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Summary of Discussion of the Roundtable on the Role of Innovation in Enforcement Cases

Annex to the Summary Record of the 141st Meeting of the Competition Committee

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This document prepared by the OECD Secretariat is a detailed summary of discussion of the roundtable on the Role of Innovation in Enforcement Cases, held by the Competition Committee on 5 December 2023.

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Summary of Discussion of the Roundtable on the Role of Innovation in Enforcement Cases

On 5 December 2023, the OECD Competition Committee held a roundtable discussion on the role of innovation in enforcement cases. The roundtable was chaired by Professor Frédéric Jenny and expanded upon themes explored during the June 2023 hearing on the relationship between competition and innovation. Specifically, the aim was to take stock of the experience in enforcement cases and to examine how the theoretical and very complex relationship translated into practice.

The **Chair** explained that the roundtable would consist of three parts. Part 1 would look at how competition authorities consider innovation when conducting enforcement activities. Part 2 would focus on the dynamic aspects in terms of how innovation can be measured, the type of information required, the source of such information and how competition authorities can meet the required standard of proof in such cases. Lastly, part 3 of the discussion would examine some of the current legal changes which are allowing competition authorities to adapt and effectively incorporate innovation considerations in their enforcement work. Two experts would also speak at the roundtable; **Douglas Melamed**, Professor at Stanford Law School and **Simonetta Vezzoso**, Associate Professor, Economics Department at the University of Trento.

The Chair opened the discussion by introducing **Aura García Pabón** from the OECD Secretariat and gave her the floor to provide an overview of the background paper.

Aura García Pabón explained that the background paper first looked at how competition authorities address innovation considerations in their enforcement work and concluded that, with respect to legal frameworks, competition authorities are already taking innovation into account in merger control, in the review of anti-competitive conduct, either unilateral or coordinated, and in the different stages of the investigations. The background paper identified three approaches. The most common approach, which mirrors a traditional theory of harm perspective, is a scenario where competition authorities look at incentives to innovate, and how a reduction in competition would affect ability and incentives of firms to innovate. The second most common approach involves cases where innovation is used in efficiency claims or to justify conduct. Lastly, the impact approach looks at the dynamics of the market and considers the extent to which current innovation will define the market in the future. In this way, capabilities rather than incentives drive the competitive analysis. In closing, Pabon noted that capturing competitive dynamics (particularly in the long term), meeting the legal test, and securing sufficient evidence is precisely what the roundtable aims to explore and invited participants to share challenges, issues, and experiences with innovation in enforcement.

The Chair thanked **Aura García Pabón** and gave the floor to **Douglas Melamed** to open the discussion talking about what competition authorities are currently doing with respect to innovation in enforcement.

Douglas Melamed began his presentation by asserting that when assessing alleged anti-competitive conduct, competition authorities should apply innovation specific theories of harm which are in many ways different from traditional theories of harm. The key premise is that innovation is crucial to economic welfare. Using the U.S. model to illustrate his argument, Melamed explained that the key issue in U.S. antitrust law is identifying conduct that should be prohibited by assessing whether the conduct increased or is likely to increase market power. Market power is increased when the competitive discipline of rivals is

decreased, which can be the result of mergers, collusions, or conduct that excludes rivals or raises entry barriers. In other words, in this scenario, the defendant gains market power and, thus, gains the ability to profitably increase prices or otherwise harm trading partners. Evidence of past harm or its absence might be relevant, but it is not a necessary element of this type of offence. In this model, price, output and quality harm can be presumed from an increase in market power. In this way, the focus on increased market power is sufficient to establish harm in most antitrust cases, and inquiry into innovation effects is often superfluous. However, Melamed pointed out that assessing innovation effects in antitrust cases is sometimes important and necessary as it can help determine the extent of harm to competition and the potential for innovation harm. Moreover, he emphasised that in unusual circumstances, such as comprehensive regulation or long-term contracts that prevent or ameliorate price increases and similar harms, innovation harm may be the only likely harm to customers and suppliers. Assessing innovation effects may also be necessary to create an optimal remedy or to create substantive conduct rules that accurately reflect the costs of false negatives and false positives. He explained that in U.S. law, burdens of proof on defendants and plaintiffs can be of specific importance to innovation. The defendant may argue that the conduct has or will have off-setting benefits of increasing the likelihood of welfare-enhancing innovation. However, innovation harm cannot be presumed from an increase in market power alone. For Melamed, the analysis is more complicated as it depends on the defendant's ability and incentive to reduce innovation. In his opinion, assessing the ability issue requires examining a separate R&D market or innovation market and identifying firms with the ability to innovate in the relevant space. Melamed acknowledged that some experts rebut this approach with the argument that R&D and innovation are usually not traded the way goods or services are traded in commercial markets. Having said that, Melamed clarified that the idea is simply to identify firms that have the ability to innovate in the relevant space.

