SUMMARY

The ongoing structural transformation and the rapid spread of the technologies of the fourth industrial revolution are challenging current democratic institutions and their established forms of governance and regulation. At the same time, these changes offer vast opportunities to enhance, strengthen and expand the existing democratic framework to reflect a more complex and interdependent world. This process has already begun in many democratic societies but further progress is needed.

Examining these issues involves looking at the impact of ongoing complex and simultaneous changes on the theoretical framework underpinning beneficial democratic regulation. More specifically, combining economic, legal and political perspectives, it is necessary to explore how some adaptations to existing democratic institutions could further improve the functioning of democracies while also delivering additional economic benefits to citizens and society as whole.

The introduction of a series of promising new tools could offer a potential way to support democratic decision-makers in regulating complexity and tackling ongoing and future challenges. The first of these tools is to use strategic foresight to anticipate and control future events; the second is collective intelligence, following the idea that citizens are collectively capable of providing better solutions to regulatory problems than are public administrations; the third and fourth are concerned with design-thinking and algorithmic regulation respectively. Design-based approaches are credited with opening up innovative options for policy-makers, while algorithms hold the promise of enabling decision-making to handle complex issues while remaining participatory.
The challenge of the ongoing transformation

How rapidly are democratic institutions evolving and how successfully are hybrid forms of democratic participation replacing the classic interest-representation model? The answers to these daunting questions may vary, particularly when economic, social and environmental developments are reshaping the institutional setting within and among countries. For a better understanding of this ongoing structural transformation, three aspects are worth considering:

First, ongoing the **simultaneous introduction of potentially disruptive innovations** such as digitalisation, social networks, artificial intelligence (AI) and genetics is proving extremely challenging for public regulators as they make the regulatory environment more rapid, fluid and uncertain. While these technological developments could offer large potential welfare gains, they could also open the door to negative outcomes. In particular, they could be used by some policy-makers to pursue and promote highly interventionist policies sometimes encompassing alternative views of ethics and individual rights. The opposing option of under-regulation, is equally of concern. As pointed out by the European Commission’s Joint Research Centre (JRC), disruptive innovation has the potential to be instrumentalised in the pursuit of purely egoistic and non-ethical goals, bypassing or undermining existing regulatory standards in democratic countries.

Second, the **rise of new global economic powers**, some with autocratic tendencies, combined with an increasingly **uneven distribution of wealth** in some parts of the world and **accelerating climate change**, might suggest that democratic, economic, social and environmental progress cannot always go hand in hand. For instance, according to 2017 estimates, in 10 years from now a mere 1% of the world population may own close to two thirds of global wealth. In the meantime, if no action is taken, autocratic tendencies could expand their reach, as the lack of universal access to social protection and quality education, and the lack of professional opportunities will impact mainly on the most vulnerable. Through its negative impact on public finances in the medium term, the ongoing coronavirus pandemic is also likely to further exacerbate such inequalities. As a result, democratic participation and civic engagement may become more confrontational.

Third, the process of **globalisation and reorganisation of supply chains at the international level** means that the world’s economies have become highly interdependent, making the modern regulatory process far more complex. As argued by some scholars, this growing interdependence could force governments to rethink their policies and organisational forms. This too, however, will result in **new challenges for public institutions**, making it difficult for them to tackle regulatory challenges effectively, efficiently and in a timely manner. Public institutions seem to be unprepared for these challenges. With few exceptions, public administrations appear to lack the capacity to develop systemic approaches and to design coordinated solutions strategically across actors, sectors, and skills.

This raises questions as to the possibility of new alternative paths for democratic development. Second, it induces a renewed interest in future-thinking studies. Contemporary public sector institutions need to be swift, adaptive, inclusive, and innovative. Governments and institutions therefore have an incentive to engage progressively in a more systematic form of strategic-thinking. A third – and related – consequence consists of a renewed interest in the future of democratic institutions. Challenged by the re-distribution of power-roles and the re-formation of public arenas for participation, policy-makers are being pushed to reflect on how to broaden and re-design participatory avenues for more inclusive policy making.
Democratic institutions: The best path towards prosperity

Democratic institutions are more flexible and effective as they result from an evolutionary process.

