, agents and consequences highlighted areas where elements of the framework activated and mutually reinforced each other. In this chapter we aim to detail how these interactions work in the European context, by responding to the four questions that guided this research. The first three questions were: (1) what is the empirical evidence for the trends, drivers and consequences of Truth Decay in Europe, and how does that compare with what was found in the United States?; (2) to what extent does this evidence apply across Europe as a whole, or are there differences within Europe in the empirical evidence of trends, drivers and consequences of Truth Decay?; and (3) what are the implications of applying the conceptual framework developed for the US framework of Truth Decay in Europe? We then present ideas for further research, responding to the fourth and last research question, namely: (4) which areas need to be further investigated in order to tackle Truth Decay in Europe?

7.1. Implications for the application of the Truth Decay trends framework in Europe

7.1.1. What is the empirical evidence for the trends, drivers and consequences of Truth Decay in Europe? How does that compare with what was found in the United States?

As demonstrated in the previous chapters, we found evidence of the occurrence of the Truth Decay trends in Europe, although the evidence is not as overwhelming nor the trends as pronounced as in the United States. While there are similarities (such as increased vaccine hesitancy, and a blurring of the line between opinion and fact due to changing journalistic practices), insufficient evidence was found on the increasing relative volume of opinion over fact. In contrast to the trend in the United States, trust in governance institutions has increased across Europe since the end of the financial crisis.

We have been able to show the existence of the drivers and agents of Truth Decay in Europe, while highlighting relevant differences between the European and US contexts. Yet, we have not always found evidence of the role of these drivers and agents in driving and exacerbating Truth Decay. Similar cognitive processing and biases affect Europeans, and there have been changes to the European information system that have driven a rise in the Truth Decay phenomenon and impacted on the aforementioned cognitive processing and biases. The education systems across Europe, however, differ from those in the United States, which perhaps make them less prone to be a driver of Truth Decay, but rather a possible
part of its solution. Additionally, while there has been an increase in polarisation across Europe (whether political, socio-demographic, or social and economic), the overall extent of polarisation is not as strong as that evidenced in the United States.

Regarding agents, there are both similarities and differences with the evidence found by Kavanagh and Rich.611 While similar agents can be found across different settings (e.g. the media, academia and politics), there are notable differences. In part, these are driven by factors such as more limited polarisation (meaning that there is less material for agents to exploit), and different media systems in the European setting in comparison to the US context. Overall, while agents are present in Europe, they play less of a role in Truth Decay than in the United States.

We also find examples illustrating the occurrence in Europe of most of the consequences of Truth Decay as presented by Kavanagh and Rich and some evidence, though weaker, that these consequences stem from the trends of Truth Decay. In the European setting, the consequences of Truth Decay differ from what is seen in the United States. These are due, for example, to differences in political systems, or they are less prevalent or consequential. In addition, although we found some evidence of the consequences described by Kavanagh and Rich, we found little direct evidence of a link to Truth Decay.

**Overall, the research has shown that there is evidence that Truth Decay is occurring in Europe. The phenomenon, however, is less prevalent than in the United States, at least for the time being. This signifies that perhaps Truth Decay in Europe is at a less advanced stage than in the United States, which would indicate that there is still time to act, or that there are specific factors in Europe that help prevent or slow Truth Decay.**

### 7.1.2. To what extent does this evidence apply across Europe as a whole, or are there differences within Europe in the empirical evidence of trends, drivers and consequences of Truth Decay?

As noted in Chapter 1, this study intended to review the trends, drivers, agents, and consequences of Truth Decay at the pan-European level (as opposed to within each individual European country), while still providing country-level snapshots and examples. While the research cannot comment in detail on the situation within each European country, the findings appear to show that there are notable differences across European countries. Therefore, while our findings show that Truth Decay does occur, to some extent, in Europe, this does not mean that each trend, driver or consequence occurs in each European country or that they occur at a similar rate. There is likely to be a range of cross- and in-country differences. Indeed, evidence provided in this report has shown that there are some regional differences (for example Western versus Eastern versus Southern European) as well as differences due to particular political or education systems. The findings have also shown that certain countries or sets of countries react differently to the occurrence of a trend. For example, while vaccine hesitancy has increased more generally, this trend has been particularly prominent in a number of countries, including France and Italy.

---

7.1.3. What are the implications of applying the conceptual framework developed for the United States framework of Truth Decay in Europe?

Given the responses to the two research questions above, we conclude that the Truth Decay framework is relevant and applies to the European context.

Table 7.1 below summarises the extent to which the framework applies, building on responses to the previous research questions.

