

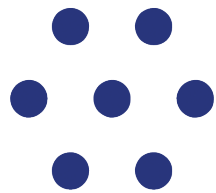
The Output[®]

SPECIAL ISSUE

ACTECON

**NEXT-GENERATION REGULATION: COMPETITION LAW IN
THE DIGITAL, INTELLIGENT & SUSTAINABLE ECONOMY**

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ACTECON

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SPECIAL ISSUE

NEXT-GENERATION REGULATION:
COMPETITION LAW IN THE DIGITAL,
INTELLIGENT & SUSTAINABLE ECONOMY

International Conference
7 November 2025
Istanbul



FOREWORD

Dear Reader,

Important events should never go unnoticed - they leave traces in our hearts and on paper. That is why we decided to compile this special issue of The Output® devoted to the international conference “Next-Generation Regulation: Competition Law in the Digital, Intelligent & Sustainable Economy”, which we are proud to have played a part in making it happen.

On 7 November 2025, the Boğaziçi University’s historic Albert Hall in Istanbul became the meeting place for competition law scholars, practitioners, regulators, and industry players. The conference - co-organised by The George Washington Competition and Innovation Lab, Türkiye Initiative, and the Boğaziçi University Innovation and Competition Based Development Studies Research Center, was a valuable contribution to the ongoing dialogue about the future of competition policy. It was a day of bold ideas and open debate, bridging international perspectives and experiences.

The discussions at the conference were as diverse as they were urgent: digital disruption and the DMA’s limits in an AI-driven economy; algorithmic pricing and the fine line between efficiency and collusion; data wars and the race for control over training datasets; and green sustainable cooperation with its antitrust risks.

What did we learn? First, adaptability is non-negotiable. Static frameworks cannot keep pace with AI-driven markets and sustainability imperatives. Regulators must embrace dynamic, context-sensitive approaches that evolve alongside technology and market realities.

Second, data has emerged as the new battleground. Control over training datasets - not algorithms - will define competitive advantage in the AI era. This raises urgent questions about access, exclusivity, and the role of synthetic data in mitigating scarcity and bias.

Finally, balance is the future. Competition law must safeguard rivalry while supporting innovation and environmental goals. It cannot become a blunt instrument for industrial policy, nor can it ignore the broader societal context in which markets operate.

This special issue of The Output® ensures that the important takeaways are documented (at least some of them) and that those who could not join us in Istanbul can gain a better understanding of the main ideas discussed and the critical questions addressed. It is important to keep such discussions going. The articles in this issue represent not final answers but contributions to an evolving dialogue - one that will continue as markets, technologies, and societal expectations continue to change.

Sincerely,

ACTECON Team

Editorial

How does competition policy relate to other policies? What are the objectives of competition law nowadays? Should competition enforcement be truly independent, or is it another tool in the hands of government to achieve wider goals? Is ex ante regulation a better response to problems with the functioning of markets than competition enforcement? What is the role of the State, business, academia, international organizations in this and in shaping competition law?

These are just some of the fundamental questions that are now being challenged. Many of the principles we previously took for granted are increasingly being questioned and re-examined. The traditional boundaries of competition law are increasingly being tested by three transformative forces:

- **Digital Disruption:** The rise of powerful platforms, data-driven business models, algorithmic decision-making, and artificial intelligence have challenged traditional antitrust frameworks. Digital markets are inherently dynamic, characterised by rapid innovation, network effects, and winner-takes-most outcomes. Market power is not always reflected in prices, but in control over data, user attention, and access to digital infrastructure.
- **Sustainability Imperatives:** Competition policy can no longer simply disregard ecological issues in its mission to protect competitive markets. The green antitrust discussion reveals that social and economic aims sometimes align and sometimes clash. Competition authorities have displayed a willingness to look favourably upon green but potentially anticompetitive business projects, yet this path requires caution to avoid jeopardising the effectiveness of a policy that has been the driving force behind the growth of the companies and the prosperity of the society.
- **Geopolitical Fragmentation:** The relationship between competition policy and industrial policy has come under renewed scrutiny as we navigate an era marked by geopolitical shifts, technological disruptions, and economic uncertainty. Industrial policy can be inherently selective, picking winners and shielding them from market forces, whilst competition policy focuses on immediate market outcomes: prices, quality, and consumer choice.

The articles in this Special Issue are organised according to the conference programme, reflecting the thematic progression from digital markets through AI challenges to sustainability concerns and greenwashing, and culminating in a strategic outlook for competition law in 2030.

Part I opens with Antonio Capobianco's keynote, which sets the broader policy context by examining the relationship between competition policy and industrial policy, rethinking the goals of competition law, and addressing the evolution from static to dynamic approaches in digital markets. He uses the metaphor of a "crystal ball" to illustrate the uncertainty of the future, noting that while competition policy has long been insulated from political influence, today's global order - with protectionism, industrial strategies, and geopolitical tensions - makes the crystal ball "misty and blurred." His remarks call for frameworks where competition and industrial policy reinforce each other rather than collide.

Part II turns to the digital economy with Selcuk Yilmaz's analysis of the Digital Markets Act (DMA). His article explains why ex ante regulation became necessary, the limitations of traditional enforcement, and the challenges of implementing the DMA, including regulatory overlap and the shift from effects-based to rule-based regulation. Complementing this, Can Sarıçiçek explores how AI is reshaping digital competition and testing the DMA's assumptions. She highlights the Collingridge dilemma in regulating AI-driven markets, enforcement gaps around algorithmic coordination and data concentration, and the questions the 2026 DMA review must address to remain relevant in an AI-driven economy.

Part III examines AI's impact on competition law through Dr. Christian Bergqvist's study of AI-assisted pricing, algorithmic collusion, and personalized pricing under Articles 101 and 102 TFEU. He explains why AI may enable tacit collusion without explicit agreements and why current frameworks struggle to address exploitative pricing practices. Dr. Sencer Ecer and Dr. Mehmet Ekmekci extend this discussion by analyzing algorithmic pricing across governance contexts, highlighting how machine-learning tools can blur the line between efficiency and collusion. Their article explores legislative, regulatory, and enforcement responses, including U.S. proposals like the Preventing Algorithmic Collusion Act and the DOJ's RealPage settlement, which introduces behavioral remedies to curb hub-and-spoke coordination and discriminatory pricing. They argue that algorithmic pricing represents not just incremental change but a paradigm shift requiring new monitoring criteria and adaptive antitrust frameworks to address risks of tacit collusion and pervasive price discrimination. Elena Ponte adds a forward-looking perspective on the "data wars" shaping AI markets, arguing that control over training data - not algorithms - will define competitive dynamics. She emphasizes the growing role of synthetic data as a potential solution to scarcity and bias, while warning that exclusivity in data access could entrench market power. Her piece calls for nuanced frameworks to classify data markets and address these emerging bottlenecks.

Part IV explores sustainability and competition policy. Dr. Muzaffer Eroğlu examines ESG practices and their tension with competition law, warning that sustainability collaborations can lead to "green cartels," boycotts, and information-sharing risks. He contrasts the EU's move toward safe harbours with U.S. antitrust actions against ESG initiatives, stressing that good intentions do not eliminate liability. Elif Acelya Balkı follows with Migros' Green Lentils Project, showing how sustainability can revive local production and enhance brand value, while noting the antitrust challenges of sector-wide standards. Acelya's analysis underscores that sustainability is most effective when it creates tangible economic incentives, but collective action often triggers antitrust scrutiny - raising questions about how authorities weigh environmental benefits against short-term consumer harm. Dr. Hanna Stakheyeva's article provides a practical guide on what is allowed under EU law, covering safe harbours for sustainability agreements, informal guidance letters, national divergences, and enforcement against "green cartels," offering clear compliance tips. Part V addresses greenwashing. A. Deniz Altınay explains why companies resort to misleading environmental claims and why authentic ESG alignment delivers better financial results. Hande Karakulah provides a detailed account of L'Oréal's sustainability program and its successful defense against regulatory scrutiny, illustrating best practices in transparency and substantiation.

Part VI looks ahead to 2030. Dr. Fevzi Toksoy offers a strategic outlook on enforcement priorities in a fragmented global order. Complementing this perspective, Mathew Heim reflects on the shifting

landscape of international competition governance, emphasizing that credible global leadership in a fragmented and politicised environment depends on independence, transparency, procedural integrity, and sustained multilateral cooperation. Dr. Aslı Helvacioğlu explores the intersection of competition law, ex ante regulatory systems, and innovation ecosystems. Her article argues that regulators must overcome “technological myopia” and adopt resilience-oriented frameworks that balance compliance with space for experimentation. She emphasizes the role of intellectual cooperation hubs - such as innovation labs and university partnerships - in shaping adaptive legal design for next-generation digital markets, warning that overly rigid ex ante rules risk stifling innovation and creating barriers to entry. Müge Bulat Cetinkaya closes with insights on the expanding role of in-house counsel in antitrust compliance, emphasizing operational readiness and proactive risk management. In the closing keynote in Part VII, Teresa Moreira articulates a renewed vision for competition policy grounded in UNCTAD’s development mandate, calling for a polycentric and forward-looking framework that fosters resilient, fair and inclusive markets, strengthens consumer trust, and aligns competition enforcement with broader economic, digital and sustainability objectives through international cooperation.

In this regard, several overarching themes emerge from the conference proceedings and the articles in this Special Issue:

- **The Need for Adaptive Frameworks:** The dynamic and rapidly evolving nature of digital markets - characterised by frequent innovation and shifting patterns of market behaviour - necessitates a regulatory framework that is simultaneously robust and adaptable. Enforcement authorities must engage in continuous refinement of their monitoring strategies and enforcement mechanisms to identify compliance gaps and to respond effectively to emerging forms of exclusionary or exploitative conduct.
- **Balancing Multiple Objectives:** Whilst the consumer welfare standard has been the cornerstone of competition enforcement, there is growing awareness that markets are embedded in social and environmental contexts. Competition law can support sustainability goals, including climate action, resource efficiency, democracy, and human rights, becoming a tool not only for economic efficiency but also for long-term societal well-being.
- **The Limits of Competition Law:** Competition policy plays only a supporting role in the development of sustainable technology. Integrating environmental protection need not change antitrust’s general purpose. Traditional theory of economic policy suggests that a multi-goal approach could raise serious controllability issues and could render a policy ineffective. Antitrust coexists with a robust European environmental policy, which ought to take centre stage when aiming to achieve ecological objectives.
- **International Cooperation and Divergence:** In an interconnected world, competition enforcement and policymaking cannot operate in isolation. Yet we are witnessing growing divergence between jurisdictions, with some including broader goals in their mandates to align with government agendas, whilst others continue to focus on a clearly defined narrow notion of consumer welfare.

Looking Ahead

Competition policy is not static. It must adapt to digital disruption, sustainability imperatives, global interdependence, and the demands of innovation. Well-functioning competition is essential for scaling innovation, reducing costs, and diffusing new and better technologies across the economy.

We do not claim to provide definitive answers to all the questions raised at the conference. Rather, we seek to advance the dialogue, present rigorous analysis, and offer practical insights for policymakers, practitioners, and scholars dealing with next-generation regulation challenges. We are particularly grateful to all the speakers, moderators and panellists, and participants who contributed to the rich discussions in Istanbul and now have transformed those insights into the scholarly contributions presented here. We hope that more events of this calibre will continue to take place in Istanbul, further establishing the city as a vital hub for competition policy dialogue bridging Europe, Asia, and beyond.

Dr. Hanna Stakheyeva,
Knowledge Counsel, ACTECON
January 2026



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PART I

The Future of Competition Law in a Rapidly Changing Global Order Opening Keynote

*by Antonio Capobianco,
Deputy Head of the OECD Competition Division*

Good morning, ladies and gentlemen,
It's a real privilege to be here with you today at such an important gathering of competition law professionals, scholars, and policymakers. And for that I am very grateful to the GW Competition and Innovation Lab and to the Bogazici University and to all the sponsors of today's event.

When I saw the topic of my introductory remarks ("The future of competition law ...") I immediately thought of an old Chinese proverb: "To define the future, one must study the past." (Confucius). Being able to glimpse at how the future of competition policy would shape was - at least for me - one of the reasons why I joined the OECD many years ago. I have always liked to compare the OECD to a crystal ball that allows you to peep into future trends by looking at what is on today's policy agenda of the Competition Committee.

But in this "... Rapidly Changing Global Order", I am afraid that the visions in the crystal ball are becoming increasingly misty and blurred. And this is probably the first point I can make today. We are sailing into uncharted waters, where some of what we thought in the past to be undisputed paradigms are today increasingly put into question: how competition policy relates to other policies? What are the objectives of competition law? Should competition enforcement be truly independent or is it another tool in the hands of government to achieve wider goals? Is ex ante regulation a better response to problems with the functioning of markets than competition enforcement? What is the role of the State in the economy and in the market?

For many years now, the OECD and its Competition Committee have been at the forefront of global efforts to adapt competition policy to a rapidly changing world. Today, I'd like to share with you a few key themes that have shaped our work and, I hope, will contribute to define the future of competition policy. I chose them hoping that they can provide the panel discussions that will follow the broader policy context, at least as I see it from a very personal perspective. So the usual disclaimers apply.

1. Insights on Industrial Policy and Competition Policy

Let me start with some observations on the relationship between competition policy and the broader policy agenda of governments. For a long time, we (including at the OECD) have worked hard to insulate competition policy from external influences. We argued that competition policy has its very clear and unique goals, uses very specific and complex analytical tools, it requires unique expertise and skills, and deserves to be protected by a cloak of independence from political interferences and that competition policy did not need to be diluted by other policy goals.

As we navigate an era marked by geopolitical shifts, technological disruptions, and economic uncertainty, the relationship between competition policy and other policies (especially industrial

policy) has come under a renewed scrutiny. The OECD has been at the forefront of this debate, offering critical insights into how these two domains can (and must!) coexist in a rapidly changing global order.

Historically, competition policy has served as a guardian of market efficiencies, consumer welfare, and innovation. It seeks to prevent anti-competitive practices and ensure that markets remain open, contestable and dynamic. Industrial policy, on the other hand, often aims to steer economic development, support strategic sectors, and respond to national priorities. In other words, the two policies can coexist: government should not stack the playing field by picking winners and losers but leave that to the market and to the competitive process, but they can - and probably should - pick the battles to fight. However, at times, these complementary objectives may appear to be in tension. Industrial policy can be inherently selective, picking winners and shielding them from market forces. Industrial policy may seek to achieve broader and longer term economic goals like technological leadership, job creation, or national security, even if that means favoring certain players. Competition policy rather focuses on immediate, short-term market outcomes: prices, quality, consumer choice.

Our recent work shows that this tension is not inevitable. In fact, well-designed industrial policies can be pro-competitive. The key lies in ensuring that industrial policy does not distort market dynamics or favor incumbents at the expense of innovation and consumer choice. In this way, we emphasized that government interventions if transparent, non-discriminatory, time-bound and grounded in competition principles, can reinforce rather than undermine competitive markets.

The Committee has also highlighted the role of competition authorities in shaping industrial policy. Through advocacy and enforcement, authorities can help ensure that industrial strategies are aligned with competition goals. They can also ensure that competition provides a strong foundation for successful policy implementation. This includes not only scrutinizing subsidies or state aid, but keeping markets competitive through enforcement, and most importantly reviewing regulatory frameworks to prevent unintended anti-competitive effects from ill-designed policies.

In today's global order, where supply chains are being reconfigured and strategic autonomy is gaining prominence, the OECD's message is clear: competition policy must remain a cornerstone of economic governance. It is not a constraint on industrial ambition; it is a prerequisite for efficient, sustainable, inclusive growth. As we look to the future, the challenge is not to choose between competition and industrial policy, but to design frameworks where they reinforce each other.

But what does the crystal ball say ... ? Very difficult to read the future in this case... I see an increase in protectionist policies, an appetite for building and supporting national champions, a revival of subsidization and restrictive trade policies. Will all this prevail and put aside sound competition policy and vigorous enforcement? Only the future will tell!

2. Rethinking the Goals of Competition Law in a Changing World

As we reflect on the future of competition law in such a rapidly evolving global landscape, one fundamental question demands our attention: What are the goals of competition law and policy, and should they be broader than consumer welfare? Traditionally, the consumer welfare standard has been the cornerstone of competition enforcement. It emphasizes efficiency, lower prices,

and increased output as the primary metrics of success. This approach has provided clarity and consistency, particularly in merger control and antitrust enforcement. The OECD has long supported this standard as a way to promote economic growth and innovation.

However, the OECD has also recognized that competition law does not operate in a vacuum. We explored the advantages and disadvantages of alternative standards, such as the total welfare standard, the citizen's welfare standard and the protecting competition standard. These frameworks consider broader societal impacts such as fairness, sustainability, and resilience, alongside traditional economic metrics.

This shift in thinking reflects a growing awareness that markets are embedded in social and environmental contexts. For example, the OECD has examined how competition policy can support sustainability goals, at topic on today's program and on which I will come back in a moment, including climate action, resource efficiency, democracy, and human rights. In this view, competition law becomes a tool not only for economic efficiency but also for long-term societal well-being.

Yet, expanding the goals of competition law is not without risks and challenges.

Think for example of what a broad standard means when it comes to enforcement: can these broader benefits be measured? How can we balance them against possible anticompetitive effects? And assess trade-offs across markets? Do competition authorities or courts have the necessary degree of democratic representativeness that puts them in the best place to do this balancing of objectives? What is the acceptable timeframe in which we should expect these benefits materialize and therefore to be taken into consideration? No easy questions...

Moreover, the OECD warned that if broader objectives should become part of the mandate of competition authorities, this must be pursued with legal certainty, transparency, and procedural integrity. Enforcement must remain objective and predictable, avoiding politicization or arbitrary decision-making.

So where does this leave us?

The OECD Competition Committee suggests a balanced approach. Consumer welfare remains a vital benchmark, but it need not be the only one. Competition authorities can incorporate broader goals also through prioritization, advocacy, guidance, and collaboration with other policy domains, while maintaining rigorous enforcement standards. In a world facing climate change, digital transformation, and geopolitical fragmentation, competition law must evolve. Its goals must reflect not only the needs of consumers, but also the values of society.

But again what does the crystal ball say ... ? Very difficult to read the future in this case too ... we see divergence between jurisdictions, some of which include in their mandates broader goals either to align the work of the authority to the broader government agenda (e.g. growth agendas), or to respond to Ministerial steer or from broad provisions in the competition laws themselves (e.g. focus on development or on total welfare); as opposed to those who continue to see the role of competition laws focused on promoting efficiencies and on a clearly-defined narrow notion of consumer welfare.

3. Digital Markets and the Evolution of Antitrust Enforcement from Static to Dynamic Approach

An important part of today's program will be devoted to discussing how competition law is facing a profound transformation in light of ongoing digitisation. The rise of powerful platforms, data-driven business models, and algorithmic decision-making, and now Artificial Intelligence (AI) has challenged traditional antitrust frameworks.

The OECD has been instrumental in analysing these shifts and guiding policy responses.

One of the most significant developments in antitrust enforcement in the digital era is the move from static to dynamic analysis. Traditional competition assessments often focused on static indicators, such as price levels, market shares, and short-term consumer harm. These tools were well-suited to industrial-era markets, but they fall short in capturing the complexities of digital markets and their ecosystems. Digital markets are inherently dynamic. They are characterized by rapid innovation, network effects, and winner-takes-most outcomes. Market power is not always reflected in prices, but in control over data, user attention, and access to digital infrastructure.

The recent Nobel Prize for Economics to Joel Mokyr, Philippe Aghion and Peter Howitt recognised that innovation is the lifeblood of competitive markets, not only digital markets. But it also raises complex questions: how do we assess market power in fast-moving sectors? How do we ensure that competition policy supports – rather than stifles – innovation? We have explored these questions, highlighting the role of competition in driving innovation and the need for dynamic analysis. We've looked at how mergers, IP rights, and market entry barriers affect innovation ecosystems. The message is clear: competition policy must evolve to better capture the nuances of innovation-driven markets.

Dynamic analysis considers innovation incentives, entry barriers, and long-term competitive trajectories. It asks not just whether a merger will raise prices today, but whether it will stifle or steer innovation tomorrow. It examines whether dominant platforms are leveraging their position to entrench market power through self-preferencing, data accumulation, or exclusionary conduct.

Importantly, the OECD warns against a one-size-fits-all approach. Dynamic analysis must be context-sensitive, grounded in economic evidence, and mindful of unintended consequences. Over-enforcement can chill innovation; under-enforcement can entrench monopolies. The challenge is to strike the right balance.

In this evolving landscape, competition authorities must become more agile, interdisciplinary, and forward-looking. They must engage with technologists, data scientists, and behavioral economists. As we look ahead, the future of antitrust enforcement lies not in abandoning traditional principles, but in reimagining them for a dynamic world.

If we go back to our crystal ball, what do we see ... ? Well, in many ways I see again an unclear future, both for ex post enforcement and for ex ante regulation in the digital sphere. Why? Well, mostly because competition has arguably been weaponized in the trade wars and it has become an source of geo-political tensions. Moreover, these remain complex markets, with fast developing technologies (think of AI, GenAI, Agentic AI!) and there are still questions on the extent to which we need to adjust our legal frameworks to tackle such concerns. This has a somewhat chilling effect on enforcement, especially in agencies which are still building up digital skills and knowledge.

Take then the example of ex ante regulation, which saw the light when we realized the shortcomings of ex post enforcement. The OECD has highlighted the potential complementarity between ex ante and ex post tools. While traditional antitrust enforcement remains vital, many jurisdictions are now adopting ex ante regulations to address systemic concerns in fast-moving digital markets, which may require timely solutions. These include obligations for gatekeepers to ensure fair access, interoperability, and transparency. That said, the views on ex ante regulation as a viable solution to the challenges of the digital economy continue to be polarized, and we are seeing divergent approaches to the adoption of digital regulations and digital remedies across the world and these different views are creating a patchy regulatory landscape.

4. Sustainability and Competition Policy

I mentioned sustainability earlier. Let me come back to it, as this is the main topic for discussion this afternoon.

As the global economy confronts the urgent challenges of climate change, resource depletion, and social inequality, the question arises: can competition policy contribute to sustainability? The OECD has actively explored this intersection.

Sustainability encompasses environmental, economic, and social dimensions. It includes goals such as reducing greenhouse gas emissions, promoting circular economies, protecting biodiversity, and ensuring fair labor practices. Traditionally, competition law has focused on economic efficiency and consumer welfare. But the OECD's analysis suggests that these goals need not be in conflict.

