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Algorithmic competition – Note by Italy

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More documents related to this discussion can be found at
<https://www.oecd.org/competition/algorithmic-competition.htm>

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1. Introduction

1. The role of algorithms in the economic environment is growing steadily. Most consumers' experiences are influenced by comparison tools, auction bidding mechanism and functionalities that imply - at various level of awareness and transparency - the use of algorithms, which contribute to define choices, prices and outputs. In other words, algorithms contribute to define the main parameters of market structures. Furthermore, they can contribute to create new markets and satisfy new needs. By doing so, algorithms have proved to be beneficial to social economic welfare and efficiency-enhancing. In some instances, they can contribute to allocative efficiency as well as to technical efficiency as they can have pro-competitive effects¹.

2. However, the widespread usage of algorithms and the growing relevance of Artificial Intelligence (AI) can also pose competitive concerns². First of all, pricing algorithms could generate or strengthen cartels or environments conducive to collusive agreements as they can make it easier for firms to achieve and sustain collusion³. Moreover, they can strengthen the market power held by big players and reduce the contestability of their ecosystems, thus generating a greater persistence of a platform's market power. Finally, they can be designed to implement abusive strategies that can be declined as “*algorithmic exclusionary conduct*”⁴ and “*algorithmic exploitative conduct*”⁵.

3. The Italian Competition Authority (AGCM or Authority) welcomes the opportunity provided by the OECD Competition Committee to discuss algorithms and their implications for antitrust policy. This contribution provides an overview of the Authority's experience in this field and outlines some of the opportunities that the agency foresees.

4. AGCM started to consider these topics in 2017, when it launched a sector inquiry on Big Data in cooperation with the Italian telecom (AGCOM) and privacy regulators

¹ Descamps, A. (2021), “Algorithms and competition: the latest theory and evidence”, *Competition Law Journal* 20(1), pp. 32-39,

<https://scholar.archive.org/work/oko6ivzrhbhynarfoyv7ms3poy/access/wayback/https://www.elgaronline.com/downloadpdf/journals/clj/20-1/clj.2021.01.04.pdf>.

² Competition & Markets Authority (2021), Algorithms: How they can reduce competition and harm consumers, <https://www.gov.uk/government/publications/algorithms-how-they-can-reduce-competition-and-harm-consumers/algorithms-how-they-can-reduce-competition-and-harm-consumers>

³ Calvano, E. et al. (2020), “Artificial intelligence, algorithmic pricing, and collusion”, *American Economic Review* 110(10), pp. 3267-3297, <https://www.jstor.org/stable/pdf/26966472.pdf>

⁴ Fumagalli, C., Motta, M. and Calcagno C. (2018) *Exclusionary Practices. The Economics of Monopolization and Abuse of Dominance*, Cambridge University Press.

See also Fumagalli C. and Motta M. (2020) *Dynamic Vertical Foreclosure*. *The Journal of Law and Economics*, vol. 63, n. 4, November 2020.

⁵ Botta, M. and K. Wiedemann (2019), “Exploitative conducts in digital markets: Time for a discussion after the Facebook Decision”, *Journal of European Competition Law & Practice* 10(8), pp. 465-478, <https://academic.oup.com/jeclap/article-abstract/10/8/465/5644110>.

(GDPD). This represented an opportunity to engage in an inter-institutional dialogue that allowed to address multi-disciplinary challenges from competition, regulatory and privacy perspectives.

5. Some of the competition concerns envisaged in the sector inquiry materialised and were addressed in subsequent enforcement action undertaken by the Authority. In its 2021 investigation concerning an "anti-fraud project" established the Italian Association of Insurers, AGCM acknowledged the positive purpose of the initiative, but made binding a set of commitments, which include the algorithm used for data processing, with a view to preventing possible coordination and homogenization of important aspects of the policies offered by the companies. In its FBA Amazon case in 2021, AGCM examined the role of Amazon's algorithm in the tying strategy leading to the raising rivals' costs on the logistics services market.