From an historical point of view, democratic institutions have not emerged spontaneously and they have always adapted and evolved constantly. Their development is the direct result of a long evolutionary process as the institutions forming part of modern democracy and the related laws have been introduced gradually and sometimes modified to reflect changes and evolving preferences in society. The right to vote, for instance, was not given to all citizens from the outset in modern democratic systems. Women’s suffrage is a major but relatively recent event in the history of democratisation in western Europe and elsewhere. Albeit already formally abolished in most Western regimes, the effective end of slavery occurred long after the first democratic constitutions were introduced. Another case in point is the rights of lesbian, gay, bisexual, transgender and queer (LGBTQ+) people. These rights have not yet been recognised in all European Union (EU) Member States or other democratic countries to the same extent. There are many other examples, but they all point to the same evidence, an historical process of flexibility and adaptation to societal change displayed by democratic institutions.

Similarly, profound economic and technological transformations have also led to the adaptation of democratic infrastructure in the past. The recognition of trade unions and social partners, for example, became necessary as the industrial revolution radically altered the structure, composition and geographical organisation of society. Population movements within countries, and subsequently the internationalisation and then globalisation of exchanges and ideas, contributed to the emergence of powerful economic actors, requiring a move towards new institutions for regulation to be effective. This led to the creation of central banks, the implementation of competition policies and the emergence of international organisations such as the World Bank, the World Trade Organization (WTO) and the United Nations (UN).

Flexibility and adaptability are thus a key strength of the democratic institutional framework compared to the rigid and slow structures of less democratic systems. This key faculty of democracy to evolve and to grow more complex as society changes has been demonstrated many times in history, whereas less democratic institutional arrangements, sometimes perceived as more powerful at particular points in time, have then vanished under the weight of their inflexible and burdensome approaches. The evolutionary process that characterises democracy is instrumental in that process as it ensures that the regulatory environment undergoes constant renewal, adaption and complexification. This in turn helps to build a more cohesive social contract where those less fortunate are not constantly left behind. It also ensures that the gains from economic growth are not entirely captured by vested interests, while also guaranteeing that economic growth and private activities are not over-burdened by heavy public regulatory intervention. The unique ecosystem that characterises democracy does not always evolve in a smooth and rapid manner, as illustrated by some of the examples given. It does however offer the best available option for acceptable regulatory intervention.

In the long run, democratic governance leads to higher levels of income and reduces inequalities.

Regulatory intervention with democratic institutions is more beneficial, as it encourages rather than discourages innovation, critical thinking, transparency and rule of law, thus boosting productivity in the longer term. This renewal of the institutional landscape is also a guarantee of a higher quality of checks and balances within countries, as rent-takers are constantly challenged. Democratic institutions are therefore key drivers of redistribution and, as a result, welfare and economic output levels are on average higher and inequality levels lower in more democratic countries. This has been confirmed in the economic literature by many economic studies following up on the seminal work by Douglas North.
To illustrate this evidence empirically, the figure below reproduces an analysis looking at the correlation between level of income, level of inequality and a proxy for democratic institutional quality based upon a series of common indices taken from the World Bank governance indicators database, the Economist Intelligence Unit and Freedom House. The values for the income and inequality indexes are represented on the vertical axes with higher values corresponding to higher levels of income and inequality respectively. The values for the governance indexes are represented on the horizontal axes with higher values corresponding to higher levels of democratic institutional quality (democracy index, more voice and accountability, more political stability, higher governance effectiveness, better regulatory quality, rule of law and control of corruption, freedom index). Each line is the estimated linear regression line, calculated using a sample of 130 countries and using the most recent data available.

Figure 1 – Democratic governance and level of income and inequality

Source: EPRS based on data from the UN, the World Bank, the Economist Intelligence Unit and Freedom House.

The results show that the countries with the highest level in each of the indices – i.e. the countries with the higher levels of democratic institutional quality – also display the highest levels of income and the lowest levels of inequality. The results hold for all sub components and indices. However, some authors continue to question and to revisit these facts, pointing at ongoing transformation as a serious challenge to these results.