Already in 2020, we explored how sustainability considerations can be integrated into competition law enforcement. It identified two key pathways:

1. Enforcement against anti-competitive practices that hinder sustainability, for example, cartels that suppress green innovation or abuse of dominance that blocks sustainable entrants.
2. Support for sustainability-enhancing collaborations, such as joint ventures or horizontal agreements that promote environmental standards, provided they meet competition law criteria.

The Committee acknowledges that market failures often justify government intervention. But it also warns against government failures, where policy responses are insufficient or poorly designed. In this context, competition policy can play a complementary role: ensuring that sustainability initiatives do not entrench market power or reduce consumer choice.

Importantly, the OECD emphasizes the need for legal certainty and procedural integrity. Authorities must assess sustainability claims rigorously, balancing long-term societal benefits with competitive effects, including those arising in the short-term. This requires new tools, interdisciplinary expertise, and international co-operation.

Also here, we see a possible future divergence in the crystal ball. European authorities have shown increasing openness to integrating sustainability into antitrust analysis. They are exploring frameworks that allow for environmental benefits to be weighed against potential competitive harms. In contrast, U.S. agencies remains more cautious, with a stronger emphasis on consumer welfare and a reluctance to broaden the scope of competition law beyond economic efficiency.

5. International Cooperation / Convergence and Evidence-Based Policy Making

My last point is about the role of International Organizations like the OECD in this rapidly changing global order. In an interconnected world, competition enforcement and competition policymaking cannot operate in isolation. The OECD has long served as a platform for dialogue and convergence among competition authorities and across governments.

Through our Competition Committee, its subsidiary bodies and its global and regional policy platforms, we have promoted best practices, procedural fairness, and transparency. Our joint work with the ICN, UNCTAD and other regional networks has strengthened global enforcement capacity. This co-operation is essential – especially in digital markets, mergers with global impact, and cartel investigations that cross borders. We continue to be a trusted convener in this space.

Finally, the OECD has championed evidence-based policymaking. Data helps agencies benchmark their performance, identify gaps, and design better policies. It also supports transparency and accountability, values that are essential to public trust in competition enforcement. We believe that robust data and rigorous analysis are the foundation of effective competition policy. And on this one, I hope you won't ask to look in the crystal ball! I prefer to remain firmly convinced that there is a role for OECD and other International Organizations in designing and promoting better policies for better lives (our motto)! In closing, the past has shown that competition policy is not static. It must adapt to digital disruption, sustainability imperatives, global interdependence, and the demands of innovation.

At the OECD, we remain committed to supporting competition authorities with the tools, insights, and exchange platforms they need to meet these challenges. Personally, I remain convinced that policy dialogue will continue to build on the past and to inform policy making the next decades of economic transformation. OECD analysis shows that well-functioning competition is essential for scaling innovation, reducing costs, and diffusing new and better technologies across the economy.

It also shows that competition and industrial policy can be powerful complements when industrial strategies are designed to foster rivalry, entry, and innovation rather than to protect incumbents. And it reminds us that effective enforcement is indispensable to safeguard contestability, protect from exclusionary conduct, and ensure that sustainability goals are achieved through rivalrous innovation. Competition authorities can also play an important role in ensuring policy interventions and regulations are proportionate through advocacy.

Finally, deeper co-operation across borders and across government agencies can help ensure that markets are not distorted or fragmented across critical supply chains.

Thank you for your attention, and I look forward to today's discussions.

PART II

Legal and Practical Challenges in the Implementation and Enforcement of the Digital Markets Act: Early Lessons from Practice

***by Selçuk Yılmaz,
Deputy Head of Department, Turkish Competition Authority***

1. Rationale for the Ex Ante Regulation of Digital Gatekeepers

Before addressing the substantive issues, it is useful to recall the rationale for subjecting so-called gatekeepers - the primary focus of the Digital Markets Act - to ex ante regulatory obligations. In essence, the question is why their market conduct necessitates regulatory intervention. Three interrelated factors generally explain this need. First, gatekeepers are able to exploit pronounced network effects to reinforce their market positions. Second, they benefit from significant barriers to entry and expansion, which shield them from effective competitive pressure. Third, they possess the ability to lock users - both consumers and business users - into their proprietary ecosystems. Collectively, these elements enable gatekeepers to obtain and maintain positions of economic power, thereby affording them the capacity to shape or even distort competitive dynamics in digital markets.

The market power of gatekeepers manifests itself primarily in two dimensions. On the one hand, they control the conditions under which third-party undertakings can reach end users, as exemplified by online marketplaces or mobile application stores. On the other hand, they determine access to digital content, products, or services, such as through general search engines or social networking platforms. In both contexts, gatekeepers act as intermediaries that constitute essential gateways between users and digital content. Their power, therefore, derives not merely from their size or market share, but from their strategic position as unavoidable trading partners within the digital ecosystem. In this sense, the concept of a gatekeeper extends beyond mere economic scale and rests instead on functional and structural significance.

2. Limitations of Traditional Ex Post Competition Law Enforcement in Digital Markets

The following section examines the legal and practical challenges arising from the implementation of the DMA. Before turning to those issues, however, it is necessary to consider the shortcomings of traditional competition law mechanisms. The key question, therefore, is what limitations have been observed under the existing ex post enforcement framework, and why these have justified the adoption of an ex ante regulatory regime.

Reliance on traditional competition law instruments often results in delayed intervention. This is primarily due to the inherently retrospective nature of ex post enforcement, which depends on extensive economic analyses and comprehensive evidence gathering. As a consequence, enforcement actions are frequently initiated only after the anticompetitive conduct has become firmly entrenched in the market structure and its adverse effects have materialised.

Moreover, the definition of the relevant market and the assessment of market power pose particular challenges in the context of digital markets. Such markets are typically characterised by multi-sidedness, rapid innovation cycles, and complex interdependencies among various

services. These features blur market boundaries and undermine the applicability of conventional competition law methodologies, thereby complicating the identification and quantification of competitive harm.

The effectiveness of traditional enforcement mechanisms is further constrained by bureaucratic inertia and the resource-intensive nature of investigations. Lengthy administrative and judicial proceedings often provide dominant undertakings with sufficient time to cause irreversible harm to competition. In certain instances, these undertakings may even engage in procedural strategies aimed at prolonging investigations or appeals, thereby exacerbating enforcement delays and diminishing the deterrent effect of competition law.

3. Legal and Practical Challenges of the Digital Markets Act's Implementation

3.1. Complementarity and Tension between Ex Ante and Ex Post Enforcement Mechanisms

Turning now to the substantive discussion, while the DMA constitutes a significant advancement towards a more proactive and preventive regulatory approach, its effective implementation remains subject to a number of legal and practical challenges. One of the most salient among these is the problem of regulatory arbitrage.

Regulatory arbitrage arises when undertakings exploit divergences between legal systems or regulatory regimes in order to secure a competitive or compliance-related advantage. Given the inherently global operations of digital platforms, such undertakings frequently fall within the scope of multiple jurisdictions simultaneously. Furthermore, their conduct may be subject to both ex ante regulation under the DMA and ex post scrutiny under general competition law, with behavioural remedies or sanctions potentially imposed following the latter.

This regulatory overlap creates opportunities for gatekeepers to circumvent more stringent regimes and align their compliance strategies with those offering comparatively lighter obligations. Consequently, effective coordination among regulatory authorities and the establishment of consistent enforcement standards across jurisdictions are essential to prevent forum shopping and to ensure the uniform application of the DMA framework.

On the other hand, within a single jurisdiction, both ex post and ex ante intervention mechanisms may be applied to the same anticompetitive conduct, particularly where a dual enforcement regime has been established. This overlap gives rise to the risk of regulatory duplication and, in certain circumstances, to concerns of double jeopardy. It may also generate uncertainty for both regulatory authorities and undertakings, while increasing administrative and compliance costs. Accordingly, it is essential that the legal framework be carefully designed to avoid such disruptions, safeguard legal certainty, and address the institutional and procedural challenges inherent in a dual enforcement structure.

To enhance the overall effectiveness of the regulatory system, ex post and ex ante instruments should not be conceived as competing or substitutive mechanisms. Rather, they ought to function in a complementary and coordinated manner, with clearly delineated boundaries between their respective scopes of application. Such complementarity is indispensable for maintaining coherence between competition law enforcement and regulatory intervention in digital markets.

3.2.From Effects-Based Analysis to Rule-Based Regulation: A Paradigm Shift under the DMA

From the outset, the DMA has been subject to criticism for its departure from the traditional effects-based approach that underpins modern competition law analysis. Rather than relying on detailed economic assessments designed to identify and remedy specific market failures, the DMA establishes threshold-based, preventive obligations. In doing so, it marks a clear shift away from the conventional case-by-case analytical framework characteristic of ex post competition enforcement.

This departure inevitably gives rise to a fundamental question: does the DMA's prescriptive, rule-based approach entail a risk of regulatory overreach? More specifically, might it enable public authorities to act beyond the limits of necessity and proportionality, thereby intervening in an excessive or unwarranted manner?

At this stage, it would be premature to offer a definitive answer to this question, as the practical contours of the DMA's enforcement and its interaction with existing competition law principles are still in the process of emerging.

3.3.The Dynamic Nature of Digital Markets and the Need for Adaptive Enforcement under the DMA

Another significant challenge in the implementation of the DMA stems from the inherent characteristics of digital markets themselves. As previously noted, digital markets differ fundamentally from traditional ones, both in their structural configuration and in their regulatory context. The multi-sided nature of digital platforms, combined with their operation as complex and interdependent ecosystems, poses substantial difficulties for the consistent and effective application of the DMA.

Furthermore, the dynamic and rapidly evolving nature of digital markets - characterised by frequent innovation and shifting patterns of market behaviour - necessitates a regulatory framework that is simultaneously robust and adaptable. In this respect, enforcement authorities must engage in continuous refinement of their monitoring strategies and enforcement mechanisms to identify compliance gaps and to respond effectively to emerging forms of exclusionary or exploitative conduct.

As the services, business models, and practices targeted by the regulation evolve, so too must the measures designed to ensure compliance. This dynamic regulatory environment underscores the need for a strong, ongoing, and technologically informed system of supervision on the part of the competent authority.

Given the inherently dynamic character of digital markets, the remedial mechanisms provided under the DMA must likewise incorporate a degree of flexibility. Enforcement instruments should be sufficiently adaptable to evolve in parallel with rapid technological and market developments. A rigid or overly prescriptive approach risks rendering regulatory intervention obsolete in the face of innovation-driven change.

3.4. Balancing Effective Enforcement with Administrative and Operational Costs under the DMA

A further challenge concerns the administrative, financial, and operational burdens imposed on undertakings subject to the DMA. Excessive regulatory obligations may give rise to unintended consequences. Specifically, the extensive compliance requirements introduced by the DMA are likely to generate substantial additional costs, which designated gatekeepers may subsequently transfer to consumers or business users. The impact of such costs is not distributed evenly across the market, as smaller firms are particularly vulnerable to disproportionate compliance pressures.

Accordingly, the principles of burden minimisation and proportionality must play a central role in the design and implementation of regulatory measures. Striking an appropriate balance between deterring anticompetitive conduct and avoiding undue regulatory burdens is essential to ensure both the legitimacy and the effectiveness of the regime. In this context, the enforcement mechanism should remain agile, adequately resourced, and capable of adapting to continuous market innovation, while refraining from imposing unnecessary or duplicative costs on market participants. A proportionate and flexible approach of this kind is indispensable to sustaining the DMA's long-term credibility and practical enforceability.

In summary, achieving a balanced and coherent implementation of the DMA is of critical importance. The regulatory framework must be sufficiently robust to deter anticompetitive practices, while avoiding the imposition of excessive administrative constraints that could hinder innovation and legitimate competitive dynamics. In revisiting and refining compliance obligations, due consideration should be given to the heterogeneity of digital undertakings in terms of their scale, business models, and market impact. Such differentiation would allow regulatory requirements to be appropriately calibrated for designated gatekeepers.

A graduated enforcement model, under which fines and remedial measures are proportionate to an undertaking's size, market position, and competitive significance, could enhance the proportionality and fairness of the regime. This approach would not only mitigate the risk of disproportionate enforcement and regulatory overreach but also preserve the innovative potential of smaller market participants.

Ultimately, a balanced and adaptive enforcement framework of this nature would promote a digital ecosystem in which competition, innovation, and consumer welfare are mutually reinforcing objectives rather than competing policy goals.

The same challenge may also be examined from the perspective of the regulatory authorities. These bodies are required to continuously enhance their technical expertise in order to conduct complex digital audits, evaluate algorithmic transparency, and effectively monitor the practices of designated gatekeepers. Such tasks demand not only a sophisticated understanding of digital technologies but also the institutional capacity to translate that understanding into consistent and enforceable regulatory action.

Nevertheless, both the European Commission and national regulatory authorities face significant constraints in terms of resources and specialised expertise, which constitute a major obstacle to effective enforcement. Moreover, substantial disparities in technological capability and institutional experience among national competition authorities further complicate regulatory

coordination across jurisdictions. This uneven distribution of expertise risks undermining the uniform application of the DMA and may result in divergent enforcement outcomes across the European Union.

It is therefore imperative to strengthen the institutional and technical capacities of regulatory and enforcement bodies. This objective may be pursued through the establishment of specialised teams with expertise in digital technologies, the promotion of cross-disciplinary collaboration between legal, economic, and technical experts, and the enhancement of cooperation and information-sharing among national and supranational authorities.

These capacity-building measures are not merely institutional in nature but have direct practical implications for compliance efforts. The extensive administrative and procedural requirements introduced by the DMA - including detailed data reporting obligations, complex algorithmic audits, and heightened transparency standards - have the potential to impose significant operational and financial burdens on both gatekeepers and regulators. Another critical challenge relates to the practical implementation of the commitments set out in the compliance reports submitted by designated gatekeepers. As is now well known, several gatekeepers have already published their initial compliance reports, and non-compliance investigations have been initiated against certain undertakings.

This development raises a fundamental question for enforcement authorities: do these reports genuinely reflect substantive changes in market behaviour, or do they merely amount to formal compliance with regulatory requirements? While gatekeepers may submit extensive documentation purporting to demonstrate adherence to the DMA, regulators often face considerable difficulty in assessing whether the measures described translate into tangible improvements in competitive conditions or merely constitute a superficial or procedural response to regulatory obligations.

4. Key Lessons Learned from the Early Implementation of the DMA

4.1. The Non-Self-Executing Nature of the DMA and the Central Role of the Commission

The DMA entered into force in November 2022. The period preceding March 2024 - the deadline for full compliance - and subsequent developments have already revealed a number of key lessons from its early implementation, in addition to various legal and practical challenges.

A key observation has emerged from this initial experience: as anticipated, the DMA has not proven to be a self-executing regulatory framework. Rather, its application has necessitated continuous interpretation, assessment, and active engagement by the European Commission throughout the implementation process. It has also become evident that the involvement and feedback of industry stakeholders constitute an integral component of this evolving regulatory practice.

At this stage, the European Commission, acting as the sole competent authority entrusted with the enforcement of the DMA, continues to refine its institutional practice by issuing guidance, developing interpretative tools, and accumulating experience in addressing the complexities inherent in the enforcement of ex ante obligations in digital markets.

4.2. Transparency, Legal Certainty, and the Risk of Regulatory Capture

The initial experience with the implementation of the DMA has revealed a pronounced need for greater transparency and predictability in the enforcement process. Ambiguities in reporting standards, coupled with evolving enforcement priorities, have contributed to protracted legal disputes and a fragmented compliance landscape.

It has become increasingly apparent that more precise and detailed guidance is required to facilitate effective compliance by designated gatekeepers. In the absence of such clarity, there is a substantial risk that uncertainty will impede the timely and consistent attainment of the DMA's overarching regulatory objectives.

Nevertheless, the development of interpretative guidance and secondary instruments carries its own set of risks, notably that of regulatory capture. Owing to their considerable financial and informational resources, major industry actors may seek to influence the policy-making process, steer the formulation of interpretative documents, and shape enforcement priorities in a manner favourable to their commercial interests.

Such dynamics, if not adequately contained, could ultimately undermine the effectiveness of the DMA and weaken its practical enforceability by distorting the balance between regulatory discretion and accountability.

4.3. Proactive Enforcement, Malicious Compliance, and the Limits of Financial Sanctions

The initial enforcement experience demonstrates that the DMA adopts a zero-tolerance approach toward practices such as self-preferencing, breaches of data-sharing obligations, and failures to ensure effective interoperability. At the same time, it has become apparent that regulators may increasingly confront instances of so-called malicious compliance - situations in which undertakings formally adhere to the letter of the law while simultaneously circumventing or undermining its underlying objectives. This phenomenon underscores the necessity of proactive and preventive regulatory intervention to ensure that compliance is both substantive and aligned with the normative purpose of the DMA.

Another concern relates to the deterrent effect of financial sanctions. Despite their considerable magnitude, some argue that monetary penalties alone may not be sufficient to deter firms with vast and stable revenue streams. In this context, structural remedies - including mandatory divestitures - have been increasingly discussed as potential enforcement instruments. It has been suggested that such measures could be considered where financial sanctions fail to achieve effective deterrence.

The key takeaway is that even ex ante regulatory measures may require more robust enforcement mechanisms to induce genuine changes in deeply entrenched business models. However, these discussions remain largely theoretical at present, as no such remedies have yet been implemented or tested in practice.

Reconciling Regulation and Innovation: The Digital Markets Act in the Age of Artificial Intelligence

by Can Sariçiçek, Counsel, ACTECON

Introduction

Digital markets are being re-shaped by rapid advances in artificial intelligence. AI is not only adding new products and features, it is changing how market power is built and defended. Control over data, compute, and cloud infrastructure increasingly determines who can innovate at scale, while AI-driven interfaces and autonomous agents are emerging as new gateways through which users access information, services, and transactions.

The DMA embodies an ambitious ex ante strategy that prioritises speed and legal certainty by identifying gatekeepers through certain thresholds and imposing a largely standardised set of obligations. However, AI-driven markets are characterized by rapid evolution, with consequential market power shifting upstream to infrastructure and development layers of the AI supply chain, rather than remaining solely in consumer-facing services.¹

This structural shift presents a Collingridge dilemma. Late intervention risks the entrenchment of AI-related advantages that become irreversible while, conversely, premature regulation risks freezing technological trajectories, distorting experimentation, and chilling investment incentives. Against this backdrop, the Commission's forthcoming 2026 review of the DMA begs to raise a fundamental question: whether the existing framework can effectively support fair and contestable digital markets in an AI-driven economy, or whether regulatory adaptation is required.

2. Artificial Intelligence and the Changing Dynamics of Digital Competition

2.1. How AI redefines scale: data, compute, and cloud infrastructure

AI changes what scale means in digital markets. Traditional platform advantages, such as network effects and switching costs, remain relevant, but AI adds a new layer of rivalry around access to high-quality data, sufficient computing capacity, and the ability to deploy models through cloud infrastructure. These inputs shape entry conditions, determine the pace of iteration, and influence which firms can expand into adjacent markets. AI also alters what dominance enables firms to do once scale is achieved. In digital markets, market power in one activity is rarely an endpoint; technological capabilities, user relationships, and infrastructure can be redeployed to support entry into adjacent or even functionally distinct markets, including AI-driven services.

Training advanced AI models requires access to large and diverse datasets. Incumbent digital platforms benefit from extensive user interactions generated through search, social networks,

¹Turkish Competition Authority, *Impact of Digital Transformation on Competition Law*, October 2023, Ankara, paras. 9.

²Boom J van den, "Regulating the Digital Network Industry" (ProMarket, November 24, 2025) <<https://www.promarket.org/2025/11/24/regulating-the-digital-network-industry/>> accessed December 23, 2025

e-commerce, and productivity services. These data advantages are often difficult for new entrants to replicate and can create self-reinforcing dynamics in AI development.

2.2. Key competition concerns and blurred boundaries

The integration of AI into digital markets gives rise to several competition concerns that are not easily addressed through traditional analytical tools. These concerns relate in particular to the functioning of algorithms, access to key inputs, and the risk of exclusionary practices across interconnected services.²

One concern relates to algorithmic coordination, where pricing or strategic algorithms may learn from market signals and converge on outcomes that resemble collusion, even in the absence of explicit human coordination. Such dynamics challenge traditional concepts of intent and coordination in competition law.

A second concern relates to the concentration of data required for training and improving AI systems. Where access to large, high-quality datasets is limited to a small number of firms, data may function as a critical input that competitors cannot easily replicate. In this context, the competitive significance of data advantages depends on whether they reflect genuine innovation or instead arise from barriers to entry and expansion within the relevant digital ecosystem. This raises questions similar to those traditionally associated with essential facilities, while also highlighting the limits of applying that doctrine directly to data-driven markets.

The DMA establishes objective criteria for identifying gatekeepers, including a significant impact on the internal market, user-based thresholds, and a durable position over time. While cloud computing services readily meet the DMA's financial thresholds, the user thresholds were primarily designed for consumer-facing services. As a result, forms of market power exercised through AI development environments, infrastructure provision, or model deployment may fall outside the DMA's designation logic, despite their competitive significance.

3. The Digital Markets Act Under Pressure

3.1. Original assumptions behind the DMA and their limits today

The architecture of the DMA is grounded in a set of assumptions that are increasingly tested by advances in artificial intelligence. In particular, the DMA presupposes relatively stable market structures in which gatekeepers can be identified through quantitative thresholds. AI-driven markets, by contrast, are marked by a higher degree of fluidity, with competitive positions shifting rapidly in response to evolving model capabilities and changing deployment strategies.

From a law and economics perspective, the DMA largely reflects a rules-based, per se regulatory approach. It requires designated gatekeepers to comply with the same set of obligations across all core platform services. ⁴This design favours speed and legal certainty⁵, but leaves limited room for contextual assessment in fast-evolving AI markets.

The DMA further assumes that contestability can be promoted mainly through interoperability obligations, data portability, and prohibitions on self-preferencing. In AI-driven markets, competitive advantage often depends less on downstream access and more on access to training data, computing resources, and development infrastructure.

3.2. Conceptual and enforcement challenges posed by AI

Early enforcement practice shows that the DMA does not operate as a set of self-executing rules. Several obligations rely on open-ended concepts and require interpretation through enforcement decisions and compliance guidance issued by the Commission.⁶

Artificial intelligence further intensifies these interpretative challenges. Article 6.2, which restricts the use of business users' data by gatekeepers, illustrates the limits of applying existing obligations to AI-driven settings. In AI environments, competitive insights may be derived indirectly from patterns of infrastructure use rather than from direct access to proprietary datasets. This blurs the boundary between prohibited data use and permissible observation of system performance.

Several DMA obligations involve clear trade-offs that are not explicitly addressed later on. Article 6.7 on interoperability illustrates this problem, as opening systems to competitors may also expose platforms to security and integrity risks beyond competition law.⁷ For AI systems, these security concerns are particularly acute.

