

Rethinking Modes of Market Definition for multi-Sided Platforms

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Abstract—The relevant market definition based on SSNIP test is a starting point for the analysis concerning abuse of market dominant position. In other words, abuse of market dominant position presupposes that there is market dominant power in the market and market dominant power should be inferred from high market share, and in order to calculate market share, relevant market should be defined, and the relevant market should be defined by means of the SSNIP test reflecting the substitutability of demand or supply. Meanwhile, a market definition for multi-sided platforms is complex and incoherent due to particular features of multi-sided platforms. In this regard, some modified tools of market definition for multi-sided platforms are suggested with related Korean cases.

Index Terms—Abuse of market dominant position, market definition, multi-sided platform, multi-sided market.

I. INTRODUCTION

Currently, chances of mediating transactions among customer groups are significantly increased with the advent of the internet. It leads to magnify the importance of online platforms. Moreover, the number of platform operators is increasing thanks to the popularization of smartphones and development of big-data cloud computing technology. Thus, more cases regarding market definition for multi-sided platforms have been examined by competition authorities and courts. According to the Commission Notice on the definition of relevant market for the purposes of Community competition law, “market definition is a tool to identify and define the boundaries of competition between firms” [1]. In Korea, according to Article 2(8) of Monopoly Regulation Act, the relevant market is specified as “a certain line of transaction” which means a field wherein there actually or potentially exists competition in terms of trading items, level of a transaction, regional area. Moreover, the guidelines for the abuse of market dominant position of Korea (hereafter, Korean guidelines) present the principle of relevant market definition similar with SSNIP test to the effect that competitive relation can be judged by demand substitutability [2]. Defining relevant market is not an end, but means for assessment of competitive constraints and market power. Thus, the traditional tools need to be modified for multi-sided platform business as Evans suggested [3].

II. THE GENERAL APPROACH ON A RELEVANT MARKET DEFINITION

A. The Role of Market Definition

Defining relevant market is the crucial step with regards to competition law enforcement in most of competition law jurisdictions. It should be considered that what kind of competition exists in the market in question. Defining relevant market is an essential precondition for assessment of market-dominating power and determination of abuse of dominant position. However, with regards to other types of behaviours relevant market definition is just an instrument for determination of unfairness. According to Article 102 of TFEU, “the existence of market dominance should be within the internal market or in a substantial part of it.” Therefore, a relevant market definition is the precondition for assessment of market share to establish market dominant position. To define a relevant market, the SSNIP test, HM test, and CLA test can be applied. And the assessment of competitiveness and the definition of the relevant market can be considered as “communicating vessels” [4] i.e., a narrow market definition often goes along with an indication of substantial market power, while a broad market definition means little market power [4].

B. The New Trend on Relevant Market Definition

A superior product can be offered in place of an inferior one. By way of example, Blockbuster, traditional video retailing closed its mortar store in the UK responding to consumer’s demand on digital distribution of video entertainment. In this regard, new market strategies have been suggested to respond to brisk competition. Besides, the boundaries in-store and online channel are blurring.

III. REDEFINITION OF A RELEVANT MARKET IN A MULTI-SIDED MARKET

A. Market Definition in a multi-Sided Market

It becomes more complicated to conduct the SSNIP test for multi-sided platform market because each price is set by platform operators and the increase of price on one side triggers network effects, i.e. additional decrease or increase of demand on the other side. In other words, while the increase of price on one side leads to decrease of demand on the side (direct network effect), in multi-sided platform market, an increase of price on the side trigger change of demand on the other side additionally. However, the profitability resulting from an increase in price depends on the type of network externalities involved [5].

In addition, the existence of indirect network effect in multi-sided market affects substitutability of demand and limits increase of profits from the increase in price. There are also some difficulties in setting the level of price, i.e., the level of price based on costs is not suitable for multi-sided platforms since it cannot reflect indirect network effects from multi-sidedness.

Meanwhile, multi-sided platforms compete with firms acting in a one-sided market and individual stores and one-sided platforms vertically integrated. It makes relevant market definition complicated. In addition, multi-sided platforms, in many cases, provide different services to their customer groups. It also results in an unclear assessment of market share and degree of market concentration. Thus, it is inappropriate to do integrated analysis on activities with regards to customer groups with significantly different characters.

In short, it is essential to recognize that what specific customer groups are relevant to competing targets and what kind of operators or services are competing regarding relevant market definition of multi-sided platform. Therefore, in a multi-sided market, the traditional SSNIP test cannot be conducted as it comes, [6], [7] since there are plural customer groups to be considered regarding relevant market definition involving multi-sided platforms.

B. New Methodologies for multi-Sided Platform Market

There are several suggestions regarding relevant market definition in the multi-sided market for practical applications by competition authorities.

1) The view that one single market encompassing all customer groups is needed

The definition of the relevant market for multi-sided platforms should encompass all sides of customer groups for correct assessment of competitive constraints. Thus, the logic of the SSNIP test should be extended to account for the indirect network effects between customer groups in terms of assessment of the profitability from price increase [6], [7]. According to this view, the unit for analysis should be multi-sided platform by itself instead of using specific product or service [6]. It may be inappropriate to define separate markets when each group is inseparably linked by interaction necessarily involving all customer groups. And one relevant market composed of plural customer groups can be defined when customer groups are highly complementary and closely linked and platforms of the industry hold same customer groups [6]. Without considering interdependencies between customer groups, market would be drawn narrowly and corresponding market concentration would be estimated too high [6]. In other words, each customer group can be considered as one unit under the same “business ecosystem” [3]. Given economic inducement of platforms operators, a relevant market should be defined by binding plural customer groups. And substitutability of demand should be assessed based on the sum of change of demand in response to the total price increase of both sides. In other words, it is required to check whether profits are generated from the sum of increase in prices [8]. And the market share of multi-sided platform can be calculated by applying methods of weighted average based on magnitude of indirect network effect.