He then moved on to explain that competition in the product market also plays a crucial role in the incentive issue as it creates incentives to innovate to gain market share or prevent loss of share to innovative rivals. However, reduced competition in the product market can increase the innovator's ability to appropriate the fruits of its innovation when intellectual property and other protections are insufficient to prevent unauthorised copying. In this way, theories of harm to innovation are more complex than those of price output and quality harms. To illustrate, Melamed used an innovation specific example. If a firm has market power in the R&D market, gaining market power in the product market may reduce its *incentive* to innovate and make innovation less likely. This is because the firm's increased market power will increase the revenues from existing products that would be lost by innovation through so-called cannibalisation. Conversely, if the firm only does business in the R&D market, gaining a monopoly in the R&D market may reduce the *likelihood* of innovation as it reduces the threat of innovation by others. That said, Melamed emphasised that the statements about when innovation is more or less likely are generalisations about varied situations. They are meant to be used as helpful assumptions (not definite predictions) open to challenge based on the specific facts in each case.

He then moved on to describe how conduct can increase a defendant's ability to innovate by combining complementary innovation resources, such as intellectual property, capital, or entrepreneurial culture. Conduct can also increase the ability of other firms to innovate by increasing their access to necessary resources. For example, the sale of a subsidiary or division can make innovation more likely if the subsidiary or division has a leading position in the R&D market and the selling firm has market power in the relevant product market. Conduct can also increase the incentive of a defendant to innovate by acquiring intellectual property, increasing the ability to appropriate the fruits of innovation, or increasing the ability of other firms to innovate.

Lastly, Melamed commented on the notion that competition law is inherently backward-looking and that innovation is a result of broader, complex factors. For Melamed, current laws are forward-looking and consider dynamic harms as seen in the Microsoft case, for example. Acknowledging that innovation is indeed complex, Melamed urged competition authorities to use existing knowledge to evaluate conduct under antitrust law. He closed with the assertion that antitrust law is not about industrial planning but rather about preventing harmful conduct that can affect innovation.

The Chair thanked **Douglas Melamed** and moved the discussion towards practical case studies, starting with enforcement cases that mirrored the traditional theory of harm perspective; that is, where competition authorities looked at incentives to innovate, how reduction in competition would affect ability and incentives to innovate. He then gave the floor to **Poland** whose contribution detailed several enforcement cases touching upon innovation. The Chair asked Poland to comment on the Allegro case, where the competition authority found that the e-commerce platform was engaging in anti-competitive conduct by self-preferencing its own products which likely reduced innovation and therefore reduced competition.

Part 1: The Incentive to Innovate Approach

Poland explained that in November 2024 an infringement decision was issued stating that Allegro abused its dominant position due to self-preferencing practices. Allegro, a hybrid platform similar to Amazon, facilitated transactions between consumers and sellers and competed with other merchants through its official store. The decision found that Allegro used information about the best match algorithm and user behaviour to improve retail activity and sales and promotional functionalities - information that is not available to other sellers on the platform. For the competition authority, the main question was whether the use of these features was justified as a means to improve the platform's quality and facilitate transactions between users, professional sellers, and consumers. Poland concluded that this conduct was considered an abuse of dominance and was not proportionate to justify the reduction on innovation. Overall, the decision emphasised that while operators can test the functionality of their platforms and favour their official store, the justification must be proportionate to the potential of competition harm.

The Chair thanked Poland and asked **Japan** to speak about the Lam Research Corporation and KLA-Tencor Corporation transaction, a case where the competition authority concluded that the merger reduced innovation incentives. The Chair was particularly interested in the analysis which considered various effects, including competitors being less able to innovate due to anti-competitive practices, and firms having more incentive to innovate themselves.

Japan explained that the JFTC analysed the impact of a merger between KLA-Tencor, a supplier of metrology and inspection tools for semiconductor manufacturing, and Lam Research Corporation, a supplier of semiconductor manufacturing equipment. The merger was considered vertical, as KLA's sales and input of these tools were crucial for Lam's production use. Specifically, KLA's products are considered industry standard and indispensable for Lam and its competitors. During the analysis, concerns arose regarding innovation, as Lam would gain an unfair advantage if KLA shared confidential information obtained through joint R&D with Lam. As a result, the JFTC concluded that the merger would restrain competition in the semiconductor manufacturing tool market. Although the merging parties proposed remedies to make sure that Lam's competitors would be provided with an opportunity to use KLA tools practically at the same time as Lam, the JFTC did not accept the proposed remedies. Japan explained that it is very difficult to monitor the

remedy implementation and if competition is once lost, it will be very difficult to restore it. As a result, the party withdrew the plan of the merger.