The myth of authoritarian regimes’ economic development

The fact is still that authoritarian regimes have never managed to reach the level of standard of living of comparable democracies. Using advanced statistical estimates, Acemoglu recently confirmed that democracy does indeed cause growth. Despite overwhelming evidence, some analyses, looking at specific past periods for certain countries, continue to argue that regimes with authoritarian tendencies play a role in economic development. China is currently an example that is often cited. Since the US decided to open up relations with China and in particular since it was allowed to join the WTO in 2001, China has grown its GDP by around 10 % a year on average. As a result, more than 850 million people have been lifted out of poverty. As in the Soviet Union, however, this has occurred at a relatively high cost in terms of the economy, the environment and human rights. Moreover, such a level of growth is not entirely surprising for economists, as the Chinese standard of living, still at 20 % of that observed in democracies, is still far from the efficiency frontier.

According to the World Bank, the 10 other countries that have grown at more than 7 % on average in the last 20 years are Myanmar (9.3 %), Ethiopia (9.1 %), Qatar (9.1 %), Equatorial Guinea (8.4 %), Turkmenistan (8.3 %), Rwanda (7.7 %), Tajikistan (7.6 %), Cambodia (7.6 %), Bhutan (7.2 %) and Djibouti (7.2 %), again starting from very low standards of living. Moreover, according to the World Bank index on governance, 7 of these 10 improved their democratic governance scores during this period as well, albeit sometimes only by very little and starting from low levels. Looking at the full World Bank dataset, the analysis confirms the robust results found by Acemoglu of a positive relationship between a move towards more democratic governance and higher economic growth.

South Korea best exemplifies this evolutionary process between economic and political opening. In the early 1960s, it was one of the poorest countries in the world, but has become the ninth largest economy by GDP in 2020 and a liberal democracy. These trends are also endorsed by a study, which by examining types of regime
and their economic outcomes back to the 19th century established a correlation only between the presence of an authoritarian regime and poor economic performance, while ‘growth-positive autocrats (autocrats whose countries experience larger-than-average growth) are found only as frequently as would be predicted by chance … [and] the infrequent growth-positive autocrats largely ‘ride the wave’ of previous success.

Some authors have conjectured that development is a precondition of democratisation, and therefore some form of authoritarian regimes could be needed initially in poor countries. In an influential 1997 article, Adam Przeworski and Fernando Limongi refuted this misconception showing that ‘The emergence of democracy is not a by-product of economic development. It must also be noted that the movement towards democratic institutions in democratic countries has been gradual, and that institutions are continuously evolving. The process of economic growth and development of democratic institutions is thus a symbiotic self-reinforcing one, as explained by Douglas North.

To conclude, during the Cold War, some academics constantly predicted that the Soviet Union economy would overtake democratic economies. They were proven wrong at high cost. As long-term growth is always explained by the capacity of economies to innovate and to open up, it is not surprising that rigid authoritarian regimes, after periods of economic growth, can enter severe economic crises and ultimately collapse under the weight of their own structure, unless they democratise. Moreover, undemocratic regimes are more prone to internal instability because they do not allow dissent and display higher levels of social fragmentation and inequality. They are also more likely to engage in inter-state conflicts than democracies, which are more peaceful (according to the democratic peace theory). Violent conflicts, through the destruction they entail, can wipe out many previous years of economic growth, such as in Syria. The loss of output due to conflict but also to widespread societal violence is significant and often persists for a long time.

Impact of the ongoing transformation on democratic regulatory intervention

From a theoretical point of view, a distinction can be drawn between three possible forms of intervention by a government or a centralised regulatory institution. In this simplified representation, the first extreme corresponds to a situation of over-regulation under an authoritarian form of governance and the second to a situation of relatively under-regulated self-governance. The third form corresponds to moderate democratic governance. This is naturally a very schematic and simplified description and the separation between each model may not be as clear or obvious in practice. The level of democratic governance can also vary to a great extent. It does however offer a way to understand the impact of current change on democratic regulatory intervention.

Model 1 – Over-regulated authoritarian form of governance

In this first extreme, the regulator is highly interventionist and assumed to prescribe in detail what is expected from each economic agent in terms of quantity, characteristics, price and quality of products and services put on the market. This approach is interventionist and leaves little room for market interactions. In democratic countries it is generally applied for the regulation of a potentially extremely harmful situation – for instance when the use of certain substances or practices are prohibited. In less democratic countries, it is generally the preferred form of regulation as it allows a central authority to exert total control over the economy while also protecting some sectors heavily. The costs of collecting information and of administrating such a system are naturally very high. Moreover, in theory, this approach is considered relatively inefficient, as it does not satisfy the conditions associated with an optimal economic outcome. It is however true that the cost of coordination (net of administration costs) between agents is minimum, as agents are expected to comply with the detailed recommendations addressed to them by the overarching regulator.