Table 7.1: Summary of key insights

<table>
<thead>
<tr>
<th>Is there evidence this is happening in Europe?</th>
<th>Level of evidence of contribution to Truth Decay in Europe</th>
<th>What does the evidence say?</th>
<th>How does it compare with the United States?</th>
<th>Variation within Europe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increasing disagreement about facts and data</td>
<td>Moderate</td>
<td>Low</td>
<td>We found evidence of disagreement about facts, illustrated with several examples across Europe</td>
<td>Not as pronounced in Europe as in the United States, earlier stage</td>
</tr>
<tr>
<td>A blurring of the line between opinion and fact</td>
<td>Moderate</td>
<td>Low</td>
<td>We found evidence that the line between fact and opinion is blurring and that this trend is increasing</td>
<td>Not as pronounced in Europe as in the United States, earlier stage</td>
</tr>
<tr>
<td>The increasing relative volume and resulting influence of opinion over fact</td>
<td>Moderate (volume), low (influence)</td>
<td>Low</td>
<td>We found evidence that the volume of opinion is increasing and so is the ‘traffic’ of both facts and opinion. We found less evidence of the increasing influence of opinion over facts in Europe</td>
<td>Not as pronounced in Europe as in the United States, earlier stage</td>
</tr>
<tr>
<td>Declining trust in formerly respected sources of factual information</td>
<td>Moderate</td>
<td>Moderate</td>
<td>The evidence is mixed as we found ‘clusters’ of declining trust, stable trust and increasing trust</td>
<td>Not as pronounced in Europe as in the United States, earlier stage</td>
</tr>
<tr>
<td>Cognitive processing and cognitive bias</td>
<td>Moderate</td>
<td>Moderate (same as in the United States)</td>
<td>Cognitive bias affects decision making the same way in Europe as in the United States</td>
<td>Similar driving role as in the US context</td>
</tr>
<tr>
<td></td>
<td>Level of evidence of contribution to Truth Decay in Europe</td>
<td>What does the evidence say?</td>
<td>How does it compare with the United States?</td>
<td>Variation within Europe</td>
</tr>
<tr>
<td>-------------------------</td>
<td>----------------------------------------------------------</td>
<td>-----------------------------</td>
<td>-------------------------------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>Changes in the information system</td>
<td>Moderate</td>
<td>Moderate</td>
<td>We found that changes in the information system drive Truth Decay the same way in Europe as in the United States</td>
<td>Europe is at an earlier stage of changes in the media business model and the use and influence of social media (in particular in Eastern Europe), therefore the role of this driver was not found to be as prominent in Europe as in the United States</td>
</tr>
<tr>
<td>Competing demands on the educational system</td>
<td>Moderate</td>
<td>Low</td>
<td>Education systems in Europe were more ‘ready’ to address challenges linked to Truth Decay, therefore the role of this driver is not as prominent in Europe as in the United States</td>
<td>Education systems in Europe are different from the United States. Nothing indicates an imminent and rapid change towards more conflicting demands in the education systems in Europe</td>
</tr>
<tr>
<td>Polarisation</td>
<td>Moderate</td>
<td>Moderate</td>
<td>We found that polarisation drives Truth Decay, but it operates in a different way than in the United States</td>
<td>We found that the way polarisation operates in Europe is more complex than in the United States. This is because both social, economic and political polarisation present many different gradients in Europe</td>
</tr>
<tr>
<td>Agents of Truth Decay</td>
<td>Moderate</td>
<td>Moderate</td>
<td>We found evidence of the agency of the media, and academia and research organisations in the European context</td>
<td>The role of agents seems less prevalent than in the United States. This is linked to differences in institutional systems (e.g. polarisation) and a different stage of change in the information system</td>
</tr>
<tr>
<td>Erosion of civil discourse</td>
<td>Moderate</td>
<td>Low</td>
<td>We found that civil discourse is eroded in Europe, but no evidence that this is a new phenomenon nor that it is increasingly eroding</td>
<td>Erosion of civil discourse is less prevalent in Europe than in the United States</td>
</tr>
<tr>
<td></td>
<td>Is there evidence this is happening in Europe?</td>
<td>Level of evidence of contribution to Truth Decay in Europe</td>
<td>What does the evidence say?</td>
<td>How does it compare with the United States?</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>----------------------------------------------</td>
<td>----------------------------------------------------------</td>
<td>-----------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>Political paralysis</td>
<td>Low</td>
<td>Low</td>
<td>We found that there is political paralysis in Europe as in the United States, but this political paralysis does not necessarily affect the functioning of institutions the way it does in the United States</td>
<td>Political paralysis has to do with institutional systems. In Europe there are multiple systems, strong administrations and civil services (which do not change with political changes) and institutional processes that mitigate the potential consequences of Truth Decay. Therefore Europe seems less ‘vulnerable’ to political paralysis than the United States</td>
</tr>
<tr>
<td>Alienation and disengagement</td>
<td>Moderate</td>
<td>Low</td>
<td>We found evidence that alienation and disengagement are happening in Europe but there are notable exceptions. There are groups (e.g. the youth and the green) that are more engaged, both in traditional and non-traditional ways</td>
<td>This consequence is not observed as much in Europe as in the United States</td>
</tr>
<tr>
<td>Uncertainty</td>
<td>Moderate</td>
<td>Moderate</td>
<td>We found evidence that there is uncertainty in Europe but not necessarily a link with Truth Decay</td>
<td>Compared to what was found in the United States, we see uncertainty in Europe as a ‘consequence of consequences’, with a less direct link with Truth Decay than other consequences</td>
</tr>
</tbody>
</table>
7.1.4. Conclusions and recommendations

In light of our findings, we recommend that policymakers in Europe should be vigilant of the drivers, trends and consequences of Truth Decay. Beyond acknowledging the importance of this phenomenon, we recommend the scale and scope of Truth Decay should be monitored and assessed in Europe. The drivers of Truth Decay should be tackled in order to prevent these trends from following a similar trajectory as they have in the United States.

The objective of this research was to understand Truth Decay in the European context. Based on the evidence that we found regarding trends, drivers, agents and consequences of Truth Decay, we considered areas where policy action could be taken in Europe to counter Truth Decay. We focused on what we believe would be feasible and likely to limit the role of the drivers and agents, and limit the consequences of Truth Decay. We offer some pointers towards what we believe should be the highest priorities for policymakers in Europe in order to slow the pace and mitigate the implications of Truth Decay. These are:

1. **Ensure that citizens are equipped to play their part as actors of democracy in Europe and to avoid becoming agents of Truth Decay themselves.** For instance, investing in media literacy skills would help people address their cognitive bias when processing information and make them less vulnerable to disinformation, when accessing various forms of media, and particularly online social media. It would also make it easier for them to distinguish fact and opinion.

2. **Ensure that the traditional news media sector has alternative business models that guard against Truth Decay.** Ensuring that the news media do not rely on advertising alone and that they do not have to rely on sensational content to optimise viewers or readership and revenues would contribute to fighting Truth Decay. When public funds are used to support the media in their role of safeguarding democracy, this financial support could come with something in return: for example, a pledge towards quality and concrete actions to (re-)gain trust from the public.