The **Chair** thanked Japan and reminded the expert speakers to intervene at any time throughout contribution presentations. He circled back to **Japan** asking them to talk about a study group convened in Japan and the resulting report which sets out how to consider the dynamic approach in innovation cases such as KLA-Tencor.

Japan explained that the report provides a conceptual framework capturing the general mechanisms of impact on innovation based on economic theories and knowledge, focusing on four specific types of business conduct: horizontal, vertical and conglomerate mergers; and joint R&D's. Japan then described how the framework works in the case of horizontal mergers. Specifically, there are two major mechanisms through which horizontal mergers affect R&D and incentives: directly affecting internal competition of merging companies and indirectly affecting the incentives of merging parties or their rivals by affecting competition in the product market. The internal conditions include probability, spillover, necessary input, ability, and profit structure and conditions. Japan explained that horizontal mergers can increase the probability and increase R&D of merging parties by internalising rivals who are potential free riders on R&D. However, such mergers may also decrease spillover beliefs for firms other than the merging parties, decreasing R&D incentive. The report also highlights the importance of the necessary input and ability of R&D's, as well as the profit structure and condition as mergers can increase product division incentives, demand, and profits. The report goes on to discuss the impact of external conditions on product markets, including replacement effects, escape competition, merging parties, and rent-dissipation effects. Replacement effects involve internalising competition for sales through innovation, causing cannibalization between companies. Escape competition effects reduce or eliminate R&D incentives based on the expectation of increasing profits by escaping competition through innovation. Rent-dissipation effects increase the incentive to conduct R&D when a merged company becomes a monopolist, but may decrease if the vast wheel of new entry decreases.

Japan commented that the report also discusses joint research ventures, highlighting extra concern for markets of products produced by joint research members. The study group has also developed a framework for vertical and conglomerate mergers, focusing on both upstream and downstream markets. In closing, Japan noted that the report can be found on the JFTC website. The study group is continuing with their research and is now looking to apply the framework to actual cases using more details in the law. Japan looks forward to sharing the results of their study at a future meeting of the competition committee.

The Chair thanked Japan for their presentation and opened the floor for comments and questions. He first gave the floor to **Doug Melamed** who asked Japan if higher profit margins, whether from cost savings or reduced competition, could lead to more innovation. For **Japan**, profit margins encompass both cost reduction and product innovation, further noting that product innovation can lead to product differentiation which decreases competition. So, in that sense, an increase in margins due to differentiation does involve reducing competitive constraints.

Next, **Simonetta Vezzoso** asked Japan to explain how the study group plans to make positive spillover effects usable for competition authorities, as it is crucial and may connect with different economic or innovation concepts. **Japan** reiterated that the study group is currently working on making the framework practical. In the case of spillovers, it involves measuring these effects, and Japan suggested that antitrust agencies might be able to use research on measuring spillover effects in innovation economics for that kind of analysis.

The **Chair** thanked Japan and introduced the next segment of the roundtable on innovation-based theories of harm. He invited **Spain** to present their contribution and asked how their analysis and application of innovation-based theories of harm differ from the traditional incentive-based approach.

Part 2: Innovation-based theories of harm

For **Spain**, the analysis of digital mergers has increased significantly over the past four years with the relevance of innovation factors in operations assessments increasing from 20-30% to 60%. Spain noted that this has been particularly relevant in cases involving online food delivery, anti-plagiarism software, cyber security, online legal resources, and other digital platforms.

Next, Spain described several case examples such as the 2019 acquisition by Just Eat. In their analysis, Spain observed that the target company had a modest turnover, despite expanding its market share. Notably, the company did not invest much in research and development and, consequently, the competition authority concluded that the buyer was not aiming to eliminate an innovative competitor from the market.

Two years later, there was another case involving Turnitin/Ouriginal, which offers anti-plagiarism and education software. Spain explained that this merger was approved quickly after examining the bundling of digital products and its impact on innovation. Similar to Just Eat, Spain noticed that the target company did not invest much in research and development compared to its revenue. Additionally, in this case, there were other players in the market, including big tech firms capable of innovation. Based on these factors, Spain concluded that there was no risk to innovation from this merger.

Spain also mentioned Norton's acquisition of smaller competitor Avast in cyber security solutions which was analysed for its impact on innovation and barriers to entry due to lock-in effects. The analysis found that the target was less innovative than the buyer, and the competitive landscape included big tech firms and free products in their ecosystems. There was a permanent incentive to improve products due to the rise of cyber security threats. Notably, Spain concluded that the merger also spurred efficiencies, rather than threats, in innovation.

Contrastingly, in the case of Karnov/Thomson Reuters and Wolters Kluwer the analysis identified possible concerns with respect to innovation. Spain explained that Thomson Reuters and Wolters Kluwer were joint entities in the legal software solutions, databases, training, and publications sector with significant market shares and overlaps (30-40% market shares and 10-20% overlaps). Noting that innovation is crucial in some segments, such as legal software and automated file management, and given that the parties were close competitors in terms of their innovative strategies, Spain launched a market study to assess the impact on innovation.

