



Shaping Competition Policy in the Era of Digitisation

ERT welcomes the opportunity to respond to the Commission's call for contributions on "Shaping competition policy in the era of digitisation". Even though in general competition law is flexible enough to deal with new developments, the characteristics of the digital economy, in particular the effects of algorithms and big data, may require a change in the way competition law has traditionally been applied.

A. Introduction

The power of algorithms and the amount of data that can now be processed can bring great benefits to society and the consumer but may also change the dynamics of competition to the detriment of consumers. In some markets, this may intensify competition, while in others, it could restrict competition and undermine the current antitrust assessment and enforcement regime.

Policy-makers should encourage fair competition by ensuring that digital environments remain open, not only to new entrants and products but also to existing actors seeking to evolve and adapt.

Competition law should be applied in a way which addresses both the abuse of market power in digital markets and (where justified) the M&A activities of dominant platforms which seek to appropriate the upside of innovations in order to preserve or enhance dominance and eliminate future significant competitors. Moreover, the business model of "free" services may require a rethink of the assessment of competitive effects, by focusing not only on prices but also consumer choice (including on how and what personal data is used), quality, transparency and innovation. Finally, competition policymakers should consider the impact of data and AI on the analysis of competitive effects. Some of the traditional assumptions of competition law may need to be reassessed to ensure a level playing field in Europe between all players, both European and non-European.

B. General observations

1. Data

Nowadays, data plays an important role in digital markets, and business models of firms are based on the provision of free services in exchange for users' data, which is used to refine products and better target the consumer. This can give dominant firms an extraordinary advantage when competing in the digital arena. Data fuels the advancement of digitalisation and automation and is the base to enhance machine-learning, algorithms and artificial intelligence ("AI") activities.

The expanding role of data in digital market places is due to exponential growth in the collection and combination of data across different markets, the computational capabilities and lower storage costs. There is a real risk to marketplaces where only one player has exclusive access to significant datasets that are not easily replicable. This exclusive access to data may not only provide a competitive advantage, it may ultimately harm consumers, if only one or few players get access to the data.

Even though not all big data are personal data, it is the information which helps companies to better understand consumer preferences so as to develop improved products and services and tailor advertising that is seen as particularly valuable. Data serves as an input for data analytics, advertisement services, creating new and improved digital services, improving efficiency, differentiated pricing and pricing decisions (including automatic price matching). Data also reinforces AI, machine learning and can be a product itself in the case of resale of personal data to third parties as data brokers. Gaining a vast amount of consumer data can provide a competitive advantage not only in the development of new and superior services, but also in better targeting the consumer, e.g. by targeted advertisements and personalised pricing. Data contributes substantially to the different direct and indirect network effects in digital markets and ultimately may support the creation or intensification of market power. This should be reflected in the analysis of competitive effects.

On the other hand, data and privacy could form part of a consumer welfare standard, just as price and quality, especially if one considers that users are paying with their data. One example could be data protection as a quality restriction, as pointed out in the Microsoft/LinkedIn decision. Another example is the Google Search shopping case, where it was noted that consumer personal information is a currency for accessing online services.

2. AI & Algorithms

AI is at the core of the digital transformation and led today by a few dominant tech players. These tech players may increase their competitive advantage in AI by acquiring companies that are data-rich or involved in the development of AI.

We can only make the most of the opportunities offered by AI if, based on industry-driven initiatives, companies are allowed to pool resources to achieve economies of scale, in order to have a chance to compete with the AI tools emerging from dominant companies. The Horizontal Cooperation Guidelines should be applied in a way that does not impede non-dominant companies from gaining the volume and scale they need to compete with dominant tech players with global reach.

3. Effects on B2C and B2B

Some of the effects and harms described in the context of digital markets may differ in the B2B space versus the B2C space. B2B business platforms may create interoperability and provide options to create applications and services running on the platform which offer a variety of business opportunities for third parties. This difference was recognised in the white paper on digital platforms of the German Ministry of Economic Affairs.