3. **Introduce measures that help elevate the political debate to serve the quality of democracy in Europe.** In addition to funding investigative journalism, measures to promote honesty and clarity in political communication could include systematically fact-checking political debates and/or having non-partisan research institutions estimate the (economic) impact of electoral programmes. Reinforcing rules for electoral campaigns (e.g. reporting or prohibiting private donations) and effectively protecting whistle-blowers would support the quality of democracy in Europe.

4. **It may be unrealistic to expect private enterprises who benefit from some of the elements of the Truth Decay framework (e.g. social media) to abandon their profitable business model.** It may, however, be possible for social media to mitigate their contribution to Truth Decay by demanding easier and wider access to their (anonymised) user data for independent researchers. Research findings can be used as an opportunity to build a more socially sustainable, yet profitable, business.

5. **This study pertains to Europe as a whole.** One area for future research would be to examine the extent to which the framework applies to different national or regional contexts. Other areas for future research include examining specific aspects of the framework more in-depth, such as disinformation as a trend of Truth Decay.
Decay in Europe, and, overall, setting up more longitudinal studies focused on the issues raised by Truth Decay. The research community should take up the challenges and opportunities that this report and the wider Truth Decay research agenda represent, and enrich the current knowledge base with further research on parts or all of the Truth Decay framework, particularly on the hotspots of Truth Decay that we have identified in Europe.

Overall we found that Truth Decay is real in Europe, but it does not happen at the same scale as in the United States. This sends a hopeful message that there is still time to act and room for interventions that will slow down or counter the trends of Truth Decay in Europe.

7.1.5. Methodology and limitations

We conducted an in-depth literature review (the search protocol is provided in Annex A). In brief, the search strategy focused around the four trends of Truth Decay, namely: (1) increased disagreement about facts and data; (2) a blurring of the line between opinion and fact; (3) the increasing relative volume and resulting influence of opinion over fact; and (4) declining trust in institutions previously looked to as sources of factual information. Once we collected a sufficient research base around the trends, we looked for and undertook additional targeted searches for indicators across all four trends, to complement the data collected through the literature review. We then examined evidence for the drivers and consequences of Truth Decay.

Our application of this framework has a number of limitations that should be noted. First, given the thematic scope of the research, the in-depth literature review focused on existing academic studies published in English. Our research and findings pertain to the European context as a whole and do not reflect the differences we noticed at the country-by-country level, with the exception of anecdotal evidence presented to illustrate the discussion. Therefore, it cannot be applied to explain the situation in individual European countries. Second, and as noted in Section 7.1.1, limitations in the evidence base have meant that certain trends were not as verifiable in the European context. Yet, this does not mean they do not exist. Should more data become available, this could be fed into the framework and contribute to any modifications. Finally, our research sought to explore the extent to which the framework developed by Kavanagh and Rich applies to Europe, and we did not seek to identify additional trends, drivers and consequences. As such, the framework displayed may only present a partial picture, to which any additional and European-specific elements would need to be added via further research, as discussed in Section 7.2.

7.2. Areas for further investigation

This section responds to the fourth and final research question: which areas need to be further investigated in order to tackle Truth Decay in Europe? During the course of our research, a number of areas for further exploration were identified, and are described below. Many of these are interlinked. For example, conducting more in-depth research on specific European countries could be combined with other areas for further research.

- Determine if additional trends, drivers and consequences exist that are specific to the European context. As mentioned in Section 7.1.3, this is currently a missing element within the framework. While this report has drawn out the specificities of the European setting and context, conducting further research as to the Truth Decay phenomenon agnostic of the United States Truth Decay framework would demonstrate
whether there are any elements specific to Europe and European countries.

- **Examine the role of ‘people’ as agents of Truth Decay.** An aspect that would be interesting to explore further is the extent to which individuals act as agents of Truth Decay in addition to their being subject to its effects. This area was beyond the scope of the present research, but may provide more insight into the role of agents, and how these agents may be helped (willingly or unwittingly) by people, going beyond cognitive processing and biases.

- Given the relevance of disinformation in several areas of the framework (in other words, not only with regards to changes in the information system) we would also see merit in exploring the extent to which disinformation should be presented as a separate/distinct Truth Decay trend instead of being presented as a part of the driver ‘changes in the information system’. This disinformation trend would be closely associated with, but separate from, disagreement about facts and the blurring of the line between opinion and fact. Alternatively, disinformation could be merged with the blurring line between what is fact and what is opinion. Yet, disinformation is more than simply a matter of opinion as it also entails the purposeful supply of mis/disinformation. Such a line of research would allow exploration of the links between disinformation and changes in the information system and other drivers (e.g. competing demands on the education system and polarisation), and see the extent to which it contributes to the consequences of Truth Decay (e.g. erosion of civil discourse and uncertainty).

- **Investigate Truth Decay at the country level.** As mentioned above, individual countries have had very different experiences of Truth Decay. There is value in understanding the differences between different European countries, and seeing whether there are any broader patterns emerging with regard to specific factors such as type of media system, type of political system, or socio-demographic or economic circumstance. Undertaking a more detailed analysis could therefore also help pinpoint ‘what works’ according to different settings or circumstances. This country-level research could start with what we identified as Truth Decay ‘hotspots’ as part of this research (e.g. France, Italy, Poland and the United Kingdom).

- **Explore the extent to which the United States context has influenced the European one.** While the act of mis- or dis-informing people is not new, as shown by Kavanagh and Rich, the way in which this phenomenon is now occurring in terms of speed and the penetration is completely different. The information gathered on the European context demonstrates that while Truth Decay is also occurring in Europe, there is less literature focused on Truth Decay in Europe. This may be because it is less prevalent than in the United States or a more recent phenomenon. Understanding if the United States plays a role in Truth Decay abroad – perhaps as an unsuspecting agent – can then help seek solutions and prevent this type of influence on other countries.

