Ensuring Compliance in the Digital Age: A Data-Driven Approach to EU Consumer Contract Law

Felix Pflücke[*]

Abstract: The e-commerce landscape within the European Union (EU) has undergone significant transformation due to technological advancements and shifting consumer preferences. This Chapter examines the criteria for good evidence and data use within EU consumer law and policy, focusing on the evolving dynamics of e-commerce compliance. As digital transactions increase, ensuring consumer protection and trader compliance becomes increasingly complex. Consumer trust in e-commerce hinges on the effectiveness of legal frameworks. Over the past 30 years, EU consumer law has rapidly evolved, beginning with the Unfair Terms Directive 93/13, which addressed fairness in consumer contracts. Recent advancements, such as the Digital Content and Services Directive 2019/770 and the Sale of Goods Directive 2019/771, reflect a shift towards enhancing consumer rights in the digital age. The analysis focuses on whether the current legal framework adequately addresses e-commerce compliance nuances and how the evolution from the Unfair Terms Directive to the 2019 Directives has shaped the legal landscape. It delves into the deficiencies in understanding e-commerce compliance and how evidence and a data-driven approach can enhance the legislative quality and efficiency. The Chapter subsequently argues for an evidence-based and data-driven approach to EU consumer contract law.

Keywords: Digital Governance; European Consumer Law; Evidence-Based Regulation; RegTech; Law and Technology

1. Introduction

The e-commerce landscape within the European Union (EU) has undergone a profound transformation, propelled by technological advancements and shifting consumer preferences. As digital transactions increase, the complexities of ensuring consumer protection and e-commerce trader compliance have become paramount. This Chapter explores the criteria for good evidence and data use within EU consumer law and policy, with a specific focus on the evolving dynamics of e-commerce compliance.

Consumer trust in e-commerce transactions is contingent upon the efficacy of legal frameworks that underpin these interactions. As the EU consumer law acquis has evolved rapidly over the last 30 years, navigating the terrain of e-commerce compliance has become increasingly complex. The Unfair Terms Directive 93/13 laid the initial groundwork, grappling with issues of fairness in consumer contracts.[1]

However, the landscape has since transformed, most recently with the Digital Content and Services Directive 2019/770[2] and the Sale of Goods Directive 2019/771,[3] signifying a progressive shift in focus towards enhancing consumer rights in the digital era.

Central to the analysis of evidence-based law-making in this Chapter are questions concerning the alignment of EU consumer contract law with the criteria for good evidence and use of data, such as in impact assessments before or evaluations after their adoption. The relationship between evidence and regulation is crucial, as effective regulation relies on robust, high-quality data to inform policy decisions and ensure compliance. EU consumer contract law should be data-driven to accurately reflect market trends, consumer behaviour, and compliance challenges, thereby enhancing consumer protection and regulatory effectiveness in the evolving and fast-paced e-commerce landscape. The aim of this Chapter is twofold. First, to assess whether the current EU legal framework adequately addresses the nuances of e-commerce compliance. Second, to explore whether and how evidence and data can be utilised to improve the EU consumer contract law framework, drawing on recent legal and empirical research.

---

[1] Council Directive (EEC) 93/13 of 5 April 1993 on unfair terms in consumer contracts [1993] OJ L95/29 (Unfair Contract Terms Directive).

[2] Directive (EU) 2019/770 of 20 May 2019 on certain aspects concerning contracts for the supply of digital content and digital services [2019] OJ L136/1.

[3] Directive (EU) 2019/771 of 20 May 2019 on certain aspects concerning contracts for the sale of goods, amending Regulation (EU) 2017/2394 and Directive 2009/22/EC, and repealing Directive 1999/44/EC [2019] OJ L136/28.