6. Importantly, algorithms are associated with several other risks in the way they select information and affect consumer behaviour. They can be programmed to bias consumers' decisions, manipulate rating systems, collect and use data and content in violation of privacy and property rights, resulting in consumer harm. The Authority employs its consumer protection tools to empower consumers and enhance their ability to make fully informed choices. At the same time, AGCM fights against behaviours enacted through algorithms that can harm vulnerable categories of consumers, as in its TikTok case. This combined action between competition enforcement and consumer protection allows for synergies and cross-fertilization between the two disciplines when facing the digital challenges.

7. In order to respond to the growing importance of algorithms related concerns the Authority is in the process of equipping itself with sector-specific experts, including data scientists.

2. Algorithmic Coordinated conduct: how algorithms can facilitate collusion

8. In the context of the above-mentioned sector enquiry on Big Data⁶, the Italian Competition Authority observed that pricing algorithms are increasingly used by professional online sellers of any size. In fact, a number of specialized software developers offer solutions that allow even small companies to implement "strategic" dynamic pricing strategies. This foster increased competition, as long as companies can exploit transparency on price or other parameters to identify the best positioning of their offer in the market.

9. However, several elements suggest that algorithms can also facilitate situations of collusion: a greater degree of transparency in online markets, given the wide availability of price data and other relevant information about competitors; the frequency with which prices can be adjusted, given the ability of algorithms to monitor markets in real time and their ability to instantly and continuously change prices; and, the development of optimal pricing strategies through machine learning. The use of pricing algorithms might also increase the likelihood that cheating on the collusive "agreement" will be detected as well as the speed of punishment. In fact, companies can monitor their rivals' prices and detect

⁶ Market inquiry on Big Data (Final Report in Italian only) https://www.agcm.it/dotcmsdoc/allegati-news/IC_Big%20data_imp.pdf

Summary of the final report

<https://en.agcm.it/dotcmsdoc/pressrelease/Italy%20Big%20Data%20Sector%20Inquiry%20-%20Summary.pdf>

changes in real time. Also, (strategic) dynamic interaction occurs more quickly than in traditional markets, thereby easing companies' ability to implement harsh punishment strategies, making punishment stronger, swifter and more certain.

10. Furthermore, the sector inquiry highlighted that pricing algorithms might extend the scope for possible collusive conduct, traditionally confined to oligopolistic and highly concentrated markets. Due to the new opportunities brought about by algorithms, available to sellers of different sizes, collusive behaviour might even arise in markets whose structural features made collusion difficult to achieve or maintain, such as fragmented markets or oligopolistic markets with a fringe of small competitors.

11. AGCM took these considerations into account when it carried out a case concerning the so-called "*anti-fraud project*", an initiative by ANIA (Associazione Nazionale Imprese Assicuratrici, the Italian Association of Insurers) aimed at fighting insurance fraud (see Box 1).

Box 1. Progetto Antifrode ANIA

In September 2021, the AGCM accepted and made binding the commitments presented by the Italian Association of Insurers (ANIA) with respect to its "Antifraud Project", notified to the Authority in order to verify its compliance with Art. 101 TFEU.

The project involved the creation of databases and the development of common algorithms to define fraud risk indicators that insurance companies may use both in the underwriting and compensation phase. More specifically, the project envisaged the set-up of (i) a platform for the exchange of information on fraudulent activities so as to obtain general trends on the anti-fraud actions undertaken by the insurance companies, and (ii) a portal providing insurers with useful information to detect in real time fraud risks before settling the claims.

The relevant markets concerned by the project are the production and distribution of life and non-life insurance products. While acknowledging the costs of fraudulent activities to the industry, the AGCM considered that the project as originally notified raised three main competition concerns. First, the Authority questioned whether the project would benefit all companies in the market or whether companies that are not members of ANIA could be excluded from the platform. Second, the Authority questioned whether and to what extent the information exchange required by the project could facilitate collusion among ANIA members by artificially increasing market transparency. Third, the development of common algorithms and the sharing of large amounts of data, including information related to the characteristics of claims and policyholders, could influence and standardize company's business decisions, since the ability to acquire and process data requires a specific set of skills and is an important parameter of competition.

