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Summary of discussion of the Hearing on The Relationship between Competition and Innovation

Annex to the Summary Record of the 140th Meeting of the Competition Committee

14 June 2023

This document prepared by the OECD Secretariat is a detailed summary of the Hearing on The Relationship between Competition and Innovation, held by the Competition Committee on 14 June 2023.

More documents related to this discussion can be found at:
www.oecd.org/competition/the-relationship-between-competition-and-innovation.htm

Antonio CAPOBIANCO
Email: Antonio.Capobianco@oecd.org

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Summary of discussion of the Hearing on the Relationship between Competition and Innovation

1. On 14 June 2023, the OECD Competition Committee held the first of two sessions[1] on the relationship between competition and innovation chaired by Professor Frédéric Jenny.

2. The **Chair** opened the hearing by noting the apparent lack of a systematic approach for assessing the extent to which market activities and transactions spur or hinder innovation. He explained that the purpose of the hearing would be to identify and reconcile existing theories and approaches used to understand the complex relationship between competition, innovation and its drivers, and to solicit law enforcement and policy recommendations from experts.

3. The Chair then introduced the expert speakers and set out the structure of the hearing.

4. For the first part of the hearing, **Álvaro Parra**, Assistant Professor at the UBC Sauder School of Business; **Philippe Aghion,** Professor at the College of France and the London School of Economics; **Carl Shapiro**, Professor at the University of California at Berkeley; and **Wolfgang Kerber**, Professor of Economic Policy at the University of Marburg, would provide an overview of existing literature and prevailing theories on the relationship between competition and innovation.

5. The second part of the hearing would look at other drivers of innovations through the lens of economic and management theory as presented by **Chiara Criscuolo**, Head of the Productivity and Business Dynamics (PBD) Division in the Science, Technology and Innovation (STI) Directorate at the OECD; and **Eva Sørensen,** Professor at Roskilde University, with an additional commentary from **Wolfgang Kerber.**

6. Lastly, in the third part, expert speakers would be asked to glean lessons learned from the analytical perspective and to identify recommendations for competition authorities on how they should address the relationship between competition and innovation in terms of enforcement activities and policy development.

1. Overview of existing literature and prevailing theories on the relationship between competition and innovation

7. The Chair gave the floor to **Álvaro Parra** to introduce the discussion.

8. **Álvaro Parra** started by pointing out that as many as 40% of mergers in innovative industries claimed to be associated with R&D efficiencies (quoting a study by Gilder & Field). The challenge lies in evaluating these claims using current merger guidelines, particularly since most guidelines predominantly revolve around the 'Williamson trade-off' which is limited in its ability to incorporate innovation and *dynamic* efficiency concerns (i.e. the future implications for prices, quantities, and costs in the long run).

9. Parra connected the concepts of market power, competition policy, and innovation through the lens of incremental rent and its effects on R&D incentives (i.e. Arrow's replacement effect). He believes that the 'Arrow replacement effect' model is better suited

[1] The second session will be a roundtable to be held in December 2023.

for analysing innovation incentives as it can better capture dynamic efficiency factors. Arrow's replacement effect shows that the drive to innovate stems from the incremental rent, that is the difference between pre- and post-innovation profit, a firm derives from a cost-reducing innovation. The model assumes that pre-innovation profit is determined by the number of firms (i.e. product market competition); equilibrium prices; the degree of product differentiation; and ownership structure, including vertical structure and contracts in place. Post-innovation profit depends on the size and type of innovation (i.e. product differentiation) and all of the above mentioned factors.

10. Parra then used the 'Arrow replacement effect model' to explain how market power affects innovation in two scenarios, where each scenario involves two firms, a market leader and a follower (i.e. competitor). In the first scenario, he talked about the extent to which coordinating activities, such as mergers or the rise of common/cross ownership, impact the competitor's R&D efforts. His analysis showed that the outcome largely depends on whether the innovation is incremental or radical. When innovation is incremental the innovating firm gains a market advantage whereas radical innovations result in the innovating firm monopolizing the market.

11. The second scenario considered how coordinating activities impact the market leader's R&D efforts. According to the model, R&D efforts depend on the degree of coordination and whether both firms (market leader and follower) adopt the innovation. Parra observed that traditional merger analysis supports these findings as anti-competitive mergers decrease the incremental rent incentive (again, the difference between pre- and post-innovation profits), by allowing firms to increase prices as a result of their market power alone - they are no longer driven by the incentives of potential future price increases derived from innovation.