The Chapter unfolds as follows. Section 2 outlines the standards for credible evidence, emphasising data integration with hypotheses testing to validate regulatory assumptions. It delves into the importance of accuracy, quality, and impartiality of evidence and data while advocating for interdisciplinary collaboration and stakeholder engagement to ensure a holistic analysis of consumer contract law issues. Moving forward, Section 3 delves into the shifting foundations of EU consumer law. Tracing its historical trajectory, this Section unveils the initial reliance on the presumption of consumer rationality, coupled with the influence of neo-classical economic theory and the integration of national practices. The evolution from the Unfair Contract Terms Directive to the more recent Directives 2019/770 and 2019/771 is critically scrutinised, shedding light on the challenges in aligning legislative choices with evolving consumer theories and evidence. Section 4 navigates the intricate relationship between enforcement actions and data collection, elucidating the potential of this connection to drive policy and legislative development. The transformative power of enforcement actions is highlighted, drawing parallels from real-time enforcement in financial law as a source of inspiration for EU consumer contract law. This Section aims to unravel the missing link between enforcement and data, underscoring the potential of such a symbiotic relationship in shaping future policies. Section 5 synthesises the key insights and offers concluding remarks.

2. The Criteria for Good Evidence and Role of Data

This Section defines the criteria for what constitutes good evidence and how data could and should be utilised. Over the last few decades, evidence-based regulation has garnered significant momentum, initially in the United States and later in Europe.[4] Despite this progress,

---

[4] For insights in the United States, see, e.g., Jeffrey J Rachlinski, 'Evidence-Based Law' (2010) Cornell Law Review 901; Franziska Weber, 'US behavioural consumer research' in Anne-Lise Sibony, Fabrizio Esposito, and Hans-Wolfgang Micklitz (eds), *Research Methods in Consumer*

standards and definitions continue to vary, with the primary challenge lying in its correct implementation.[5]

At the core of defining the criteria for good evidence lies the recognition that good governance encompasses governmental effectiveness and regulatory quality.[6] The underlying principle is that legislators should rely on credible evidence derived from scientifically robust data.[7] This method involves rigorously testing hypotheses to validate regulatory assumptions, utilising data that is not only accurate and of high quality but also impartial. If it fails to achieve the latter criteria, it is policy-based evidence and not evidence-based policy.[8] Moreover, this approach should be interdisciplinary in nature, incorporating input from various fields of expertise and ensuring the broad involvement of stakeholders to adopt a comprehensive

---

Law: A Handbook (Edward Elgar Publishing 2018). For an overview of the developments in the European Union and its Member States, see, e.g., The Organisation for Economic Co-operation and Development (OECD), 'Better Regulation Practices across the European Union – Executive Summary' (OECD, 19 March 2019) <https://www.oecd-ilibrary.org/governance/better-regulation-practices-across-the-european-union_582c4ee9-en> accessed 16 April 2024.

[5] See, for example, Felix Pflücke, *Compliance with European Consumer Law: The Case of E-Commerce* (Oxford University Press 2024) ch 2.

[6] Worldbank, 'The Worldwide Governance Indicators (WGI) project' (Worldbank, 2023) <http://info.worldbank.org/governance/wgi/#doc> accessed 23 April 2023. Discussed in Aurelia Colombi Ciacchi, 'Good Governance and the Fitness Check of EU Consumer Law' in Esther van Schagen and Stephen Weatherill (eds), *Better Regulation in EU Contract Law: The Fitness Check and the New Deal for Consumers* (Hart Publishing 2019) 192-193. See also the chapter of Catalina Goanta in the present edited volume, where she argues that the sheer complexity of current issues brings experts to their limits, limiting scientific and regulatory practice.

[7] For a general overview, see, e.g., Justin Parkhurst, *The Politics of Evidence: From evidence-based policy to the good governance of evidence* (Routledge 2016) 14ff; Sandra Nutley and Jeff Webb, 'Evidence and the Policy Process' in Sandra Nutley, Huw T O Davies, and Peter Smith (eds), *What Works? Evidence-based Policy and Practice in Public Services* (Policy Press 2000) 25-26.