- **Set up more longitudinal studies focused on the issues raised by Truth Decay.** One of the findings from the European context is the limited evidence base for certain trends. This demonstrates a need
to invest in more longitudinal studies that will observe whether the issues identified – such as a blurring of the line between the reporting of opinions and facts, or an increasing volume of opinion over fact – changes over time, or if the change is due to our perception of the issue or topic.

• **Continue the search for solutions to the drivers and consequences of Truth Decay.** It is necessary to go a step beyond our present report and identify the solutions to the issues raised. Part of the search for solutions will be to look what works well in different contexts, and identify whether and how these areas of good practice can be adapted to other contexts. For example, a solution could be to set up continuous education or continuous civic learning programmes for citizens. Further research would then look into the extent of the impact of each solution, and the set of solutions as a whole, as well as their feasibility, for example in relation to cost or effectiveness.


Bastarrica, M. 2020. ‘False: “gender violence is a big lie. [...] it’s like denying day or night”.’ Eufactcheck.eu, 10 July 2020. As of 21 December 2021: https://eufactcheck.eu/factcheck/false-gender-violence-is-a-big-lie-its-like-denying-day-or-night/


BBC. 2017. ‘What is 2017’s word of the year?’ Bbc.co.uk, 2 November 2017. As of 21 December 2021: https://www.bbc.co.uk/news/uk-41838386


Groskopf, C. 2016. ‘European politics is more polarized than ever, and these numbers prove it.’ Qz.com, 30 March 2016. As of 21 December 2021: https://qz.com/645649/european-politics-is-more-polarized-than-ever-and-these-numbers-prove-it/


Lelkes, Y., G. Sood & S. Iyengar. 2017. 'The hostile audience: The effect of access to broadband internet on partisan affect.'


Lindhout, S. 2019. 'Duitse boren demonstreren mee: andere problemen, zelfde sentiment.'
Volkskrant.nl/ Nieuws, 2019. As of 21 December 2021:


Lockerbie, B. 1993. 'Economic dissatisfaction and political alienation in Western Europe.'

Lodigiani, E. 2016. 'The effect of emigration on home-country political institutions.'
Wol.iza.org, 2016. As of 21 December 2021:
https://wol.iza.org/articles/effect-of-emigration-on-home-country-political-institutions/long

Lorenzoni, I., & N.F. Pidgeon. 2006. 'Public views on climate change: European and USA perspectives.'
Climatic change 77(1): 73–95.

'Study on the Benefits and Drawbacks of Remote Voting.'
Brussels: European Commission, Directorate-General for Justice and Consumers. As of 21 December 2021:

Mader, O. 2019. 'Enforcement of EU Values as a Political Endeavour: Constitutional Pluralism and Value Homogeneity in Times of Persistent Challenges to the Rule of Law.'

Maillé, P. 2017. 'Le Débat Présidentiel Vu Par Les Fact-Checkeurs: «C’était Le Festival Du N’importe Quoi».'
Telerama.fr, 2017. As of 21 December 2021:

Mair, P. 1991. 'The Electoral Universe of Small Parties in Postwar Western Europe.'

'Understanding our Political Nature: How to put knowledge and reason at the heart of political decision-making.'
Luxembourg: Publications Office of the European Union. As of 21 December 2021:
https://espace.library.uq.edu.au/view/UQ:00dc8e5


Pfauth, E.-J., & R. Wijnberg. 2020. ‘The Correspondent will stop publishing on 1 January 2021. We’d like to thank our members for their support.’ Thecorrespondent.com, 10 December 2020. As of 21 December 2021: https://thecorrespondent.com/834/the-correspondent-will-stop-publishing-on-1-january-2021-wed-like-to-thank-our-members-for-their-support


Truth Decay in Europe


Strömbäck, J. 2015. ‘Future media environments, democracy and social cohesion.’ Digital Opportunities (pp.97–122)


Annex A. Literature review search strategy

As discussed in Chapter 1, we developed a search strategy based on the four trends identified in Kavanagh and Rich’s 2018 Truth Decay report. This search strategy was the basis of the data on trends (Chapter 3) and drivers (Chapter 4). In addition, we also conducted targeted searches to complement the information gathered through the primary search strategy.

A.1. Search strategy

The search strategy focused on identifying empirical research, based on either qualitative or quantitative primary data, documented in academic or grey literature. The literature of focus is detailed further in Table A.2: inclusion and exclusion criteria. The terms to be searched were derived from the terms used in the 2018 Truth Decay report, and iterated based on relevance to the European context. The terms are detailed in Table A.1 below.

Table A.1: Search terms

<table>
<thead>
<tr>
<th>Trend</th>
<th>Search terms</th>
</tr>
</thead>
<tbody>
<tr>
<td>General search for Truth Decay</td>
<td>Europe* AND (“post-truth” OR “post-fact” OR disinform* OR misinform* OR “fake news” OR “alternative facts” OR “truth decay”)</td>
</tr>
<tr>
<td>Trend 1: Increased disagreement about facts and data</td>
<td>Europe* AND (misinform* OR disinform* OR trust OR distrust OR “social media” OR perception* OR sceptic* OR critic*) AND (fact* OR data OR evidence OR “post-fact” OR “post-truth” OR science OR “climate change” OR vaccine* OR “genetically modified”)</td>
</tr>
<tr>
<td>Trend 2: A blurring of the line between opinion and fact</td>
<td>Europe* AND (opinion* OR agenda OR “public opinion” OR bias* OR partisan*) AND (fact* OR data OR evidence OR “media literacy” OR “critical thinking” OR communication* OR journal*)</td>
</tr>
<tr>
<td>Trend 3: The increasing relative volume and resulting influence of opinion over fact</td>
<td>Europe* AND (opinion* OR bias* OR polar* OR agenda OR editorial* OR silo* OR lie* OR falsehood*) AND (media OR communication* OR “social media” OR information* OR journal* OR bubble)</td>
</tr>
<tr>
<td>Trend 4: Declining trust in formerly respected sources of factual information</td>
<td>Europe* AND (trust OR expert* OR confidence OR attitude*) AND (government* OR institution* OR media OR scien* OR academi* OR universit*)</td>
</tr>
</tbody>
</table>