12. Noting the two scenarios are based on horizontal merger analysis, he then moved on to discuss the relationship between innovation and monopsony power. Because firms in innovative industries often rely on global supply chains to create and manufacture input products (Boeing's 787 Dreamliner is an example where practically everything is outsourced), much of the production and R&D is kept outside of the boundaries of the market leader firm. However, news reports allege that firms in innovative industries (such as Tesla, Apple and Boeing) "squeeze" their suppliers to reduce costs. Parra explained that this is possible in vertical markets where firms with monopsony power can influence supplier innovation by decreasing current purchases and contract terms, reducing today's incremental rent, thereby incentivising innovation. In other words, the pressure to "reduce costs" drives supplier firms to become more innovative. Parra concluded that this dynamic between vertical market power and innovation, which sometimes involve seemingly uncompetitive terms and practices, illustrate the complex relationship between competition and innovation. Near the end of his intervention, Parra mentioned that innovation can also affect competition potentially driving firms to collude on higher production prices but that this would be explored later in the hearing.

13. The Chair thanked Álvaro Parra and gave the floor to **Carl Shapiro** to share his view on the relationship between competition and innovation.

14. Acknowledging the existence of divergent views and theories, **Carl Shapiro** began his presentation by firmly asserting that competition promotes innovation. He sees three areas of competition policy affected by innovation: mergers, exclusionary conduct, and collaboration. First, he defined key terms central to his argument that competition promotes innovation: contestability and disruption. Contestability is seen as distinct from competition and refers to a market where firms that innovate can gain significant sales, at a profit, while non-innovators may lose significant sales. Shapiro's premise is that if a market is contestable, it will spur innovation. Disruption, in contrast, involves firms

challenging the status quo and changing industries, posing a threat to incumbents' profits and in that way, disruptive firms further spur innovation.

15. According to Shapiro, the diffusion of technologies that allows less efficient firms to be more efficient should also be viewed as innovation. Echoing the previous speaker's remarks, he warned against a static analysis of competition and innovation, highlighting the importance of capturing dynamic aspects such as diffusion. Diffusion is the process by which more and more firms adopt new technologies and learn to be more efficient (for example, how the retail sector was transformed by the application of digital technologies to warehousing, inventory, self-check outs). In this way, innovation does not only involve new inventions but also improvements to existing ones, oftentimes across sectors. Nevertheless, Shapiro understands that the uncertainty inherent in innovation makes predicting outcomes challenging.

16. Despite his firm belief that competition fosters innovation, Shapiro also emphasized the need to consider factors beyond competition policy for effective innovation, including the role of the public sector, complementary inputs, infrastructure, financing, education, intellectual property rights, and regulatory frameworks.

17. Regarding competition's impact on innovation, Shapiro believes that more competition should be seen in terms of contestability rather than mere static measures of market shares and market structure because contestable markets can foster innovation even with high concentration. For example, a pure monopoly can still foster innovation so long as the market is contestable because a monopolist will fear that a new entrant could leapfrog into the market and take over. In contrast, a fragmented market considered to be competitive may not be contestable if innovative firms innovating cannot gain significant sales as a result of those innovations. This could happen when other market players quickly imitate or steal proprietary information, perhaps due to weak intellectual property rights.

18. Lastly, Shapiro noted the tendency of incumbents to exclude disruptive entrants and emphasized that competition authorities should ensure that powerful incumbents fear disruption and are incentivized to innovate instead of excluding or acquiring potential threats.

19. The Chair thanked Carl Shapiro and commented that it would be important to consider how competition authorities can assess contestability. Next, the Chair gave the floor to **Philippe Aghion.**

20. **Philippe Aghion** talked about competition and innovation through the lens of Schumpeter growth theory. This model of growth through creative destruction is based on three main ideas. First, productivity growth is driven by a cumulative process of innovation, where each innovator builds upon previous innovations. Second, innovation results from entrepreneurial activities motivated by respect of innovation rights. Third, new innovations displace old technologies through the process of creative destruction. Aghion pointed out the contradiction at the heart of the Schumpeter paradigm which is that the prospect of monopoly rents motivates firms to innovate and those innovators are then tempted to use their rents to prevent subsequent innovation and to block subsequent entry. In his view, regulating capitalism is largely about how to manage this contradiction.