[8] Pflücke (n 5) ch 2.

perspective. Failure to do so risks examining issues in isolation, potentially overlooking crucial interconnected factors.[9]

Another crucial aspect pertains to the timing of evidence gathering. Initially, the consensus was that evidence collection should occur before the implementation of legislation. However, it has since been recognised that periodic reviews of legislation are also essential. Presently, the cutting-edge approach involves the utilisation of real-time data, as exemplified by its integration into EU financial law to measure and possibly sanction financial actors' compliance with prudential requirements in real-time.[10] This real-time data enables legislators and regulators to promptly assess the effectiveness of implemented measures and make necessary adjustments in response to evolving circumstances. By embracing this dynamic approach to evidence gathering, regulatory frameworks can become more adaptive and responsive to the needs of society and the economy. This approach is particularly needed in times of rapid technological advancements.

The final consideration revolves around the role of data within the legislative and regulatory process. It prompts questions about whether data should solely dictate the political discourse and determine the fate of legislation.[11] While data undoubtedly holds immense value in shaping policy decisions, it should serve as an informing rather than dictating force in the

---

[9] Shmuel I Becher, 'Unintended Consequences and the Design of Consumer Protection Legislation' (2018) 93(1) Tulane Law Review 132. Further challenges regarding evidence-based regulation are outlined in Kevin E Davis, 'The Limits of Evidence-Based Regulation: The Case of Anti-Bribery Law' (2019) NYU Law and Economics Research Paper No. 19-42.

[10] Further details in Section 4 of this Chapter.

[11] Pflücke (n 5) 27-28.

political discourse.[12] The essence lies in striking a delicate balance, where data provides crucial insights and evidence-based guidance without overshadowing broader societal values, ethical considerations, and democratic deliberation.[13] Moreover, an overreliance on data risks diminishing the role of human judgment and factors like empathy and contextual understanding in policymaking. Hence, it is imperative to view data as a tool to enhance, rather than dominate, the decision-making process, ensuring that legislative and regulatory outcomes align with the collective aspirations and principles of the society they serve.

The criteria for good evidence and the role of data are pivotal in shaping effective legislative and regulatory processes. While evidence-based regulation has gained momentum, implementation, as will be depicted in the following Section, remains a significant challenge due to varying standards and definitions. Emphasising the importance of good governance, this Section highlighted the necessity for legislators to rely on scientifically robust data and incorporate interdisciplinary perspectives. Additionally, the integration of real-time data into regulatory frameworks underscores the importance of adaptability in response to evolving circumstances in the digital age. Data holds immense value, but it should still complement rather than overshadow the political debate.

---

[12] ibid.

[13] See, for example, Nutley and Webb (n 7) 25– 26; Parkhurst (n 7) 14 ff. It is therefore also crucial to involve a variety of different actors in the drafting of legislation, see, e.g., Becher (n 9) 132.

3. Shifting Foundations of EU Consumer Contract Law

The foundation of EU consumer law has undergone significant shifts over the years, reflecting changing perspectives on consumer behaviour, economic theory, and the incorporation of national practices. This Section delves into the historical underpinnings of EU consumer law, tracing its evolution from early reliance on the presumption of consumer rationality and neo-classical economic principles to incorporating evidence-based approaches in recent directives. It critically examines the utilisation of evidence from the Unfair Contract Terms Directive to the latest Digital Content and Services Directive 2019/770 and Sale of Goods Directive 2019/771, highlighting the challenges in aligning legislative choices with consumer theories and evidence.

The origins of EU consumer law can be traced back to its initial reliance on the presumption of consumer rationality and the principles of neo-classical economics.[14] In its early stages, the legal framework governing consumer contracts largely reflected the belief that consumers were rational actors capable of making informed decisions in the marketplace. This presumption informed early directives, which sought to promote market efficiency and consumer welfare by fostering competition and facilitating free choice.[15]

---

[14] For the historical evolution, see, e.g., Pflücke (n 5) ch 2.

[15] See, e.g., Fabrizio Esposito, *The Consumer Welfare Hypothesis in Law and Economics: Towards a Synthesis for the 21st Century* (Edward Elgar Publishing) ch 6; Pflücke (n 5) ch 3.5.