The search strategy was two-pronged, though with a primary focus on the first search strategy:

- **Google Scholar search.** When searching via the Google search engine, the first 50 search results were considered. This search technique also included:
  - ‘Snowball’ searching, whereby the project team identified relevant literature in the reference lists of academic papers and grey literature reports that were selected for review.
  - Searching for other, more recent papers that cite the academic papers and grey literature reports that were selected for review, by using the automatic Google function.
  - Key word search (with Booleans) in bibliographic database Web of Science for a limited set of search strings to test the completeness of the Google Scholar queries.

We also applied a set of inclusion and exclusion criteria during a review of titles and subsequently abstracts to ensure only relevant documents were included in our review. Table A.2 below outlines these criteria.

**Table A.2: Inclusion and exclusion criteria**

<table>
<thead>
<tr>
<th>Inclusion criteria</th>
<th>Exclusion criteria</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research focus</strong></td>
<td>Literature that focuses on Truth Decay (or equivalent terms or concepts) or one or more of the trends comprising Truth Decay.</td>
<td>Literature that does not pertain to the focus specified in the inclusion criterion.</td>
</tr>
<tr>
<td><strong>Country</strong></td>
<td>Europe as a whole, individual European countries or combinations thereof, regions or cities in Europe.</td>
<td>Any countries, regions or cities outside of Europe; Russia; Turkey.</td>
</tr>
<tr>
<td><strong>Document type</strong></td>
<td>Research articles presenting empirical results</td>
<td>Media articles, documents without clear organisational authorship, letters, editorials, comments, book reviews, policy documents.</td>
</tr>
<tr>
<td><strong>Language</strong></td>
<td>English</td>
<td>Languages in which we do not have language capabilities.</td>
</tr>
<tr>
<td><strong>Publication date</strong></td>
<td>2000–present</td>
<td>Research published before 2000.</td>
</tr>
</tbody>
</table>
This resulted in the use of 20 different search strings. The search strings and an overview of the number of articles found, excluded, reviewed and snowballed are illustrated in Box 7.1 and Figure 7.1.

**Box 7.1: Search strings**

- Search 1: Europe* and post-truth
- Search 2: Europe* and disinform*
- Search 3: Europe* and “fake news”
- Search 4: Europe* and misinform* and fact*
- Search 5: Europe* and disinform* and fact*
- Search 6: Europe* and trust and evidence
- Search 7: Europe* and “social media” and “fake news”
- Search 8: Europe* and sceptic* and “post-truth”
- Search 9: Europe* and distrust and climate change
- Search 10: Europe* and “fake news” and misinform*
- Search 11: Europe* and “fake news” and vaccine*
- Search 12: Europe* and distrust and genetically modified
- Search 13: Europe* and disinform* and “media literacy”
- Search 14: Europe* and fact and opinion and “fake news”
- Search 15: Europe* and polar* and media
- Search 16: Europe* and opinion* and fact* and media
- Search 17: Europe* and “social media” and echo*
- Search 18: Europe* and trust and institution*
- Search 19: Europe* and trust and media
- Search 20: Europe* and trust and government
A.1.1. Targeted searches

A number of targeted searches were also conducted, to complement the information found through the search strategy outlined above. The details on the targeted searches are provided in Box 7.2 below.

An additional eight sources were reviewed based on the targeted searches.

We also conducted additional searches when reviewing the evidence base on drivers. The targeted searches are provided in Box 7.2.

**Box 7.2: Targeted search strings on trends**

- Fact-check* AND sites AND Europe* AND number
- “Increase in commentary” AND “media” AND Europe*
- “Commentary” AND “reporting” AND “proportion” AND “media” AND Europe*
- “Alternative news” AND sites AND number AND Europe*
- “Alternative news” AND Europe*
- “Fake news” AND sites AND number AND Europe*
- “Fake news” AND sites AND proportion AND Europe*
- “Alternative news” AND sites AND proportion AND Europe*
Annex B. Data tables