Following the investigation, the Authority accepted and made binding commitments offered by ANIA, which were amended in view of the comments received during the market test (including comments from the Italian data protection authority and the sectoral regulator). The association committed to allow access to the database by non-member insurers. It further committed to allowing members to only use the platform in the settlement phase of an insurance claim, and not during the underwriting phase. The association also appointed a third party to monitor that the data collected on the platform are used correctly and not as a tool for sharing sensitive information. Moreover, for the purposes of defining the so-called "Anomaly Index", ANIA committed not to use a self-

learning algorithm. Finally, ANIA undertook to report to the AGCM on the implementation of the commitments every two years.

12. The Authority understood the potential of this initiative, because solid anti-fraud instruments lead to substantial cost savings, which can lead to better insurance at cheaper prices. However, it observed that extensive data sharing could facilitate collusion, while common algorithms could uniform price setting criteria. In particular, the Portal could facilitate the homogenization of important aspects of the policies offered by the insurance companies and enable new forms of coordination. For example, the Portal allowed insurers to use the fraud risk score in order to refuse some clients or to increase their premiums, on the basis of an associative choice embedded in the design of the algorithm.

13. Following a thorough balancing exercise, the Authority came up with commitments that prevent the sharing of sensitive data and ensured access to the databases by competitor Association members. Noteworthy, the commitments offered by ANIA and made binding in the final decision also include the nature of the algorithms used for data processing. In particular, ANIA committed to use an “*Anomaly Index*”⁷ based on an algorithm belonging to the “*Anomaly Detection*” rather than the “*Self-learning*” family. This mitigated the competitive concerns regarding possible standardization of commercial strategies, insofar as it left room for a personalization of the individual choices of the insurance companies.

14. An important aspect of this case is that AGCM carefully considered the views on the commitment proposal expressed by the Data Protection Authority in the context of the market test, in order to make sure that the commitments regarding the input data that fed the Portal also complied with privacy rules.

3. Algorithms and abuse of dominance

15. As already underlined in the context of the Big Data sector inquiry, sophisticated algorithms provide digital ecosystems with the ability to collect and process enormous quantity and variety of data. This can result in exclusionary conduct. The ability and incentives for companies to implement restrictive conduct are further increased by the high degree of vertical and conglomerate integration that characterizes digital ecosystems.

16. In this context, the scrutiny of practices by dominant operators in multisided markets, playing a dual role as intermediary on a digital platform and user in (at least) one of the sides of the market, was set as a priority by AGCM in light of the increased likelihood of abusive leverage of a dominant position into related markets, through exclusionary practices.

17. In a case concerning Amazon, the Italian Competition Authority analysed the functioning of the algorithm used by the company to select the so-called Featured Offers on its marketplace *Amazon.it*.

18. In particular, in December 2021 the AGCM fined the Amazon group over 1 billion Euros and imposed behavioural remedies for an abuse of dominant position in violation of Article 102 of the Treaty⁸.

⁷ The synthetic index that allows to define the distance - in statistical terms - of the accident being analyzed from the standard.

⁸ Case A528 – FBA AMAZON.

19. Even though the focus of this case lies in the tying strategy (see BOX 2), it is worth reporting the analysis of the *Featured Merchant Algorithm* (FMA) carried out by AGCM to understand the abusive extent of Amazon’s conduct.