However, as the field of consumer psychology and behavioural economics advanced, scholars and policymakers began to question the validity of the rational consumer model.[16] Empirical studies revealed systematic biases and cognitive limitations influencing consumer decision-making, challenging the traditional economic assumptions underlying EU consumer contract law.[17] Consequently, there was a growing recognition of the need to incorporate insights from behavioural science and data into legislative frameworks to better protect consumers' interests.

The Unfair Contract Terms Directive 93/13 marked a significant milestone in EU consumer law, albeit without an evidence-based approach.[18] While the UCTD aimed to address unfair terms in consumer contracts, its formulation was largely influenced by national practices, including the codification of case law from Member States.[19] While this approach in the UCTD provided a degree of harmonisation across the EU, it lacked a rigorous scientific basis, relying instead on national legal traditions and precedents that varied significantly between Member States.

---

[16] See, e.g., the contributions in Dorota Leczykiewicz and Stephen Weatherill (eds), *The Images of the Consumer in EU Law: Legislation, Free Movement and Competition Law* (Hart Publishing 2016) chs 2, 5, and 8.

[17] Joasia A Luzak, 'To Withdraw or Not to Withdraw? Evaluation of the Mandatory Right of Withdrawal in Consumer Distance Selling Contracts Taking into Account Its Behavioural Effects on Consumers' (2011) 37(1) Journal of Consumer Policy 91; Christoph Busch, 'The future of pre-contractual information duties: from behavioural insights to big data' in Christian Twigg-Flesner (ed), *Research Handbook on EU Consumer and Contract Law* (Edward Elgar Publishing 2016) 239-240; Geneviève Helleringer and Anne-Lise Sibony, 'European Consumer Protection Through the Behavioral Lense' (2017) 23(3) The Columbia Journal of European Law 617; Pflücke (n 5) 105-107.

[18] Pflücke (n 5) 90-91.

[19] For an overview, see, Pflücke (n 5) ch 3.

In the early 2000s, the EU embarked on a journey towards a more evidence-based approach via the Better Regulation agenda,[20] aiming to enhance the quality and effectiveness of legislative initiatives.[21] As part of the Better Regulation agenda, efforts were made to improve the evidence base underlying consumer law and policy. While the quality of evidence gradually improved, particularly with the increase of impact assessments and stakeholder consultations, there remained challenges in ensuring that legislative choices were grounded in robust evidence and data.

The legislative debate surrounding the adoption of the E-Commerce Directive[22] lacked a foundation in scientific evidence.[23] However, the inclusion of mandatory disclosures aligns seamlessly with consumer protection theories that emphasise empowering individuals through access to information rights.[24] Despite the absence of scientific evidence backing in the legislative discourse, the incorporation of these disclosures reflects a commitment to enhancing consumer empowerment and transparency in online transactions.

---

[20] European Commission, 'European Governance: A White Paper' COM(2001) 428.

[21] For a detailed overview, see the Chapters in Esther van Schagen and Stephen Weatherill (eds), *Better Regulation in EU Contract Law: The Fitness Check and the New Deal for Consumers* (Hart Publishing 2019).

[22] Directive (EC) 2000/31 of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market ('Directive on electronic commerce') [2000] OJ L 178/1.

[23] Pflücke (n 5) ch 4.2.

[24] Luzak (n 17).

Before the adoption of the Consumer Rights Directive,[25] the EU extended the Better Regulation approach with Smart Regulation.[26] The Smart Regulation approach requires a holistic approach throughout the policy cycle of legislation, before and after its adoption, taking Better Regulation to a new level of sophistication.

The Consumer Rights Directive marked a significant milestone, as it was informed by extensive studies and behavioural evidence.[27] However, there are lingering debates about whether it fell short in certain aspects and strayed from scientific standards. While the Directive was supported by evidence, not all consumer theories or studies backed the legislative choices, for instance, regarding the right of withdrawal. The evidence of whether the statutory withdrawal right corrects the information asymmetry in business-to-consumer distance contracts is divided.[28]

The European Commission revised and refined the Better Regulation approach from 2015 onwards, including introducing fitness checks.[29] In European consumer contract law, the European Commission first conducted an ex post fitness check of the Consumer Rights Directive. One finding was that 67 per cent of consumers regard information on the right of

---

[25] Directive (EU) 2011/83 of 25 October 2011 on consumer rights, amending Council Directive 93/13/EEC and Directive 1999/44/EC of the European Parliament and of the Council and repealing Council Directive 85/577/EEC and Directive 97/7/EC of the European Parliament and of the Council [2011] OJ L 304/64.