Although the market study did not provide clear evidence regarding the impact on innovation, other factors were considered and provided sufficient evidence for the competition authority to make a determination. Specifically, these factors included competitive pressure from comparable innovative competitors, the influence of alternative solutions, and internal documents indicating efficiency and continued innovation efforts on the part of the buyer. Spain explained that the deal was approved in phase one with certain commitments, primarily addressing clauses and potential restrictions related to multi-homing, rather than specific to innovation.

The **Chair** thanked Spain for their insights and highlighted the importance of understanding the relationship between R&D budgets and innovation capacity. The Chair observed that

internal company documents may provide more precise insights as an accurate measure of innovation capacity, when compared to using R&D budget as a measure.

Next, the Chair turned to the European Commission, acknowledging its extensive experience in dealing with innovation markets, particularly since the Dow/DuPont merger. The Chair asked whether the impact on innovation alone is sufficient to meet legal tests for anti-competitive conduct, or if additional evidence linking innovation restrictions to competition restrictions is required for merger prohibition. He then gave the floor to the **European Commission**.

To set the stage, the **European Commission** first emphasised that the EU legal system explicitly mentions innovation as a relevant parameter of competition, as confirmed by EU courts. For example, based on EU competition law, the conduct that negatively impacts innovation can be caused by restrictive agreements (article 101) and abuse of dominant position (article 102). That said, the European Commission agrees that a universal legal test for determining anti-competitive conduct is difficult. They explained how EU regulation on technology transfer agreements includes a system of market share thresholds to determine agreements that can benefit from exemptions of the prohibition of executive agreements. Specifically, these regulations focus on competition and innovation, with a focus on the relevant product market and technology markets. The regulations also take into account residual competition and innovation, considering other technology poles that can innovate. While these are not theories of harm per se, for the European Commission, this analysis provides first indications of how to assess harm to innovation in mergers.

The European Commission then commented specifically on theories of harm cases in antitrust, particularly in the digital sector where innovation is crucial and provided examples from the pharmacy sector and a car emissions case where an illegal agreement was sanctioned and prohibited for stifling innovation in less polluting technologies. Other examples illustrated the impact of zero-priced products on customers, such as the Microsoft and Google cases, where the normally tied product was offered for free. The European Commission explained that in markets where the products are zero priced, harm may manifest itself as less innovation and choice. To further illustrate the point, the European Commission asserted that reduced innovation is an objective justification for intervention in the interim Broadcom, a case where reduced innovation is part of a specific legal test in the refusal to supply.

Moving on to mergers, the European Commission explained that EU merger control allows the Commission to assess the impact of merging acquisition on innovation. Of note, the Commission does not put competitive harm caused by reduction of innovation on an equal footing with increased price and reduced output. The substantive test is outlined in Article 2(3), which addresses the significant impediment of effective competition, otherwise known as “SEIC”. The European Commission explained that a significant impediment of effective competition can manifest in various forms, such as diminished innovation. This concept is included in its merger guidelines which also identify specific merger scenarios, like those involving two significant innovators or those promising pipeline products, that could result in prohibition. In conclusion, the European Commission believes that innovation is fundamental and should be part of the legal test in mergers.

The **Chair** thanked the European Commission agreeing that reducing innovation can lead to reduced competition, with fewer new products. That said, applying the legal test to innovation can be challenging. Next, the Chair invited Brazil to present their experience and the challenges they have had.

Brazil spoke about three cases where the competition authority (CADE) used theories of harm to evaluate innovation impacts and dynamic competition concerns. The cases,

described in their contribution, related to Google and alleged anti-competitive practices which included appropriation of third-party content, scrapping impediments to multiple platforms, multi-homing, anti-competitive innovation, and self-preferencing in Google Shopping. These cases raised the discussion about dynamic competition in Brazil and have different singularities, requiring case-by-case analysis. Brazil explained that it already has a clear standard for cases involving abuse of dominant position, with the presumption of potential abuse occurring when at least 20% of the relevant market is affected. In this way, the standard provides legal certainty for Brazil in markets involving innovation.

The speaker emphasised that CADE has dedicated itself to evaluating the effects of innovation in these markets but difficulties in measuring the possible benefits or damages caused by a decrease in innovation remain, as well as in measuring efficiencies considering a context of dynamic competition. While the Google Shopping case in Brazil raised the debate about predatory innovation, in this specific case, CADE understood that there would be insufficient elements to impose sanctions to Google for the practices investigated. It concluded that the market had room for the evolution of new agents and the entry of new players and business models, resulting in no penalty for the company.