21. According to Aghion, the Schumpeter growth theory makes two distinctive predictions with respect to competition and growth. The first prediction is that growth is positively correlated with term turnover meaning you have more entry and exit than growth. However, if you look at competition in terms of the Lerner index, the model predicts that competition is bad for growth by lowering the rents from innovation, in essence, discouraging it. Aghion explained that this apparent contradiction exists because innovations are often made by both insiders and outsiders within a market. Using a

classroom analogy, where some students are at the top of the class (frontier) and others lag behind, Aghion illustrated how competition affects innovation. When a strong student (outsider) enters the class, those at the top work harder to maintain their position, leading to more innovation. However, those lagging behind may become even more discouraged. In the context of firms, frontier firms (close to the technological frontier) tend to react positively to competition because they innovate to stay ahead. Lagging firms, on the other hand, are discouraged by competition. In more developed countries where there are mostly frontier firms, increased competition is unambiguously good for productivity, growth, and innovation.

22. Aghion stated that patent policy enhances rents for innovators, while competition policy reduces rents for non-innovators. Therefore, there is a need for both policies to work together rather than opposing each other, as they are complementary.

23. Next, Aghion made a few remarks on the growth decline in the US, particularly in sectors related to information technology (IT). Researchers have attributed this decline to an IT revolution and subsequent expansion of superstar firms (e.g., Walmart, Facebook, Amazon). Having said that, Aghion pointed out that these firms expanded through mergers and acquisitions and inhibited entry by other firms, leading to decreased competition and increased markups. Thus, Aghion suggested competition authorities may need to rethink merger and acquisition policies, focusing on their impact on innovation and entry, rather than just market share and market definition. He advocated for a more dynamic vision of competition policy that is pro-innovation and pro-entry. In closing, Aghion briefly commented on industrial policy arguing that governments should engage in sectoral state aid and green industrial policies to redirect innovation toward clean technologies. He suggested that competition policy and industrial policy can be reconciled through smart and competition-friendly approaches to industrial policy.

24. The Chair thanked Philippe Aghion and asked **Wolfgang Kerber** to expand on the dynamic dimensions of competition.

25. **Kerber** focused on the need to define competition in the context of a rapidly changing world filled with innovation. Referring to the OECD's definition of innovation as ‘the successful development and application of new knowledge’, Kerber believes that static concepts of competition in economic theory and competition law often neglect the role of innovation. His intervention proposed a dynamic competition concept that integrates innovation considerations. For example, market definition in merger analysis is problematic as it pertains to the concept of a hypothetical monopoly test which aims to predict how a proposed merger might impact market competition and consumers if one firm were to gain significant market power. In practice, innovation thrives on the heterogeneity and variety among firms with innovations often relating to each other in complex ways as a result of parallel experimentation. Such collaboration by firms leads to very complex market structures that are incompatible with this type of merger analysis framework. However, Kerber infers that merger policy can incorporate innovation considerations by assessing the negative effects of a merger on the generation of knowledge in competition (i.e. to maintain a minimum number of innovating firms). He noted important contributions from economists such as Schumpeter and Hayek to support his assertion, in particular Hayek's notion of competition as a discovery procedure that generates knowledge through market experimentation. Past dependency effects are also important in the evolution of markets. Scholars like Nelson and Winter, who combined Schumpeterian concepts with behavioural theories of the firm, offer an evolutionary approach to competition and Kerber encouraged competition bodies and experts to reflect on their ideas when thinking about the dynamic dimensions of competition.

26. He concluded his presentation by summarizing key insights for a dynamic concept of competition and its integration with innovation:

- Viewing competition as a dynamic process of parallel experimentation with diverse solutions.
- Recognizing that innovation generates knowledge through competitive processes.
- Acknowledging the complexity of innovation incentives and effects.
- Advocating for a broader, flexible concept of competition that includes normative consumer welfare.
- Encouraging collaboration among scholars from different disciplines to better understand and address the relationship between competition and innovation.

27. The Chair thanked Wolfgang Kerber and asked the **Secretariat** for a brief presentation of the background note that supported the discussion.