Box 2. FBA AMAZON⁹

In November 2021, the Authority fined Amazon Europe Core S.à r.l., Amazon Services Europe S.à r.l., Amazon EU S.à r.l., Amazon Italia Services S.r.l. e Amazon Italia Logistica S.r.l. (overall “Amazon”) € 1.1 billion for a breach of Art. 102 TFEU. In particular, Amazon was found to have leveraged its dominant position in the Italian market for intermediation services on marketplaces to favour the adoption of its own logistics service - Fulfilment by Amazon (FBA) - by sellers active on Amazon.it to the detriment of the logistics services for e-commerce offered by competing logistics operators. Moreover, Amazon abuse was capable of further strengthening its dominant position by rendering costly multi-homing by sellers active on Amazon.it marketplace.

In defining relevant markets, the AGCM adopted a multi-market approach by defining as many relevant markets as the sides of a platform: in this case, it defined a market for e-commerce intermediation services via “horizontal” (i.e., generalist) marketplaces on the sellers’ side only (e.g., all the intermediation services for sellers to reach out consumers), although the Authority indirectly considered the services provided by marketplaces to consumers (e.g., search and ranking, product reviews, refund policies). The investigation confirmed the lack of substitutability, from the retailers' point of view, between horizontal marketplaces and brick-and-mortar shops, sellers’ own websites, price comparison sites search engines and other websites, and vertical marketplaces (although market definition was left open in this case).

In assessing the dominance, the extensive investigation of the Authority found that Amazon was dominant under different metrics¹⁰. Amazon’s market share in 2019 was up to 5 times higher than that of its closest competitor, and such a gap has been sharply widening over the past four years. In AGCM’s view, Amazon’s dominant position was not contestable by competing operators even in the medium term due to significant barriers to the entry and expansion for new operators: network effects, brand recognition and consumer loyalty programs, ecosystem nature of the company active in several sectors with multiple roles.

According to the Authority, Amazon adopted a tying strategy by granting a set of exclusive benefits on its marketplace Amazon.it to sellers availing of its logistics service

⁹ Link to the decision (in Italian only): https://www.agcm.it/dotcmsdoc/allegati-news/A528_chiusura%20istruttoria.pdf

Link to the press release in English: <https://en.agcm.it/en/media/press-releases/2021/12/A528>

¹⁰ In 2019 Amazon realized over 75% of marketplaces’ total revenue from the supply of intermediation services to sellers. In the same year, over 70% of the total value of sellers’ transactions on marketplaces in Italy occurred on Amazon.it. From 2016 to 2019, the number of monthly consumer visits on Amazon.it skyrocketed from around 80 million to over 220 million (during the same period, eBay.it’s visits increased from 40 to 50 million); the number of products (in terms of range) sold by Amazon.it moved from a range of 100-200 million to 600-700; in 2019 the number of consumers who made at least one purchase on Amazon.it during the year rose to well above 10 million (a 60% increase from 2016) as compared to a drop by over a fifth experienced by eBay.it over the same period.

(Fulfilment by Amazon – FBA), which provides logistical support services covering every step of an online sale, from when a consumer searches for a product to when that product is delivered, including inventory management and product returns. Among the exclusive benefits for users of its FBA service, the most relevant is the Prime label, which makes it easier to sell to the above 7 million most loyal and high-spending consumers who are members of Amazon’s loyalty program. The investigation showed that such benefits are crucial for sellers to gain visibility, to boost sales and, in turn, to the success of sellers’ offers on Amazon.it. In addition, sellers using FBA are not subject to the stringent performance indicators that Amazon applies to monitor the non-FBA sellers’ performance, which can ultimately lead to the suspension of non-compliant sellers’ account on Amazon.it.

As for the effects of the conduct, Amazon considerably expanded in the new e-commerce logistics sector. It increased the percentage of seller transactions handled with FBA from less than 30% at the beginning of 2016 to more than 80% at the end of 2019 and delivered in 2019 more than 150 million e-commerce parcels, that is more than 60% of the total parcels generated by online sales in Italy, compared to just over 20% in 2016.