Table B.1: Child vaccination rates – measles

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>83</td>
<td>76</td>
<td>80</td>
<td>84</td>
<td>88</td>
<td>92</td>
<td>96</td>
<td>96</td>
<td>95</td>
<td>96</td>
<td>95</td>
</tr>
<tr>
<td>Belgium</td>
<td>93</td>
<td>95</td>
<td>95</td>
<td>95</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
</tr>
<tr>
<td>Czechia (formerly Czech Republic)</td>
<td>97</td>
<td>98</td>
<td>98</td>
<td>98</td>
<td>98</td>
<td>99</td>
<td>99</td>
<td>99</td>
<td>98</td>
<td>97</td>
<td>96</td>
</tr>
<tr>
<td>Denmark</td>
<td>87</td>
<td>84</td>
<td>85</td>
<td>87</td>
<td>90</td>
<td>89</td>
<td>90</td>
<td>91</td>
<td>94</td>
<td>97</td>
<td>95</td>
</tr>
<tr>
<td>Estonia</td>
<td>95</td>
<td>95</td>
<td>95</td>
<td>94</td>
<td>94</td>
<td>94</td>
<td>94</td>
<td>93</td>
<td>93</td>
<td>93</td>
<td>87</td>
</tr>
<tr>
<td>Finland</td>
<td>97</td>
<td>99</td>
<td>98</td>
<td>97</td>
<td>97</td>
<td>97</td>
<td>97</td>
<td>95</td>
<td>95</td>
<td>95</td>
<td>96</td>
</tr>
<tr>
<td>France</td>
<td>89</td>
<td>89</td>
<td>89</td>
<td>89</td>
<td>91</td>
<td>90</td>
<td>91</td>
<td>91</td>
<td>90</td>
<td>90</td>
<td>90</td>
</tr>
<tr>
<td>Germany</td>
<td>95</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>97</td>
<td>97</td>
<td>97</td>
<td>97</td>
<td>97</td>
<td>97</td>
<td>97</td>
</tr>
<tr>
<td>Iceland</td>
<td>96</td>
<td>92</td>
<td>93</td>
<td>94</td>
<td>90</td>
<td>91</td>
<td>90</td>
<td>93</td>
<td>92</td>
<td>92</td>
<td>92</td>
</tr>
<tr>
<td>Ireland</td>
<td>89</td>
<td>90</td>
<td>90</td>
<td>92</td>
<td>92</td>
<td>92</td>
<td>92</td>
<td>93</td>
<td>93</td>
<td>92</td>
<td>92</td>
</tr>
<tr>
<td>Italy</td>
<td>90</td>
<td>90</td>
<td>91</td>
<td>90</td>
<td>90</td>
<td>87</td>
<td>85</td>
<td>85</td>
<td>85</td>
<td>92</td>
<td>93</td>
</tr>
<tr>
<td>Latvia</td>
<td>96</td>
<td>92</td>
<td>95</td>
<td>92</td>
<td>90</td>
<td>96</td>
<td>95</td>
<td>96</td>
<td>93</td>
<td>96</td>
<td>98</td>
</tr>
<tr>
<td>Lithuania</td>
<td>97</td>
<td>96</td>
<td>96</td>
<td>94</td>
<td>93</td>
<td>93</td>
<td>93</td>
<td>94</td>
<td>92</td>
<td>94</td>
<td>92</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>99</td>
<td>99</td>
<td>99</td>
<td>99</td>
<td>99</td>
<td>99</td>
<td>99</td>
</tr>
<tr>
<td>Netherlands</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>95</td>
<td>94</td>
<td>93</td>
<td>93</td>
</tr>
<tr>
<td>Norway</td>
<td>93</td>
<td>93</td>
<td>93</td>
<td>93</td>
<td>94</td>
<td>93</td>
<td>94</td>
<td>95</td>
<td>96</td>
<td>96</td>
<td>96</td>
</tr>
<tr>
<td>Poland</td>
<td>98</td>
<td>98</td>
<td>98</td>
<td>98</td>
<td>98</td>
<td>98</td>
<td>97</td>
<td>96</td>
<td>96</td>
<td>94</td>
<td>93</td>
</tr>
<tr>
<td>Portugal</td>
<td>97</td>
<td>95</td>
<td>96</td>
<td>97</td>
<td>97</td>
<td>98</td>
<td>98</td>
<td>98</td>
<td>98</td>
<td>98</td>
<td>99</td>
</tr>
<tr>
<td>Slovakia</td>
<td>99</td>
<td>99</td>
<td>99</td>
<td>98</td>
<td>99</td>
<td>98</td>
<td>97</td>
<td>95</td>
<td>95</td>
<td>95</td>
<td>96</td>
</tr>
</tbody>
</table>

OECD (2019).
### Table B.2: Child vaccination rates – diphtheria, tetanus and pertussis