28. The **Secretariat** explained that the background note reviews the relationship between competition and innovation in both directions and provides an overview of key theories which were presented by the expert speakers thus far. The Secretariat pointed out that disruptive innovations like GPS, Internet and touch screens emerged from various sources and objectives, including defence research, and so, the paper also discusses the origins of innovation. It draws economic theory to help understand the extent to which competition policy drives innovation. The paper goes on to explore other drivers of innovation including firm size, business models, economies of scale, access to finance, intellectual property rights and collaboration, and considers how competition policy and enforcement activities intersect with and facilitate such drivers. It concludes that there are different approaches to understanding the relationship between competition and innovation both theoretically and among competition authorities. The Secretariat invited competition authorities to share their experiences at the upcoming meeting in December where the role of competition policy in driving innovation will be examined in detail.

29. The Chair circled back to the expert speakers and asked **Carl Shapiro** and **Álvaro Parra** to comment on **Wolfgang Kerber's** assertion that innovation should be looked at as a dynamic process and whether it is important to examine a firm's actual capacity to innovate, for example, before making judgements in merger or dominance cases.

30. **Álvaro Parra** explained that, in his opinion, both Shapiro's concept of contestability and his application of Arrow's incremental rent incorporate dynamic effects because these effects, in part, derive from market conditions today which can be observed and measured. **Carl Shapiro** agreed on understanding innovation from various disciplines and acknowledged the significance of dynamic processes. However, he cautioned against underenforcement of anti-competitive behaviour particularly in cases where firms use the argument of dynamic capabilities to downplay concerns about high market share or abusive practices.

31. The Chair sought **Kerber's** reaction to these observations. Kerber agreed and clarified that he is not advocating for less competition policy but rather for a revaluation and adaptation of competition policy to address the complexities of dynamic innovation and its potential outcomes.

32. Acknowledging that competitive markets, promoted by sound competition policy, create capable firms with incentives to innovate, the Chair opened the second part of the hearing and invited **Chiara Criscuolo** to present her work on other drivers of innovations.

2. Other drivers of innovations

33. **Chiara Criscuolo** started by sharing two key takeaways from her remarks. Firstly, measuring competition and innovation is difficult and presents a real challenge for practitioners; and secondly, that innovation does not occur in isolation but within a broader ecosystem.

34. Reflecting on the trade-off between ex ante market dynamism (contestability), which Carl Shapiro explained in detail, and ex post temporary market power for innovation, she emphasized the significance of industrial policy and intellectual property rights as other drivers of innovation. These drivers support innovators investing in uncertain outcomes due to knowledge spill overs.

35. Criscuolo explained that OECD data is showing a decline in labour productivity growth across OECD countries and slowing down innovation including a widening in differences in productivity performance in a world of heterogeneous firms. The OECD is concerned about the implications of this data not only for innovation but also for competition. In particular, there seems to be worsening reallocation of resources amongst leaders and laggards and a slowdown in the process of creative destruction, particularly noticeable in the digital intensive sectors. Measures such as the job reallocation rate are also showing the potentially worsening mobility of workers (and talent) across firms which also negatively affects innovation. In terms of contestability, declining entry rates coupled with stable exit rates are also resulting in less dynamism. OECD evidence suggests increasing concentration is heavier in sectors with significant intangible assets and Criscuolo linked this to an increase in the number and value of mergers and acquisitions, particularly during the COVID-19 crisis.

36. Acknowledging the challenge of these measurements, Criscuolo explained that there is ongoing work with the DG Competition and the European Commission to refine competition measurement and investigate correlations between industry and product markets, as well as the influence of international trade. Lastly, Criscuolo stressed the significance of industrial policy in the context of the discussion on innovation and also competition, and discussed how industrial policy can preserve the contestability of markets by reducing knowledge externalities and credit restraint or facilitating the exit of inefficient firms, for example.

37. The Chair thanked Chiara Criscuolo and gave the floor to **Eva Sørensen** to continue the discussion on other determinants of innovation.

38. **Eva Sørensen** began by explaining that her remarks would centre around the trade-offs and possible synergies between different drivers of innovation, and discerned that the previous presentation from Chiara Criscuolo was pointing to some of the ideas she planned to share. Next, she explained that her research is focused on the role of governments and competition policy in promoting innovations that are prosperous for the world. She put forth the question, "why do we need innovation"? Despite their risk and unpredictability, she argued that, historically, innovations have promoted overall economic growth and welfare. She sees unstable and turbulent times as a push factor for innovation and the possible entrepreneurial opportunities rising up of that innovation as a pull factor. Building on this notion, in her view, innovation is not limited to creating new inventions but also encompasses the ideas on their utility to solve societal problems. In this way, she sees innovation as a challenge to conventional wisdom and disruption of established practices.