[26] European Commission, 'Smart Regulation in the European Union' COM(2010) 543 final.

[27] Pflücke (n 5) ch 4.3.

[28] See, for example, Pflücke (n 5) ch 4.3.1.3 discussing, e.g., Luzak (n 17) and Horst Eidenmüller, 'Why Withdrawal Rights?' (2011) 7(1) European Review of Contract Law 18.

[29] For a more detailed account of the 2015 reform and what followed, see Catalina Goanta's contribution in the present edited volume.

withdrawal as crucial in online commerce.[30] However, the European Commission's investigation into e-commerce traders revealed significant issues: more than a quarter of traders did not provide details on withdrawal methods, and almost half did not include information on return timelines.[31] The Directive's adoption signifies a meaningful stride towards evidence-based policymaking in consumer protection, highlighting the ongoing commitment to incorporating real-world insights into legislative frameworks. It was also mostly positively reviewed in a mandatory ex ante assessment, although questions regarding scientific rigour remain.[32] The criteria for conducting studies are often so narrowly defined that they result in policy-based evidence rather than evidence-based policy. For instance, a study on compliance where businesses were surveyed and asked if they believed their competitors were adhering to applicable e-commerce rules. Predictably, many businesses reported that their competitors were non-compliant,[33] leading to calls for more stringent legislation. This approach creates the impression of policy-based evidence, as it seems to seek data to support pre-existing policy goals rather than forming policies based on objective evidence. Further scientific law-in-action studies are thus needed.[34]

---

[30] SWD(2017) 209 final 61 (Figure 28).

[31] European Commission, 'Online shopping: Commission and Consumer Protection authorities urge traders to bring information policy in line with EU law' (31 January 2020) https:// ec.eur opa.eu/commission/presscorner/detail/en/IP_20_156 (accessed 2 July 2024).

[32] SWD(2017) 209 final 61.

[33] Impact Assessment SWD(2018) 96 final s 2.3.1.

[34] See the discussion regarding the use of scientific evidence in the legislative and enforcement process in Pflücke (n 5) ch 2 and ch 5. For a content analysis on e-commerce trader compliance, see, for example, Pflücke (n 5) ch 5 and ch 6.

Despite efforts to enhance the evidence base for consumer law, challenges persist in aligning legislative choices with consumer theories and empirical evidence. While the EU has made strides in incorporating evidence-based approaches into recent directives, such as the Digital Content and Services Directive 2019/770 and the Sale of Goods Directive 2019/771, there are still areas where scientific rigour is lacking. The impact assessment presented surveys with traders and consumers, but the findings are not always credible or robust.[35] It suggested that traders, especially SMEs, perceive diverging national rules as limiting cross-border sales, and that only 15 per cent of consumers buy from other Member States. Even with the implementation of an EU sales law, enforcing minor cross-border claims would still be challenging. However, the comparative study on remedies was convincing. The core issue is that the guidelines for Better Regulation, while advocating for evidence-based policymaking, often fall short of the ideal standard of evidence collection. They should ideally resemble scientific hypothesis testing, incorporating truly independent audits,[36] and broader stakeholder input to ensure impartiality and rigour.[37] Catalina Goanta, for instance, has also suggested that there should be democratic input from scientists in the evidence-collection process; otherwise, only it only includes the most visible perspectives.[38]

---

[35] See the European Commission impact assessment at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52015PC0634.

[36] Several external studies received narrow guidelines, which limited the independence of entities and predestined outcomes. The narrow focus of these guidelines may constrain policymakers' ability to fully explore alternative regulatory approaches and assess their potential impact on consumers and markets. Pflücke (n 5) ch 2.3.2.

[37] Pflücke (n 5) ch 2.3.1.