The **Chair** thanked Brazil and observed that sometimes competition authorities have the possibility of looking at innovation as an efficiency that counterbalances anti-competitive effects. He turned to **Poland** who in its contribution described two cases, the Uber case and the Otomoto case, where it decided that innovation was a legitimate justification for decreased competition. He then gave the floor to Poland and asked them how the competition authority balanced innovation efficiencies with anti-competitive effects.

Poland explained that in the two cases mentioned by the Chair it assessed objective justifications. In the Otomoto case, justifications in terms of development in innovation played a significant role in distinguishing unlawful abuse of dominance from competition on the merits. In this case, Otomoto was an online platform for vehicle classified ads that potentially abused its dominance through excessively high pricing. However, the competition authority determined that the platform's initial price was low, and prohibiting the increase in prices would undermine the investment initiatives of dominant firms. Therefore, the objective justification was assessed after assessing potential anti-competitive conduct, rather than just *prima facie*. Speaking about another example, Poland said that the competition authority has not initiated a formal investigation into Uber but rather advocated for the disruptive business model, arguing that it could harm competitors but not competition and consumer welfare, viewing this as a natural process of competition.

The Chair turned to the **Chinese Taipei** to speak about their experience in allowing multiple fintech transactions due to innovation as a counter argument to possible competition restrictions.

Chinese Taipei first explained that the Competition Commission along with the Financial Supervision Commission collaborated to issue guidelines on mergers between fintech companies, particularly financial holding companies. As set out in their submission, Chinese Taipei noted three cases: the mobile payment service merger, the online banking market, and the acquisition of a financial holding company.

The first case involved a merger between a convenience store, commercial bank, and mobile technology company which occurred after Chinese Taipei revised its act on electronic payment institutions in 2021. In this case, the authority was concerned about the potential to enhance post-merger intervention or disrupt innovation competition. However, the review found that the technological hurdles for entry in the mobile technology and convenience store markets were not high, and the companies had a strong innovation drive after the merger.

The second example presented by Chinese Taipei involved a series of cases dealing with the online banking market. In 2018, Chinese Taipei opened the online banking market, aiming to introduce innovation competition into traditional banking. This allowed non-financial companies with strong technological abilities to enter the market. The three high-profile applications for pure online companies were reviewed and cleared by the competition authority. Specifically, Chinese Taipei asserted that the innovation potential in the traditional banking industry is evident in these cases and that the anti-competitive effects of these companies are balanced by their market share.

The third case involved the acquisition of a financial holding company by a leading financial company in Chinese Taipei, which raised concerns about the potential cancellation of fintech services after the merger. The merging company was asked to commit to continuing providing fintech services and enhancing their digital programme.

The **Chair** thanked Chinese Taipei for their intervention. He then moved to the third part of the discussion on challenges and current changes to incorporate innovation in enforcement.

Part 3: Current legal changes and incorporating innovation considerations in enforcement work

The **Chair** gave the floor to Simonetta Vezzoso to introduce the topic asking her to share her personal view of those issues given her research in this area.

Vezzoso opened with the statement that innovation can be the creative response that entrepreneurs make to changing conditions and to new challenges. Moreover, the critical role of innovation has been profoundly illustrated in humanity's emergence from the health crisis brought about by COVID-19. In the world of competition policy, there is a profound and increasing recognition that innovation is a real factor in shaping competitive processes, and Vezzoso is of the view that often it should be taken even more seriously than price effects in competition policy enforcement. In her remarks, Vezzoso discusses the distinction between two approaches to innovation: one focusing on innovation incentives and the other on innovation impact. Both approaches have their merits and limitations, and understanding which one to adopt depends on competition authorities' assessment of competition in the specific market or sector. Vezzoso believes that competition enforcers can identify situations where innovation is a significant rival between companies, and that a longer-term, dynamic perspective is necessary to fully understand innovation and its relationship with competition. However, this longer-term perspective must contend with uncertainty, as seen in the Brazilian case, and must forego the comfort of quantification in the application of antitrust law. Her presentation outlined key differences between the two approaches.

The first approach to product market rivalry focuses on product or process 'incentives based' innovation, while the second approach, 'impact (effects) based' innovation directly considers innovation efforts by competing firms. The two approaches have distinct innovation concerns, such as a reduction in introducing new features or changes in innovation levels and intensity. For example, the first approach focuses on financial incentives to innovate while the second approach focuses on capabilities to innovate and therefore disruption. Vezzoso pointed out that uncertainty levels vary between the approaches. In the first approach, uncertainties linked to the fact that products have not yet entered the market or potential outcomes from innovation are not clearly identifiable. For the second, the uncertainty is more radical as it stems from the circumstance that there is a high uncertainty regarding future outcomes of innovation efforts.