3.3. Core questions raised in the 2026 DMA review

The mandatory 2026 review will require the Commission to clarify how the DMA should respond to AI-driven market power. The central questions concern;

- scope (whether AI systems, cloud infrastructure, or other emerging technologies should be brought within the DMA),
- substance (whether existing obligations are sufficient or require AI-specific refinement),
- designation (whether gatekeeper criteria adequately capture infrastructure-based power),
- capacity (whether enforcement requires additional technical expertise), and
- coordination (how the DMA should interact with the AI Act and related regulatory frameworks).

3.4. Insights from enforcement practice and recent case law

Early enforcement actions suggest that the Commission intends to apply the DMA in an assertive manner, including in areas that overlap with established competition law concerns, as illustrated

³ Simone, C., and Laudando, A., *Principles and Obligations of the Digital Markets Act in Regulating the Economic Power of Gatekeepers: Positive, Negative or Trade-off Effects?*, *Electronic Markets*, 2025, p. 12.

⁴ Kerber, W., *Taming Tech Giants with a Per-Se Rules Approach? The Digital Markets Act from the "Rules vs. Standard" Perspective*, version 02/06/2021, p. 2.

⁵ See, for a critical discussion of whether the DMA in fact delivers legal certainty in practice, Ünekbas S, "Two Faces of Inefficiency in European Competition Law" (*Truth on the Market*, November 17, 2025) <<https://truthonthemarket.com/2025/11/17/two-faces-of-inefficiency-in-european-competition-law/>> accessed December 23, 2025.

⁶ *Ibid.*

⁷ *Ibid.*

by the Apple anti-steering case, which highlights both the potential reach and the inherent limits of the DMA, given that the Commission's intervention focused on restrictions affecting developers' ability to inform users about alternative purchasing options, an issue previously addressed under Article 102 TFEU.⁸ The case suggests that the DMA may accelerate enforcement timelines, while also raising questions about its interaction with traditional competition law tools.

Although the DMA was intended to reduce regulatory fragmentation through a single EU level framework, firms increasingly face parallel enforcement at both EU and national levels, even in relation to conduct covered by the DMA.⁹

The Court of Justice's judgment in Google Shopping offers relevant guidance. The Court emphasised that assessments of self-preferencing must take account of the specific economic and factual context, rather than relying on abstract presumptions.¹⁰ This contextual approach sits uneasily with the DMA's per-se prohibitions.

4. Conclusion: Toward a Future-Proof Regulatory Mindset

4.1. DMA as a partially effective but evolving instrument

The Commission has shown a clear willingness to deploy the DMA alongside traditional competition law tools, reinforcing its role as a complement to ex post enforcement rather than a replacement. But the implementation challenges remain significant. In particular, the asymmetric treatment of Articles 5 and 6 creates uncertainty and may incentivise strategic behaviour, as firms seek clarification through enforcement rather than guidance.

Reported compliance costs have substantially exceeded initial projections, raising concerns about the allocation of resources between regulatory implementation and innovation. Some observers have questioned whether early DMA implementation has delivered tangible benefits for end users, pointing instead to increased complexity, delayed features, and changes in service quality.

4.2. Principles for a regulatory framework that supports both innovation and fairness

Several principles should guide the DMA's evolution:

Context sensitivity should remain a guiding principle of digital regulation. As the Court of Justice has consistently held, competition analysis must take account of the specific economic and factual context in which conduct occurs.

⁸ Ünekbas S, "Two Faces of Inefficiency in European Competition Law" (*Truth on the Market*, November 17, 2025) <<https://truthonthemarket.com/2025/11/17/two-faces-of-inefficiency-in-european-competition-law/>> accessed December 23, 2025.

⁹ Barcentewicz, M., *The Digital Markets Act as an EU Digital Tax: When Compliance Costs Dwarf Regulatory Estimates*, *Truth on the Market*, July 8, 2025.

¹⁰ Kjølbbye, L., *Antitrust in the Digital Era: A Contextual and Fact-Based Approach*, *Network Law Review*, Spring 2025.

Regulatory intervention should prioritize access to key inputs rather than attempting to prescribe market outcomes. Ensuring access to data, infrastructure, and distribution channels allows competitive processes to shape business models and innovation paths. Proportionality remains essential. Obligations should be limited to what is necessary to address identified competitive harms, rather than serving as instruments for imposing preferred market structures.

Regulatory frameworks should recognise that competitive pressure in digital markets often arises from differentiation and problem-solving innovation rather than convergence toward similar offerings. Regulatory trade-offs should be addressed explicitly. Measures such as interoperability may promote contestability, but they also raise concerns relating to system integrity, security, and other non-competition values. Effective implementation requires coordination across regulatory frameworks, including competition, data protection, and AI governance, in order to reduce conflicts and cumulative compliance burdens.

International dialogue remains important, as alignment on core regulatory principles can reduce fragmentation and compliance costs, even where full harmonisation is unattainable. Finally, effective oversight of AI driven markets requires sustained investment in regulatory expertise, as well as sufficient flexibility to accommodate experimentation and unanticipated technological developments.

Preserving space for experimentation is therefore essential. As artificial intelligence reshapes competitive dynamics, the challenge is to maintain the DMA's core insights, namely the special responsibilities of gatekeepers and the role of ex ante regulation, while adapting its application to technological realities that could not have been fully anticipated. A more ecosystem-oriented approach, focused on opening bottlenecks and avoiding exclusionary incentives, offers a pragmatic path toward sustaining both innovation and fairness in digital markets.

¹¹ Siragusa, M., Setari, A., Trombetta, F., and Conti, N., *Competition Stories: January 2025 - June 2025*, *Network Law Review*, Fall 2025.

¹² Ünekbas, S., *Two Faces of Inefficiency in European Competition Law*, *Truth on the Market*, November 17, 2025.

¹³ Ünekbas, S., and Radic, L., *Implementing the EU's Digital Markets Act: The Seen and the Unseen*, *Truth on the Market*, June 25, 2025.

¹⁴ Kjølbbye, L., *Antitrust in the Digital Era: A Contextual and Fact-Based Approach*, *Network Law Review*, Spring 2025.

¹⁵ *Ibid.*

¹⁶ Ünekbas, S., *Two Faces of Inefficiency in European Competition Law*, *Truth on the Market*, November 17, 2025.

PART III

AI Discrimination – Should we be concerned?

**by Dr. Christian Bergqvist,
Associate Professor University of Copenhagen, and
Senior Fellow at GW Competition and Innovation Lab¹⁷**

1. Introduction

AI-assisted pricing has attracted considerable attention within the antitrust community, amid concerns that it may enable firms to collude in novel ways or to optimise prices at consumers' expense. From a legal perspective, neither scenario presents insurmountable challenges under EU law - at least not unless the underlying algorithms become exceptionally sophisticated. The EU Commission is already attentive to these risks and appears prepared to intervene against AI-induced collusion if required. By contrast, in the context of personalised pricing, existing case law offers limited support for an optimistic posture, suggesting that significant legal obstacles remain before we can, and should rely on competition law to police the matter.

The growing use of AI-assisted pricing has also prompted concerns that it may facilitate anti-competitive conduct that falls short of apparent infringements of Articles 101 and 102. In my view, this is overstated and premature. Nevertheless, prudence and vigilance remain valuable qualities for competition authorities. Assessing the associated risks requires a clear understanding of what AI-assisted pricing can actually deliver and why companies might find it attractive to deploy it. When setting prices with a view to revenue maximisation, undertakings confront two major uncertainties: the prices their competitors will charge and the amounts individual consumers are willing to pay. AI can help reduce both unknowns, but AI-induced collusion might infringe upon Article 101, and personalised pricing might be in defiance of Article 102. Below, this will be explored in detail, starting with AI collusion.

2. AI-assisted pricing can help form and stabilise cartels

Conventional economic theory suggests that firms set prices based on their costs and on consumers' responses to price changes. Demand is typically assumed to be inversely related to price, yielding a downward-sloping demand curve. This approach, however, overlooks the importance of competitors' reactions, which introduce substantial uncertainty for any undertaking. One traditional - albeit manifestly illegal - means of reducing this uncertainty is to form a cartel, though doing so entails significant risks of detection and sanction.

AI-assisted pricing has the potential to lower these risks by facilitating coordination without the need for physical meetings or overt communication.¹⁸ Moreover, once coordinated behaviour is in place, AI systems can enhance stability by continuously monitoring adherence to the agreed strategy, thereby mitigating the inherent instability of what remains a covert and unlawful arrangement.

¹⁷ Christian Bergqvist is Associate Professor University of Copenhagen and Senior Fellow at GW Competition and Innovation Lab at The George Washington University. He has no conflict of interest to declare and can be reached at cbe@drbergqvist.dk

2.1. Enforcement action does not indicate a strong basis for concern

For some time, competition authorities have debated¹⁹ whether algorithmically generated price adjustments and AI-assisted pricing systems could undermine the effectiveness of Article 101. Although no clear consensus has emerged, recent enforcement practice suggests that such concerns may be overstated. In 2018, the EU Commission pursued four cases²⁰ involving the use of algorithms to secure compliance with unlawful resale price maintenance policies. Because the parties had already reached an illegal understanding and used AI solely to enforce it, there was little difficulty in identifying an agreement in breach of Article 101.

A similar analysis should apply where parties intend to form a cartel but struggle to agree on its specific parameters and consequently delegate aspects of that coordination to an AI system. The Court of Justice²¹ has held that an undertaking may be held liable for the conduct of an external service provider acting under its direction - reasoning that readily extends to situations in which firms agree to delegate decision-making powers to an AI system, whether operated in-house or by a third party. Liability would likewise arise where undertakings agree to use the same pricing algorithm and a collusive outcome ensues. Even indirect communication through public channels, such as press statements,²² or via intermediaries,²³ including IT systems or auto-generated emails, can constitute contact between competitors if shown to serve as an invitation to collude.

The broad reach of Article 101 is reinforced not only by its coverage of conduct that does not create legally binding obligations, yet nonetheless facilitates coordination, but also by the expansive concept of a “single and continuous infringement.” Under this doctrine,²⁴ firms need not be aware of every operational detail of a cartel, provided they understand its overall purpose and have accepted its essential elements.

¹⁸ For further on how AI-assisted pricing can impede competition, see Christian Bergqvist and Camila Ringeling, *Finding the Ghost in the Shell: EU and US Antitrust Enforcement of AI Collusion*, in *Artificial Intelligence and Competition Policy*, by Alden Abbott and Thibault Schrepel (eds.), *Concurrence* 2025.

¹⁹ See, e.g., Competition and Markets Authority, *Pricing Algorithms: Economic Working Paper on the Use of Algorithms to Facilitate Collusion and Personalized Pricing*, (Oct. 2018).

²⁰ More specifically, Case AT.40465 – *Asus*, recital 27; Case AT.40181 – *Philips*, recital 64; Case AT.40182 – *Pioneer*, recital 155, and Case AT.40469 – *Denon & Marantz*, recital 95.

²¹ Case C-542/14 - *SIA VM Remonts*, recitals 27–33.

²² See, e.g., Case IV/31.149 - *Polypropylene*, recital 67.

²³ *Guidelines on the Applicability of Article 101 of the Treaty on the Functioning of the European Union to Horizontal Co-Operation Agreements*, recital 401–404. See also Case C-74/14 – *Eturas*, para 42–44.

²⁴ See generally, Christian Bergqvist, *Single and continuous infringement*, 5 *Eur. Competition & Regul. L. Rev.* 380–393 (2021).

2.2. Raising the stakes: AI makes autonomous decisions

A more substantive concern arises with the prospect of next-generation AI systems capable of scanning the internet for competitors' prices and making autonomous pricing decisions that incorporate potential competitive reactions.²⁵ In the absence of any contact between undertakings, the legal assessment changes considerably. Firms are entitled to adapt to prevailing market conditions, including competitors' observable conduct,²⁶ a principle that underpins the concept of lawful conscious parallelism. In practice, liability under Article 101 typically requires evidence of a concurrence of wills²⁷ - a "meeting of the minds" reflecting a shared intention to coordinate. Where independent undertakings unilaterally adopt parallel conduct, even if facilitated by sophisticated AI tools, their behaviour does not in itself fall within the scope of Article 101.

2.3. The EU Commission is acutely aware of the risk

The EU Commission is clearly not oblivious to these risks. In recent years, it has attempted to bring certain unilateral disclosures - whether made in meetings or published on websites - within the ambit of Article 101 where they are clearly directed at competitors. This approach has emerged both in enforcement practice²⁸ and in separate guidance,²⁹ notably in relation to the shipping industry's practice of announcing intended price increases three to five weeks in advance through press releases. Given the unusually long notice period and the non-binding character of the announcements, the EU Commission considered them a means of signalling and testing competitors' willingness to follow suit. No formal decision was ultimately issued, as the companies involved amended their practices. Nonetheless, the EU Commission's stance appears to be that Article 101 can apply in such circumstances - a position that sits uneasily with established case law, for the reasons discussed above.

2.4. The prudent position is to accept enforcement lacunae

As we look ahead, it should be assumed that Article 101 cannot readily be applied to highly sophisticated AI-assisted pricing systems in which an algorithm surveys the market - including competitors' behaviour - and autonomously sets prices while anticipating potential competitive

²⁵ See generally, Ai Deng, *What Do We Know About Algorithmic Tacit Collusion?*, 33 *Antitrust* 88 (2018).

²⁶ See, e.g., *Joined Cases 40-48/73, C-50/73, C-54-56/73, C-111/73, C-113/73, and C-114/73 - Suiker Unie*, para 174.

²⁷ See, e.g., *Case C211/22 - Super Bock Bebidas SA*, para 49 and *Case T-41/96 - Bayer AG*, para 69.

²⁸ *Commission Communication published pursuant to Article 27(4) of Council Regulation (EC) 1/2003 in Case AT.39850 - Container Shipping*, recitals 40-43.

²⁹ *Guidelines on the Applicability of Article 101 of the Treaty on the Functioning of the European Union to Horizontal Co-Operation Agreements*, recitals 396-400.

³⁰ For possible enforcement steps, see, e.g., Christian Bergqvist and Camila Ringeling, *Finding the Ghost in the Shell: EU and US Antitrust Enforcement of AI Collusion*, in *Artificial Intelligence and Competition Policy*, by Alden Abbott and Thibault Schrepel (eds.), *Concurrence* 2025.

reactions.³⁰ This limitation does not arise from any absence of anti-competitive effects, but rather from the lack of a “meeting of minds” among independent undertakings. Article 101 could still apply if the parties were to agree, even informally or in a non-binding manner, to deploy such tools; absent such coordination, however, we cannot, and should not, expect Article 101 to address these risks. That said, it remains doubtful that AI pricing systems with such advanced capabilities currently exist, rendering the issue primarily a matter of future concern.

3. Personal pricing under Article 102

Turning to the second potential concern associated with the proliferation of AI-assisted pricing - namely, personalised pricing - it is striking that this issue has attracted significantly less scholarly attention than AI-facilitated collusion.³¹ The relative neglect is likely due to the limited evidence of such practices being deployed in real-world markets. Before addressing potential legal implications, it is necessary to understand why personalised pricing might be attractive from a firm’s perspective.

Once again, the starting point for understanding this risk is the downward-sloping demand curve. Each consumer can be characterised as having an individual maximum willingness to pay. Because firms generally cannot observe this reservation price directly, they rely on imperfect, indirect instruments such as student discounts, off-peak pricing, happy hours, or Black Friday promotions in an effort to segment consumers and approximate differentiated willingness to pay. If more powerful AI-driven pricing tools, supported by larger and richer data sets, were to become available, firms might be able to offer each consumer a price approaching his or her maximum willingness to pay. Economists would describe this as perfect price discrimination. In competitive markets, they would also dismiss the basis for antitrust concerns, as perfect price discrimination typically requires market power. However, where the deploying firm holds a dominant position, personalised pricing could affect a profound redistribution of welfare from consumers to producers, thereby potentially engaging Article 102.

³¹ A notable exemption can be found with Marinova, Miroslava, and Bergqvist, Christian, *Unlocking Manufacturer Utopia: AI’s Role in Perfect Price Discrimination* (June 22, 2025). Available at SSRN.

³² See, e.g., *DG Competition discussion paper on the application of Article 82 of the Treaty to exclusionary abuse, recital 141*.

³³ *Personalised Pricing in the Digital Era – Note by the European Union, 28 November 2018*.

³⁴ *Case 27/76 - United Brands v Commission, paras 250-252*.

³⁵ *Case COMP/A 36.568/D3 Scandlines Sverige AB v. Port of Helsingborg, recitals 221-232 and 234-235. Revisiting United Brand, the same consideration can be seen in para 228*.

³⁶ See, e.g., *European Commission’s skeleton argument of 14 June 2019, for hearing on 26-28 November 2019 in Case No. C3/2018/1847 and C3/2018/1874 (Flynn Pharma limited), recitals 39-42*.

3.1. The EU Commission appears confident, but

In 2005, the EU Commission³² indicated that Article 102 could be invoked against perfect price discrimination/personalised pricing, classifying such conduct as an exploitative abuse under Article 102(a). This position was reaffirmed in a 2018 note to the OECD on Personalised Pricing in the Digital Era.³³ However, neither statement provides substantial analytical detail. Nor are they fully aligned with existing case law.

The case law on exploitative abuse under Article 102(a) has never developed a clear or coherent framework. The traditional reference point is *United Brands*,³⁴ which articulates a two-pronged test: first, whether the price is excessive, and second, whether it is unfair. This requires an assessment of the value of the relevant product or service, and subsequent cases³⁵ have allowed for the inclusion of non-economic factors on the consumer's side. Applied to personalised pricing, this implies that consumer preferences and willingness to pay a premium must be taken into account when evaluating the value of a product or service under Article 102(a).

3.2. It appears that the EU Commission has realized its impediments

The Commission appears to have recognised the difficulties inherent in this approach. The leading cases are decades old - *United Brands*, for example, dates from 1978 - and it remains uncertain how far they can be stretched to address personalised pricing practices. It is reasonable to assume that, at the time these cases were decided, the prospect of widespread AI-assisted pricing techniques was not contemplated. Consequently, the EU Commission's assertions regarding the applicability of Article 102(a) to personalised pricing may be somewhat overconfident, as the existing jurisprudence offers limited support for such an interpretation.

This situation is not immutable. In 2019, the EU Commission³⁶ made a discreet attempt to recalibrate the legal landscape by submitting an amicus brief in a pending national case, cautioning against an overly expansive reading of prior cases. This intervention suggests that the Commission is aware of the precarious doctrinal footing of its current position and is prepared to act to clarify the law should suitable cases arise. Until such clarification occurs, however, it must be assumed that enforcement based solely on Article 102 will be constrained when seeking to address the perceived unfairness associated with personalised pricing.

Algorithmic Pricing Across Governance Contexts: An Economic Perspective with a Case Study on Behavioral Remedies in the DOJ–RealPage Settlement

by Dr. Sencer Ecer, Senior Vice President, Compass Lexecon, Washington, DC, USA, & Dr. Mehmet Ekmekci, Professor of Economics, Boston College and Senior Consultant, Compass Lexecon

1. The Governance Context for Algorithmic Pricing

Algorithmic pricing is the practice by which firms automatically determine prices using advanced computational tools, including machine-learning and AI-powered software, that process market data, competitor pricing, and customer behavior. Algorithmic pricing often includes dynamic pricing, under which prices adjust over time in response to changing market conditions (MacKay et al., 2024).³⁷ In the evolution of market practices and business strategies, technological advancements typically manifest along a continuum, ranging from incremental improvements that subtly enhance existing methods to more disruptive innovations that fundamentally alter market dynamics. We believe surveillance technologies and algorithmic pricing have the potential to exemplify the latter category for reasons that we will address through economic foundations of pricing.³⁸ In other words, these tools represent not merely a refinement of traditional pricing and monitoring mechanisms but rather a paradigm shift with profound implications for competitive behavior, market transparency, and regulatory oversight. Their adoption introduces novel efficiencies, yet also raises significant concerns regarding collusion and price discrimination, thereby demanding a reassessment of existing antitrust frameworks.

The institutional landscape governing algorithmic and surveillance pricing comprises four distinct but interrelated modalities: legislation, regulation, antitrust enforcement, and judicial proceedings. Legislation operates at the foundational level, establishing or amending the legal framework within which market conduct is evaluated often in response to perceived gaps or emerging risks. Regulation follows as an administrative expression of legislative authority, deploying ex ante rules and supervisory tools to shape firm behavior before violations occur. Where regulation is absent, insufficient, or ineffective, antitrust enforcement functions as a primarily ex post mechanism, whereby competition authorities intervene to address specific instances of conduct alleged to harm market competition. Judicial proceedings then serve both as a forum for the adjudication of enforcement actions and as a venue for resolving challenges to the legality, scope, or application of legislative and regulatory instruments. These four components form a continuum of governance,

³⁷ MacKay, A. and Svartbäck, D. and Ekholm, A. G., *Dynamic Pricing, Intertemporal Spillovers, and Efficiency* (December 14, 2023). *Harvard Business School Strategy Unit Working Paper*, Available at SSRN: <https://ssrn.com/abstract=4164271> or <http://dx.doi.org/10.2139/ssrn.4164271>.

³⁸ *Surveillance pricing is a newer concept, which is a pricing regime dependent on inputs derived from meticulously following consumers virtually every move and across every possible platform, e.g., mouse movements while shopping online. Notably, the Federal Trade Commission (FTC) has initiated investigations into the competitive and consumer protection implications of such practices. Henceforth we focus on algorithmic pricing in general and consider surveillance pricing as an integral part of algorithmic pricing.*

ranging from rule creation to retrospective accountability, collectively shaping the competitive implications of technologically mediated pricing practices. So, we start by discussing legislative actions.

While scholars and practitioners set out to analyze and address these transformative shifts, legislative and enforcement bodies are concurrently grappling with the implications often responding in a reactive, and at times hasty, manner. In particular, algorithmic pricing has elicited growing scrutiny, with concerns that such mechanisms may facilitate tacit collusion or undermine price competition even absent explicit agreements. This reaction is understandable as discussed below. Nevertheless, there is still room for dispassionate analysis. The legislative developments mainly originate in the USA. At the U.S.A. federal level, Senator Amy Klobuchar introduced the Preventing Algorithmic Collusion Act in 2025, currently under committee review, which aims to explicitly prohibit the use of pricing algorithms to facilitate collusion, including tacit forms. At the U.S. state level, the New York Senate advanced the Algorithmic Pricing Disclosure Act (2025), expanding upon earlier proposals for transparency in surveillance-based pricing; while enforcement of this measure had initially been stayed in litigation brought before the Southern District of New York, it has since been upheld.