Amazon’s conduct harmed first and foremost, competing e-commerce logistics operators. The AGCM analysed the new form of logistics for e-commerce and considered the importance of reaching economies of scale. In particular, the AGCM found that Amazon’s strategy succeeded in curbing the development of competing integrated logistics formulas by innovative operators, created specifically in response to the development of e-commerce. Unlike the operators already structured in B2B logistics, for the new players, specialized in B2C e-commerce logistics, the possibility of competing on equal terms with Amazon for the demand expressed by retailers active on Amazon.it does not constitute the mere expansion of their business to an additional segment, but is essential to the large-scale development of their business. Furthermore, Amazon’s conduct had a secondary effect of consolidating its dominance in the Italian market of intermediation services on marketplaces, by increasing the costs of multi-homing for sellers.

According to the Authority, Amazon did not provide any objective justification for its conduct: in particular, the alleged superiority of FBA was not supported by convincing evidence. Moreover, the Authority’s investigation found that that the attractiveness of the FBA service from the sellers’ perspective did not stem from the efficiency of the service itself but on its associated benefits (on Amazon marketplace). Indeed, a survey of Italian sellers found that the FBA service is costly (due to the fees and the reverse logistics), especially for SMEs, and does not provide incentive to develop multi-channel strategy (multi-homing), with two effects: new innovative logistics services for e-commerce could not achieve a minimum efficient scale and other marketplaces become less attractive for sellers compared to Amazon.it marketplace.

The Authority imposed behavioural measures on Amazon that will be subject to review by a monitoring trustee. In particular, Amazon shall: 1) grant sales benefits and visibility on Amazon.it to all sellers which are able to comply with fair and non-discriminatory standards for the fulfilment of their orders, in line with the level of service that Amazon intends to guarantee to Prime consumers; 2) define and publish such standards; 3) apply the process of monitoring compliance with the standards required for the assignment of the Prime label uniformly to all offerings regardless of the logistics services adopted; 4) apply the performance indicators uniformly to all offers on Amazon.it providing full information to sellers.

Amazon appealed the decision and was granted a suspension of the behavioural remedies by the Court of First Instance in March 2022.

20. The algorithm was used by the company to select the so-called Featured Offer, that is the offer – among those available on the platform for a given product – which better responds, in Amazon’s view, to a customer’s product search. The selected Featured Offer is the one and only displayed in the so-called Buy Box, the top-right box on the results page which allows for customer’s direct purchase and avoids a visual comparison with other offers available for that product¹¹.

21. The design of the *FMA* algorithm increased the likelihood of *FBA*-retailers’ offers winning the Buy Box. Indeed, it attached a higher “rating” to Prime-eligible offers (that means only those handled through *FBA*). This happened at different stages, since the algorithm operated in two phases.

22. It first identified "eligible" offers for the Buy Box, through a set of filters discarding retailers’ offers that did not meet the characteristics expressed by the customer through its search¹². At this "*pre-qualification*" stage, the first differential treatment between *FBA* and non-*FBA* offers took place: if a retailer proposed, for the same product, both an offer managed by Amazon *via FBA* and an independent non-*FBA* managed offer, the algorithm automatically excluded both offers from the Buy Box if the *FBA* offer was less competitive (i.e. if its price exceeded by more than [20%-30] the price of the non-*FBA* offer). This means that retailers could not rely on cost advantages achieved by using more efficient logistics operators compared to *FBA*.

23. In the second phase, the *FMA* algorithm estimated, for each eligible offer, the probability of a customer choosing that particular offer on the basis of five characteristics (variables X_1, X_2, \dots). To each characteristic *FMA* applied a "weight", determined by econometric and machine-learning methods. Weights were calculated separately for different product types and for Prime and non-Prime customers, but the calculation did not change based on the identity of the seller.

24. Finally, the scores obtained by the eligible offers determined the *FMA* ranking: the offer with the highest score would be the Offer featured in the Buy Box.

25. Two out of five characteristics are relevant in this case, since they were connected to the use of *FBA*: the “*Evaluation of the third-party seller's performance*” and “*Prime eligibility of the offer*” variables.