C. Theories of harm

1. Gatekeeper position and dominance

Major online platforms may become gatekeepers for other providers due to their scale and reach. Once an online platform acquires a gatekeeper position, it can foreclose markets and impede innovation from other players or new entrants, especially in downstream markets, which is dependent on the same platform for access to customers.

One of the core criteria for success in the digital economy is the ability to attract and keep the user's attention. An increasing number of online platforms may open up an ever-growing number of choices within their respective "walled gardens", which will maximise their ability to control the consumer's ecosystem, within each walled garden. The competition authorities should pay close attention to keep markets open and contestable to all competitors and prevent such gatekeeper platforms from entering into anti-competitive practices, particularly if these platforms are dominant and/or vertically integrated, or result in anti-competitive agreements or unlawful information exchange about competing products offered via the platform.

Algorithmic voice assistants can intensify the problems that arise when platforms become online gatekeepers. Although they increase convenience, voice assistants normally also further reduce choice, since unlike a webpage of search results which might show 5 or more choices on the first page, the voice assistant will often give just one choice, unless the consumer specifically asks for further options. This could significantly increase the risk of platforms restricting competition in downstream markets.

Dominant platforms may need to open themselves up for participation by different service providers and allow for diverse ecosystems along the supply chain to connect and build up their own services dedicated to the growth of their industry segment and the innovation priorities of connected communities. Platforms that provide effective and granular choice for customers (not the usual "take it or leave it" dilemma) and platforms that ensure fair and transparent business practices are critical to the growth and success of the users – both buyers and sellers.

2. Leveraging

Multi-sided platforms can rapidly grow into monopolies due to their strong cross-platform network and feedback effects. Algorithms and big data speed up and potentially aggravate these effects of multi-sided markets, further accelerating tipping effects towards "winner-takes-it-all" market outcomes.

The characteristics of digital markets and their scalability could allow dominant platforms to expand very quickly. Once critical scale is reached, tying and bundling of new services can be used to leverage market power from one service to the next – this has been seen in the Microsoft Windows and Google Android cases. In this sense, companies compete for the market rather than in the market, using their consumer base to envelope competing services. When a market is closely tied to another platform market and where a platform is dominant, competition may not be fair or effective.

Another example of leveraging market power from one market to another is the algorithmic promotion of a platform's own services and demotion of competitors' services. In the Google Shopping case, algorithms combined with a vast amount of data led to market power and were then used to discriminate against competitors.

We already are witnessing a world with only a few tech players. Allowing these dominant companies to continue unfettered with acquisitions and accumulating huge and non-replicable datasets could exacerbate the following consequences which are already negatively impacting consumers:

- a) Less diversity and choice of the types of Terms and Conditions offered (including in relation to the treatment of data).
- b) Increasingly limited access to personal and behavioural data controlled by dominant tech companies, which impedes existing companies and new entrants from offering competing and new innovative services.
- c) Allowing dominant tech companies to gobble up start-ups, which might otherwise have offered their competing innovative services to a wider audience and deprive companies from being able to test new business models. There could be a detriment to consumers if dominant tech companies effectively are able to eliminate competing innovative business models offered by start-ups. Examples are Google purchasing DoubleClick and Facebook purchasing Instagram and WhatsApp. Enforcers need to be more forward-looking in their analysis in such markets and consider more critically the broader strategy of the purchaser and perhaps, consider using Article 102 TFEU, in addition to merger control, to prevent this elimination of competition.
- d) A consumer has effectively no choice but to agree identical Terms & Conditions, including the treatment of personal data, as Facebook controls the services not only of its own platform but also of Instagram and WhatsApp. The original merger assessment of these cases focussed on whether the services directly competed. Had the relevant authorities gone beyond scrutinising the narrow service (e.g. messaging, photosharing etc) and considered preserving a consumer's choice on which type of social/messaging network to join based on e.g. (i) the protection and treatment of data, or (ii) allowing the consumer a choice on avoiding targeted advertising within the service itself, then the outcome may have been different.