39. While in her opinion it is true that much innovation occurs within markets and the economy, Sørensen pointed out that innovative ideas also emerge from the public sector where governments grapple with designing innovative public policy. With respect to her

research on the drivers of innovation, competition policy alone is seen as an insufficient driver particularly in the way that fiercely competitive markets can, to some extent, dissuade collaboration and reduce the amount of resources firms put towards innovation.

40. With this perspective in mind, Sørensen put forth a framework that consists of three important and complementary drivers of innovation: regulation, collaboration and meta-governance competition. While competition incentivizes innovation, regulation helps shape and guide it, ensuring that innovative efforts are aligned with broader societal goals. Next, diverse collaboration among actors with different beliefs, experiences, skills, and resources brings together a variety of perspectives, enabling mutual learning, the exchange of ideas, and the creation of innovative solutions. It allows for the breaking down of existing perceptions, the development of joint solutions, and the subsequent diffusion of innovations. Acknowledging that not all collaborations lead to innovation, Sørensen believes that diverse collaboration is the catalyst that triggers the process of creative destruction and mutual learning, leading to impactful innovations. The third driver within this framework is the concept of 'meta-governance competition', which she described as a nuanced approach that balances competition and collaboration. Sørensen described Horizon Europe, an EU program that provides research funding in Europe, as an example of such meta-governance competition. The program combines intense competition for research grants with collaborative project requirements. Decision makers define research topics and encourage collaborative efforts among European universities, research institutes, and practitioners. In this way, Horizon Europe showcases how a balance between competition and collaboration, guided by regulatory mechanisms, can drive innovation by directing research efforts and encouraging diverse participation.

41. Finally, she concluded that the challenge moving forward is to design competition policy in a way that harnesses the synergistic effects of well-balanced competition, regulation and collaboration.

42. The Chair thanked Sørensen for introducing a normative perspective on innovation to the discussion and turned to **Wolfgang Kerber** who asked for the floor.

43. **Kerber** raised the importance of data availability and sharing for enabling both competition and innovation, particularly in the context of the digital economy. He added that although EU data policy aims to make more data accessible through voluntary and mandatory data sharing and data portability, significant challenges remain. Specifically, he spoke about the European Commission's Data Act as a key instrument to unlock Internet of Things (IoT) data for innovation and competition. Currently, IoT device manufacturers have exclusive control over IoT data, hindering access for data users and other firms seeking to provide new services or innovations. Although the proposed Data Act aims to grant users of IoT devices new rights to access and use IoT data, Kerber expressed scepticism about its effectiveness. He described it as a weak mechanism citing narrow data scope and high transaction costs for firms seeking data access. In his view, the act seems to prioritize manufacturers' interests and may not sufficiently promote innovation and competition and Kerber sees a need for rebalancing in favour of innovation and competition.

44. The Chair thanked him for the regulatory example and gave the floor to **Business at OECD** (**BIAC**) to present their written contribution.

45. **BIAC** began their presentation by commenting on the multifaceted nature of innovation as the incentives to innovate vary across markets, in different sectors, industries or individual economies. In their view, the promotion of competition is not necessarily the best method or only method for achieving greater innovation. It depends on the precise

nature of the innovation at stake, the incentives to innovate, and whether those incentives are indeed restricted.

46. Referencing their written contribution, BIAC mentioned six other factors that, in their view, also drive innovation: technological development, incentives for investment, demand conditions, regulation, education, and globalization. Regarding technological development, BIAC elaborated that sometimes technology is the subject of innovation itself, and sometimes as new technology is created, firms incorporate it into different aspects of their business in different ways. In this regard, innovating by incorporating (i.e. purchasing) new technology can be much easier for a dominant firm with significant liquid capital than for a smaller firm. Next, investment availability is crucial for entrepreneurs and companies to pursue innovative ventures, and the competitive landscape becomes irrelevant if there is no financing for innovation. Noting a paper by Tom Nicholas, who argues that the financing of innovation depends on an adequate supply of capital and efficient contracting to ensure entrepreneurs are productive and that financiers receive a return on their investment, BIAC asserted that availability of exit strategies is an important consideration in driving innovation and may also have consequences for merger policy. BIAC agreed that regulations can drive innovation by enforcing changes in response to industry needs and environmental regulations. On the other hand, for BIAC, regulatory barriers and administrative burdens can sometimes create obstacles and extra work for startups, which can hinder new and creative ideas from succeeding.