[38] See the chapter of Catalina Goanta in the present edited volume.

The evolution of EU consumer contract law reflects a shift towards evidence-based policymaking, albeit with challenges in its implementation. While recent directives demonstrate a growing recognition of the importance of empirical evidence and data, there is still room for improvement in ensuring that legislative choices are grounded in robust scientific studies. Addressing these challenges requires a concerted effort to enhance the quality and scope of evidence considered, foster greater transparency and accountability in the policymaking process, and strengthen the alignment between legislative choices and consumer protection objectives. Only through a more systematic and evidence-driven approach can EU consumer contract law effectively protect the rights and interests of consumers in the digital age.

4. Real-Time Evidence and Enforcement: EU Financial Law as a Source of Inspiration?

This part of the Chapter analyses the connection between enforcement actions and data collection and how it could contribute to the development of EU consumer contract law. It focuses on the transformative power of enforcement, discussing how enforcement actions can evolve into tangible data and their role in shaping future policies.[39] EU financial law, with its advancements in real-time enforcement, provides a compelling model from which EU consumer law could draw valuable insights.

---

[39] There are also other policy areas where real-time data collection is used, see, e.g., Vanessa Mak, *Legal Pluralism in European Contract Law* (OUP 2020) 212ff and Christoph Busch, 'From Algorithmic Transparency to Algorithmic Choice: European Perspectives on Recommender Systems and Platform Regulation' in Sergio Genovesi, Katharina Kaesling, and Scott Robbins (eds), *Recommender Systems: Legal and Ethical Issues* (Springer 2023).

Over the past 15-20 years, the financial sector has been at the forefront of integrating technology to manage compliance and regulatory oversight.[40] Banks and regulators have collaboratively established innovation regulation hubs to navigate and oversee these rapid advancements.[41] Real-time enforcement in EU financial law signifies a paradigm shift towards proactive regulation and data gathering.[42] Unlike traditional enforcement models, which often operate retrospectively,[43] real-time enforcement endeavours to monitor and regulate behaviours and shortcomings as they occur.[44] This approach relies on advanced technological tools and data analytics to promptly detect, assess, and respond to potential instances of non-compliance. This enhances enforcement efficiency and generates a constant stream of data that regulators can use to shape future policy decisions.

Data-driven tools have revolutionised data collection and analysis in financial regulation, allowing regulators to process vast amounts of information quickly and accurately. By using algorithms to detect patterns of suspicious behaviour and regulatory breaches, enforcement becomes more precise and efficient. These data-driven systems can flag potential non-compliance for further investigation, enabling regulators to concentrate their efforts where they are most needed. This approach maximises the impact of enforcement actions and feeds valuable real-time data back into the system.

---

[40] Philip Treleaven, 'Financial Regulation of Fintech' (2015) 3(3) Journal of Financial Perspectives 9-11.

[41] ibid 12-13.

[42] Herwig C H Hofmann, Dirk A. Zetzsche, and Felix Pflücke, 'The changing nature of "Regulation by Information": Towards real-time regulation?' (2023) 28(4) European Law Journal 181-185.

[43] ibid 181-182.

[44] ibid 185.

A notable illustration of real-time regulation within European Union financial law is evident in the supervision of prudential requirements imposed on banks.[45] Here, algorithms, developed and maintained by third-party entities, assume the regulatory role by overseeing compliance and promptly imposing penalties in cases of non-compliance.[46] The European Union's adoption of real-time enforcement mechanisms in EU financial law stands out as a compelling example of the transformative potential inherent in such approaches. Over recent years, EU regulatory bodies have increasingly turned to technology-driven solutions to bolster their oversight and enforcement capacities in this field.[47] This embrace of technological innovation is evident in initiatives such as the European Securities and Markets Authority's (ESMA) enforcement of the Market Abuse Regulation (MAR)[48] and the revised Markets in Financial

---

[45] Directive (EU) 2019/878 of the European Parliament and of the Council of 20 May 2019 amending Directive 2013/36/EU as regards exempted entities, financial holding companies, mixed financial holding companies, remuneration, supervisory measures and powers and capital conservation measures [2019] OJ L 150/253; Regulation (EU) 2019/876 of the European Parliament and of the Council of 20 May 2019 amending Regulation (EU) 575/2013 as regards the leverage ratio, the net stable funding ratio, requirements for own funds and eligible liabilities, counterparty credit risk, market risk, exposures to central counterparties, exposures to collective investment undertakings, large exposures, reporting and disclosure requirements, and Regulation (EU) No 648/2012 [2019] OJ L 150/1.