These examples demonstrate that, in digital markets, product market definition should go beyond simply the narrow functional definition of the product or service in question, but also extend to preserving choice for the consumer on Terms & Conditions, use of personal data and in-line advertising.

3. Behavioural Discrimination

One problem that may arise with online gatekeepers, mass data collection and algorithmic processing is behavioural discrimination, in particular price discrimination. Price and product differentiation can clearly be efficient and pro-competitive, but with growing information asymmetries, the lack of transparency could facilitate behavioural discrimination that is negative for the consumer. Where products and services as well as their prices are personalised, it is generally more difficult for consumers to understand whether they have been discriminated against on the basis of their data.

Currently, it may not be in the interest of companies to engage in first-degree price-discrimination against consumers, not least given the risk of an adverse customer reaction. Evolving algorithms and AI however will make this more likely going forward. This can be negative, especially if undertaken in such a way that it is not obvious to the consumer that the consumer is targeted with different pricing. In this context, authorities should consider whether information asymmetries exist and how a level playing field could be ensured, including for consumers.

This may also have an impact on innovation, where consumers may only see what AI has decided for them, and specifically, they may not discover new products and services once they have been categorised by AI. This may disincentivise new, innovative product launches which will not be promoted by algorithms.

4. Algorithmic Collusion

AI can be both positive and negative for competition as it speeds up competitive interactions and can model more potential outcomes – in some markets this can intensify competition while in other markets more prone to tacit collusion it can facilitate or speed up that process and restrict competition.

In the digital economy, this might facilitate reaching tacitly collusive outcomes even in markets which do not otherwise appear to be oligopolistic. Not only is the high-speed processing of information about competitors' behaviour accelerated by algorithms and growing computing power, but in addition, collusion becomes easier to implement and sustain where machines can monitor and replicate a greater number of competitors' behaviour more quickly and more efficiently than humans ever could (whether this be an intentional or unintentional aim of competitors making use of algorithms).

In markets that tend to be competitive, AI will speed up the market reaching the perfectly competitive equilibrium. Whilst it is important not to assume that AI is by default bad for competition, it is an extra factor in considering whether markets are competitive or have reached (or are prone to) a tacitly collusive equilibrium.

The above covers the situation where self-learning algorithms analyse the market, develop competitive strategies and, in the tacitly collusive outcome, start matching prices without any explicit agreement.

It is quite different where AI/algorithms are executing a pre-existing anticompetitive agreement and the application of competition law is more straightforward. This is the crucial factor that brings such collusion within Article 101 TFEU – the existing law requires that there must be a meeting of the minds and the introduction of AI/algorithms does not change that.

5. Conglomerate Effects

In the digital economy, which is currently dominated by platforms, markets are more and more integrated. Platforms try to combine vertical, horizontal and adjacent products and services. Data strategies of those big players allow them to quickly enter/expand in markets, including in neighbouring markets (or even totally different markets). There is also a shift from physical products to access, where eyeballs, attention and data play a big role. These characteristics of the digital economy imply the need for a more holistic approach in the assessment of competitive effects.

More specifically, it is necessary to take into account the interrelationship of different sides of the market and how platform owners seek to bind their whole ecosystem together, thereby tying consumers and providers/sellers to their platform. Applying very narrow market definitions may fail to reflect these strong cross-platform effects. Conglomerate effects and economies of scope play a much bigger role in digital markets, and the assessment of competitive effects needs go beyond narrow market definitions to analyse business models of platform owners, taking into account the entire legal and economic context.