California is also advancing legislation that, according to reporting by The Capitol Forum (October 23, 2025), may subject “price recommendation services, especially in consumer-facing markets,” to heightened antitrust scrutiny. Parallel legislative initiatives are emerging in Illinois, Texas, Massachusetts, Pennsylvania, New Jersey, Ohio, Vermont, and Maine, collectively signaling an intensifying legislative response to the antitrust risks posed by surveillance and algorithmic pricing practices. Next, we move on to regulation. In the domain of algorithmic pricing and surveillance pricing, as of late 2025, there is no “pure” regulation in the classic sense, i.e., general, binding, ex ante rules issued by an administrative agency with delegated legislative authority, that directly targets these practices as standalone subjects. The settlement proposal of the DOJ in DOJ v RealPage, which we discuss below, may signal some quasi-regulations that might be forthcoming. Next, we discuss antitrust enforcement.

While actual antitrust enforcement remains limited, regulators in the EU, UK, Japan, Canada, and others have issued guidance, launched market studies, and initiated public consultations to better understand the implications. The European Commission has clarified in its 2023 Horizontal Cooperation Guidelines that the use of shared algorithmic tools, particularly those relying on commercially sensitive data, may constitute unlawful information exchange under Article 101 TFEU. The UK’s CMA and Japan’s JFTC have similarly highlighted algorithmic hub-and-spoke arrangements and autonomous learning as enforcement priorities. Finally, Canada has launched targeted investigations and public consultations, including on algorithmic rent-setting and retail energy pricing. Finally, we discuss some judicial proceedings.

Legislative Actions are ex ante responses, in other words, they are forward-looking, whereas judicial proceedings are ex post mechanisms that address alleged violations in the past. Such proceedings start with the DOJ’s 2010 Statement of Interest opposing the Google Books Settlement, objecting to, among other things, the parties’ joint delegation of pricing decisions to a shared algorithm, potentially constituting collusive behavior under antitrust law. Then, many other lawsuits followed.³⁹ In all the US cases, the government or private parties assert claims of illegal

price-fixing and restraint of trade in violation of the Sherman Act, Section 1. Especially the RealPage Settlement proposal has a lot of economics-inspired elements, which we discuss below. Note that these cases are essentially motivated by higher observed prices, but higher prices can be the outcome of lawful or unlawful activities. To emphasize, there has been no antitrust enforcement case to date involving algorithmic pricing that addresses price discrimination in consumer markets. The only statutory avenue under U.S. federal law for challenging price discrimination is the Robinson-Patman Act, which applies exclusively to business-to-business (B2B) transactions involving commodities.

2. Clarifications of Efficiency Concepts in Economics in relation to Price Collusion and Price Discrimination

Productive efficiency is achieved when a firm produces goods and services using the least resources possible and when output is maximized given existing resources and technology. Algorithmic pricing can enhance productive efficiency through cost savings in pricing personnel, inventory, and capacity management, and may have procompetitive effects as such. We set aside productive efficiency going forward but note that it may be critical for arguments related to large scaled companies such as Amazon.

Allocative efficiency is the condition in which trade is unrestrained, ensuring that resources are allocated to their highest-valued uses in the economy. Consumer surplus represents the gains of

³⁹ *United States Department of Justice. (2015, April 6). U.S. v. David Topkins; U.S. v. Aston & Trod Ltd. (2015); Trod Ltd/GB Eye Ltd case in the UK: Online sales of posters and frames, Case 50223, Decision of the CMA, dated 12 August 2016; In re RealPage, Inc. Rental Software Antitrust Litigation (2022) in parallel with DOJ's case; Duffy v. Yardi Systems, Inc. (2023); Gibson v. MGM Resorts International et al. (2023); In re MultiPlan Health Insurance Provider Litigation (2024); Comisión Nacional de los Mercados y la Competencia (CNMC), Decision Booking S/0005/21 of 29 July 2024, S/0005/21 - BOOKING | CNMC; In re GoodRx and Pharmacy Benefit Manager Antitrust Litigation (No. II) (2025).*

⁴⁰ *Communication from the Commission, Guidelines on the applicability of Article 101 of the TFEU to horizontal co-operation agreements, OJ No C 259, 21.07.2023, p. 79.*

⁴¹ *Holt, B., Szyfer, C., Steinhauer, H. and Ottenberg, J., 2025 (October 1), Recent developments in algorithmic pricing: U.S. appeals court weighs in, enforcers stay aggressive, and open questions remain, available at <https://www.hoganlovells.com/en/publications/recent-developments-in-algorithmic-pricing-us-appeals-court-weighs-in>*

⁴² *C Calvano, E., Calzolari, G., Denicolo, V., & Pastorello, S. (2020). Artificial intelligence, algorithmic pricing, and collusion. American Economic Review, 110(10), 3267-3297.*

⁴³ *Assad, S., Clark, R., Ershov, D., & Xu, L. (2024). Algorithmic pricing and competition: empirical evidence from the German retail gasoline market. Journal of Political Economy, 132(3), 723-771.*

⁴⁴ *Ge, Q. and Kim, M. and Kim, M., AI Adoption, Market Outcomes, and Coordination Risks (October 29, 2025). Available at SSRN: <https://ssrn.com/abstract=5679104> or <http://dx.doi.org/10.2139/ssrn.5679104>*

consumers from trade and producer surplus represents the gains of producers from trade, more technically, their profits gross of fixed costs. Achieving allocative efficiency maximizes total surplus, which is the sum of consumer surplus and producer surplus. Allocative efficiency is independent of the distribution of the total surplus between consumers and producers.

It is well-established that price collusion leads to a deterioration in allocative efficiency. Where collusion is explicit, such conduct is per se unlawful in most jurisdictions. The present concern lies in the capacity of pricing algorithms to render tacit collusion more attainable. Although tacit collusion has the same adverse effect on allocative efficiency, it is not per se illegal. In contrast to explicit collusion, tacit collusion emerges through the mutual recognition of interdependence among firms (often modeled with game theory), absent any formal agreement or direct communication. Importantly, recent developments in EU and U.S. antitrust enforcement and jurisprudence suggest that the mode of collusion whether executed by human agents or by algorithms is largely immaterial and independent usage of the same third-party pricing software without an underlying agreement or confidential information sharing amongst the competitors is not illegal.^{40,41}

A hub-and-spoke system refers to a structure in which the underlying algorithms aggregate data from all participating firms, thereby obtaining more precise information regarding cost and demand shocks in the market. The algorithm subsequently provides individualized pricing recommendations to each firm. There is some empirical evidence of tacit price coordination in the airline industry, even though many carriers still employ pricing heuristics rather than fully dynamic AI models, suggesting that tacit collusion may become more effectively sustained through algorithmic pricing.

In some instances, firms deploy pricing algorithms independently, yet such use can still give rise to collusive outcomes. A commonly employed class of algorithms is Q-learning, a type of reinforcement learning algorithm that determines optimal actions by iteratively updating value estimates through trial-and-error interactions, with the objective of maximizing long-term rewards. In a seminal simulation study, Calvano et al. (2020) demonstrated that Q-learning algorithms can readily learn to collude absent any explicit communication akin to the behavior of human executives.⁴² For instance, these algorithms may implement strategies involving temporary punishment of price-cutting behavior followed by a gradual return to elevated prices, effectively replicating the “tit-for-tat” strategy known to sustain tacit collusion.

Empirical evidence of supracompetitive prices is limited at the moment. For example, Assad et al. (2022) present such evidence from the German retail gasoline market that in a duopoly where both firms adopt algorithms, higher prices are sustained.⁴³ Furthermore, not all available evidence points to successful and sustained collusion. Ge et al. (2025) find that AI adoption is associated with a 2.4% increase in average fares, some but not all attributed to quality improvements, the remaining part more consistent with coordination channels.⁴⁴ Next, we move to a potentially even more controversial effect of algorithmic pricing, what is, in practice, called “revenue” or “yield” management as revenue management almost always entails a form of “price discrimination.”

Surveillance of consumers via price targeting or consumer segmentation and profiling tools allows firms to determine all these relevant inputs and hence their willingness to pay (WTP)

for a particular product or service at given locations, times, and sales channels. The practice of charging different prices to different consumers or consumer groups based on their WTP is called price discrimination, and surveillance pricing makes this practice much easier. In perfect price discrimination (PPD), a seller charges each buyer their maximum WTP, capturing all of the consumer surplus. Marinova and Bergqvist (2025) warn that AI-driven price discrimination may harm consumers.⁴⁵ Consistent with theory, Dubé and Misra (2023) show for an online platform that matches job seekers with employers that average consumer surplus declines by 23% with algorithmic pricing, even though the consumers who join the market may still pay less than the previously prevailing uniform price.⁴⁶

Price discrimination may fail when secondary markets emerge or competition leads to successful price undercutting. It works best with product differentiation, switching costs, price search costs, and no capacity constraints. If a firm is successful in perfect price discrimination, then consumer surplus declines to zero, but this decline typically does not harm competition. Moreover, PPD improves allocative efficiency. This characteristic is one of the reasons why price discrimination is generally not illegal. From a foundational economic perspective, this situation represents the emergence on dedicated markets for each consumer where price is determined by bilateral bargaining rather than an auction. The emergence of markets are consistent with the completeness assumption of the first fundamental welfare theorem, as such allocative efficiency follows. On the other hand, price determination via bargaining affects only the distribution of the surplus to be gained from bilateral trade. Ecer (2025) discusses deeper aspects of price discrimination in algorithmic pricing.⁴⁷

3.A Case Study: The Behavioral Remedies in the DOJ's Settlement Proposal in RealPage

It is amply clear by now that algorithmic pricing requires new criteria and monitoring in terms of facilitating price collusion. There are several emerging ideas discussed in Ecer and Ekmekci (2025).⁴⁸ In this article, we lay out and discuss the elements of the settlement proposal of the DOJ in the RealPage matter as it relates to our thinking.^{49,50} Most of the items are about decreasing the scope for collusion by putting in more friction. The economically relevant behavioral remedies in the settlement proposal and our comments are as follows:

- i. "Cease having its software use competitors' nonpublic, competitively sensitive information to determine rental prices in runtime operation;"
 - This measure directly targets hub-and-spoke collusion, where a central platform may use private inputs from multiple firms to generate interdependent pricing suggestions. In economic models, lack of information sharing hinders collusion hampering mutual monitoring, destabilizing collusion (Green & Porter, 1984; Abreu, 1988).^{51,52}
- ii. "Cease using active lease data for purposes of training the models underlying the software, limiting model training to historic or backward-looking nonpublic data that has been aged for at least 12 months;"
 - This criterion aims to limit the algorithm's learning speed and relevance, thereby reducing its ability to forecast and coordinate with competitors' current strategies. Using aged data dilutes the strategic value of training inputs and increases informational frictions, which are central to preventing tacit collusion in repeated-game models.

iii. “Not use models that determine geographic effects narrower than at a state level, which is broader than the markets alleged in the complaint;”

- This targets the granularity of market segmentation. Collusion is often easier to sustain in narrower, more homogeneous markets (i.e., with fewer firms, stable demand). Prohibiting micro-level geographic modeling blurs market-specific demand and supply signals, raising coordination costs. In economic terms, this restriction raises noise in the signal extraction process, which Green & Porter (1984) show can disrupt self-enforcing collusive strategies. This remedy may also hamper price discrimination indirectly.

iv. “Remove or redesign features that limited price decreases or aligned pricing between competing users of the software;”

- This directly targets alignment mechanisms. Features that resist price cuts or guide users toward similar pricing effectively soften competition and create a focal point for coordination. Such design elements simulate “facilitating practices” akin to most-favored-nation clauses or uniform pricing policies, which reduce incentives to deviate. Their removal restores firms’ autonomy and reintroduces incentives to undercut, increasing the instability of collusion.

v. “Cease conducting market surveys to collect competitively sensitive information;”

- Economic models emphasize that observability and monitoring are prerequisites for sustaining collusion. Prohibiting such surveys reintroduces opacity into competitive conditions and reduces the ability of firms (or the platform) to detect and punish deviations.

vi. “Refrain from discussing market analyses or trends based on nonpublic data, or pricing strategies, in RealPage meetings relating to revenue management software.”

- Strategic discussions can foster a shared understanding or signaling environment, which economic literature classifies as a “plus factor” for establishing collusion. Limiting such discussions removes soft coordination cues, reducing mutual awareness and the likelihood of coordinated expectations.

As the DOJ’s behavioral remedies demonstrate, enforcement is likely to intensify in the realm of algorithmic pricing, given the perceived potential for increased price collusion and discriminatory practices that threaten not only digital markets but also traditional sectors increasingly reliant on data-driven pricing, blurring the line between efficiency-enhancing innovation and conduct that may distort competitive outcomes.

⁴⁵ Marinova, D. M., & Bergqvist, C. (2024). *Unlocking Manufacturer Utopia: AI’s Role in Perfect Price Discrimination*. Available at SSRN 5153695.

⁴⁶ Dubé, J. P., & Misra, S. (2023). *Personalized pricing and consumer welfare*. *Journal of Political Economy*, 131(1), 131-189.

⁴⁷ Ecer, S., *The Political Economy of Widespread Algorithmic Retail Price Discrimination*, *The Forum Newsletter (The Capitol Forum, Dec. 6, 2025)*.



⁴⁸ Ecer, S. & Ekmekci, M., *Between Efficiency and Illegality: The Competitive Implications of Surveillance and Algorithmic Pricing*, *CPI Columns*, Aug. 6, 2025.

⁴⁹ *United States v. RealPage, Inc.*, No. 1:24-cv-00710-WLO-JLW (M.D.N.C. proposed final judgment filed 2024). See U.S. Department of Justice, *Justice Department Requires RealPage to End Sharing of Competitively Sensitive Information and Adopt Antitrust Compliance Measures*, Office of Public Affairs (Nov. 3, 2023), <https://www.justice.gov/opa/pr/justice-department-requires-realpage-end-sharing-competitively-sensitive-information-and>

⁵⁰ For a legal interpretation of the settlement see Holt, B., Phibbs, L., Steinhauer, H. and Ottenberg, J., 2025 (December 5), *Proposed DOJ settlement provides guidance on use of competitive information in algorithmic pricing tools*, available at <https://www.hoganlovells.com/en/publications/proposed-doj-settlement-provides-guidance-on-use-of-competitive-information>

⁵¹ Green, E. J., & Porter, R. H. (1984). *Noncooperative Collusion under Imperfect Price Information*. *Econometrica*, 52(1), 87–100

⁵² Abreu, D. (1988). *On the Theory of Infinitely Repeated Games with Discounting*. *Econometrica*, 56(2), 383–396.

The Data Wars: Why AI's Future is Decided Before Models Ever Launch

by **Elena Ponte,**
Attorney at Federal Trade Commission⁵³

1. The battle for AI supremacy isn't happening where you think

While onlookers obsess over benchmark scores, the companies winning the AI race are winning it in a different arena entirely: the market for training data. And right now, that market is being carved up in ways that may determine competitive dynamics for the next decade.

Disney just licensed its entire content library to OpenAI in an exclusive deal.⁵⁴ The New York Times sued OpenAI and Microsoft over alleged wholesale copying of its articles for training purposes.⁵⁵ Anthropic settled with authors for a massive \$1.5 billion after getting accused of training its models on copyrighted books scrapped without permission.⁵⁶ These aren't random IP skirmishes. They're strategic moves in a war over who controls the raw materials of artificial intelligence. And these data access battles aren't new. After Agence France-Presse sued Google for copyright

⁵³ Elena Ponte is a practicing lawyer with experience in competition law, AI, intellectual property, and international arbitration. She holds an LL.M. in Intellectual Property Law and Policy from the University of Washington. She co-founded the first Y-Combinator-backed synthetic data startup. The views expressed are entirely her own and do not represent the views of her employer.

⁵⁴ Brook Barnes & Cade Metz, *Disney Agrees to Bring Its Characters to OpenAI's Sora Videos*, *The New York Times* (Dec. 11, 2025), <https://www.nytimes.com/2025/12/11/business/media/disney-openai-sora-deal.html>; see also Emma Roth, *Disney Accuses Google of Massive Copyright Infringement Following Deal with OpenAI*, *The Verge* (Dec. 11, 2025), <https://www.theverge.com/news/842573/disney-google-copyright-infringement-cease-and-desist>.

⁵⁵ *The New York Times Company et al. v. Microsoft Corporation et al.*, No. 1:23-cv-11195 (S.D.N.Y. Dec. 27, 2023).

⁵⁶ *Bartz et al. v. Anthropic PBC*, No. 3:24-cv-05417-WHA (N.D. Cal. 2025) (settlement); Blaker Brittain & Mike Scarcella, *Anthropic Agrees to Pay \$1.5 billion to Settle Author Class Action*, *Reuters* (Sep. 5, 2025) <https://www.reuters.com/sustainability/boards-policy-regulation/anthropic-agrees-pay-15-billion-settle-author-class-action-2025-09-05/>.

⁵⁷ *Agence France Presse v. Google Inc.*, No. 1:05CV00546, 2005 WL 5834897 (D.D.C. Apr. 29, 2005) (copyright infringement lawsuit settled for undisclosed amount); see also Josh Cohen, *More Hosted News Partners in Europe*, *Google News Blog* (Mar. 17, 2009), <https://news.googleblog.com/2009/03/more-hosted-news-partners-in-europe.html> (documenting Google's expansion of licensing agreements with news content providers following the AFP settlement); Josh Cohen, *Extending the Associated Press as Hosted News Partner*, *Google News Blog* (Aug. 30, 2010), <https://news.googleblog.com/2010/08/extending-associated-press-as-hosted.html>.

infringement in 2005, Google settled and proceeded to negotiate licensing agreements with news agencies worldwide, locking up access to premium journalism through deals with providers like the Associated Press.⁵⁷ That strategy accelerated in 2020 when Google launched News Showcase with a \$1 billion investment across more than 2,300 publishers in 22 countries, relationships now feeding content into Google's Gemini AI.⁵⁸ In 2021, before ChatGPT's release, OpenAI licensed Shutterstock's image library for training DALL-E, a deal Sam Altman called "critical" to the model's development, and then expanded it into a six-year agreement covering images, videos, and music.⁵⁹ And in 2023, OpenAI also got into the news licensing game, signing a deal with the Associated Press.⁶⁰ The economic logic is brutal. If you're building an entertainment AI and your competitors have exclusive access to Disney's catalog, Netflix's library, and Universal's archives, you may have lost before you started. Your algorithms might be superior.

⁵⁸ Sundar Pichai, *Our \$1 billion investment in partnerships with news publishers*, Google Blog (Oct. 1, 2020), <https://blog.google/outreach-initiatives/google-news-initiative/google-news-showcase/> (announcing three-year, \$1 billion commitment to license content from nearly 200 publishers, later expanding to over 2,300 titles in 22 countries); see also Robby Stein & Jaffer Zaidi, *Supporting the Web With New Features and Partnerships*, Google The Keyword (Dec. 10, 2025), <https://blog.google/products/search/tools-partnerships-web-ecosystem/> (announcing pilot partnerships with publishers including The Washington Post and The Guardian, and real-time information partnerships with The Associated Press and other news agencies for Gemini AI).

⁵⁹ Shutterstock Partners with OpenAI and Leads the Way to Bring AI-Generated Content to All, Shutterstock Press Release (Oct. 25, 2022), <https://www.shutterstock.com/press/20435> (noting the partnership "began in 2021" and quoting Sam Altman: "The data we licensed from Shutterstock was critical to the training of DALL-E"); Shutterstock Expands Partnership with OpenAI, Signs New Six-Year Agreement to Provide High-Quality Training Data, Shutterstock Press Release (July 11, 2023), <https://investor.shutterstock.com/news-releases/news-release-details/shutterstock-expands-partnership-openai-signs-new-six-year>.

⁶⁰ OpenAI and The Associated Press Announce Strategic Collaboration, AP Press Release (July 13, 2023), <https://www.ap.org/media-center/press-releases/2023/ap-open-ai-agree-to-share-select-news-content-and-technology-in-new-collaboration/>; Matt O'Brien, *ChatGPT-maker OpenAI signs deal with AP to license news stories*, Associated Press (July 13, 2023), <https://apnews.com/article/openai-chatgpt-associated-press-ap-f86f84c5bcc2f3b98074b38521f5f75a>.

⁶¹ Hasan Chowdhury et al., *AI Improvements Are Slowing Down. Companies Have a Plan to Break Through the Wall*, Business Insider (Nov. 27, 2024), <https://www.businessinsider.com/generative-ai-wall-scaling-laws-training-data-chatgpt-gemini-claude-2024-11>. Ilya Sutskever called data the "fossil fuel" of AI and has been raising concerns about data scarcity for years. See Ilya Sutskever, *Sequence to Sequence Learning with Neural Networks: What a Decade, Test of Time Award Lecture*, Conference on Neural Information Processing Systems (Dec. 15, 2024), <https://www.youtube.com/watch?v=sJE8qZmQWGU>.

⁶² See, e.g., Nikita Bhatt et al., *A Data-Centric Approach to improve performance of deep learning models*, *Scientific Reports* 14, 22329 (2024), <https://doi.org/10.1038/s41598-024-73643-x> (showing that improving training data quality consistently leads to better model performance with less data).

Your engineers might be brilliant. But if you lack premium training data, can your AI product compete? It's like trying to enter the semiconductor manufacturing industry when your rivals control the world's lithium supply: technically possible, but likely economically nonviable. Training data scarcity is already constraining AI development. Model developers are running out of high-quality text on the internet.⁶¹ The best datasets – medical imaging libraries, proprietary financial data, edge-case autonomous vehicle scenarios – are increasingly locked behind institutional walls or prohibitively expensive to collect. Sample efficiency matters tremendously: models trained on higher-quality, more representative data achieve better performance with less data, a crucial advantage as compute costs continue to rise.⁶² The legal uncertainty around training data presents an added challenge. Courts are still deciding whether training AI on copyrighted content constitutes fair use.⁶³ If they rule narrowly, vast swaths of web-scraped training data could become unusable overnight, forcing developers to obtain licenses from copyright holders.⁶⁴ This would, in turn, dramatically increase data costs.

It could also create an AI market that favors players with large, valuable, proprietary databases, and companies with the resources to negotiate licenses at scale. The entire competitive landscape could shift based on how judges interpret copyright doctrine. While antitrust practitioners and enforcers recognize that data confers competitive advantages, the analytical vocabulary to define data as a product market is underdeveloped. Scholars have debated for over a decade whether a “market” for data can exist when most data isn't traded as a stand-alone product.⁶⁵

When the European Commission reviewed Google's Fitbit acquisition, it imposed data separation requirements to prevent Google from using Fitbit health data for advertising, effectively acknowledging data's competitive significance, but analyzed these concerns within markets for wearables and online advertising.⁶⁶ An analysis of the relevant market for data becomes critical in AI, where the market for medical diagnostics training data is distinct from the autonomous vehicles data market or that of generative art.