[46] Hofmann, Zetzsche, and Pflücke (n 42) 185.

[47] Similarly, the European Securities and Markets Authority (ESMA) is investigating the implementation of AI by funds and its supervision of future developments. The European Securities and Markets Authority, 'Artificial intelligence in EU securities markets' (ESMA, 1 February 2023) <https://www.esma.europa.eu/sites/default/files/library/ESMA50-164-6247-AI_in_securities_markets.pdf> accessed 17 April 2024.

[48] Regulation (EU) 596/2014 of the European Parliament and of the Council of 16 April 2014 on market abuse (market abuse regulation) and repealing Directive 2003/6/EC of the European Parliament and of the Council and Commission Directives 2003/124/EC, 2003/125/EC and 2004/72/EC [2014] OJ L 173/1.

Instruments Directive (MiFID II).[49] These endeavours underscore the European Union's steadfast commitment to real-time monitoring and enforcement within financial markets, reflecting a proactive stance toward addressing emerging regulatory challenges and fostering market integrity.

EU consumer contract law currently lacks a data-driven approach for evidence collection and enforcement. Also, its enforcement is a matter reserved for Member States. One potential first step could be to empower regulators to gather and access real-time data on market practices and trader behaviours. This would better equip them to identify unfair or deceptive practices and take swift corrective action. Nonetheless, this initial step at the EU level would not result in real-time enforcement, as this falls under the jurisdiction of the Member States in EU consumer contract law. Such an approach to deploy real-time enforcement and collect evidence in the same vein would not necessarily require an increase in the European Commission's powers but could be a collaborative project for EU and national regulators. This proactive approach would deter misconduct and foster a more conducive environment for consumer trust and confidence. Additionally, it would enable more adaptive and responsive regulatory frameworks, ensuring that policies remain relevant and effective in a rapidly changing market.

Moreover, the evidence gathered through real-time evidence collection and enforcement actions could serve as a catalyst for legislative reforms aimed at strengthening consumer

---

[49] Directive (EU) 2014/65 of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU (recast) [2014] OJ L 173/349.

protections and closing regulatory loopholes. By analysing patterns of non-compliance and market abuse, policymakers could identify areas where existing regulations may be insufficient or outdated, prompting the introduction of new legislative measures. Additionally, real-time evidence could inform the development of targeted interventions, such as consumer awareness campaigns or enhanced statutory requirements, to empower individuals to make informed decisions.

Empirical evidence shows that there are compliance issues with European consumer contract laws, which were attributed to the size of companies and underenforcement in certain jurisdictions.[50] Other rules, like using the EU's Online Dispute Resolution (ODR) platform, are ineffective in practice. Businesses only need to provide the link to the ODR platform but can state that they are unwilling to resolve disputes via the platform.[51] Research suggests that businesses are not keen on using the European Commission's ODR platform, and instead prefer to use a national provider for ODR services.[52] The study examined 300 e-commerce websites and found that more than 52 per cent of traders did not notify consumers about the existence of the EU's ODR platform, which is a clear violation of consumer protection standards. Additionally, approximately 39 per cent actively chose not to participate in the EU's ODR platform, which is allowed but shows a lack of appetite from traders for using the EU's platform. However, 73 out of 300 traders were interested in resolving disputes via a national ODR provider, showing that there is an interest in it, but not in the Commission's platform.

---

[50] Pflücke (n 5) ch 6.2.

[51] Pflücke (n 5) 4.3.1.6.

[52] Pflücke (n 5) 187-188.

Further research is thus necessary to determine why traders disliked the Commission's platform.