Vezzoso then focused on the interconnection of the two approaches to innovation in enforcement practice. She explained that the first approach is more static, focusing on determining product markets and competition potential, and using conventional theories of harm. The second approach is more dynamic, focusing on determining product markets through innovation space and theories of harm. Noting that there is still much work to be done in developing a more dynamic approach to competition, Vezzoso described the challenges in developing this approach. She emphasised the importance of understanding these interconnected aspects for analytical clarity and strategic development in enforcement practice. In her view, there is a need for a better understanding of competition as a process of innovation and knowledge creation, suggesting that competition authorities and experts may wish to consider alternative economic theories such as evolutionary economics. She asserted that traditional orthodox industrial organisation thinking may provide limited assistance, and alternative economic conceptualisations should be given greater attention by antitrust enforcers. A better understanding of innovation capabilities is also necessary, especially in less structured sectors where tools of appropriation may differ from traditional IP rights. Additional factors like dynamic patterns, path dependency, absorptive capacities, and technological trajectories also need attention. Greater efforts may be needed to assess the impact of innovation efforts on multiple sectors, and some jurisdictions may need to clarify market definition under certain circumstances. Moreover, understanding innovation processes within ecosystems is also crucial, requiring differentiation between innovation and knowledge production and appropriation mechanisms. Vezzoso suggested that evidence for capturing innovation dimensions can be obtained through portfolios of activities, commercial and licensing agreements, university links, and participation in scientific conferences. Antitrust authorities could collaborate on common fronts by organising symposiums, seminars, and workshops to enhance understanding of innovation processes within specific industries or sectors.

The **Chair** thanked Vezzoso for her thorough interview and turned to **Doug Melamed** who asked for the floor.

Melamed asked whether Vezzoso sees a direct impact on innovation as being a competition enforcement issue apart from its impact on or its being the consequence of competition, or harm to competition. Specifically, Melamed wondered whether one might find a direct impact on innovation that is not related to a reduction in competition.

Vezzoso believes that competition processes and parallel experimentations are worth protecting. She acknowledged that while such capabilities may not always be needed it may be worthwhile to protect them in certain situations to ensure consumers can choose and generate more knowledge.

The **Chair** thanked the two experts for their candid discussion and informative presentations before moving on to the United States (US).

The **US (FTC)** began by emphasising that market definition is crucial in identifying areas of effective competition, including ongoing innovation competition to develop new products. Firms compete through innovative activities to gain sales and improve existing ones. As such, in mergers, it is important to consider the potential for new markets to emerge or create new markets where competition will occur. In the US, the FTC has experience defining markets for pharmaceutical treatments and identifying products that would take sales away from existing products. Based on their experience, the FTC asserted that in cases where firms are competing to develop new products, it is important to define a broad market that encompasses different approaches and core capabilities. For example, the FTC took the approach of defining the market for the research and development of cancer detection products, focusing on core features and functionality. This approach

ensured that the FTC's merger enforcement approach remains relevant in highly dynamic markets.

The **Chair** thanked the US and reiterated the importance of considering market definitions when developing innovation theories, mentioning the trade-off between in-market efficiencies and out-of-market efficiencies. The Chair pointed out the need to assess dynamic capacities, which are the potential outcomes of a market, and asked the **US** how such capacities can be assessed.

The **US FTC** responded that defining markets can be challenging due to assigning different roles and capabilities for firms. Some measures include $1/N$; that is, counting the number of firms with similar capabilities in an innovation space to determine the impact of a merger between two companies. Given these challenges, the US also turned to the room to ask for the experiences of other competition authorities.

The **Chair** intervened noting the importance of understanding technology in business strategy, particularly as business school economists emphasise the need to understand the capabilities required to innovate. The Chair contemplated whether there is an existing exercise or if this is too complex. Mentioning academic papers on this topic, particularly in the automobile industry, the Chair expressed curiosity if this approach has been taken by the US or if it is something for the future.

The **FTC** emphasised their ongoing work needed to analyse evidence and market capabilities of firms to identify their competitiveness through innovation. The US mentioned the FTC's investment in sharing and collaboration, including convening a working group on theories of harm and pharmaceutical mergers. This public consultation provided an opportunity to share experiences and takeaways, which can be implemented in their work. However, the FTC could not yet elaborate on any specific outcome of this work.

The **Chair** thanked the US for their intervention pointing that, in his opinion, the space for lawyers and economists in competition authorities is likely to become more limited due to the increasing importance of digital technology skills which are considered an essential additional set of skills that should be available in such authorities. With that, he turned his attention to Turkey where a different approach is used. He asked **Turkey** to describe their guidelines which touch upon a number of variables that Turkey uses to assess innovation in enforcement cases.