Model 2 – Under-regulated self-governance

The second extreme involves a non-interventionist regulator but still maintains a centralised form of regulation to ensure compliance with judicial procedures, guarantee of property rights and enforcement of contractual laws. In such a hypothetical situation, assuming property rights are fully
defined, the need for an interventionist regulator would disappear, as all conflicts could be expressed as a free exchange on an open market. Ethical considerations are therefore absent from this approach, which also raises the question of the market power of each participant or of participants colluding to achieve certain goals at the cost of society. Although in theory this approach could satisfy the conditions for an economically efficient outcome, consideration must be given to the potentially high transaction costs between market participants to arrive at an agreed settlement or to coordinate in order to increase their market power. In this case, administration costs are kept to a minimum.

Model 3 – Balanced democratic governance

The central position corresponds to a regulator that aims to secure balanced regulation, where checks and balances are in place to control the quality and the outcome of the regulatory process. The level of prescription results from a democratic process and ethical considerations are taken into account. Depending on the problem at hand, the balance towards using a more market-oriented or more prescriptive approach can be adjusted thus providing flexibility. In theory, this could lead to a high level of efficiency but it will also lead to more moderate economic gains in situations where more complex regulatory objectives are taken into consideration. In the same vein, the administrative and transaction costs in such a model could be assumed to be between the corresponding costs for the two most extreme models, depending on the agreed regulatory objectives.

This simplified theoretical framework is represented in Figure 2. This figure aims to illustrate that while, on the one hand, the highly interventionist approach entails low transaction costs, on the other, it entails high administrative costs linked to the need for information. This simple framework also illustrates how the ongoing digital transformation will modify the established views on each approach, as explained in the section below. Going further, it is also possible to examine the extent to which each model is more or less favourable for innovation, and more or less flexible and resilient when faced with external shocks.

Figure 2 – Simplified theoretical framework

<table>
<thead>
<tr>
<th></th>
<th>Over-regulated authoritarian form of governance</th>
<th>Balanced democratic governance</th>
<th>Under-regulated self-governance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theoretical economic efficiency</td>
<td>low</td>
<td>moderate to high</td>
<td>high</td>
</tr>
<tr>
<td>Cost of administration – quantity of information required by the regulator for effective administration</td>
<td>high (game changer: 4th industrial revolution, in particular big data and AI)</td>
<td>moderate (game changer: 4th industrial revolution, in particular big data and AI)</td>
<td>low</td>
</tr>
<tr>
<td>Transaction costs – quantity of information required by the agent for effective coordination</td>
<td>low</td>
<td>moderate (game changer: 4th industrial revolution, in particular social networks, online platforms)</td>
<td>high (game changer: 4th industrial revolution, in particular social networks, online platforms)</td>
</tr>
</tbody>
</table>

Source: EPRS.

The impact of the ongoing transformation on the regulatory environment

Until recently, the two extreme options described above were considered unsustainable in the long term. On the one hand, the administration and transaction costs make mass individual surveillance and detailed control of the economy extremely costly. On the other, they also make the coordination of fragmented actors impossible, therefore not allowing for fully decentralised self-regulation or
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unrestricted collusion by some economic actors. In practice these non-beneficial forms of intervention are eliminated and, as time advances, their cost proves too much of a burden for society.

The advent of the fourth industrial revolution has begun to challenge this view and to broaden the scope of possible intervention and policy options, rendering the regulatory setting much more complex. The fact that the range of potentially beneficial forms and arrangements of regulation has expanded is opening the door to a vast number of policy options.

- First, if the cost of administration and of the gathering and analysis of information becomes very low, and available at individual level, as is the case for instance with the development of big data and AI, the inefficiencies generally linked with this area are going to be substantially reduced. This could make heavy regulatory intervention economically sustainable, thus challenging established democratic institutional organisation in a large number of sectors.
- Second, as transaction costs are reduced to a minimum, for instance through social networks and platform coordination, powerful coalitions of actors can gather at low cost to seize monopoly powers on markets, challenging established regulatory powers. Self-regulation by independent actors also becomes easier as the central coordination role of regulators can sometimes be overlooked without additional costs. This could allow forms of completely unregulated activities to emerge and to develop, thus challenging the traditional need for a central regulator to moderate and make beneficial interventions.