26. The *Evaluation of the third-party seller's performance* (X_2) depended on the seller's delivery performance over the previous 12 months, calculated on the basis of various parameters, such as the number of negative reviews or late deliveries. These metrics did not apply to third-party sellers that subscribed to *FBA*, implying that for those offers the X_2 variable always assumed a maximum value, by default equal to 1.

¹¹ The Featured Offer is the offer that Amazon deems the most suitable to satisfy the consumer's search (based on its own algorithm). In Amazon's view, the purpose of the Buy Box is to “*simplify the shopping experience for customers by identifying the offer most likely to be chosen if customers compared in detail all the offers available for a given product, taking into consideration various characteristics such as price, speed and shipping costs, trust in the seller, customer service*”.

¹² Only three out of seven filters directly reflect consumer revealed preferences. Some of the filters are based on Amazon’s assumptions about consumer preferences, not directly expressed by the consumer during its search.

27. This meant, in turn, that for an *FBA* offer, the value associated with this characteristic was always greater than (or, at most, equal to) the value that could be assigned to a non-*FBA* offer.

28. The *Prime eligibility of the offer* (X_5) was, instead, a binary variable, which was equal to 1 if the offer was included in the Prime programme and to 0 otherwise. So, third-party sellers' offers handled through *FBA* would get a positive score in relation to X_5 , because these offers were granted the "Prime badge", while for non-*FBA* offers this characteristic was always assumed a null value. This element of the *FMA* score significantly reduced the likelihood of offers not managed through *FBA* being selected for the Buy Box.

29. In conclusion, entrusting Amazon with the logistics of orders received on *Amazon.it* affected the selection of the Featured Offer and the Buy Box assignment process in several direct and indirect ways. First, if a third-party seller had two offers for the same product, one managed with *FBA* and the other on its own (or by a third-party logistics operator), the price of the *FBA* offer could not be higher than that of the non-*FBA* offer. Secondly, with regard to *FBA* offers, the algorithm assigned a maximum value of 1 to the *Evaluation of the third-party seller's performance* characteristic. Finally, *FBA* offers obtained the Prime badge, and the Prime eligibility of the offer characteristic was worth 1.

30. Calculations on Amazon's data confirmed the impact of the system described above: a Prime offer (an offer handled through *FBA*) had a [100-200%] higher probability of winning the Buy Box than a non-Prime offer. For a third-party seller, choosing Amazon's logistics also resulted in higher sales: in 2019, [60-70%] of the total sales made by third-party retailers on *Amazon.it* - both in volume and in value - involved Featured Offers in the Buy Box, of which [60-70%] consisted in products managed through *FBA*.

31. On top of the preferential treatment granted to *FBA* offers through the algorithm, exclusive advantages on the platform for *FBA* retailers included the disapplication of a full set of performance metrics that Amazon applied to evaluate the activity of non-*FBA* retailers. This evaluation process was very strict and could ultimately lead to the suspension of their account on *Amazon.it* and the prevention from associating the Prime label with their offers, in case of protracted non-compliance. The AGCM observed that some of the metrics had nothing to do with the quality of the logistics service used, therefore unduly discriminating offers of retailers which chose competing logistics service, independently of the level of the service they provided.

4. Algorithms and consumer protection

32. On the demand side, comparison tools and electronic marketplaces using algorithms allow consumers to quickly compare prices and other conditions of products or services across a large number of online sellers. This facilitates consumer choice and leads firms to compete more aggressively on prices¹³. These positive effects on competition depend on the extent to which consumers are provided with transparent and trustworthy information and might thus be undermined by unfair practices that can distort consumer

¹³ Algorithms and Collusion - Note from Italy, DAF/COMP/WD(2017)18.

choice. Several studies on consumer behaviour have demonstrated that the positioning of the results that appear following a search input influences consumption choice¹⁴.

33. As an authority with dual competence both in competition and consumer protection, the AGCM has proved to be well placed to tackle such possible unfair practices and safeguard trust in reliable and independent online comparison tools.