Without tools to distinguish between fundamentally different types of training data, regulators risk missing where competition actually occurs. Of course, though it is increasingly clear that training data can be where barriers to entry crystallize and the concentration of power in AI and downstream AI markets occurs, creative disruption through zero-to-one technologies can alter these market dynamics. Synthetic data technologies, for example, which can replicate or exceed real-world data utility, could potentially democratize AI development by increasing access to high-quality, targeted training data.

2. The reality of AI is this: AI is only as capable as the data on which it is trained.

Data determines sample efficiency. Data determines generalization. Data determines which companies can enter markets and which face insurmountable barriers. And this is only becoming truer. We're witnessing fundamental shifts in how AI systems learn. Dr. Fei-Fei Li's work on “world models” (that is, AI systems that build internal representations of physical reality) underscores how specialized, high-fidelity training data is essential for next-generation applications.⁶⁷ And the industry's shift to reinforcement learning (RL) heightens the stakes of much needed training data analysis, as RL systems rely on ongoing access to interaction data, human or AI-generated reward signals, and operational environments rather than static datasets.

This article's call is straightforward: to understand competition in AI markets, practitioners must develop a nuanced framework for classifying training data based on its actual attributes, including purpose, source, structure, processing, generation method, sensitivity, ownership, and accessibility. Only then can we properly evaluate market power, assess substitutability, and craft effective policy. A one-size-fits-all approach to training data fails to capture critical distinctions that shape competition in AI-driven industries.

2.1. A Taxonomy for Training Data Markets

So, how should we think of training data? Training data isn't a single product market, it's a constellation of distinct markets defined by specific attributes.⁶⁸ Think of it as the difference between 'food' (too broad) and 'organic wheat for artisan bread production' (specific enough to analyze competitively). Here's how we can break it down: Purpose: Understanding the AI Training Pipeline The most fundamental classification asks: How will this data be used in the training workflow? Modern AI development follows a general pipeline with distinct stages, each requiring different types of data. At a macro-level:

- Pre-training data forms the foundation. This is where models learn general patterns and representations, typically through unsupervised learning on massive, unlabeled datasets. OpenAI's GPT-3 trained on essentially "the whole internet", in a combination of Common Crawl, WebText2, and Wikipedia.⁶⁹ In computer vision, foundational architectures like ResNet trained on ImageNet, a massive repository of manually labeled images organized using the WordNet hierarchy.⁷⁰ The key feature of robust pre-training datasets is volume. Almost always, larger datasets yield better downstream performance.⁷¹ However, diversity and quality should not be discounted. Recent research into sample efficiency suggests that even in pre-training, thoughtfully curated smaller datasets may outperform larger, noisier ones.⁷²
- Post-training data serves an entirely different function. This is where models get refined for specific tasks through supervised fine-tuning (SFT) or reinforcement learning (RL). Fine-tuning data must be high-quality, meticulously labeled, and directly aligned with the model's intended application. While pre-training might use billions of tokens, fine-tuning can succeed with just thousands of carefully curated examples. A developer training a lung tumor detection model might fine-tune a pre-trained ResNet on a small, targeted dataset of annotated MRI images.

The rise of reinforcement learning (RL) paradigms for training adds another layer of complexity.⁷³ RL moves the AI from systems that passively predict to agents that actively learn, adapt, and optimize against explicit goals. RL datasets need to enable agents to learn through sequential decision-making, where actions influence future states and rewards. Unlike the static collections typical of supervised learning, RL datasets form dynamically as agents interact with environments. The training data here consists of state representations, action choices, reward signals, and environment transitions, most of which are generated within simulated environments. Effective RL datasets must capture long-term dependencies, delayed rewards, exploration-exploitation trade-offs, and high-dimensional state spaces.

A developer training an autonomous warehouse robot under supervised learning needs millions of labeled images. Under RL, that same developer needs a high-fidelity warehouse simulator and billions of training episodes on compute clusters. The bottom line: The purpose of the data fundamentally shapes its characteristics, quality requirements, and competitive substitutability.

2.2. Source, Structure, Cleaning and Processing, Sensitivity, and Ownership and Accessibility

Beyond purpose, training data can be classified along several other dimensions that significantly impact competitive dynamics and substitutability. Each attribute below represents a distinct lens through which to evaluate whether datasets serve the same market:

⁷¹ Rahim Entezari, *The Role of Pre-Training Data in Transfer Learning* (Mar. 1, 2023), <https://arxiv.org/abs/2302.13602> (“We find that pre-training on a well-curated dataset leads to better transfer accuracy than pre-training on a noisy dataset of a similar size...[however] our investigations also show that pre-training on a 15x-2000x larger but noisier dataset can [match the performance of supervised ImageNet pre-training].”).

⁷² Elvis Dohmatob et al., *Why Less is More (Sometimes): A Theory of Data Curation*, arXiv (Nov. 5, 2025), <https://arxiv.org/abs/2511.03492>; Chenda Li et al., *Less is More: Data Curation Matters in Scaling Speech Enhancement*, arXiv (June 30, 2025), <https://arxiv.org/html/2506.23859v1>.

⁷³ See Elena Ponte, *Reinforcement Learning: A Paradigm Shift in AI Training and its Competitive Implications*, U. Md. J. Bus. & Tech. L. (forthcoming 2026).

Attribute	Key Questions	Key Distinctions	Competitive Implications
Source	Where and how was the data gathered? By whom?	<p>Collection location: Geographic diversity affects model performance. Datasets predominantly sourced from certain regions may lack diversity, causing models to underperform when applied to data from areas underrepresented in the training dataset. In addition, the device used to collect the data may also influence the composition of a dataset.</p> <p>Collection method: Random vs. stratified vs. convenience sampling may affect bias. Temporal scope (static, time-series, real-time) can affect relevance and cost.</p> <p>Collecting entity: The individuals or organizations responsible for collecting data can significantly influence the dataset's attributes. Their choices regarding where the data is collected and how it is collected can introduce biases and affect data quality. Datasets are frequently categorized as first-party (direct), second-party (partner-shared), or third-party (purchased) data.</p>	<p>Datasets are not substitutable across geographic contexts. Cultural and socioeconomic contexts existing where the data is collected can similarly influence data characteristics. Additionally, data collected on the edge, by IoT devices, wearable technology, industrial machines, or autonomous vehicles is specific and not substitutable. This type of data may be challenging to collect and require specialized hardware and infrastructure, making it more expensive. Further, the methods used to select subsets of data from an entire population determine how representative the data is and directly affects the model's bias, diversity, and capabilities. Also regarding collection method, gathering and assembling real-time datasets has expensive infrastructure and computational demands. Finally, collection entity may pose additional burdens on the data user to ensure they meet regulatory standards.</p>
Structure	How is the data organized?	<p>Training datasets can also be classified based on whether they are structured or unstructured.</p> <p>Structured data refers to highly organized data that is formatted into predefined, fixed schema, such as tables with rows and columns, that provide defined relationships between data points. This type of data is easier for supervised learning with minimal preprocessing.</p> <p>Unstructured data lacks organization, this is data like images, audio, videos, text. It captures contextual information ideal for NLP and computer vision. Semi-structured data is a middle ground with organizational properties (JSON, XML, CSV).</p>	<p>Structured data may fail to capture qualitative or complex relationships and is often more liable to privacy or security concerns. Unstructured data requires extensive preprocessing and labeling steps, as well as significant storage infrastructure. Generally, semi-structured data is readable and interpretable without requiring extensive preprocessing but requires more computational resources than structured data to parse and analyze. Different use cases demand different structures.</p>

Attribute	Key Questions	Key Distinctions	Competitive Implications
<p>Cleaning and Processing</p>	<p>Has the data been cleaned? Was any processing/transformation of the data done (e.g., tokenization, tagging, feature extraction, or removal of instances)? Is there a label or annotation associated with each instance that comprises the dataset?</p>	<p>Raw vs. processed: Raw data requires cleaning (handling missing values, removing outliers, correcting inconsistencies) and transformation (encoding, tokenizing, feature extraction).</p> <p>Labeling and annotation: Labels represent ground truth. Annotations provide metadata for complex tasks. High-quality labels minimize bias.</p>	<p>The labor and cost of data labeling is enormous, creating a critical bottleneck in ML development. Pre-labeled, high-quality datasets command premium value.</p>
<p>Sensitivity</p>	<p>Does the dataset contain confidential or sensitive data?</p>	<p>Public/non-sensitive: Publicly available with no risks (government datasets, open-source datasets, synthetic data).</p> <p>Internal/confidential: Trade secrets, IP, business strategies. Unauthorized disclosure causes competitive harm.</p> <p>Protected: Subject to legal protections: PII, health data (HIPAA), financial data, children's data (COPPA), classified information.</p>	<p>Developers requiring protected data (e.g., medical AI) must comply with regulations and apply anonymization, making it non-substitutable with public data. Compliance costs create barriers to entry.</p>
<p>Ownership and accessibility</p>	<p>Is the dataset distributed under copyright or IP license? What terms of use govern it? Are there any restrictions to downstream use of the dataset?</p>	<p>Open data: Freely available without significant restrictions. May require attribution or Creative Commons licenses.</p> <p>Proprietary data: Owned with restricted access. May be strictly proprietary or licensed under specific terms prohibiting commercial use, redistribution, or derivative works.</p>	<p>Licensing agreements dictate how data can be used, shared, and modified, and failing to comply with these terms can lead to legal and ethical complications. For example, proprietary data or datasets under restrictive licenses may prohibit commercial use, redistribution, or derivative works, limiting the scope of models trained on such data. Dataset ownership affects maintenance and updates.</p>

2.3. Synthetic Elements

Here we reach the classification that may prove most transformative: the degree to which data is synthetically generated. Let's back up: data can either be real-world (gathered) or synthetic (artificial). Distinguishing different types of synthetic data is best done with respect to how dependent, or reliant, the synthetic data is on real-world data. At one end of the spectrum, data augmentation creates synthetic data by modifying collected data through transformations like rotated images or paraphrased sentences, maintaining the statistical properties of the original dataset. Data augmentation frequently combines real-world and synthetic data to boost representation of undersampled groups.

Moving along, model-based generators create completely artificial data by learning statistical patterns from real-world datasets. For example, Datagen scanned hundreds of real people's faces to train a generator that can create millions of new identities.⁷⁴ Different from model-based generators, Generative Adversarial Networks (GANs) were a groundbreaking ML framework that played a pivotal role in generating synthetic data. GANs consist of two neural networks, a generator and discriminator, trained simultaneously in competitive process. They are prominent because they can close the sim-to-real gap.⁷⁵

Currently riding a wave of popularity, knowledge distillation utilizes synthetic data technologies to generate compact, high-quality synthetic datasets from larger datasets, using a larger pre-trained model (the teacher) to generate outputs that guide training of a smaller model (the student), as exemplified by Stanford's Alpaca project.⁷⁶ Finally, at the far end of the spectrum, simulators create entirely new virtual worlds from which synthetic data can be harvested, generating data based on world rules rather than extrapolating from existing datasets. Simulators allow data scientists to manipulate parameters and generate data under specific conditions, making it possible to study edge cases or rare events that would take human-years to collect naturally, and generate decades worth of data in seconds.

3. Why Synthetic Data is Important

The AI industry is undergoing a fundamental shift to true agentic AI, where systems are capable of autonomous goal-setting, decision-making, and execution, and then to physical AI, where embodied systems interact dynamically with the real world.⁷⁷ Training robots to manipulate

⁷⁴ Sam Forsdick, *Artificial Advantage: Can Synthetic Data make AI Less Biased?*, *Raconteur* (Aug. 1, 2022) <https://www.raconteur.net/technology/artificial-advantage-can-synthetic-data-make-ai-less-biased>.

⁷⁵ Norman Ponte, *Short Intro to GANs*, *Medium* (May 19, 2021) <https://normponte.medium.com/short-intro-to-gans-9359c888b806>.

⁷⁶ Rohan Taori et al., *Stanford Alpaca: An Instruction-following LLaMA Model*, *GitHub* (2023) https://github.com/tatsu-lab/stanford_alpaca.

⁷⁷ Sean Kinney, "NVIDIA CEO Jensen Huang sees agentic AI and AI-enabled robotics as a multi-trillion dollar opportunity" *RCRWireless News* (Jan. 10, 2025), <https://www.rcrwireless.com/20250110/ai-ml/nvidia-charts-a-course-from-agentic-ai-to-physical-ai>.

objects with human-like dexterity requires understanding friction, inertia, and deformation across infinite variations of objects, grips, and environmental conditions. Collecting real-world data for every possible scenario is prohibitively expensive and time-consuming. Synthetic data isn't just convenient, it's often the only viable path to training sufficiently robust models for a physical future.⁷⁸

Synthetic data transforms training data markets by delivering both expanded access and fundamental technical advantages. On the access side, it overcomes scarcity where real-world data is rare or expensive, for example, the U.S. NIH Clinical Center used synthetic chest X-rays to train AI for detecting tuberculosis in underrepresented populations,⁷⁹ while solving privacy barriers for GDPR, HIPAA, and CCPA compliance by providing statistically similar data containing no real-world information. But the deeper technical advantages are what make synthetic data genuinely transformative. Computers creating synthetic scenes possess perfect state knowledge, enabling annotations that capture not just visible features but underlying physics. Practitioners can deliberately generate edge cases, those rare events crucial for model performance that explain why autonomous vehicle companies were early adopters. Domain randomization – manipulating background, lighting, and environmental features – produces more robust models by preventing spurious correlations, even when the data isn't photorealistic. For robotics especially, synthetic data offers an essential iterative advantage, the ability to generate, modify, and augment data repeatedly as needs evolve, all without needing to invest in storage infrastructure. Perhaps most powerfully, synthetic data enables deliberate creation of balanced, representative datasets, allowing developers to reduce bias by determining the world they want their models to see.

These advantages come with meaningful limitations. Synthetic data generation techniques may fail to capture complex real-world patterns, as illustrated by IBM Watson Health's early struggles when training on synthetic scenarios that didn't represent real clinical complexity, leading to inappropriate treatment recommendations.⁸⁰ Where synthetic data derives from biased real-world data, those biases can be amplified during generation without explicit intervention. Privacy risks persist even with synthetic data; poorly designed techniques may retain patterns enabling re-identification attacks, and even synthetic genetic data may not fully protect participants. Intellectual property concerns also remain: synthetic data can be model-generated, yet when derived from copyrighted material, courts could still find copyright violations if the synthetic data closely resembles original works or reproduces distinctive elements.

⁷⁸ Khaled El Emam, *Accelerating AI with Synthetic Data: Generating Data for AI Projects*, O'Reilly Media, at 34-36 (2020), https://www.nvidia.com/content/dam/en-zz/Solutions/deep-learning/resources/accelerating-ai-with-synthetic-data-ebook/accelerating-ai-with-synthetic-data-nvidia_web.pdf.

⁷⁹ NIH Clinical Center, *NIH Clinical Center Provides One of the Largest Publicly Available Chest X-Ray Datasets to the Scientific Community*, NIH.gov (Sept. 26, 2017) <https://www.nih.gov/news-events/news-releases/nih-clinical-center-provides-one-largest-publicly-available-chest-x-ray-datasets-scientific-community>.

⁸⁰ Sandeep Konam, *Where did IBM go wrong with Watson Health?*, Quartz (Mar. 2, 2022) <https://qz.com/2129025/where-did-ibm-go-wrong-with-watson-health>.

3.1. Market Structure Implications of Synthetic Data

These technical capabilities and limitations of synthetic data can shape training data market structures in consequential ways. Synthetic data generation itself requires sophisticated capabilities: advanced generative models trained on extensive real-world data, deep domain expertise, and substantial computational resources. This creates potential for concentration in synthetic data generation, where few providers could dominate the market. We're already seeing emergence of specialized synthetic data companies like Synthesis.AI, DataGen, and Gretel AI, alongside large players like NVIDIA investing heavily in sophisticated synthetic generation engines such as OMNIVERSE. The competitive question becomes whether synthetic data markets will prove more or less concentrated than traditional data markets. Moreover, hybrid approaches combining real-world and synthetic data are becoming standard practice, creating interdependencies between traditional data collectors and synthetic data generators with competitive dynamics that warrant close scrutiny.

4. Beyond the One-Size-Fits-All Approach for Training Data Markets

The AI revolution's competitive landscape is being determined now, in decisions about training data that receive far less attention than model releases. When we treat "training data" as a monolithic category, we miss critical competitive dynamics. Because not all training data is the same. A dataset's purpose, source, structure, processing, generation method, sensitivity, ownership, and accessibility fundamentally determine its competitive substitutability and strategic value.

Recent legal developments signal growing recognition that training data demands specific attention. The EU AI Act, which entered into force in August 2024 with the rules for general-purpose AI models taking effect in August 2025, imposes transparency obligations requiring providers to make publicly available detailed summaries about training content, including copyrighted material and synthetic data.⁸¹ In the United States, California has led state-level action with Assembly Bill 2013 requiring disclosure of training data information starting January 2026,⁸² and the Transparency in Frontier Artificial Intelligence Act mandating governance frameworks and transparency reports.⁸³ Yet these regulatory efforts, while representing progress, still lack the granular analytical frameworks necessary to distinguish between fundamentally different types of training data and their competitive implications.

As synthetic data reshapes the training data landscape, creating opportunities while potentially concentrating power in generation capabilities, we need analytical frameworks that capture these nuances. The classification system proposed here offers a starting point: a way to move beyond crude categories toward granular analysis. We are at an inflection point. The shift to RL paradigms, the development of world models, and the emergence of physical AI all heighten the competitive stakes. Understanding how different types of training data function in AI development becomes essential for properly defining relevant markets, assessing competitive dynamics, and crafting effective policy.

⁸¹ *EU Artificial Intelligence Act, art. 10(2)-(3), 53(1)(d), Reg. (EU) 2024/1689.*

⁸² *AB 2013, 2023–2024 Reg. Sess. (Cal. 2024).*

⁸³ *Transparency in Frontier Artificial Intelligence Act (SB 53), 2025–2026 Reg. Sess. (Cal. 2025).*

PART IV

Is Everything Justified for Environmental, Social, and Governance (ESG) Goals? Current Issues in the Relationship Between ESG Practices, Regulations and Competition Law

***by Dr. Muzaffer Eroğlu,
Boğaziçi University, Faculty of Law***

For much of the twentieth century, the prevailing economic model was unambiguous: corporations existed primarily to generate profit. Social and environmental concerns were regarded as the responsibility of the state, and unless governments imposed specific regulations, companies operated freely within the liberal market system, focusing exclusively on maximising shareholder returns. The twenty-first century, however, has ushered in a profound transformation. Business theory now encompasses stakeholder capitalism, also known as moral capitalism, in which companies are expected to address negative externalities, such as carbon emissions, human rights violations, and environmental degradation. This transformation has crystallised into the framework of environmental, social, and governance (ESG) practices, which evaluate companies not only on financial performance but also on their impact on society and the planet.

Although ESG was initially welcomed as a positive evolution of corporate responsibility, it has recently provoked significant criticism. In the United States, a political and legal backlash known as the anti-ESG movement argues that ESG prioritises political agendas over financial returns and consumer welfare. This debate has escalated into a political conflict with tangible legal consequences. Investigations by the House Judiciary Committee into major investment firms highlight concerns that coordinated efforts to reduce emissions may constitute antitrust violations. When competitors collectively agree to decarbonise, they may restrict fossil fuel supply and raise energy prices, behaviour that resembles cartel activity.

The most contentious aspect of this debate is the notion of the so-called green cartel. Competition law traditionally treats agreements that fix prices or restrict supply as per se violations. Critics argue that many sustainability agreements fall into this category, masking anti-competitive behaviour under the guise of environmental goals. Risks include competitors agreeing on minimum prices for sustainable products, collective decisions to phase out non-sustainable products, and collusion that suppresses innovation. The European Union's AdBlue case,⁸⁴ in which Daimler, BMW, and Volkswagen were fined for colluding to limit the use of emissions-cleaning technology, exemplifies how agreements intended to promote sustainability can be interpreted as restrictions on competition. Boycotts present another risk. When companies collectively refuse to purchase from suppliers who fail to meet environmental standards, such as in the Amazon Soy Moratorium, the practice can be legally classified as a purchasing cartel. Farmers in Brazil challenged the moratorium, arguing that it exceeded national law and resulted in billions of dollars in losses, thereby illustrating the fine line between environmental initiatives and illegal commercial boycotts.

⁸⁴ <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021AT40178%2802%29>

Information sharing also raises concerns in ESG practices. Sustainability goals require companies to measure and report emissions, often through platforms or associations. When competitively sensitive information, such as costs, production capacities, or investment plans, is shared through the platforms or associations, it can lead to hub-and-spoke cartel structures. Even indirect coordination through shared benchmarks may result in aligned strategies that restrict competition. Litigation in the United States demonstrates how these issues have moved beyond theory. Republican state attorneys general have begun framing ESG initiatives as conspiracies against the fossil fuel industry. Cases such as *Texas v. BlackRock*, *State Street*, and *Vanguard* allege that asset managers used shareholder power to force coal companies to reduce production, thereby inflating energy prices. Similar investigations into clean truck partnership agreements highlight the risk that companies acting on good intentions may nonetheless face antitrust lawsuits.

Underlying these disputes is a philosophical question about the purpose of competition law. The market-centric view holds that competition law should focus exclusively on consumer welfare, ensuring low prices, high quality, and choice. Environmental externalities, according to this perspective, should be addressed through innovation and market competition rather than cooperation. Proponents of ESG, by contrast, argue for a broader definition of welfare that encompasses citizen well-being, including clean air, human rights, and sustainability. They argue that competition law should not hinder agreements that yield substantial social benefits, even if they lead to higher prices. Yet quantifying non-economic benefits remains difficult. The Dutch “Chicken of Tomorrow” case illustrates this challenge, as regulators blocked an agreement to improve animal welfare because the consumer price increase was deemed disproportionate to the perceived value of the welfare improvements.

Global approaches to addressing ESG matters in competition law and policy diverge sharply. The European Union is working to establish safe harbours and guidelines for sustainability agreements, while the United States is intensifying scrutiny and using antitrust law against ESG initiatives. This divergence leaves businesses in an unstable position, as actions welcomed in Brussels may be prosecuted in Texas. In such a differentiated regulatory climate, companies cannot rely on willingness alone to justify sustainability collaborations. The principle that good faith does not absolve one from responsibility for competition underscores the need for precise antitrust compliance. Every green agreement carries the risk of becoming a green antitrust case, and businesses must navigate this uncertain terrain with cautiousness.