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Slovenia</td>
<td>96</td>
<td>95</td>
<td>95</td>
<td>96</td>
<td>95</td>
<td>94</td>
<td>94</td>
<td>94</td>
<td>92</td>
<td>93</td>
<td>93</td>
</tr>
<tr>
<td>Spain</td>
<td>98</td>
<td>98</td>
<td>95</td>
<td>97</td>
<td>97</td>
<td>95</td>
<td>96</td>
<td>96</td>
<td>97</td>
<td>97</td>
<td>97</td>
</tr>
<tr>
<td>Sweden</td>
<td>96</td>
<td>97</td>
<td>97</td>
<td>96</td>
<td>97</td>
<td>97</td>
<td>97</td>
<td>98</td>
<td>97</td>
<td>97</td>
<td>97</td>
</tr>
<tr>
<td>Switzerland</td>
<td>92</td>
<td>92</td>
<td>92</td>
<td>93</td>
<td>93</td>
<td>94</td>
<td>94</td>
<td>94</td>
<td>94</td>
<td>95</td>
<td>96</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>86</td>
<td>86</td>
<td>89</td>
<td>90</td>
<td>92</td>
<td>93</td>
<td>93</td>
<td>93</td>
<td>92</td>
<td>92</td>
<td>92</td>
</tr>
<tr>
<td>United States</td>
<td>92</td>
<td>90</td>
<td>92</td>
<td>92</td>
<td>91</td>
<td>92</td>
<td>92</td>
<td>92</td>
<td>92</td>
<td>92</td>
<td>92</td>
</tr>
<tr>
<td>Austria</td>
<td>83</td>
<td>83</td>
<td>86</td>
<td>89</td>
<td>92</td>
<td>95</td>
<td>98</td>
<td>98</td>
<td>87</td>
<td>90</td>
<td>82</td>
</tr>
<tr>
<td>Belgium</td>
<td>99</td>
<td>98</td>
<td>98</td>
<td>98</td>
<td>99</td>
<td>99</td>
<td>99</td>
<td>99</td>
<td>99</td>
<td>98</td>
<td>98</td>
</tr>
<tr>
<td>Czechia (formerly Czech Republic)</td>
<td>99</td>
<td>99</td>
<td>99</td>
<td>99</td>
<td>99</td>
<td>99</td>
<td>99</td>
<td>99</td>
<td>99</td>
<td>96</td>
<td>96</td>
</tr>
<tr>
<td>Denmark</td>
<td>88</td>
<td>89</td>
<td>90</td>
<td>91</td>
<td>94</td>
<td>94</td>
<td>92</td>
<td>93</td>
<td>94</td>
<td>98</td>
<td>97</td>
</tr>
<tr>
<td>Estonia</td>
<td>95</td>
<td>95</td>
<td>94</td>
<td>93</td>
<td>94</td>
<td>94</td>
<td>93</td>
<td>93</td>
<td>93</td>
<td>93</td>
<td>92</td>
</tr>
<tr>
<td>France</td>
<td>99</td>
<td>98</td>
<td>99</td>
<td>99</td>
<td>99</td>
<td>99</td>
<td>98</td>
<td>97</td>
<td>96</td>
<td>96</td>
<td>96.3</td>
</tr>
<tr>
<td>Germany</td>
<td>98</td>
<td>97</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>95</td>
<td>95</td>
<td>95</td>
<td>93</td>
</tr>
<tr>
<td>Iceland</td>
<td>98</td>
<td>96.2</td>
<td>96</td>
<td>95.3</td>
<td>89</td>
<td>91.2</td>
<td>90</td>
<td>92</td>
<td>87</td>
<td>91</td>
<td>91</td>
</tr>
<tr>
<td>Ireland</td>
<td>93</td>
<td>94</td>
<td>94</td>
<td>95</td>
<td>95</td>
<td>96</td>
<td>96</td>
<td>95</td>
<td>95</td>
<td>95</td>
<td>95</td>
</tr>
<tr>
<td>Italy</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>97</td>
<td>96</td>
<td>95</td>
<td>93</td>
<td>93</td>
<td>93</td>
<td>94</td>
</tr>
<tr>
<td>Latvia</td>
<td>94</td>
<td>94</td>
<td>92</td>
<td>92</td>
<td>91</td>
<td>94</td>
<td>92</td>
<td>95</td>
<td>98</td>
<td>98</td>
<td>96</td>
</tr>
<tr>
<td>Lithuania</td>
<td>96</td>
<td>98</td>
<td>95</td>
<td>92</td>
<td>93</td>
<td>93</td>
<td>93</td>
<td>93</td>
<td>94</td>
<td>94</td>
<td>92</td>
</tr>
<tr>
<td>Netherlands</td>
<td>97</td>
<td>97</td>
<td>97</td>
<td>97</td>
<td>97</td>
<td>97</td>
<td>96</td>
<td>95</td>
<td>95</td>
<td>94</td>
<td>93</td>
</tr>
<tr>
<td>Norway</td>
<td>94</td>
<td>94</td>
<td>93</td>
<td>94</td>
<td>95</td>
<td>94</td>
<td>93</td>
<td>95</td>
<td>96</td>
<td>96</td>
<td>96</td>
</tr>
<tr>
<td>Poland</td>
<td>99</td>
<td>99</td>
<td>99</td>
<td>99</td>
<td>99</td>
<td>99</td>
<td>98</td>
<td>98</td>
<td>98</td>
<td>98</td>
<td>98</td>
</tr>
<tr>
<td>Portugal</td>
<td>97</td>
<td>96</td>
<td>98</td>
<td>97</td>
<td>98</td>
<td>98</td>
<td>98</td>
<td>98</td>
<td>98</td>
<td>98</td>
<td>99</td>
</tr>
<tr>
<td>Slovakia</td>
<td>99</td>
<td>99</td>
<td>99</td>
<td>99</td>
<td>98</td>
<td>97</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>97</td>
</tr>
</tbody>
</table>

OECD (2019).
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Slovenia</td>
<td>97</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>95</td>
<td>95</td>
<td>95</td>
<td>94</td>
<td>94</td>
<td>93</td>
</tr>
<tr>
<td>Spain</td>
<td>97</td>
<td>96</td>
<td>97</td>
<td>97</td>
<td>97</td>
<td>97</td>
<td>97</td>
<td>97</td>
<td>97</td>
<td>98</td>
<td>93</td>
</tr>
<tr>
<td>Sweden</td>
<td>98</td>
<td>98</td>
<td>98</td>
<td>98</td>
<td>98</td>
<td>98</td>
<td>98</td>
<td>98</td>
<td>98</td>
<td>97</td>
<td>97</td>
</tr>
<tr>
<td>Switzerland</td>
<td>95</td>
<td>95</td>
<td>95</td>
<td>96</td>
<td>96</td>
<td>95</td>
<td>96</td>
<td>95.9</td>
<td>96.5</td>
<td>95.9</td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>92</td>
<td>93</td>
<td>94</td>
<td>95</td>
<td>95</td>
<td>95</td>
<td>95</td>
<td>94</td>
<td>94</td>
<td>94</td>
<td>94</td>
</tr>
<tr>
<td>United States</td>
<td>96</td>
<td>95</td>
<td>95</td>
<td>96</td>
<td>94</td>
<td>94</td>
<td>95</td>
<td>95</td>
<td>95</td>
<td>95</td>
<td>94</td>
</tr>
</tbody>
</table>

Table B.3: Levels of trust towards political parties in Europe

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust in parties</td>
<td>14</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>18</td>
<td>18</td>
</tr>
</tbody>
</table>

Table B.4: Trust in political institutions, Germany

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust in country's parliament</td>
<td>29.4</td>
<td>27.5</td>
<td>26.8</td>
<td>32.3</td>
<td>26.8</td>
<td>37</td>
<td>43</td>
<td>46.9</td>
</tr>
<tr>
<td>Trust in politicians</td>
<td>15.6</td>
<td>14.1</td>
<td>16.4</td>
<td>15.4</td>
<td>14.6</td>
<td>19.4</td>
<td>23.5</td>
<td>26.8</td>
</tr>
<tr>
<td>Voted last election</td>
<td>78.0</td>
<td>72.2</td>
<td>73.4</td>
<td>75.8</td>
<td>73.2</td>
<td>73.1</td>
<td>77.2</td>
<td>74.4</td>
</tr>
</tbody>
</table>