34. Indeed, during 2020 the Authority accepted and made binding commitments submitted by Booking¹⁵ and Expedia¹⁶ that addressed the problem of lack of transparency in the ranking of the results of the comparison researches. The AGCM addressed price rankings and default rankings as factors capable of influencing the consumer's decision-making process. The commitments increased the transparency of the results showed by the price and default ranking algorithms. First of all, the price ranking algorithm was modified in order to display the results relative only to the final price. Secondly, the companies introduced a general disclaimer regarding the neutrality of the default ranking, to make consumers aware of the fact that it could be influenced operators' payments to increase visibility.

35. In 2022 the Authority carried out six extensive investigations¹⁷ concerning the use of the Yuka *app* and the related food labelling NutriScore system, introduced by several retail companies. The Yuka *app* claimed to give a health assessment of food products based to a large extent on the NutriScore system, providing alternatives to products assessed to be of poor or bad quality.

36. The NutriScore labelling system is based on a complex algorithm that assigns scores to food products, by subtracting from the total value of the “bad” elements (energy, saturated fatty acids, simple sugars, sodium) that of the “good” elements (percentage of fruit, vegetables, legumes and oilseeds, fibres, proteins). The Authority's concern was that NutriScore labels, as well as the scores and ratings provided by the Yuka *app*, in the absence of adequate warnings, would be erroneously perceived as absolute assessments of the healthiness of the products, irrespective of individuals' specific needs (in terms of diet and lifestyle) and of quantity and frequency of intake within a varied and balanced diet. The commitments offered by the party and made binding by AGCM ensured transparency on the actual functioning of the Nutriscore system and the ranking of the alternative products suggested.

37. Furthermore, algorithms features stand out in several AGCM's cases regarding vulnerable consumers protection. In 2020, AGCM closed several investigations regarding online gaming sector, with a special focus on the protection of children and other vulnerable consumers and transparency requirements.

¹⁴ European Commission (2017), Final report on the E-commerce Sector Inquiry - Commission staff working document accompanying the document, https://eurlex.europa.eu/resource.html?uri=cellar:9d1137d3-3570-11e7-a08e01aa75ed71a1.0001.02/DOC_1&format=PDF.

¹⁵ PS10769 - Booking-servizi turistici on line.

¹⁶ PS10770 Expedia-servizi turistici on line.

¹⁷ See the AGCM decisions regarding the cases PS12183; PS12185; PS12186; PS12187; PS12131 (about the Nutriscore food labelling) and, in particular, the decision PS12184 about the Yuka App and its complex algorithmic functions.

38. Two cases¹⁸ concerned the use of A.I. systems and digital tools based on algorithms, like the so called “loot boxes”, to engage in manipulative and pressure selling techniques tailored to exploit the vulnerability of specific categories of consumers. In both cases, the Authority accepted commitments suitable to make consumers aware of the characteristics of the video game they are about to download, i.e. that the use of the game may involve payments in the form of in-game purchases or “loot boxes”. The commitments were also deemed suitable to remedy that games were presented as free without simultaneous indication of the presence of in-game purchases. These information improvements have been accompanied by tools that allow parents (through child accounts and parental controls) to supervise the use of video games by children and adolescents and to prevent unwanted purchases.

39. In March 2023, AGCM initiated an investigation into TikTok Technology Limited following the growth of videos of young people who attempt acts of self-harm on the platform. The Italian Competition Authority alleged that TikTok failed to implement appropriate monitoring mechanisms to supervise the content published by third parties, according to diligence requirements, especially when particularly vulnerable users such as minors use the service. In the Authority’s view, the company did not enforce its own “Guidelines”, which prescribe the removal of dangerous content related to challenges, suicide, self-harm and poor nutrition.

40. Notably, the Authority criticised the use of artificial intelligence techniques that may unduly influence users. Specifically, it referred to the algorithm used by the platform, which exploits user data to customise advertising and to show content similar to previously viewed and liked content.