In **Turkey**, the competition authority has included innovation as a competition parameter in its legislation and has established a roadmap for handling merger cases. In 2022, new provisions were added to the merger guidelines. For Turkey, the impact of a merger on innovation depends on the nature of innovation activities, market structure, market dynamics, and the importance attributed to innovation by undertakings and customers. Factors such as R&D investments, intellectual property rights, and economic reasons can be considered. The competition authority's analysis of innovation competition dynamics considers the degree of overlap between activities, competitive pressure on the merged firm, and barriers to innovation. Moreover, market power and competition analysis based on innovation capacities is considered. However, Turkey noted that their decisions so far do not provide a detailed assessment of the impact of mergers on innovation. Overall, the competition authority aims to protect the competitive process by keeping markets open to new entries.

The **Chair** noted the importance of structural variables in innovation, focusing on inputs rather than output. He mentioned Brazil's experience in the Microsoft/Activision case, in particular with respect to the evolution of a nascent market and potential future competition. Giving the floor to **Brazil**, the Chair asked about the basis for their analysis and how they did so.

Brazil explained that the recent Microsoft/Activision transaction in Brazil resulted in horizontal overlaps in game development, publishing, distribution, online advertising, and merchandising markets. This case reinforced vertical integration in upstream, publishing, and downstream game distribution markets. CADE raised concerns about incipient and growing markets, particularly in its analysis of vertical integrations. The analysis revealed that Call of Duty and other Activision Blizzard games would not be as popular in Brazil as in other countries, especially the US. CADE considered that the streaming model might not supplant the device-centric model of the industry in the coming years. That said, CADE also examined potential competition in expanding the video game subscription service with cloud service model, which is considered conservative due to the specific and still incipient segment of digital game distribution activity in Brazil.

The **Chair** thanked Brazil for their intervention pointing out that their analysis focused on potential competition in innovation, examining if there is a commercial space for innovation development. The Chair said that although the likelihood of innovation occurring was not explicitly stated, CADE's sophisticated analysis linked current market conditions to potential innovation introduction. In his view, the analysis remains a black box to determine potential competitors ready to innovate and compete with Microsoft and Activision after the merger. With that, the **Chair** circled back to the **European Commission** to seek clarification on the European Commission's approach to assessing innovation, arguing that the European Commission tends to focus on output rather than input, highlighting the need for more direct assessment of innovation in the innovative process.

The **European Commission** opened by reiterating that the importance of innovation in an industry or market can be assessed using various metrics. They suggested that R&D input, such as the amount of expenditure spent on R&D across a given market, can provide insights into a company's innovation, strength, and importance. For example, the Dow/DuPont merger highlighted the high costs of discovery and development for new active ingredients in the crop protection industry. In the pharma industry, the European Commission pays particular attention to the effects on innovation due to its importance. For the European Commission, widespread, efficient, and long IP protection in an industry indicates a high level of appropriability and importance of innovation. Specifically, R&D output, such as patents, product launches, and pipeline projects, can provide indications of a company's innovative strength. In addition, the European Commission believes that general market features, such as rapidly growing or evolving markets, also indicate that innovation plays an important role. Lastly, the European Commission can also assess the overlaps in pipelines and products of merging parties and their competitors. Such assessment is of particular relevance in the research-intensive pharma industry, with its clear and often standardised development and regulatory approval processes.

The **Chair** thanked the European Commission and gave the floor to **BIAC** whose presentation would discuss the differences between probabilities, possibilities and conjecture in the context of innovation harm in competition cases.

BIAC explained that their submission focuses principally on the standards applicable to cases based on harm to innovation resulting from mergers or conduct of parties. In order to do this, BIAC analysed court decisions in the US, EU, UK to look at what standard of proof the courts require for innovation theories of harm. It is BIAC's view that innovation theories of harm are legitimate, independent bases for enforcement. That said, BIAC noted that competition cases based on innovation theories are different in some respects from cases based on price or output effects. While both cases require some predictive assessment of future competitive impacts, innovation cases rely exclusively on this basis. Merger cases based on price or output effects, for example, can often test (or approximate) the immediate

post-merger profit-maximising price, or optimal output level, of the combined firm, leading to a more immediate assessment of the likelihood of harm on the current market. Innovation merger cases, however, require a counterfactual that predicts whether and to what degree future innovation will impact the future market. These factors are always case-specific and require a deep understanding of market dynamics. Innovation theories of harm are particularly challenging because they require agencies to discern and distinguish between probabilities, possibilities, and conjecture. In many cases, reasonable minds can differ on what innovation may result, when it will occur, and the impact it may have. Indeed, the innovating parties themselves are often unable to make these predictions or to get them right, with a common theme being a high degree of (over) optimism. A key issue in enforcement, therefore, is the standard of proof to demonstrate harm to competition based on innovation theories. Based on BIAC's analysis of court cases, there is good reason to maintain the same burden of proof in innovation cases as in cases involving other types of harm like price effects and output reduction. Furthermore, BIAC asserted that a lower standard of proof, the balance of harms approach, is not appropriate for assessing competition cases, as it raises questions about how much speculation should be tolerated. The focus should be on the likelihood of innovation, its significance on competition, the company's technical, financial, and specific capabilities, and the net effects on platform incentives. In conclusion, BIAC also suggested that competition authorities should consider these factors to conduct efficient assessments and protect innovation competition, especially in the context of platforms with various revenue streams.