617 European Commission (2016).
620 Respondents reporting ‘tend to trust’.
621 Percentage of all respondents who claimed they trust the parliament in their country at least on level six, on the scale from six to ten. European Social Survey (2021).
622 Percentage of all respondents who claimed they trust the parliament in their country at least on level six, on the scale from six to ten. European Social Survey (2021).
623 Percentage of all respondents. European Social Survey (2021).
### Table B.5: Trust in political institutions, France

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust in country’s parliament</td>
<td>19</td>
<td>26</td>
<td>26.7</td>
<td>30.2</td>
<td>24</td>
<td>26.1</td>
<td>26.7</td>
<td>25.2</td>
</tr>
<tr>
<td>Trust in politicians</td>
<td>12.9</td>
<td>16.4</td>
<td>12.3</td>
<td>14.6</td>
<td>13.3</td>
<td>13.5</td>
<td>10.5</td>
<td>10.3</td>
</tr>
<tr>
<td>Voted last election</td>
<td>74.7</td>
<td>69.4</td>
<td>68</td>
<td>69.8</td>
<td>64.0</td>
<td>71.6</td>
<td>61.3</td>
<td>59.9</td>
</tr>
</tbody>
</table>

### Table B.6: Trust in political institutions, Italy

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust in country’s parliament</td>
<td>40</td>
<td></td>
<td>17.8</td>
<td></td>
<td>21</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust in politicians</td>
<td>18.2</td>
<td></td>
<td>6.9</td>
<td></td>
<td>19.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voted last election</td>
<td>86.1</td>
<td></td>
<td>78.3</td>
<td></td>
<td>67.6</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table B.7: Trust in political institutions, Switzerland

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust in country’s parliament</td>
<td>53.8</td>
<td>48</td>
<td>53.3</td>
<td>48.8</td>
<td>56.5</td>
<td>63.2</td>
<td>66.2</td>
<td>67.4</td>
</tr>
<tr>
<td>Trust in politicians</td>
<td>36.4</td>
<td>32.6</td>
<td>37.5</td>
<td>32.6</td>
<td>42</td>
<td>45.2</td>
<td>47.5</td>
<td>48.9</td>
</tr>
<tr>
<td>Voted last election</td>
<td>59.2</td>
<td>56.5</td>
<td>55.2</td>
<td>53.9</td>
<td>51</td>
<td>55.5</td>
<td>51.7</td>
<td>56.3</td>
</tr>
</tbody>
</table>

---

624 Percentage of all respondents who claimed they trust the parliament in their country at least on level six, on the scale from six to ten. European Social Survey (2021).

625 Percentage of all respondents who claimed they trust the parliament in their country at least on level six, on the scale from six to ten. European Social Survey (2021).

626 Percentage of all respondents. European Social Survey (2021).

627 Percentage of all respondents who claimed they trust the parliament in their country at least on level six, on the scale from six to ten. European Social Survey (2021).

628 Percentage of all respondents who claimed they trust the parliament in their country at least on level six, on the scale from six to ten. European Social Survey (2021).

629 Percentage of all respondents. European Social Survey (2021).

630 Percentage of all respondents who claimed they trust the parliament in their country at least on level six, on the scale from six to ten. European Social Survey (2021).

631 Percentage of all respondents who claimed they trust the parliament in their country at least on level six, on the scale from six to ten. European Social Survey (2021).

632 Percentage of all respondents. European Social Survey (2021).
Table B.8: Trust in political institutions, United Kingdom

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust in country’s parliament</td>
<td>35.6</td>
<td>28.6</td>
<td>28</td>
<td>30</td>
<td>28.9</td>
<td>29.5</td>
<td>33.6</td>
<td>37</td>
</tr>
<tr>
<td>Trust in politicians</td>
<td>21.9</td>
<td>18.3</td>
<td>16.8</td>
<td>17.1</td>
<td>17.7</td>
<td>19.4</td>
<td>19.8</td>
<td>21.5</td>
</tr>
<tr>
<td>Voted last election</td>
<td>69.1</td>
<td>69.4</td>
<td>68.6</td>
<td>66.8</td>
<td>69.1</td>
<td>68.6</td>
<td>67.6</td>
<td>73.2</td>
</tr>
</tbody>
</table>

Table B.9: Trust in political institutions in Europe

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust in country’s parliament</td>
<td>49.1</td>
<td>33.8</td>
<td>33.3</td>
<td>30.5</td>
<td>25.7</td>
<td>28.3</td>
<td>36</td>
<td>36.9</td>
</tr>
<tr>
<td>Trust in politicians</td>
<td>23.8</td>
<td>20.4</td>
<td>20.4</td>
<td>18.1</td>
<td>16.6</td>
<td>18.7</td>
<td>22.5</td>
<td>23.2</td>
</tr>
<tr>
<td>Voted last election</td>
<td>74.2</td>
<td>70.4</td>
<td>71.9</td>
<td>71.5</td>
<td>70.2</td>
<td>69.9</td>
<td>69.3</td>
<td>70.2</td>
</tr>
</tbody>
</table>

633 Percentage of all respondents who claimed they trust the parliament in their country at least on level six, on the scale from six to ten. European Social Survey (2021).
634 Percentage of all respondents who claimed they trust the parliament in their country at least on level six, on the scale from six to ten. European Social Survey (2021).
635 Percentage of all respondents. European Social Survey (2021).
636 Percentage of all respondents who claimed they trust the parliament in their country at least on level six, on the scale from six to ten. European Social Survey (2021).
637 Percentage of all respondents who claimed they trust the parliament in their country at least on level six, on the scale from six to ten. European Social Survey (2021).
638 Percentage of all respondents. European Social Survey (2021).