Beyond the Green Image: The Real Economics of Retail Sustainability

***by Elif Acelya Balkı,
Head of Antitrust at Migros Group***

In the modern corporate landscape, companies often present sustainability as a moral imperative. However if we pull back the curtain to reveal the pragmatic reality, we can see that undertakings do not have hearts and souls but have economic motivations. Economic benefits, collected either unilaterally by the undertaking itself or collectively as a sector/group of undertakings, motivate the undertakings for sustainability issues. That said, evaluation of these two cases by antitrust rules would be completely different.

The first major driver for corporate sustainability might be the competitive advantage it creates in favor of the undertaking's brand image. A specific example, namely Migros' Green Lentils Project, may be more straightforward to elaborate: Migros partnered with public and private entities in Kayseri, a hub for sugar production in Türkiye. The challenge was agricultural: sugar beets are demanding crops that deplete the soil, requiring the land to rest for a year between cycles. Migros' Project suggested green lentils as an "inter-crop" to be planted during the resting year. Lentils naturally fix nitrogen, improving soil health and fertility. This allows farmers to generate income during what would otherwise be a "dead" year. Also, historically, Turkish lentil production was decimated by cheaper imports from Canada. By guaranteeing the purchase of these local lentils, Migros is not only restoring soil health but also reviving local production and reducing reliance on imports.

This case demonstrates that sustainability is most effective when it aligns with economic logic. It does not only improve local production and farmer welfare but also boost the brand's reputation among conscious consumers and creates a consumer awareness on sustainability matters. While individual projects like Green Lentils do not raise eyebrows in terms of antitrust law, structural issues like zero-pesticide products require sectoral collective action, a move that is often blocked by antitrust law.

Even though supermarket chains make up only 15% of the fresh fruit and vegetable market in Türkiye, consumers demand zero-pesticide products from supermarkets as they are the most organized part of the market (the remaining 85% is sold through open bazaars and wholesalers which face less scrutiny). So what if all supermarkets agreed to sell only zero-pesticide products? Such an agreement would likely be notified to the Turkish Competition Authority (TCA) for individual exemption evaluation, as such an agreement would result in competitors setting a standard that raises prices. TCA would probably take a deeper dive to conclude on whichever to prioritize, public health or economic efficiency. There are not many rulings concerning the balance of public concerns, therefore it is hard to foresee the potential jurisprudence in advance.

In short, to understand how the authorities would overlook sustainability and antitrust overlaps, it boils down to the parties who are involved in the sustainability project. Indeed, it is not limited to the parties but the next step to take would be striking the balance between the economic benefits/efficiency and environmental, public health or public order improvements. Apparently this is where everything gets more complicated.

Sustainability Claims in the Shadow of Competition Law: A practical guide to what's allowed and what's risky

**by Dr. Hanna Stakheyeva,
Knowledge Counsel, ACTECON**

1. Introduction

Sustainability collaborations are increasingly central to corporate strategies, but they sit under a bright antitrust spotlight. Since 2023, the European Commission has clarified when “green” cooperation is acceptable, offered informal guidance letters to give comfort in novel cases (July 2025), and opened a wideranging review of merger guidelines with sustainability and resilience in scope (May 2025). National authorities like the Dutch ACM and the UK CMA are also shaping practice, sometimes more permissively. This article distills the current landscape across horizontal agreements, information exchange, unilateral conduct, enforcement against “green cartels,” sectorspecific rules for agriculture, and mergers.

2. Horizontal “green” cooperation

The 2023 EU Horizontal Guidelines introduced a full chapter on sustainability agreements,⁸⁹ alongside longstanding frameworks for R&D, joint purchasing, and standardisation. The Commission explains: some sustainability agreements fall outside Article 101(1) TFEU (e.g., agreements only about internal conduct; compliance with binding international rules; industrywide awareness campaigns without joint advertising; collective databases about supplier sustainability), because they do not affect key competition parameters such as price, output, quality, choice or innovation. Where cooperation does affect competition, parties may still self-assess exemption under Article 101(3) - but benefits must be verifiable, indispensable, and passed on in a substantial way to the consumers affected; the Guidelines give examples and analytic tools (including how to think about “collective benefits” like cleaner air when they overlap with the relevant consumers). The Commission also encourages parties to seek informal guidance in novel situations.⁹⁰

Standardisation & the soft safe harbour. Sustainability standardisation agreements can enjoy a soft safe harbour if they are open, transparent, nonbinding, with no exchange of competitively sensitive information, and allow members to develop alternative standards - illustrated with

⁸⁹ *The Guidelines include a broad definition of “sustainability”, which encompasses activities that support economic, environmental and social development (including labour and human rights development). Similarly, “sustainability agreements” are defined as “any horizontal cooperation agreement that pursues a sustainability objective, irrespective of the form of the cooperation”. In this article we will focus mostly on the environmental aspect of the agreements. // Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements (2022/C 164/01), para. 551. Also see https://www.slaughterandmay.com/insights/importedcontent/european-commission-clarifies-sustainability-rules-in-revised-horizontal-guidelines/#_ftn2*

⁹⁰ *Questions and Answers on adoption of the new Horizontal Block Exemption Regulations and Horizontal Guidelines // https://ec.europa.eu/commission/presscorner/api/files/document/print/en/qanda_23_3014/QANDA_23_3014_EN.pdf*

examples (e.g., phasing out lowefficiency devices by setting minimum sustainability thresholds rather than fixing prices). Counsel should document openness, stakeholder participation (including NGOs where relevant), and the absence of price/output coordination. So, to simplify, if your initiative aims to phaseout lowefficiency washing machines via a voluntary standard, keep it nonbinding, open to all producers, ensure independent testing criteria, and prohibit any exchange on future pricing or output. These elements speak directly to the soft safe harbour conditions.

3. Informal guidance letters - DG COMP is finally giving comfort

In July 2025, the Commission issued its first two informal guidance letters under the 2022 Notice on Informal Guidance:

- APM Terminals (ports) - joint purchasing and minimum technical specifications for batteryelectric straddle/shuttle carriers (to accelerate the shift from diesel). The letter indicates no concerns under Article 101 if safeguards apply: independent purchasing freedom, cap on pooled demand, strict limits on sensitive information exchange. Guidance applies for five years in the EEA.⁹¹
- Automotive Licensing Negotiation Group (ALNG) - a joint licensee negotiation group for SEPs in automotive (e.g., 5G connectivity), with conditions: <15% combined share in the upstream licensing market, open participation, voluntary negotiations for SEP holders, and no exchange of commercially sensitive information among ALNG members. The letter frames efficiency and competitiveness objectives, including facilitating decarbonisation through digitalisation.⁹²

Several lawfirm and policy briefs parse these letters and their implications.⁹³ They underscore that comfort letters are back as pragmatic tools to derisk innovative “green” cooperation.

4. National “outliers” and convergence (ACM, CMA vs EU)

The Netherlands (ACM) - the 2023 Policy Rule signals a more permissive stance in two extra scenarios (beyond the EU Guidelines): ACM may decline enforcement for (i) agreements ensuring compliance with binding sustainability rules that are not fully implemented/enforced, and (ii) environmental damage agreements where consumers in the relevant market receive an appreciable part of benefits. This builds on ACM’s experience (and debates sparked by the

⁹¹ *Commission provides guidance on sustainability agreement to reduce CO2 emissions in European ports* https://ec.europa.eu/commission/presscorner/api/files/document/print/en/ip_25_1769/IP_25_1769_EN.pdf

⁹² *Commission provides guidance on the creation of a licensing negotiation group in the automotive sector for the licensing of standard essential patents* https://ec.europa.eu/commission/presscorner/api/files/document/print/en/ip_25_1768/IP_25_1768_EN.pdf

⁹³ <https://www.crowell.com/en/insights/client-alerts/the-european-commission-issues-competition-guidance-in-the-transport-sector> or <https://www.arnoldporter.com/en/perspectives/blogs/environmental-edge/2025/07/first-informal-guidance-letters-sustainability-related-agmts>

aborted “Chicken of Tomorrow” initiative, where sustainability objectives clashed with restrictions on competition). Counsel should note ACM’s opendoor approach - but also that EUwide initiatives must still meet EU standards.⁹⁴

United Kingdom (CMA) - the Green Agreements Guidance⁹⁵ (Oct 2023) adopts an opendoor policy and a more permissive approach for climate change agreements, including assurances against fines when businesses prediscuss and address concerns. The CMA explains which agreements are unlikely to infringe (internal conduct; pooling funds to mitigate emissions; standards; phasing out nonsustainable products) and how to selfassess those that might restrict competition.⁹⁶ So where does EU sit relative to ACM/CMA? The EU Horizontal Guidelines remain stricter on “outofmarket” benefits and insist that benefits substantially reach the affected consumers. ACM and CMA are experimenting with prioritisation and climate carveouts, respectively. For crossborder projects, structure them to satisfy EU core tests even if a national authority offers extra comfort.

5. Article 102 TFEU and sustainability: justification or pretext?

The Commission is drafting Guidelines on exclusionary abuses under Article 102 TFEU (consultation 2024; debate continues). Commentators note the limited express treatment of sustainability in the current drafts and ask whether - and when - sustainability objectives can form an objective justification for conduct that may exclude rivals (e.g., access limits to “dirty” inputs, selfpreferencing “green” products). The orthodox test still requires competition on the merits and consumeroriented harm analysis; authorities remain wary of “greenwashing” defenses.⁹⁷

Economic and legal analyses⁹⁸ recommend clarifying how sustainability fits at three stages: (i) indicators of dominance; (ii) whether conduct is liable to be abusive; (iii) objective justification or efficiencies. Expect the final Guidelines to articulate rebuttable presumptions carefully and to keep sustainability claims tethered to verifiable consumer benefits, not mere corporate narratives.

6 “Green cartels” & “antigreen” conduct - enforcement heat map

Agencies will not hesitate when “sustainability” becomes cover for coordination or suppression of greener competition:

- Endoflife vehicles (ELVs) cartel - On 1 April 2025, the Commission fined 15 carmakers and ACEA EUR 458m for collusion over ELV recycling, including agreements not to pay dismantlers and not to promote recycling performance or recycled content - seen as suppressing consumer awareness of environmental quality. Parallel fines came from the UK CMA.⁹⁹

News coverage highlights the Commission’s stance that “green” messaging cannot be coordinated to mute competition and consumer choice on environmental attributes.¹⁰⁰

- “Car emissions” (diesel) decision - A prior landmark (2018/2020) shows a long enforcement arc around emissions technologies - relevant when companies coordinate to limit cleaner tech or slow innovation. The theme: do not use sustainability language to justify output/quality restrictions or information exchanges that reduce competitive pressure to go beyond legal baselines.

So “green” can be anticompetitive when it limits rivalry on environmental performance or shifts costs unlawfully; compliance teams should map any sustainability collaboration against marketing claims, consumer information, and cost-allocation rules.

7. Agriculture’s special rule (Article 210a CMO): when sustainability agreements can restrict competition

Article 210a CMO (common organization of the markets) creates a novel exclusion from Article 101(1) for agricultural sustainability agreements that are indispensable to achieving higher-than-mandatory sustainability standards (environmental protection, reduced pesticide/antimicrobial use, animal health/welfare). The Commission’s December 2023 Guidelines clarify scope (must include agricultural producers; must relate to agricultural products), eligible objectives, and indispensability at both agreement and restriction level. Agreements may include restrictions of competition if indispensably required to reach the higher standard.¹⁰¹ Commentary notes the unique EU approach in agrifood compared to general horizontal rules; undertakings should align any pre-guidelines deals and consider seeking Commission opinions for further comfort.¹⁰²

8. Information exchange for ESG purposes - clean data vs. clean room

Sharing ESG-related data (e.g., emissions factors, supplier audit results, “green premium” cost components) can be procompetitive (reduces asymmetry, enables benchmarking). But the 2023 Horizontal Guidelines significantly expand the information-exchange chapter: exchanges of

⁹⁴ Policy rule ACM’s oversight on sustainability agreements

<https://www.acm.nl/en/publications/policy-rule-acms-oversight-sustainability-agreements>

⁹⁵ Green Agreements Guidance, https://assets.publishing.service.gov.uk/media/6526b81b244f8e00d8e742c/Green_agreements_guidance_.pdf

⁹⁶ CMA launches Green Agreements Guidance to help businesses co-operate on environmental goals, <https://www.gov.uk/government/news/cma-launches-green-agreements-guidance-to-help-businesses-co-operate-on-environmental-goals>

⁹⁷ See Pinar Akman, Chiara Fumagalli, Massimo Motta, *The European Commission’s draft guidelines on exclusionary abuses: a law and economics critique and recommendations*, *Journal of European Competition Law & Practice*, Volume 16, Issue 4, June 2025, Pages 234–243, <https://doi.org/10.1093/jeclap/lpaf020>. See also https://competition-policy.ec.europa.eu/public-consultations/2024-article-102-guidelines_en

⁹⁸ <https://www.oxera.com/insights/agenda/articles/grey-or-green-giants-sustainability-and-exclusionary-abuse-of-dominance-under-article-102-tfeu/> See also Pinar Akman, Chiara Fumagalli, Massimo Motta, *The European Commission’s draft guidelines on exclusionary abuses: a law and economics critique and recommendations*.

⁹⁹ Commission fines car manufacturers and association €458 million over end-of-life vehicles recycling cartel https://ec.europa.eu/commission/presscorner/api/files/document/print/en/ip_25_881/IP_25_881_EN.pdf

¹⁰⁰ <https://www.politico.eu/article/eu-fines-big-carmakers-e458m-for-green-cartel/>

commercially sensitive information (current/future prices, output, capacity, demand forecasts, customer lists, strategy) can be “by object” infringements in certain settings. The Commission details age/aggregation thresholds, hubandspoke risks, public announcement signaling, and riskmitigation (clean teams, thirdparty trustees, robust aggregation, delays, anonymisation). There is no safe harbour for information exchange based on market shares.

Do’s/Don’ts (for ESG data rooms):

- Do: aggregate historic emissions and audit metrics; use thirdparty platforms; limit fields to what’s objectively necessary; adopt cleanteam protocols; predefine permissible queries.
- Don’t: share forwardlooking pricing/output, specific supplier terms, or any companylevel contemporaneous data that could steer market conduct.

9. Mergers & sustainability: is a wave coming?

The Commission launched a comprehensive review of the Merger Guidelines (May–Sept 2025 consultations). The focus papers ask how to consider innovation, resilience, and sustainability/clean tech in merger analysis; they explore dynamic effects, efficiencies, and whether broader policy considerations can be reflected while staying within the EUMR framework and CJEU limits. Stakeholder briefs suggest revised guidelines will not arrive before 2027, but the Commission may test approaches in ongoing cases. Counsel should prepare evidence on innovation and sustainability effects (quality improvements, resilience of supply, investment cycles) that can move the needle under classic efficiency and nonprice competition tests.¹⁰³

The Commission’s “listening mode” and hint at rebuttable presumptions for some harms, balanced with openness to innovation/sustainability defenses - yet outofmarket benefits will remain tricky.

¹⁰¹ *Commission adopts antitrust Guidelines for sustainability agreements in agriculture* // https://ec.europa.eu/commission/presscorner/api/files/document/print/en/ip_23_6370/IP_23_6370_EN.pdf See also <https://eur-lex.europa.eu/eli/C/2023/1446/oj/eng>

¹⁰² *New EU Antitrust Regime for Agricultural Cooperation – Green Shoots*// <https://legalblogs.wolterskluwer.com/competition-blog/new-eu-antitrust-regime-for-agricultural-cooperation-green-shoots/>

¹⁰³ *Review of the Merger Guidelines*
https://competition-policy.ec.europa.eu/mergers/review-merger-guidelines_en See also *Integrating resilience, innovation, and sustainability into EU merger control* // <https://www.aoshearman.com/en/insights/modernizing-eu-merger-control>

10. Practical checklist before you cooperate:

- ✓ Define the sustainability objective clearly (e.g., decarbonisation of port equipment; animal welfare standard above legal baseline).
- ✓ Choose the right instrument: standardisation (soft safe harbour), joint purchasing, collective database, awareness campaign. Align design to no price/output coordination.
- ✓ Map competition parameters affected; if any, plan an Article 101(3) efficiencies narrative: indispensability, passon to affected consumers, residual competition.
- ✓ Govern information: adopt clean teams, aggregate/historic data, thirdparty facilitation; prohibit future pricing/output/capacity exchanges.
- ✓ Consider informal guidance for novel designs (DG COMP or ACM/CMA opendoor). Document safeguards (caps, independence, voluntary participation).
- ✓ Avoid greenwashing risks: do not suppress environmental claims or coordinate to reduce consumer awareness; align with consumerlaw rules (green claims).
- ✓ Agriculture? Check Article 210a and indispensability for higher standards; include producers and ensure the product falls under CMO scope.
- ✓ Dominant firm? If conduct risks exclusion, prepare objective justification based on verifiable consumer welfare - be ready for scrutiny under Article 102 drafts.
- ✓ M&A planning: Build evidence files on innovation, quality, resilience, sustainability outcomes; anticipate 2025–2027 review trajectory.

11. Final thoughts

Sustainability cooperation is possible - and increasingly guided - if designed to preserve competition on price, output, quality, choice and innovation, and to deliver verifiable benefits to the consumers affected. The new comfort letters show DG COMP's willingness to support decarbonisation where robust safeguards exist. National regimes may offer extra room, but crossborder projects should be built to EU standards. For dominant firms, sustainability is not a shield against exclusionary conduct unless objectively justified and consumerbeneficial. And in mergers, prepare to evidence genuine innovation/resilience benefits as the guidelines evolve.

PART V

L'Oréal Sustainability Program: Balancing Transparency and Trust

*by Hande Karakulah,
Legal and Scientific Director and
Ethics Correspondent at L'Oréal*

Introduction

L'Oréal has a deep-rooted commitment to sustainability that dates back over 25 years. Our philosophy is simple yet powerful: we believe that economic performance and environmental and social responsibility are fundamentally linked. We started our sustainability journey in 1979 as one of the pioneers and strongly built the pillars over the years. After joining UN Compact in 2003 and publishing our first sustainability report in 2004, our sustainability commitments transformed into “Beauty for a Better Life” Program in 2009 where we have set our 2020 targets, upon reaching 2020 targets, we have launched “L'Oréal for the Future” program, which is our comprehensive roadmap to shape the future of beauty in a sustainable and inclusive way.

This program is built on three interconnected pillars:

1. Transforming our business to respect planetary boundaries: This is about fundamentally rethinking our operations to minimize our environmental footprint.
2. Empowering our ecosystem: Engaging our entire value chain – from suppliers to consumers – in this transformation.
3. Contributing to global challenges: Addressing pressing social and environmental issues beyond our direct business activities.

We are making significant progress on these ambitions. For example, by the end of 2024, 97% of the energy used at our operated sites came from renewable sources. We've also achieved a 51% reduction in Scope 1 & 2 greenhouse gas emissions compared to 2019, far exceeding our 2030 target. In our product formulations, 66% of ingredients are bio-based, derived from abundant minerals, or circular processes. Furthermore, we've made strides in packaging, with 37% of our plastic packaging now coming from recycled or bio-based sources.

Now, how do we communicate these efforts to our consumers? Transparency and clarity are paramount. We understand that consumers are increasingly seeking out sustainable choices, and we aim to empower them with reliable information.

A key initiative in this regard is our Product Impact Labelling system, which is based on rigorous scientific methods, including life cycle assessments. This system assigns an environmental performance rating from 'A' to 'E' to our products, making it easy for consumers to understand their environmental footprint. This labeling is now available on the product pages of 12 Group brands, across various categories and countries.

We also engage in continuous dialogue with our stakeholders and consumers through various channels. This includes:

- **Transparent reporting:** We publish detailed reports, like the Universal Registration Document, which outline our environmental, social, and governance impacts.
- **Partnerships:** We have established the EcoBeautyScore Association and invited many industry players to develop industry-wide methodologies for assessing environmental impact, ensuring our approach aligns with broader standards. This association now has more than 70 international cosmetics companies as members, which shows our genuine desire to transform the industry in an inclusive manner.
- **We are one of the founding partners of The Science Based Targets initiative (SBTi)** is a corporate climate action organization that enables companies and financial institutions worldwide to play their part in combating the climate crisis.
- **Digital platforms:** We leverage our digital channels, including our finance website, to provide accessible and up-to-date information on our sustainability performance.

In essence, L'Oréal is committed to creating beauty that is not only effective and safe but also responsible and respectful of our planet and its people. Our programs and communications are designed to reflect this commitment, fostering trust and enabling informed choices for everyone.

2. L'Oréal's Green Claims Scrutinized by Authorities

In 2023, shortly after the publication of the Green Claims Guideline, the Turkish Ministry of Trade, Advertisement Board, initiated an investigation into the claims that we were communicating in our websites. This was a critical process for us to demonstrate the veracity and robustness of our environmental commitments. It is important to emphasize this was the first time L'oreal's sustainability claims were challenged, it is accurate to say Turkish authorities were pioneers in protecting the consumers against misleading green claims; 1 year after Turkish Advertisement Board, UK's ASA also initiated a process, where we successfully justified all the claims, even with the know how accumulated during the investigation in Turkiye.

Claims that were questioned:

- **CO2 Emissions Reduction:** Between 2005 and 2020, our Group achieved a 78% absolute reduction in CO2 emissions in our plants and distribution centers, significantly exceeding our initial 60% target, even as our production volume increased by 37%. This figure was further improved to an 87% reduction by 2021.
- **Carbon Neutral Facilities:** By the end of 2019, 35 of L'Oréal's facilities, including 14 factories, had achieved carbon-neutral status, meaning they operate using 100% renewable energy.
- **Improved Product Environmental and Social Profile:** By the end of 2019, 85% of our new or renovated products had an improved environmental and social profile. This figure reached 96% by 2020.
- **Leading CDP Score:** L'Oréal is recognized as the only company to have achieved an "A" score for four consecutive years in CDP Carbon Disclosure Project, a non-profit organization that provides an environmental reporting framework for the private and public sectors, ratings across climate change, water management, and forest protection. This exceptional performance extended to nine consecutive years by 2024.