In addition, the ongoing technological revolution is also affecting the time and space dimensions of the regulatory process. As change is happening and information being circulated increasingly rapidly within society, the existing legislative process means that regulation can become outdated before it has even been implemented. The spatial dimension of regulation is also changing as demonstrated by the increasing emergence of powerful actors with global reach, not restrained by existing administrative boundaries. Powerful aggregations of disparate small and local actors could also gather to push for some policy options. While this could be a positive thing in principle, it could also compete with the established foundation of the expression of the will of the citizen through the voting system, while excluding from the debate less well-organised actors. All in all, this situation calls for a more complex democratic regulatory framework and regulatory institutions able to respond to the ongoing challenges.

Towards controlled complexity through democratic governance?

The diffusion and adoption of more democratic institutions: recent developments

According to the 2019 democracy index of the Economist Intelligence Unit, only 22 countries in the world, home to 430 million people, could be considered full democracies. Another index – the 2019 V-DEM democracy report – stresses the fact that the world today is unmistakably more democratic compared to any point during the last century. Yet, the report adds, the globe is also increasingly characterised by a wide variation in the quality of democratic infrastructures. Democracy, emphasise the authors of the study, prevails in 55 % of the countries surveyed; but the number of liberal democracies decreased by 11.4 percentage points between 2008 and 2018.

Fragile political systems, where civil and political rights are not sufficiently deep-rooted, are those at greatest risk of democratic instability. Media freedoms, for instance, are particularly at risk in countries most affected by converging geopolitical, technological, democratic and economic crises, explains the 2020 Freedom of the Press report. Globally, this means an increasingly uneven distribution of democratic rights across countries and, even more crucially, relative fragility and volatility of some systems compared with others. The use of propaganda to control freedom of
speech and to silence diverging opinions gives an idea of this fragility. Since the coronavirus outbreak in January 2020, for instance, authorities with more autocratic tendencies have increased surveillance and clamped down on free speech, with the risk that these measures will persist even after the situation eases. Fragile democratic infrastructures have been further weakened by some authoritarian governments, restraining democratic freedoms with internet shutdowns, or using citizen-scoring systems or generalised and unrestricted automated surveillance systems without proper controls.

**Well-established democratic countries are not immune from risk however.** New laws going in the direction of less effective democratic functioning, low voter turnouts, and widespread discontent with public institutions are challenging the stability of deep-rooted democratic systems of governance, making the ‘democratic recession’ one of the most pressing global challenges today. According to the Freedom in the World 2020 Report, political rights and civil liberties worldwide have declined steadily from 2005 to 2019. Countries showing net declines in their scores have consistently outnumbered those showing net improvements. The report also claims that the gap between setbacks and gains widened between 2018 and 2019, as political rights and civil liberties deteriorated for people in 64 countries.

These challenges notwithstanding, democratic institutions offer vast opportunities to enhance, strengthen and expand the existing framework of intervention, and therefore be capable of controlling a more complex and interdependent world. This is even more crucial at a point in history when the consequences of the coronavirus pandemic are creating new threats for democratic systems. According to the Covid-19 civic freedom tracker, 96 countries in the world have adopted emergency measures to contain the spread of the virus and many have constrained various personal freedoms; e.g. 130 have adopted measures that limit the right to assembly. With specific regard to the EU, the Fundamental Rights Agency has published 27 reports to assess the fundamental rights implications of the national measures taken in response to coronavirus.

Democratic governments could be assisted in their efforts to manage this heightened complexity by a range of strategies, regulatory approaches and tools. While the benefits of such tools are not always certain, they offer a promising outlook for future democratic decision-making. There are four areas in particular in which democratic decision-makers’ attempts to regulate complexity could be further developed: first, strategic foresight, second, collective intelligence, third, design-thinking, and fourth, algorithmic regulation.

**Strategic foresight**

Public decision-makers have always tried to anticipate future events in order to handle new regulatory challenges efficiently. In recent years, however, public administrations have engaged more structurally and systematically with strategic foresight. The scale, haste and complexity of issues to be regulated, on the one hand, and the need for public sector institutions to adopt inclusive, innovative and adaptive methods in the exercise of regulatory powers, on the other, have contributed to the growing relevance of horizon-scanning and future-thinking to the public sector. Foresight activities and civic engagement are dependent on each other. Supported by technology, policy-makers can crowdsource the ‘civic surplus’ (ideas and skills) held by individuals and communities, thus bringing smarter solutions to future regulatory challenges.