A particular phenomenon in digital markets are so-called killer acquisitions: big dominant platforms that buy disruptive innovative start-ups, in particular relating to new digital services and future technologies such as machine learning and AI. The aim is to eliminate competition by acquiring the next innovation in a market the acquirer dominates before it grows and becomes a significant competitor. These M&A activities by dominant (even super-dominant) players often are not assessed by competition authorities because they fail to meet the thresholds for merger control even though their harm to competition could be quite negative in certain markets. Where such acquisitions are used in a strategic way by dominant companies to keep new competition out of the market, such behaviour could potentially be assessed under Art. 102, if they bypass the merger control regime.

6. Innovation Theory of Harm

In the digital economy, the impact of innovation is twofold: it has disrupted traditional markets while at the same time supporting competition. Therefore, competition agencies should ensure that markets remain contestable and open to innovators. Competition in the digital economy is dynamic (and includes competition for future markets) whereas competition in traditional markets tends to be slower to evolve. Therefore, the assessment of competitive effects needs to take into account the impact of conduct on future innovation.

Competitive concerns could arise where gatekeeper platforms control the interaction of consumers with business and other consumers. Here, they can use algorithms to monitor new trends and either (a) deter innovation by foreclosing future competition or (b) taking over innovation once smaller companies have taken the risk to establish demand in the first place.

D. Enforcement

1. Dynamic Approach

Digital markets evolve at a very rapid pace and – with enough reach and scale – can very quickly result in the creation of substantial market power for one platform or player and the elimination of competition. Once substantial market power has solidified, it may be difficult or even impossible for competitors to challenge, unless there is a leap in technology (such as the shift from desktop to mobile).

Therefore, it is important that competition analysis keeps pace with the technological and market developments and (i) launches investigations promptly and (ii) supports a faster enforcement mechanism in order to prevent the creation of entrenched monopolies in digital markets, e.g. the Google Search case. This case took many years to reach a decision, which arrived after many competitors had irreversibly left the market. The Commission might look at other authorities which complete investigations in a much more timely fashion (e.g. Italy, Spain) and consider how it might accelerate its antitrust investigation processes.

Beyond that, competition analysis in digital markets requires a more forward-looking approach. A purely short-term, static competition analysis, without looking at the dynamic development of the market, will fail to capture crucial competitive (or anti-competitive) developments in digital markets.

2. Level Playing Field

In the application of competition law, it is necessary that DG Competition of the European Commission takes a more holistic approach. It should take into consideration all aspects of the competitive landscape, including competition on the global level.

European companies often face competition from companies outside the narrowly defined markets, in particular from non-EU companies. These companies often operate under a less burdensome legal and regulatory regime. These inequalities should be taken into consideration when assessing the competitive pressure.

E. Conclusion

While the underlying principles of competition law remain equally valid and as important in digital markets as in physical markets, the tools of competition law enforcement should be adapted to the characteristics and dynamic nature of digital markets.

More concretely, ERT believes that it is very important to:

- analyse competition against the broader ecosystem of platforms and consider adapting the weighting of market definition in this process to take account of the dynamics of digital markets
- develop clearer guidelines on how to define markets and measure market power in the context of digital markets
- pay attention to potential abuses at an early stage before markets tip
- tackle the so-called killer acquisitions in the framework of both EUMR and Art.102 TFEU

Beyond that, the decision-making process within competition authorities should adapt to dynamic digital and expanding global markets by:

- limited time procedures to keep pace with evolving technology and given the speed with which competitive harm can manifest
- looking at inequalities in competition on a global level

About ERT

The European Round Table of Industrialists (ERT) is a forum bringing together around 55 Chief Executives and Chairmen of major multinational companies of European parentage covering a wide range of industrial and technological sectors. ERT strives for a strong, open and competitive Europe, with the EU, including its Single Market, as a driver for inclusive growth and sustainable prosperity. Companies of ERT Members are widely situated across Europe, with combined revenues exceeding €2,250 billion, sustaining around 6.8 million jobs in the region. They invest more than €50 billion annually in R&D, largely in Europe. www.ert.eu