We successfully defended and substantiated all four of the claims that were under investigation by providing extensive documentation and adhering to the highest standards of transparency. Our defence was based on:

- **Audited Financial and Activity Reports:** We provided reports that are independently audited by reputable firms like Deloitte and PwC, as required by French Commercial Law and EU regulations for publicly listed companies. These reports are submitted to authorities like the AMF (Autorité des Marchés Financiers).
- **International Standards:** Our environmental performance metrics, such as CO2 emissions, are calculated and verified in accordance with internationally recognized standards like the GHG Protocol. This ensures that our data is comparable and credible on a global scale.
- **Detailed Scientific and Operational Data:** For each claim, we presented detailed scientific analysis and operational data, including specific details on CO2 emissions from our facilities, energy sources, product formulation improvements, and environmental certifications. For example, for CO2 emissions, we provided breakdowns for industrial and administrative sites, demonstrating how the reduction targets were exceeded.
- **Commitment to Ethical Advertising:** We emphasized our adherence to ethical advertising principles, ensuring that all our communications are truthful, accurate, and transparent.

The outcome of this investigation was positive: the Advertising Board accepted our defenses and substantiation for all the questioned claims. This re-affirmed that L'Oréal's reported achievements are accurate and that our communication practices are in line with regulatory expectations. This experience further underscores our commitment to transparent reporting and continuous improvement in our sustainability journey. Our sustainability claims are not merely aspirations; they are backed by concrete actions, rigorous data, and independent verification. We remain dedicated to leading the beauty industry towards a more sustainable future, with honesty and transparency at the core of everything we do. L'Oréal adheres to a strict set of principles for its green claims to ensure honesty, accuracy, and consumer trust, drawing from both internal policies and regulatory expectations:

- **Truthfulness & Accuracy:** All environmental claims must be fact-based, avoiding exaggeration or misleading impressions. Claims must be truthful, and even factually true statements must not create an overall deceptive impression. Vague or general terms like “eco-friendly” or “carbon neutral” are only used if demonstrably supported by measurable and verifiable data.
- **Substantiation / Proof:** Claims must be scientifically proven, preferably through independent sources, utilizing robust methodologies like Life Cycle Assessments (LCA), ISO standards (e.g., ISO 14021-14040-14044), and accredited laboratory data. Internal tools like SPOT (Sustainable Product Optimization Tool) are used to assess the environmental footprint of products across their life cycle, providing data for our Eco-Beauty Score.
- **Clarity & Transparency:** Avoid ambiguous, technical, or overly general language. The meaning, scope, and basis of any environmental claim must be clearly explained. Disclaimers and limiting notes must be presented legibly. Our Product Impact Labelling

system assigns clear A-E ratings to products based on environmental impact, making information transparent and comparable for consumers.

- **Completeness / No Omission:** Companies must not conceal negative environmental aspects of a product. A holistic view of environmental impact, considering the entire product life cycle, is crucial.
- **Life-Cycle Perspective:** Claims must consider the entire product life cycle, from raw material sourcing to disposal, ensuring that environmental impact is low across all stages if a product is touted as “environmentally harmless.”
- **Fair Comparison:** Any comparative claims must be based on consistent criteria and reliable, verifiable data, clearly stating reference products, periods, and calculation methodologies.
- **Independent Approval/Certification:** Logos, labels, or green badges must originate from genuinely approved and recognized third-party systems. We avoid self-created “eco-logos” or un-audited symbols.
- **Consistent Visual and Color Usage:** Marketing visuals and colors must be consistent with the actual environmental claims and should not misleadingly imply greener attributes if not factually supported.
- **Responsible Future Claims:** Forward-looking claims, such as “carbon neutral by 2030,” must be supported by concrete roadmaps, interim targets, and public reporting on progress, otherwise they are considered misleading.

L’Oréal’s commitment to these principles ensures that our sustainability communications are not only compliant with regulations but also build and maintain trust with our consumers and stakeholders in an increasingly complex and scrutinized environment. General rules on sustainability communications

- **Truthful.** Environmental claims must be truthful and accurate. Whether a presentation is false or misleading is a question of fact, and it does not matter if there was intent to mislead. Claims can be misleading even if they are factually true, by the overall deceptive impression they may give. This can result from the presentation of the claim including the imagery
- **Substantiation.** In the context of environmental marketing claims, substantiation often requires reliable scientific evidence. Such evidence must be based on standards generally accepted in the relevant scientific fields or on recognized methodologies used.

3. In conclusion

As sustainability becomes a cornerstone of corporate reputation, transparency and scientific rigor are non-negotiable. L’Oréal’s experience demonstrates that credible green claims require more than good intentions - they demand measurable progress, independent verification, and clear communication. By adhering to strict principles and embracing industry-wide collaboration, L’Oréal continues to lead the beauty sector toward a future where environmental responsibility is not just promised but proven.

Is Greenwashing Really Worth It?

by A. Deniz Altınay
Senior Partner at Pekin Bayar Mizrah/ Norton Rose Fulbright

“Either appear as you are, or be as you appear.” – Rumi

It is safe to say that the most fundamental drivers of our actions can be reduced to two basic instincts: fear and desire. Companies that engage in greenwashing fear appearing as they truly are, yet desire to be perceived as they wish to appear. The question then becomes: why not simply be as they appear? The answer lies largely in impatience and the misguided belief that deceptive environmental claims will lead to quick financial returns.

Greenwashing (yeşil boyama, yeşil aklama) refers to the practice of companies making false or misleading statements about being environmentally friendly or sustainable in order to portray themselves as green, eco-conscious, or sustainability-oriented. Its primary aim is clear: to gain profit quickly and with less cost, even if it requires deceptive environmental marketing.

The mechanics of greenwashing take many forms. The most common include:

- Greencrowding – hiding behind group initiatives, alliances, or industry commitments to avoid individual accountability.
- Greenlighting – highlighting a minor “green” feature to distract from broader unsustainable practices; presenting products that merely meet minimum regulatory requirements as exceptional; or emphasizing a product’s sustainability attributes while ignoring the overall brand’s environmental impact (and vice versa).
- Greenshifting – shifting blame onto consumers for environmental problems rather than addressing the company’s own responsibility.
- Greenlabelling – using eco-friendly language, visuals, or claims without evidence, including applying vague or misleading terms such as “green” or “eco-friendly” that lack standard definitions.
- Greenrinsing – repeatedly revising or delaying sustainability targets before they are achieved.
- Greenhushing – intentionally underreporting or obscuring sustainability efforts to avoid scrutiny, accountability, or regulatory attention, often accompanied by irrelevant claims about complying with laws that are already mandatory.

The scale of greenwashing is alarming. A 2021 European Commission report found that 42% of online corporate environmental claims were false.¹⁰⁴

¹⁰⁴ https://ec.europa.eu/commission/presscorner/detail/en/ip_21_269

Companies employing greenwashing tactics are exploiting the rising consumer demand for eco-friendly products and services. Their single objective is to sell - and green marketing provides an easy gateway to profit.

However, decades of empirical research tell a different story about authentic sustainability. The relationship between ESG factors and corporate financial performance has been studied for more than 50 years. Over 2,000 empirical studies, along with multiple meta-analyses, have examined this link. Research conducted by the NYU Stern Center for Sustainable Business and Rockefeller Asset Management found a positive relationship between sustainability and financial performance in 58% of studies, while only 8% showed a negative relationship.

Overall, about 90% of studies report a non-negative relationship between ESG and financial outcomes, with the majority revealing clear positive effects. This positive association has remained consistent over time, strongly supporting the business case for ESG integration.

Companies with higher ESG scores tend to be more profitable. Strong performance across environmental, social, and governance dimensions is linked to better operational efficiency, higher returns on assets, and enhanced long-term value creation. ESG is therefore not merely a compliance issue - it is a strategic driver of profitability.

ESG initiatives create measurable financial value through multiple channels: boosted revenue growth, cost reduction, lower regulatory and legal risks, improved employee loyalty and productivity, and more efficient capital allocation.

In short, pretending to be sustainable may offer temporary reputational benefits, but it does not consistently improve financial performance. Authentic ESG alignment, however, strengthens both environmental outcomes and financial resilience. There is no need to fear being as you appear - and no need to greenwash. Genuine eco-friendly practices supported by ESG principles ultimately deliver superior financial results.

Beyond the financial implications, greenwashing undermines real progress on emissions reduction and the climate crisis. By spreading misleading claims, companies erode consumer and investor trust, weaken ambition, and impede the collective action required to secure a sustainable future.

Practical Guidance for Companies to Avoid Greenwashing

- Establish a pre-publication clearance protocol for environmental claims. Require substantiation - data sources, test reports, LCA summaries, certification documents - as part of legal sign-off, not afterward.
- If a claim includes numerical data, disclose the methodology (period, baseline, boundary conditions). For qualitative terms, use precise qualifiers to avoid vagueness or misleading interpretations.
- Centralize ESG messaging governance among legal, sustainability, marketing, and finance teams. Integrate ESG claim review into board reporting and risk registers to demonstrate oversight - something regulators value when assessing intent and compliance.



- Use independent verification through accredited certifiers or reputable auditors. When using third-party labels, clearly communicate their scope and methodology to avoid creating false impressions.
- Implement a “pause and review” procedure for any claim whose accuracy is uncertain. Maintain a documentation file for each claim (supporting data, approvals, correspondence). Prepare a corrective communication plan in case regulators request clarification or impose sanctions.

Greenwashing may offer the illusion of progress, but it ultimately erodes trust, undermines climate action, and exposes companies to regulatory and reputational risks. The evidence is clear: authentic sustainability is not only ethically imperative but also financially advantageous. Companies that embrace transparency, invest in verifiable ESG practices, and communicate with integrity position themselves for long-term resilience and growth. In a world where scrutiny is intensifying, the choice is simple - either appear as you are, or truly become what you claim to be. Genuine action, not “cosmetic claims”, is the only path to credibility and lasting success.

PART VI

Competition Law 2023: Strategic Outlook in a Changing Global Landscape

***by Dr. Fevzi Toksoy,
Managing Partner, ACTECON***

1. Introduction

For nearly two decades, global competition policy sought coherence through shared principles and soft convergence. That arc is bending. Security, industrial policy, and digital-platform regulation have moved to the center of enforcement, reshaping substantive tests, investigative tools, and procedural expectations. The result is an increasingly fragmented landscape - one that complicates multinational merger reviews and raises the premium on foresight, crossfunctional preparedness, and policy engagement.

Türkiye, drawing on a well-established institutional framework and prior record of proactive engagement, is well-placed to contribute constructively to this global conversation - especially by cultivating expertise in digital markets and sustainability, and by strengthening collaborative ties with peers, academia, and industry.

2. Historical Perspective: From Convergence to Complexity

In the two decades after the ICN's creation, competition authorities steadily embraced shared working principles on topics such as merger analysis, unilateral conduct, and procedural fairness. This soft convergence did not eliminate local nuance, but it helped agencies borrow from one another's experience, promoted predictability in crossborder cases, and reduced frictions in parallel reviews.

Within this architecture, the European Union assumed a formative role. Through a combination of decisional practice, guidelines, and judicial oversight, the EU became a frequent point of reference for analytical frameworks and dueprocess standards. The net effect was a workable, if imperfect, 'compass': businesses had a relatively clearer sense of the questions they would face; agencies could situate novel issues within a broadly recognizable toolkit.

Today, that compass still matters, but the map has changed. As geopolitical considerations and the digital/green transitions reframe market dynamics, authorities are adapting tools and priorities to address risks that classical competition law was not designed to manage alone.

3. The Shift: Politicization and New Dimensions of Competition

3.1. National Security and Industrial Policy Considerations

Supplychain resilience, strategic technologies, and critical infrastructure have brought national security and industrial policy into closer dialogue with antitrust. Foreign direct investment (FDI) screening regimes increasingly run in parallel with merger control, and in certain sectors - semiconductors, cloud, energy transition inputs - the interaction between these tracks can

shape remedies, timelines, and even deal viability. It is harder to assume a level playing field when government support, trade rules, or security concerns influence how companies compete (e.g. Germany's foreign investment screening has directly influenced semiconductor deals: the planned takeover of Siltronic by GlobalWafers fell through in February 2022¹⁰⁷ when approval was not granted before the deadline amid wider techsovereignty concerns. Later that year the Federal Cabinet prohibited the sale of Elmos's chip factory to Silex on public order and security grounds¹⁰⁸).

3.2. A Reframed Concept of Competition in the Digital and Green Transitions

Digital platform rules - such as obligations for gatekeepers and requirements for data sharing - aim to make markets fairer and more open by setting upfront obligations rather than relying solely on enforcement after problems arise.

Critically, this policy turn coincides with a drop in classical enforcement metrics. The OECD's decade review shows the number of investigations (cartels and abuse/dominance) on average fell roughly by one third over ten years;¹⁰⁹ decisions and fines also trended lower in many jurisdictions, even as merger filings hit records and intervention increased. This is one way to read it: is it more rules up front, fewer ex post cases? While ex ante measures seek to improve contestability and transparency, they also raise important questions about their long-term effects on innovation, investment incentives, and the flexibility businesses need to compete effectively.

Concerns about ex ante rules have been raised in the United States. During testimony before the U.S. Senate in December 2025, several legal experts warned that strict upfront obligations on large/US digital platforms could have unintended consequences for innovation and global competitiveness. While the goals of fairness and contestability are important, overly rigid frameworks might discourage investment in new technologies and services. This debate highlights the need for careful calibration of digital market regulations to balance consumer protection with incentives for innovation.

Simultaneously, sustainability policy - circularity, repairability, and emissions reduction - intersects more visibly with competition analysis. Cooperation among rivals to achieve environmental goals, or the weighting of longterm sustainability benefits against shortterm price effects are examples where competition law and public interest goals require careful consideration. This is visible in practice: the European Commission's 2023 Horizontal Guidelines introduced a dedicated chapter on sustainability agreements, while the Dutch Authority for Consumers and Markets (ACM) adopted a Policy Rule on Sustainability Agreements to offer practical assessments and informal guidance to businesses. The result is not a replacement of antitrust principles, but an expanded balancing act that agencies and courts are (should be (?) steadily adapting to.

3.3. Procedural Innovation Meets Due Process Expectations

The evidence base has migrated from paper files and local servers to cloud platforms, collaboration suites, and distributed data centers. In response, authorities are testing or deploying tools such as remote inspections, broader Requests for Information (RFIs), and enhanced digital forensics. These developments can increase investigative efficiency, yet they also elevate the importance of clear safeguards - on confidentiality, legal privilege, proportionality, data minimization, and crossborder transfer compliance. Guidance, transparency, and predictable channels for contesting overly broad measures will be essential to legitimacy and business confidence.

4. Consequences: Fragmentation and the New Transaction Playbook

4.1. A Looser Global Compass

The shared vocabulary cultivated through ICN engagement remains valuable, but jurisdictions are understandably optimizing their frameworks for local priorities - security, industrial competitiveness, data governance, or sustainability. Divergence is not inherently negative; it can spur innovation in policy design. But it also complicates coordination when parties pursue multijurisdictional transactions or face parallel conduct probes. The same market facts can meet different analytical lenses, leading to variations in timelines, information demands, and remedy expectations.

4.2. A Bumpier Road for Multinational Mergers

Deal teams increasingly navigate a layered review environment: antitrust assessments, FDI screening, sectorspecific authorizations, and - in some markets - sustainability or dataaccess undertakings. Remedy packages can involve structural divestitures, datasharing commitments, interoperability measures, and behavioral constraints that must align across jurisdictions. These commitments must fit different rules in different countries. Planning the order of filings and remedies has become a strategy in itself, with legal teams mapping out scenarios and anticipating how one authority's decision might affect another. Microsoft/Activision Blizzard merger illustrate this divergence perfectly. The EU approved the deal with behavioral remedies (like cloud gaming licenses), while the UK initially blocked it and later cleared a restructured version that gave up non-EEA cloud streaming rights. This rare split shows how regulators can reach very different conclusions (even on the same emerging market) and why companies need flexible plans. The timeline tells the story: EU clearance in May 2023, UK prohibition in April, and UK approval of a revised deal in October. The lesson? Businesses should expect mixed outcomes and prepare modular remedies that can be adapted to each authority's concerns.

Competition law aims to keep markets competitive and encourage innovation. But here's the big question: if blocking a deal is supposed to protect competition, why do we sometimes see the blocked company leave the market soon after? And the tougher follow-up: if the deal had gone through, would that company still be around instead of disappearing? These aren't just theoretical questions, they show the gap between real-world outcomes and the predictions made during reviews, especially in fast-moving tech sectors where today's market power doesn't always predict tomorrow's reality. A clear example is Amazon's attempt to buy iRobot¹¹¹: after months of scrutiny

¹⁰⁷<https://www.hoganlovells.com/en/publications/german-fdi-regulator-spoils-globalwafers-435-billion-siltronic-deal>

¹⁰⁸ <https://www.bundeswirtschaftsministerium.de/Redaktion/EN/Pressemitteilungen/2022/11/20221109-elmos-chip-factorycannot-be-sold-to-chinese-investor-cabinet-blocks-sale.html>

¹⁰⁹ OECD (2025), *A Decade of OECD Competition Trends, Data and Insights*, OECD Publishing, Paris, <https://doi.org/10.1787/05021ff2-en>.

¹¹⁰ https://ec.europa.eu/commission/presscorner/api/files/document/print/en/ip_23_2705/IP_23_2705_EN.pdf

and no EU approval, Amazon dropped the deal in early 2024, and iRobot later went bankrupt.

The European Commission worried that Amazon might disadvantage rival robot vacuum brands on its marketplace by hiding their listings, limiting visibility, or raising ad costs. In January 2024, Amazon dropped the deal after seeing no way forward in Europe. That decision, and what happened next, sparked debate: did long reviews and strict rules speed up iRobot's decline? It's the kind of counterfactual policymakers need to think about. Lengthy or heavy-handed scrutiny can hurt fragile tech firms and discourage investment. This case shows that being stuck in a long regulatory process can be deadly for companies with limited cash.

Another important issue is the call-in power, where do things stand? In the Illumina/Grail case¹¹², the EU Court of Justice in 2024 overturned the EC's broader use of Article 22 EUMR to review deals that didn't meet EU thresholds. This restored clarity as to the application of the case-referrals under the EUMR. The key point: Article 22 is not a "catch-all" tool anymore, and referral powers are shifting back to national competition authorities. So, is the issue solved? Not quite. Some Member States are introducing or tweaking their own call-in rules for below-threshold mergers, creating uncertainty about when and where intervention might happen. The challenge now is balancing predictability with the goal of catching "killer acquisitions." Companies need to adjust their filing strategies accordingly.

3. Businesses Prioritize Practical Predictability

In the current climate, many companies seek pragmatic certainty more than doctrinal uniformity. Clarity on thresholds, processes, and acceptable commitments enables better investment decisions and risk pricing. Where tools evolve - such as remote access or cloud evidence collection - predictability will depend on clear guidelines, strong protections for legal privilege, and data requests that are limited to what's really needed.

5. Strategic Implications and Action Points

Policymakers and agencies need to be clear about priorities. Goals such as security, sustainability, and innovation often complement traditional competition principles, but sometimes they pull in different directions. It is important to explain how these objectives fit together and provide examples so businesses know what to expect. Safeguards also need updating. If authorities use remote inspections or request large amounts of data, there should be clear rules for handling confidential information, limiting scope, and keeping proper records. Companies should have simple ways to resolve disputes quickly and fairly. Building capacity is another priority. Agencies will need teams with mixed skills - economics, data science, law, and sustainability - and should work with universities to test new methods and keep them transparent. Finally, international cooperation remains essential. Sharing best practices and coordinating remedies through ICN and bilateral agreements can help reduce duplication and uncertainty in global cases.

¹¹¹https://ec.europa.eu/commission/presscorner/api/files/document/print/en/statement_24_521/STATEMENT_24_521EN.pdf

¹¹² *Joined Cases C-611/22 P and C-625/22 P, Illumina Inc. and Grail LLC v European Commission*, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:62022CJ0611>

For businesses and in-house counsel, compliance should be part of strategy, not an afterthought. Competition law needs to be considered in product design, data management, and sustainability plans, with evidence of benefits documented as projects progress. Planning ahead for multi-country reviews is critical. Companies should map out antitrust, investment, and sector rules early and prepare flexible solutions - such as data-sharing or interoperability commitments - that can be adapted for different jurisdictions. Early engagement with authorities helps build trust and avoid surprises, especially when technical issues like cloud systems or data flows are involved. Businesses also need to stay ready for inspections. Updated playbooks for handling digital evidence, protecting legal privilege, and managing cross-border data issues are essential, and simulation exercises remain one of the best ways to prepare.

Türkiye's competition community has an opportunity to lead by sharing practical guidance. Short notes on topics like digital evidence handling, sustainability agreements, or data-sharing rules would be widely useful and signal thought leadership. Research partnerships with universities and businesses can explore how competition law supports innovation and green goals without harming markets, creating models that others can learn from.

6. Looking Ahead (2025–2030): ReBalancing with Confidence

The next phase of enforcement will test whether competition law can incorporate broader public-interest goals while still maintaining analytical rigor and predictability. In the coming years, we are likely to see merger reviews that explain more clearly how security concerns and industrial policy interact with traditional antitrust tests, including guidance on what evidence and remedies will be acceptable.

Securitydriven screening will remain decisive in sensitive sectors (chips, cloud, critical data). Authorities should coordinate timetables and remedy expectations; parties should sequence filings to avoid “decision gaps” that can kill deals on timing alone. Enforcers should rethink their assumptions about incentives and future competition. If real-world results keep proving predictions wrong, it's time to adjust the approach. The Amazon/iRobot case should trigger a proper review to learn and improve for the future. Finally, competition authorities should codify predictable below threshold approaches (e.g., transaction value thresholds, objective risk triggers) to avoid ad hoc referrals and minimize uncertainty.

Digital market rules will continue to evolve, the DMA is important, but it is not enough on its own, its rules need to be fine-tuned so they do not overcorrect and end up discouraging useful investment. We are particularly talking here about the refinements to obligations on large platforms, interoperability requirements, and data-access frameworks. These changes should aim to improve fairness, but they also need to consider how they affect innovation and whether compliance remains practical for businesses.

Sustainability will become a bigger part of competition analysis, with more detailed assessments of environmental benefits and long-term efficiencies supported by transparent methodologies. At the same time, investigative tools will keep expanding into digital spaces, making strong safeguards essential to maintain trust in the process. Clear rules on confidentiality, proportionality, and legal privilege will be critical as authorities use remote inspections and cloud-based evidence collection. For Türkiye, this period offers a constructive opportunity. By encouraging collaboration,



publishing practical guidance, and investing in technical and analytical capabilities, the TCA can strengthen its role as an engaged and forward-looking authority. This approach will help Türkiye contribute positively to the evolving international framework while supporting innovation and fair competition at home.