In this respect, the EU can play a leading role, given the important position that strategic studies and future-thinking already occupy in its institutional and regulatory activities. Foresight activities at EU level are carried out by dedicated structures. These include the JRC, the former European Political Strategy Centre (EPSC), also in the European Commission and now operating under the name of IDEA, the European Strategy and Policy Analysis System (ESPAS) – an interinstitutional platform monitoring global trends, the EU Parliamentary Panel for the Future of Science and Technology (STOA), and the Scientific Foresight Unit and Strategic Foresight and Capabilities Unit operating within the European Parliamentary Research Service (EPRS). In addition, foresight at EU level is developed through collaboration with strategic policy advice mechanisms, including
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informal expert groups, and Horizon 2020 advisory groups (examples include the European Foresight Platform and ERA-Net).

Collective intelligence

The idea underpinning collective intelligence is that citizens are collectively capable of providing better solutions to regulatory problems than are public administrations. A recent EPRS paper offers several examples of crowdsourcing initiatives run by public-sector institutions to harness knowledge. While nascent methods to harness citizens' skills and knowledge hold the promise of rendering policy-making more inclusive and participatory, they also raise a number of issues. How can the 'crowd' be made accountable? Are digital platforms sufficiently advanced to allow crowdsourcing processes to work smoothly? What are the ethical implications?

The European Parliament and Commission set great store in increasing citizen participation in the decision-making processes of the Union. One of the main policy priorities set out by the new Commission is a more participatory and democratic Union, to be achieved not least through the organisation of a Conference on the Future of Europe. In January 2020, the European Commission set out its vision of a two-year Conference on the Future of Europe, to be organised in a joint effort by the European Parliament, Council and the Commission. The conference is meant to represent an opportunity to engage large groups of citizens in collective thinking and the first large-scale attempt to introduce direct democracy at EU level. The European Parliament adopted a resolution in January 2020, proposing that the conference be composed of a range of bodies, including citizens' meetings, and at least two youth meetings, each comprising 200 to 300 citizens with a minimum of three per Member State. The launch of the conference has been delayed because of the coronavirus pandemic, but it is now expected to be get up and running in early 2021.

Design-thinking

The idea that policy-making should be designed in accordance with specific needs or to accomplish certain goals efficiently is far from new. The attention being paid to policy design has, however, increased over the past decade, with designers stepping up and playing a pivotal role, taking an empathetic approach to the dynamic relationships between legislators, communities, and technology. Design-based approaches are currently credited with opening up new options for policy-makers, thus helping them to explore regulatory solutions that are potentially more effective. An appropriately designed approach can help public regulators to answer important questions about new rules. For instance, can they be delivered, what types of outcomes are likely and how are stakeholders likely to react? What makes design-thinking extremely interesting in the field of civic engagement is that it portrays a collaborative vision of policy-making. Designing policies involves setting up prototypes and adapting their design in order to learn how to improve them through trial and error. Everybody benefits from this process. The regulator benefits from the skills and expertise provided by citizens, who in turn have the opportunity to shape new policies according to their needs. In this respect, the design approach is reminiscent of 'prosumerism'.

The list of national and supranational public structures that are designing innovative digital approaches to engage with unconventional forms of participation is growing. One example at EU level is the new online platform for European Citizens' Initiatives. The platform has been re-designed to help the organisers of new initiatives pass the threshold of 1 million signatures and possibly attract more young European citizens. At national level, the Grand Débat National launched by the French President in reaction to the gilets jaunes movement can be used as an example. The online consultation garnered over 2 million online contributions. At local level, interesting examples include Delib's Citizen Space (used by UK local government organisations to help run consultation processes) and participatory platforms such as Decide Madrid (used by the municipality of Madrid to consult residents about local regulatory interventions).
Algorithmic regulation

AI is quickly becoming a regulatory tool for policy-makers. Algorithms applied to policy-making hold the promise of enabling decision-making to handle complex issues and, while doing so, remain participatory, transparent and inclusive. Experts see ‘GovTech’ as an area destined to grow, fuelled by increased attention from investors. This, claim some authors, is particularly true of ‘democracy tech’. The number of initiatives designed to support governmental activities with online voting, citizens’ participation or political activities (e.g. candidates’ fundraising) is enormous. Beth Noveck, for instance, has used the term ‘wiki-government’ to describe the idea of collaborative governance through digital means. Oren Perez terms digital participatory processes ‘collaborative e-rulemaking’. César Hidalgo describes as ‘augmented democracy’ the use of digital twins (i.e. personalised virtual representations of a human) to expand people’s ability to take part directly in a large number of democratic decisions.