47. BIAC concluded their remarks by suggesting that while competition agencies are not directly responsible for innovation, antitrust policy should consider and accommodate new and novel business models and provide incentives for innovation.

48. The Chair thanked BIAC and gave the floor to **France** to present their contribution.

49. **France** considered how competition authorities can strike a balance between driving innovation and promoting competition. The discussion centred around the capacity of competition authorities to adapt their analysis through rapid action, adaptive policies, and vigilance against anti-competitive practices.

50. France noted that concentrated markets can be problematic by reducing the incentives to innovate in competitive markets, especially in R&D between competing firms. However, it has been shown that cooperation in R&D for digital and environmental transitions leads to innovative solutions. As such, France believes that competition authorities should support horizontal agreements that foster innovation, referring to a European Commission opinion on the topic. France also advocated for rapid action and conservatory measures through the use of swift remedies to prevent anti-competition practices, particularly in the digital field. In other words, competition enforcement needs to take place at the same pace as rapidly evolving markets.

51. France underscored the need for competition authorities to adapt their policies in alignment with changing dynamics. Framed as the evolution of practices, France talked about agile competition analysis, that is, the need to continue monitoring concentration levels, the role of regulations and the importance of preventing predatory acquisitions that could hinder competition and innovation.

52. Further to France's remarks, and reflecting on the discussion thus far, the **Chair** noted the need to redefine innovation and perhaps competition to better capture the dynamic aspects. The actual capacities of firms to innovate and how that could be defined and measured was another central theme throughout the hearing. The Chair also reiterated that the drivers of innovation go beyond competition itself and that competition authorities should be mindful of how other drivers of innovation intersect with competition. In particular, diversity and protecting the heterogeneity of firms needs to be weighed against

the benefits of collaboration amongst firms working towards technological advancements and innovative solutions.

53. With these comments in mind, the Chair moved to the last part of the hearing. He asked the **experts** to provide recommendations to competition authorities, particularly with respect to their enforcement activities.

3. Lessons learned and recommendations for competition authorities

54. **Álvaro Parra** recommended that competition authorities move beyond horizontal market power assessments and consider how vertical structures affect incentives and ability to innovate. There is a need to extend the scope and understanding of how market power operates in innovative markets beyond the Williamson trade-off. In this way, competition authorities can better understand and respond to possible anti-competitive practices. Parra's final thought was that market power is not good for innovation.

55. Next, **Eva Sørensen** reiterated that meta-governance competition is a model to frame and design processes that would actually stimulate people to work together, but also to compete around developing new ideas.

56. **Carl Shapiro** returned to the notion of contestability and suggested that competition authorities maximise discovery opportunities by looking for and collecting information about a firm's fears and plans on how to handle their perceived threats within their market. On conduct, powerful incumbents should not be permitted to exclude dynamic upstarts or disruptive firms. Similarly, horizontal acquisitions require aggressive enforcement, particularly when the target firm has innovative capabilities that could be a threat to the incumbent. However, he cautioned against over enforcement of powerful companies like Amazon who may seek opportunities to expand into other industries as a way to become more efficient in their primary market.

57. For **Wolfgang Kerber**, competition experts must deepen their knowledge by moving beyond competition economics and learning from other fields of study. He also emphasized the importance of a systematic approach to analysing innovation competition with clear definitions on concepts such as capabilities. Moreover, competition authorities should strive to be clear in this respect and have their approaches reflected in competition guidelines.

58. **Chiara Criscuolo** spoke about the diversity of innovation and the importance of designing approaches that can take into account a range of factors, production inputs, tangible and intangible assets such as talent and data, etc. Because competition policy exists within a wider policy ecosystem that intersects with other areas such as industrial policy, trade policy and regulatory framework, it is important to understand and consider the implications of those intersections when analysing and assessing competitive effects.

59. **Philippe Aghion** focused on the interplay between industrial policy and competition policy arguing that you can reconcile both through good design that spurs a pro-competitive market. For Aghion, competition can accelerate the energy transition and green innovation as firms evolve and innovate in this way to escape their competitors.

60. In closing, the **Chair** thanked the experts for laying the groundwork for competition authorities and helping to disentangle the complexities with respect to the dynamic relationship between competition and innovation. The Chair explained that the follow-up discussion, to take place in December, will tackle how to integrate considerations for innovation within existing competition enforcement mechanisms and analytical tools and closed the hearing.