The **Chair** thanked BIAC and observed that several speakers have referred to the quality of evidence that one should use in the case of innovation markets or innovation theories of harm. Circling back to Spain's contribution which made reference to internal firm documents, the Chair asked **Spain** whether in their experience such documents are reliable and whether they provide a better vision of what is likely or highly likely to happen in terms of innovation considerations in such cases.

Spain reiterated that internal documents have been relevant in market definition and competition assessment, helping them to assess potential competition barriers to entry and innovation theories of harm. For example, in the case of Norton/Avast, the analysis of internal documents before the merger revealed that the competitor considered the competing product Microsoft Defender as a comparable tool to the parties' products, taking 30-40% of the market share. This helped assess competitive competition constraints and the continuous incentive to innovate due to competitive pressure. The target had deployed lower innovation efforts than the buyer, indicating a need to improve to meet consumer needs. Additionally, internal documents helped calibrate the importance of factors in decision-making, such as antivirus engines and legal software. In *Karnov / TR España / WK España*, the free legal databases exerted some competitive pressure, resulting in continuous incentives to innovate and synergies. However, the risk of tying and bundling as an initiative in the future was identified, prompting specific commitments to refrain from imposing or incentivizing such conducts. In the *Turnitin/Ouriginal* anti-plagiarism case, Spain discussed the influence of big tech companies like Google on alliances and acquisitions, driving innovation. The market was projected to expand due to increased anti-plagiarism awareness, digitalization, and education accessibility. Through email analysis in a 2020 case involving *Pigment Spain and Ferro*, the competition authority discovered cost-saving benefits but also risks of reduced innovation. In that case, remedy monitoring included CNMC's approval for project closures and budget cuts. Another case involving *Boston Scientific Corporation and M.I. Tech* in medical devices reached phase two before abandonment due to inadequate commitments.

The **Chair** thanked Spain underlining once more the importance of examining the documents of firms to understand their strategies and the impact of innovation. He pointed

out that Finland's contribution also discusses the notification form firms must fill when merging which can offer valuable information for assessing the innovation movement. The Chair observed that competition authorities are taking proactive actions to better deal with innovation, such as changing their legal framework or conducting market investigations, mentioning Mexico study on digital platforms, the Nordic report on digital reform in the EU referred by Finland, and the US's draft guidelines for mergers. Before closing the discussion, the Chair opined that further research on the quality of innovation and the productivity of research may be warranted. He suggested that reducing the number of lines of research, through mergers for example, may reduce innovation and that the quality of innovation is worthy of further examination and research by competition authorities. He then invited the two experts to share their final remarks.

Doug Melamed observed that innovation has become a significant component of competition enforcement, with a growing focus on mergers and acquisitions that combine incumbent products with threatening R&D strategies. He pointed out that the CMA and European Commission have brought cases involving generalised propensity to innovate in mergers without identifying specific products or product spaces. However, in his opinion, the issue of getting the facts right is crucial for effective competition enforcement. He suggested that competition authorities and reviewing tribunals should have suitable processes for developing and analysing relevant facts and minimising confirmation bias. He opined that a relaxed standard for enforcement can be supported if rigorous fact finding is conducted. He added that non-merger cases that raise traditional concerns about price and output are less likely to require analysis of possible innovation harms. Additionally, many of these cases implicate patent issues, making it difficult for competition agencies to address these issues and that the patent lobby's influence on laws and patents in countries has also contributed to this difficulty. Melamed is hopeful that competition authorities can be more effective in addressing these issues and resisting such influence.

In her closing remarks, **Simonetta Vezzoso** discussed the importance of discussing IP rights and patents in the context of innovation. She suggested that IP rights should be taken seriously and adapted to different sectors, such as AI. She also highlighted the need for a broadened view of innovation, not just merger cases, and the impact of big companies managing innovation within their ecosystems. In addition, Vezzoso discussed the Digital Markets Act (DMA) and the digital market side which, in her view, may not be enough to address access to data produced by merchants on platforms. In conclusion, Vezzoso highlighted the importance of assessing the quality of innovation through cooperation between competition and data protection authorities, including AI regulators.

In closing, the **Chair** pointed out that competition authorities may wish to collaborate with other regulators, as suggested by several speakers through the session. He thanked the experts and participants for their interventions and closed the session.