7. Conclusion: From Shared Compass to Shared Capabilities

The convergence era supplied a helpful compass; today's environment calls for shared capabilities. As security, digital transformation, and sustainability reshape markets, competition policy must remain principled yet adaptable. Agencies can anchor legitimacy through clear objectives, modernized due process, and investment in people and methods. Businesses, for their part, can integrate compliance into strategy, engage early, and prepare for multitrack reviews with well-evidenced efficiencies and practical remedies. Türkiye's institutions are well equipped to participate in - and help shape - this evolution. By leaning into collaboration, cultivating interdisciplinary expertise, and articulating pragmatic guidance, Türkiye can contribute to a competition policy framework that supports innovation, resilience, and fairness - at home and across borders. The road may be busier and more complex than before, but with foresight and partnership, it is navigable and promising.

Innovation at the Nexus of Competition, Ex-Ante Systems and Intellectual Cooperation Hubs: A Collective Value Proposition for Next Generation Ecosystems

**by Assoc. Prof. Dr. Asli Deniz Helvacioğlu,
Director, Bogazici University Innovation Research Center**

The conventional wisdom in innovation ecosystems is that regulators bear technological myopia, and lack the essential futuristic knowledge on the potentials of innovative products and processes. This leads to anxiousness about what comes next and regulators tend to become risk averse, prioritizing avoiding losses over possibility of maximizing gains. Unpredictability of the numerous unwanted effects of innovative business solutions delivered by big tech players constitutes the main concern and uncertainty focuses on “damage” within the scope of competition policy. Regulators willing to take vigorous actions with the perception that competition law enforcement may not be as effective and thriving in settling the digital challenges, shift to compliance based ex-ante regulations. In a hypothetical case of perfect knowledge, ex-ante regimes are better equipped against any distortion as they are formulated to prevent the damaging conduct from happening (Bougette et al., 2025:2). Ex-ante systems are promoted as the novel instruments of a legal design for highly innovative, next generation ecosystems.

Of course, in principle, regulators’ fundamental mission is to achieve balance between innovation and law. However, contemporary outlook exhibits a resilience-oriented approach with sophisticated compliance mechanisms for the technology pioneers and offers a legal design that sometimes may bring about the risk of creating barriers to innovation in digital markets. This becomes much more visible in the recent EU acts that regulate the digital markets where globally seven of the most valuable 10 companies are digital platforms (UNCTAD; 2025).¹¹³

Ex-ante Regulations and Competition Law

The notion of ex-ante regulations refers to compliance based legal systems that establish prior set of obligations and present a legal design that aims at preventing anti-competitive acts before they occur. The conditionality and compliance that ex-ante regimes propose can be regarded as preemptive measures to guarantee fair competition in digital ecosystems. There are many countries like UK; Germany, South Korea, Australia, Canada, Japan and mainly the EU that have already initiated ex-ante systems.

Amongst all, Digital Markets Act of the EU provides a clearly formulated ex-ante regulation which is based upon the ecosystem power directly linked to the defined and designated gatekeeper in monopolized digital platforms (van den Boom, 2025). Compliance is the core element of DMA, in case of non-compliance the Commission may enforce the law and impose sanctions on

¹¹³ UNCTAD. *Highly concentrated digital markets put consumers at risk. Here’s how to change course. 08 July 2025.* <https://unctad.org/news/highly-concentrated-digital-markets-put-consumers-risk-heres-how-change-course>

gatekeepers. DMA expect the digital platforms, the designated gatekeepers, to respect and align their corporate policies and operations with the objective of fairness. It can be interpreted as a resembling concept of fairness in competition law which obligates the dominant companies to refrain from market failures by virtue of legal responsibility (van den Boom, 2025¹¹⁴). In this context, ex-ante interventions can be conducted as creative, innovative instruments that highlight compliance for the protection of competition as a dynamic process (Bougette et al., 2025:2).¹¹⁵

Yet, still compliance is an obligation, a legal responsibility but not a voluntary act. What really regulators want, a balanced efficient legal regime, is not totally supported by the digital market players who are the pioneers in innovation. Moreover, it is also possible that the burdens of compliance may result in a strategic decision where the gatekeepers will not be offering the same innovations in every single country.

Innovation stands at the nexus of competition law. Ex-ante regulations and compliance obligations become a new cultural hype for digital markets. Innovators and law-makers need fostering dialogue to achieve a more balanced and competitive market ensuring fair competition. It is likely that collective, cooperative spaces may engage all stakeholders; enabling communication, knowledge development, intelligence generation, enhancing partnership, mutual understanding and consensus. Intellectual cooperation hubs, innovation labs and centers at universities may fill the gap and act as facilitators in meeting of minds for regulatory design, as a value proposition for next generation ecosystems.

Next-Generation Regulation: Competition Law in the Digital, Intelligent, & Sustainable Economy,¹¹⁶ one-day international conference, co-organized by the GW Competition & Innovation Lab and the Bogazici University Innovation and Competition Based Development Studies Research Center may constitute a simple but effective sample for an intellectual space gathering academics, practitioners, regulators, and private sector representatives. Delving into the dynamics of contemporary regulations in innovation and sustainability, the conference paved the way for conceptual discussions on recent decisions by the TCA, EC and global regulatory developments and provided an inspiring outlook for future projections of an effective legal design for next generation ecosystems.

¹¹⁴ Van en Boom J. *A Regulatory Framework to Govern Ecosystem Competition*. In: *Regulating Competition in the Digital Network Industry*. Global Competition Law and Economics Policy. Cambridge University Press; 2025:183-268.

¹¹⁵ Bougette P., Budzinski O., Marty F. *Ex-ante versus Ex-Post in Competition Law Enforcement: Blurred Boundaries and Economic Rationale*. *International Review of Law & Economics* 82. 2025.

¹¹⁶ <https://competitionlab.gwu.edu/next-generation-regulation-competition-law-digital-intelligentsustainable-economy>

Bridging Law and Business: The Expanding Role of In-House Counsel in Antitrust Compliance

***by Müge Bulat Çetinkaya,
Head of Legal and Compliance at Borusan Boru***

In-house counsel serve as a bridge between legal theory and business reality. They translate complex antitrust principles - like information exchange, resale restrictions, or dominance concerns . They also act as the first line of defence: spotting potential issues early, before they escalate into investigations. This means creating an environment where business teams feel comfortable raising questions - and where the legal team is seen as a trusted partner, not as a barrier. Rather than traditional trainings, realistic dawn-raid simulations are significantly more effective for building real readiness in antitrust compliance.

Indeed, effective antitrust compliance is not just about avoiding fines - it's about protecting the company's reputation and maintaining a culture of fairness in the market. And that culture starts inside the organisation, with in-house counsel leading.

If you've been following Brussels lately, you'll have seen that the European Commission has launched a public consultation on Regulation 1/2003 - the procedural rulebook for how it enforces EU competition law.

Now, this regulation has been around for more than twenty years. And ,the world has completely changed since then. Back then, evidence was on paper, data set on local servers. Today, it's all in the cloud, scattered across jurisdictions and systems that didn't even exist when the regulation was drafted.

So the Commission is asking: Are our investigative tools still fit for purpose in this digital era? They're considering things like remote dawn raids, broader requests for information, and access to cloud-based data. That's not too surprising - enforcement needs to keep up.

Remote inspections, continuous access to cloud systems, and much broader RFI (request for information) powers may indeed help uncover complex digital behavior. However, they also raise concerns about confidentiality, legal privilege, data minimization, and cross-border data transfer limits. Companies will need clearer guidance on how these digital tools will be applied, what safeguards will accompany them, and how they can contest overly broad measures.

In that sense, the consultation is not only about upgrading enforcement mechanics - it is about re-drawing the balance between effective investigations and fundamental rights in an age where almost all relevant evidence is generated, stored, or transmitted digitally. How far these tools should go - and how far companies should be expected to cooperate - is likely to be one of the defining debates of the next enforcement cycle.

But what really caught my eye is this time is something we don't often see. For the first time, the Commission is asking companies about the cost and administrative burden of compliance. Over



the years, the procedural reality has shifted. The Commission has more investigative powers than ever - it can conduct digital dawn raids, access cloud-based data, and issue extremely broad requests for information.

And while these powers help uncover complex infringements, they also place an enormous operational and financial load on the companies under investigation. So while the system may be legally fair, it seems practically unbalanced.

As enforcement adapts to a world of cloud-based evidence and remote investigations, the role of in-house counsel becomes more critical than ever. Compliance is no longer just about legal theory - it's about operational readiness, cultural alignment, and proactive risk management. By fostering trust within the organization, implementing realistic training, and anticipating regulatory shifts, counsel can transform compliance from a defensive obligation into a strategic advantage. In an era where investigative powers are expanding and digital complexity is the norm, companies that invest in robust, transparent compliance frameworks will not only avoid penalties but also safeguard their reputation and resilience in the marketplace.

International Competition Governance in Changing Times

*by Mathew Heim,
Non-resident Senior Fellow, GW Competition & Innovation Lab,
George Washington University*

It has been common for competition authorities express a desire to lead their peers.¹¹⁷ When authorities express such ambitions, it tends to indicate those areas where an authority believes they can excel or influence other jurisdictions. Stated ambitions range from desires to secure leadership positions in international organizations, in order to influence the global competition policy agenda; being the first to tackle new challenges, such as competition in digital markets¹¹⁸; or even focus on leadership within a geographic region.¹¹⁹ While leadership ambitions, like most forms of competition, can lead to positive outcomes, competition law practitioners have identified foundational characteristics that an authority should ideally possess in order to have the credibility to lead peer authorities.¹²⁰ Characteristics include showing that an authority's activities have a tangible, beneficial impact on consumers;¹²¹ possessing sufficient legal and institutional flexibility to address novel situations although to be relevant new theories require clear legal parameters, be rooted in market realities and be of practical application.

Other characteristics are independence and procedural fairness, to guard against political influence. Transparency and meaningful stakeholder engagement, is critical to demonstrate independence of thought and action, as well as fostering a strong competition culture, guidance and building trust.¹²² Given the changing nature of competition law intervention, understanding an authority's thinking increases commercial certainty, enabling better-informed business decisions.¹²³ Finally, good outcomes can rarely be achieved without authorities being able to attract and retain highly skilled, motivated, interdisciplinary staff. These are key ingredients are needed to ensure international credibility. However, many competition authorities are under increasing budgetary constraints, which can impact output ambitions, as well as international engagement, co-operation, capacity-building and alignment.

Be that as it may, authorities from the larger economies have traditionally tended to have a disproportionate influence in shaping the global competition policy agenda. One could say that authorities, such as the European Union's DG Competition or the U.S. authorities, have a "special responsibility" to act thoughtfully and explain their approaches, so that these can be properly assessed by peers and the competition community.¹²⁴ Such historical authority can be undermined, especially if the characteristics set out above are less present. In addition, as macro-economic conditions evolve, "newer" jurisdictions are becoming increasingly confident in their own capabilities and can expect to face the same expectation that they possess the necessary characteristics, if they wish to lead their peers. This reality was recognised at the 9th BRICS International Competition Conference held in September 2025, where the BRICS countries authorities "declared a readiness and urgency to step into a leadership role on global competition policy, positioning themselves as standard-setters amid what many antitrust officials described as a pullback by Western powers from multilateralism", which could include, as noted by Doris Tshepe, head of South Africa's Competition Commission, the BRICS taking "a more prominent role in global merger analysis and remedies, as "the Global North retreats" from tackling concentration

in its own digital, pharmaceutical, and agribusiness markets”.¹²⁵ On 7 January 2026, U.S. Presidential Order withdrew the U.S. from United Nations Conference on Trade and Development, an organization which provides a global framework for competition law governance, assisting developing nations in set up sound competition regimes. The rise of politicization of competition policy and of protectionist industrial policies is also putting pressure on global consensus on critical issues and therefore coherence in competition policy. Politicization can range from very public pressure or behind-the-scenes intervention in specific investigations¹²⁶ to an outcome-driven policy steers.¹²⁷ However, while there is a recognition that competition policy may need to address broader societal challenges, such as sustainability, supply chain resilience etc., there is little debate on tensions between the need for authorities’ independence and political expectation that competition powers are used to fulfil political imperatives. This point of friction will only increase, especially as authorities seek enhanced powers, for example in market inquiries where remedies can be imposed on a sector-wide basis. Addressing political elements from competition intervention can be done in a number of ways, depending on the legal traditions of a particular jurisdiction and the tolerance for government engagement in the work of an authority.¹²⁸

Authorities can leverage their responsibility to promote competitively neutrality industrial policies and engage with their government on this bases, further reinforcing that the authority is responsibility for their area of competence.¹²⁹ In a world where political pressures on competition outcomes are increasing, where multilateralism is under strain and regional spheres of influence are developing, the competition community faces some stark choices. Yet, this very uncertainty increases the importance of the competition community coalescing around best practices and reaching common understanding on critical topics. Initiatives, such as the ICN’s Framework for Competition Agency Procedures (CAP)¹³⁰, are essential tools to ensure a high level of trust and mutual respect between authorities, let alone the business community. This requires authorities to possess the foundational characteristics, described above, if they are to provide confidence in the outcome of their work. Such elements also lay the basis for effective co-operation amongst authorities and enhance much needed consistency and certainty, for the users of the global competition system and those impacted by it.

¹¹⁷ Mathew Heim, Prof. Penelope Giosa and Patrick Porter, *What Practitioners Expect from Competition Authorities with Leadership Ambitions*, *GW Competition & Innovation Lab Working Paper Series*, No. 2025/13.

¹¹⁸ See the Canadian Competition Bureau 2025-2026 objectives that include to; “Play a leadership role, both domestically and internationally, in adapting to the impact of the digital economy on competition policy.” *CBC 2025-2026 Annual Plan, Strengthening competition in a changing economy*, May 15 2025.

¹¹⁹ For further examples, see Heim, Giosa and Porter, Chapter V, above.

¹²⁰ See survey results, footnote 1 above.

¹²¹ See e.g. *Assessing the Impact of Competition Authorities’ Activities*, *Organisation for Economic Co-operation and Development, Competition Committee, Working Party No. 2 on Competition and Regulation, Secretariat Background Note, DAF/COMP/WP2(2025)2*, 2 May 2025.

¹²² See, for example, comments by Karen Croxson, UK CMA's Chief Data, Technology and Insight Officer, at the OECD's 2025 Competition Open Day, Feb. 26, 2025; "I think we've invested a lot in understanding the [AI] technology... . There are many stakeholders to consider and this speaks a little bit, I think, to the ecosystem approach, the systems thinking approach [sic.]; firms looking to develop these technologies, those looking to deploy them in interesting ways across markets to generate value, and of course the end users and consumers. It's a really complex picture. It's moving very quickly . . . and of course working alongside expertise in academia in civil society, think tanks . . . There's a role for everyone in our view: the incumbents, the challengers, the global giants, the dynamic scrappy startup . . . making sure that we are engaging a wide array of stakeholders proactively, crucially that include[es] firms, investors, direct engagement, engaging to understand real world of those out there unleashing and investing in these innovations". (at 28:00 minutes).

¹²³ Policies for engaging with the competition community can be staid. See Khushita Vasant, US DOJ Antitrust Division's top enforcers barred from public events, MLex, 15 January 2026.

¹²⁴ A good example is a recent conference of 22 January 2026 entitled *Shaping the future of merger control*, co-hosted by the OECD Competition Division and the European Commission Directorate-General for Competition. The conference allowed the European Commission to present its preliminary thinking to the international community in relation to a significant revision of its Merger Guidelines, indicating sensitivity to the international impact of such guidelines from the European Commission.

¹²⁵ See Charles McConnell, *BRICS casts itself as stabilising force amid Western 'retreat'*, *Global Competition Review*, 11 September 2025. See also Freny Patel, *Global regulators following India's lead on merger remedies, CCI's chief says*, *Global Competition Review*, 19 January 2026; "In a significant shift in the global merger-control landscape, India, which was once seen as a follower of EU standards, has developed a distinctive enforcement philosophy that is increasingly influencing, rather than just following, international norms, the head of India's antitrust authority [Ravneet Kaur] said".

¹²⁶ See e.g. Rashid Baxter, *Snoep: Antitrust's rule-based order losing out to economic power*, *Global Competition Review*, 24 September 2025; Martijn Snoep, the Chairman of the Netherlands Authority for Consumers and Markets (ACM), is reported as saying that competition practitioners are "being replaced by lobbyists" to advance the business interests of companies facing antitrust scrutiny across several countries" and that "Political pressure and even explicit threats relating to high-profile competition cases have become more common in the past year"; or Anna Langlois, *Dem opposition to reported lobbyist sway over DOJ grows*, *Global Competition Review*, 5 September 2025 in relation to concerns about the U.S. Department of Justice's conditional approval of the Hewlett Packard Enterprise/Juniper Networks transaction in July 2025; or Timo Angerbauer, *About the German FCO and its case files*, *Antitrustpolitics* 29, August 2025; "[The Higher Regional Court of Düsseldorf in its decision of 10 May 2024] had serious doubts as to whether the FCO [German Federal Cartel Office] had investigated the case [against Lufthansa following a complaint by Condor] with an open mind and free from political influence. These concerns stem from a call between the FCO and the German Federal Ministry of Economics at a time when responsibility for handling Condor's complaint had not yet been determined, no statement from Lufthansa was available, the administrative proceedings had not been opened, and no investigation had been initiated." See also the German Federal Court of Justice's decision in *Lufthansa/Condor*, 3 December 2024, paras 9 and 12.



¹²⁷ See e.g. US Presidential Order, *Ensuring Accountability for All Agencies*, 7 January 2025, that increases Presidential oversight and control of the Federal Trade Commission, (FTC) amongst other agencies. The Presidential Order sets up new consultation and approval requirements, including over the FTC's objectives, ability to set final rules and budget.

¹²⁸ Methods to minimise political intervention include creating specific and transparent processes to hear political concerns during investigations, engaging with governments more regularly in a formal setting, creating processes outside competition assessments to address political considerations e.g. ministerial overrides for public policy imperatives, as exist in several European countries. Most importantly would be to re-enforce the principles of independence at the international level, whether in formal organisations, such as the OECD Competition Committee or informal ones, such as the International Competition Network (ICN).

¹²⁹ See the OECD Recommendation of the Council on Competitive Neutrality, adopted 31 May 2021 and ensuing OECD Competitive Neutrality Toolkit (2024) to support public officials in identifying and reducing distortions to competition due to state intervention.

¹³⁰ See the ICN's Framework for Competition Agency Procedures.

PART VII

Resilient Markets, Empowered Consumers: A New Vision for Competition?

Summary of Teresa Moreira, UNCTAD intervention

Teresa introduced the UN Trade and Development (UNCTAD), which assists developing countries in better integrating the global economy using trade, investment, finance, and technology as vehicles for inclusive and sustainable development. UNCTAD has a quasi universal membership – 195 members – and celebrated its 60th. Anniversary in 2024.

UNCTAD is the focal point for Competition law and policy within the United Nations system, being the custodian of the UN Set on Competition, the only multilaterally agreed instrument in this field, recognizing the contribution of Competition law and policy for development.

She briefly characterized the key features of Competition law and policy around the world and across times, referring to the increasing number of developing countries and of their regional economic organizations that have adopted Competition law and policy at national and regional levels, adding that regional cooperation is crucial, especially for developing countries, to successfully face their collective challenges.

Competition law and policy have proved to be responsive to global events such as the 2008-2009 financial crisis, the Covid-19 pandemic, climate change and environmental degradation, geopolitical tensions and the cost-of-living crisis, and Government intervention in the economy.

She said that countries were committed to ensure that public policies are fit for purpose even though they could pursue specific objectives but that there were global common challenges raised by digital markets, sustainability, and vulnerabilities and Inequality, as well as a general concerns about the most important sectors for the population (food, health, utilities) and for the countries' economy, especially in the case of developing countries.

Regarding digital markets, she exemplified the adjustments undertaken by Competition Authorities to better harness anticompetitive conduct - new technological investigative tools and data analysis; wider merger control; new fairness-related legal provisions; use of “ex ante” regulation -, referring the intersection of Competition law and data protection and the impact of Artificial Intelligence impact.

On sustainability, she highlighted the importance of fair-trade practices and market access, of knowledge sharing and of business incentives to sustainable production patterns. Competition law may exempt agreements based on their contribution towards sustainability, and this may be considered within merger assessment as the European Commission and some European Union Member States, namely are doing, but the assessment of a possible positive impact is not yet very clear.

She quoted two recent UNCTAD publications of interest to this topic – the Digital Economy Report 2024 on the intersection between Digitalization and Sustainability, and the Technology and Innovation Report 2025 dedicated to Artificial Intelligence.

On vulnerabilities and inequality, she talked about the need for equitable policies providing for fair and non-discriminatory opportunities for all, for instance, micro and SMEs (MSMEs) and women entrepreneurs, referring that many Competition Authorities increasingly consider and prioritize key sectors for their population, demonstrating their awareness to these concerns.

On empowered Consumers, trust is the most important issue for the economy to flourish, which makes a compelling case for effective consumer protection through access to essential goods and services, special attention to vulnerable and disadvantaged consumers, clear and transparent information for informed choices, safety of products including when bought online, sustainable products, data protection and privacy, security of online payments, business accountability, easy dispute resolution and redress (including online), and cross-border cooperation between Consumer Agencies.

She concluded that a holistic approach was the answer to address multifaceted issues, demanding greater coordination between public policies - industrial; commercial; investment; science and technology; environmental; security - looking beyond strict economic efficiency.

Finally, when referring to the question about a new vision for Competition policy, Teresa pointed out to the existing consensus across the world about open and dynamic markets, encouraging innovation, increasing productivity and improving quality for the general wellbeing of societies, and to the recent growing consensus about fair and inclusive markets, although developing countries needed to pursue specific developmental and social objectives.

She quoted the United Nations UN Secretary-General António Guterres at the UNCTAD16 Ministerial conference special session, held on 22 October 2025, where he stated that “Development is not automatic. Development requires deliberate action. It requires policies, institutions and investments that serve people. And that deliver justice for the developing world for trade and through trade.”

For UNCTAD, all countries have the legitimacy to fully integrate Competition Law and Policy into their social, economic, and development strategies, and this does not necessarily mean that the consumer welfare standard is no longer appropriate. For instance, different public interest considerations have always been included in Competition legal frameworks being compatible with the consumer welfare standard if legal certainty and predictability are guaranteed and if these considerations are not used for political or protectionist purposes.

And yet, she concluded that maybe a new vision was needed to boost Competition policy, stressing its complementarity with industrial and trade policies, and further acknowledging its developmental perspective.

This would require a Competition policy adaptable but forward-looking, with a polycentric approach, integrating broader public policy considerations; fostering resilience, fairness, and inclusiveness, while encouraging investment and innovation and market contestability; interacting with other policies and engaging all stakeholders (Government, business, civil society) for advocacy and collaboration. Based on international cooperation to bring countries together, facilitate peer learning, support the less experienced and less equipped, and find global solutions for global challenges.



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