On the other hand, GovTech can give cause for concern. The first issue is the legitimacy of the public structures delegating regulatory functions to private companies. Although not a new theme (Brinton Milward and Keith Provan analysed the progressive replacement of the public sector with a network of third-party providers and services in a famous article published at the turn of the century), the problem of third-party accountability has reignited in recent years. What happens, for instance, if a company goes bankrupt, or it is acquired by another company? How can governments be sure that private companies will take the broad spectrum of interests at stake into consideration in a fair and equitable manner? Another set of issues, suggests the Israeli scholar Yuval Harari, is that in the near future information technology could be partnered with biotechnology, allowing algorithms to access and act on human thought. Democracies might thus be replaced by tech-tyrannies, or just by new, more elaborate, political systems. A third area of concern is the diffuse lack of public regulators’ capacity to use technology to become more accessible and participatory. Explanations for this technological gap can vary, but the result may turn out to be anachronistic structures unprepared to face technological challenges.

Outlook for new regulatory approaches and tools in the European Union

These innovative approaches have significant potential to improve the connection between citizens and decision-makers, and the effectiveness of policy-making, by taking better account of needs and facts at citizens’ level and on a broader basis. As surveys have shown, citizens in many democracies are not dissatisfied with the idea of democracy itself, but sometimes with the way democratic systems work in practice, and with the perceived difficulty of embodying effectively the democratic ideals of representativity, liberty, diversity and participation. This picture varies greatly from one country to the other, as well as among various social and age groups. A renewed participatory approach should aim at including all citizens in a more inclusive approach.

The European Union, based from the outset on innovative political and institutional design and the promotion of human rights, has a unique capacity to take advantage of emerging opportunities, not least with regard to technological development, to secure better participation and inclusion of citizens and various stakeholders. Through the better regulation agenda, the European Commission already involves citizens in impact assessments of its legislation both before adoption and during implementation. In its communication on the European democracy action plan (December 2020), the Commission emphasises the transformative impact of the digital revolution on democratic politics and the new opportunities brought by this transformation for reaching out to voters, as well as for civic engagement, ‘making it easier for some groups – in particular young people – to access information and participate in public life and democratic debate’. The European Parliament is recognised for its efforts to increase representativeness through better public involvement and transparency. The use of new technologies in this area, for instance to keep track of voting patterns and parliamentary activity (VoteWatch) is often quoted. According to one author, ‘with respect to transparency, the European Parliament has often been a pioneer, with higher standards than many of the national parliaments’.
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MAIN REFERENCES


ENDNOTES


6 See World Bank, the Worldwide Governance Indicators, 2020.

7 See Economist Intelligence Unit, Democracy Index, 2020.


12 On this point, the not-for-profit organisation Access Now explains that governments cut off the internet in an effort to stifle the voices of specific communities, such as members of oppressed or marginalised minority groups or refugees. In 2019, this happened in Bangladesh, India, Myanmar and Indonesia. Nationwide shutdowns have also increased during protests, periods of political instability and elections.

13 See L. Diamond, ‘Facing up to democratic recession’, Journal of Democracy, Vol. 26, 2015. According to the World Justice Project Rule of Law Index, which covers 128 countries and jurisdictions, and relies on national surveys of more than 130 000 households and 4 000 legal practitioners and experts to measure how the rule of law is experienced and perceived around the world, in 2020 the overall rule of law score declined for the third year running, and this also concerned regions such as western Europe and North America.


See Pew Research Centre’s most recent survey (February 2020) on satisfaction with democracy around the world.

See this study by CEPS 2020, *Improving Representativeness in Europe: a Story of Missed and Future Opportunities*.

See Steven Blockmans’ final chapter in the study quoted in endnote 17.