Empirical evidence on compliance and trader preferences could be highly valuable, especially with the rise of algorithmic tools. Data-driven compliance tools like CLAUDETTE, [53] which addresses unfair terms, could generate real-time data to support future legislation and enforcement. At the EU level, the Commission could gain insights into both trader behaviours and underenforcement in Member States, enabling more targeted and effective policy decisions.

A real-time, data-driven approach using AI offers significant advantages for consumer protection. It allows policymakers to monitor market dynamics and regulatory gaps in real-time, leading to more efficient and timely interventions. Continuous monitoring helps regulators identify emerging risks and trends, facilitating proactive measures to prevent potential harm. Furthermore, the comprehensive understanding of trader behaviours provided by real-time data enables evidence-based policy development, allowing regulators to tailor frameworks to address current vulnerabilities and anticipate future challenges. It would also open the door for real-time enforcement in EU consumer contract law, either at the national level or in partnership with the Commission.

Despite the outlined advantages, the emergence of data-driven evidence in legislative and regulatory processes raises significant concerns regarding fundamental human rights and the

---

[53] European University Institute (EUI), Claudette - An Automated Detector of Potentially Unfair Clauses in Online Terms of Service (EUI, 2024) <https://www.eui.eu/research-hub?id=claudette-iii> accessed 18 October 2024.

rule of law.[54] The delegation of legislative authority to third-party entities responsible for coding algorithms, as it was done in EU financial law, would undermine democratic principles as the code becomes law in real-time data-driven enforcement. Moreover, the complexity of these algorithms poses a formidable challenge, as their intricate operations may surpass human comprehension, raising questions about accountability and transparency in decision-making. Amidst these developments, it remains imperative to assert the importance of human agency in determining the ethical and legal implications of data-driven decision-making. Regulators, who often play a pivotal role in shaping legislative frameworks, must navigate the intricate landscape of AI governance with caution, ensuring that human values and fundamental rights remain at the forefront of regulatory practices.[55]

While access to compliance data should be restricted to regulators to maintain confidentiality and integrity, researchers and other relevant stakeholders should also be granted access under strict confidentiality agreements to ensure transparency and accountability of the AI tools. Triangulation is necessary to validate findings and could be achieved by combining data from multiple sources, such as consumer reports, market analyses, academic research, and independent audits.

The analysis revealed that real-time data-driven evidence collection and enforcement actions are crucial for the future of policy and legislative development in EU consumer contract law.

---

[54] Hofmann, Zetzsche, and Pflücke (n 42) 185.

[55] Herwig C H Hofmann and Felix Pflücke, 'Automated Decision-Making in EU Public Law and Governance' in Herwig C H Hofmann and Felix Pflücke (eds), *Governance of Automated Decision-Making and EU Law* (Oxford University Press 2024) part C.

By embracing innovative technologies and collaborative approaches, regulators can harness the transformative power of enforcement to generate timely and actionable data that informs legislative and regulatory decisions.

5. Conclusion

This Chapter has undertaken a comprehensive analysis of the extent to which EU consumer contract law is driven by data and the potential avenues for its improvement. Through an exploration of the characteristics of robust evidence and its role in legislative and political discourse within the EU, it has become evident that while data holds significant value, there are notable deficiencies in the current framework of EU consumer contract law. The present Chapter illuminated these deficiencies, underscoring the need for a more nuanced and responsive approach.

Drawing upon insights from EU financial law, the Chapter has proposed several policy considerations to cultivate a more data-driven approach within EU consumer contract law. Central to these recommendations is the establishment of an enforcement-evidence loop similar to that used in EU financial law. This loop would enable real-time supervision and enforcement actions to be translated into data, which would then feed back into the legislative discourse. This evidence-based, data-driven approach would offer the essential flexibility needed to keep pace with the rapid evolution of the digital age.

This Chapter advocated for a paradigm shift towards a more data-centric approach in EU consumer contract law. By embracing the principles of evidence-based policymaking and incorporating lessons from other regulatory domains, EU consumer contract law should foster

a more adaptive and effective framework that ensures evidence-based and data-driven trader compliance.