41. Noteworthy, the Directive 2019/2161/EU (“Omnibus Directive”)¹⁹ has been recently transposed into Italian legislation. It should be noted that the transposition of the Directive marks an incisive reform of the consumer protection law in terms of effectiveness of the enforcement and provides for numerous innovations on the protection of consumers accessing the digital single market. The main aim of the “Omnibus Directive” seems to be the creation of a new special “*liability regime*” based on the business models of the big digital platforms and with a focus on the most relevant consumer criticalities, for example about personalised pricing tools; fake reviews and verification systems; sales offers; sponsored contents and hidden advertising violations; ranking criteria; full transparency on personal data commercial exploitation and sharing with third parties; etc.

42. Article 6a imposes some “*Additional specific information requirements for contracts concluded on online marketplaces*”. Indeed, before a consumer is bound by a distance contract, or any corresponding offer, on an online marketplace, the provider of the online marketplace shall, provide the consumer, in a clear and comprehensible manner, also with the information regarding the main parameters determining the ranking of the offers shown to the consumer as a result of his/her search query and the relative importance of these parameters as opposed to other parameters. By “*main parameters determining the ranking*” the Directive means “*any general criteria, processes, specific signals*”

¹⁸ PS11594 ELECTRONIC ARTS-Acquisti nei videogiochi e PS11595 - ACTIVISION BLIZZARD- Acquisti nei videogiochi.

¹⁹ Directive (Eu) 2019/2161 of the European Parliament and of the Council of 27 November 2019 amending Council Directive 93/13/EEC and Directives 98/6/EC, 2005/29/EC and 2011/83/EU of the European Parliament and of the Council as regards the better enforcement and modernisation of Union consumer protection rules.

incorporated into algorithms or other adjustment or demotion mechanisms used in connection with the ranking”.

43. Although this provision does not introduce a general obligation to disclose the detailed functioning of ranking mechanisms, including algorithms, it will most likely contribute to the awareness of consumers’ choices.

5. Conclusions

44. The Italian Competition Authority is aware that, despite undisputable efficiency gains, algorithms can raise competition concerns in some circumstances. In particular, algorithms could make markets more prone to collusion, by changing structural characteristics such as transparency and frequency of interaction, and replace explicit collusion with tacit coordination, by providing companies with automatic tools to implement a collusive agreement without direct communication. At the same time, dominant digital players can leverage artificial intelligence and wide availability of data on customer characteristics to engage in algorithmic exclusionary or exploitative conduct.

45. Like several other competition authorities, AGCM has been monitoring advancements in artificial intelligence to understand its increasing relevance in the wider economy. Evidence and enforcement practice suggest that commercial decision by firms operating online are frequently influenced by pricing algorithms.

46. The sector inquiry on Big Data, started in 2017 in cooperation with the Italian telecom and privacy regulators, enabled to appreciate the multidisciplinary nature of the concerns raised by algorithms, which also involves crucial regulatory and privacy issues. In its subsequent enforcement activity, AGCM addressed concerns raised by algorithms in facilitating collusion (Ania “Anti-fraud Project”) and playing a role into dominant operators’ tying exclusionary strategies (FBA Amazon).

47. A specificity of AGCM’s approach is that, in view of its dual remit on competition policy and consumer protection, the institution can explore and exploit synergies between its different powers and tools when facing the digital ecosystems’ challenges.

48. Moreover, AGCM’s experience shows, in light of the nature and implications of algorithmic competition, the interplay with regulation and privacy protection needs to be taken in due account. The challenge for the future is to foster inter-institutional cooperation.

49. Finally, the Italian Competition Authority believes that, given the complexity of these topics, competition enforcement requires understanding and caution, in order to carefully weigh the benefits of innovation against the costs of possible anti-competitive restrictions. In this respect, international co-operation is of great value, insofar as it enables to share knowledge and experience with other agencies.