In Microsoft and Yahoo merger case, the Commission defined relevant market as “online search advertising” reflecting the interrelationship between search market and advertising market based on this view. The Bundeskartellamt also defined one relevant market in matching platform case on the basis that the service provided by the platform is “connection of the two customer groups itself” [9]. In such a case, substitutability of platform service can be assessed in terms of uniform demand. However, the Bundeskartellamt claims that the case by case approach is needed since it would be inappropriate to suggest detailed recommendations at a general level beyond broad framework for analysis [9].

2) The view that separate market definition for each customer group is required

According to this view, services on each side should be regarded separately by customer group, and the relevant market for each service should be defined separately. Some unique features of multi-sided platforms can be considered at the phase of an assessment of market-dominant power and determination of abuse of market-dominating position. The logic of this view is similar to the reasoning that relevant market for an undertaking producing various products should be defined by product [10]. In addition, competition circumstances in terms of identifying substitutes can be captured easily by following this approach [11]. Recently, European Commission has fined Google €2.42 billion on the grounds that Google has abused its market dominance as a search engine based on the relevant market definition by customer group, i.e., the Commission identified two separate markets (general search market and comparison shopping service market) [12].

3) The view that it depends on competitors

When competitors of a platform operator in issue can provide services covering all aspects of a platform in question, one relevant market can be defined by binding customer groups. In this case, ‘the transaction via the platform’ is regarded as the service which the platform provides. However, if competitors cannot substitute all aspects, separate relevant markets should be defined by customer group [13]. In other words, if there are substitutes to cover on each side, the relevant market should be defined by each side, while if there is no substitute for each side, one single market should be defined by binding each customer group. For example, in the case of telecommunication service, there is no company to provide with only sending service. It is same in the case of receiving service. In telecommunication service market, competitors provide transmitting service and receiving service at the same time. Therefore, a relevant market should be defined as ‘one telecommunication market’ [5]. And in the case of matchmaking service, there is no competitor provides service only for man or woman. Therefore, a relevant market in this case should be defined by binding two groups. On the contrary, in the case of advertising service of an internet portal, it can be in competitive relation with different media such as newspaper, broadcasting advertising, etc., its relevant market should be defined separately.

4) The view that it varies with platform types

There is a view that the methods for relevant market

definition can be different depending on services platform operators provide. One distinction can be made between transaction platforms such as payment card system and non-transaction platforms such as media type [14]. In the case of transaction platforms mediating direct transactions between plural customer groups, one single relevant market should be defined by binding customer groups, since each customer group share the same objective and one side by itself would not be sufficient. In other words, in the case of transaction platforms, two services need to be sold in a fixed 1:1 proportion [11]. Therefore, the analysis of a merger between two payment-card platforms should thus consider whether cash transactions or PayPal exert competitive pressure on these payment card companies because its relevant market is defined as one single one. Moreover, profitability should be checked regarding each side of the market. And competition authorities should check the profitability of an increase in price regarding price level which means the sum of the prices paid for the transaction by the two-sides.

On the other hand, in the case of non-transaction platforms such as media market mediating a different kind of interaction, interactions are not observable [15]. Subscribers are not always interested in advertisements which are offered by advertisers. In this regard, some non-transaction platforms start their business with one side only and then the second side may be added later [11]. And profitability should be checked regarding each side of the market. In this case, the other sides should be considered only when the externality to the other sides exists.

However, some argue that such distinction is slightly obscure in practice, for example, users of advertising supporting platforms can make a visible interaction with a click on advertising [16]. After all, two-sidedness of platforms also rely on business models they adopt.

5) The view that two steps are required

There are drawbacks with regards to inconclusive market definition approach and holistic approach aggregating two markets [17]. In this regard, this view comprised of two steps is suggested. At first, competition authorities make “a prima facie product-specific market definition,” involving a description of the market participants and the sources of competitive constraint and no more than a cursory look at market shares [17]. This delineation would be based on qualitative indicia such as surveys and evidence of past substitution which infer the validity of a given type of market definition and data concerning the effectiveness of the competitive constraints. These prima facie markets should be defined as narrowly as possible to avoid under enforcement. Moreover, then competition authorities look into the scope for the exercise of market power, its relationship with potential entrants and whether any submarkets can be identified based on this particular relationship [17]. Instead of defining market based on the SSNIP test, competition authorities roughly delineate market structure and focus on the features of multi-sided platforms [18].

6) The view that it is necessary to use time series of quantities and simple correlation instead of using price

According to this view, quantities are used instead of prices.

Substitutability is directly reflected not in prices but quantities. Indirect network effects are also directly linked to quantities. Thus, according to this view, issues on the provision of free service can be solved easily [19]. Moreover, either cross-correlation functions or simple contemporary correlations are calculated to identify the substitutability of a different product [19].

IV. KOREAN CASES INVOLVING MULTI-SIDED PLATFORMS

A. Naver Case

The Naver, No.1 internet portal in Korea, made a contract with video providers that it is not allowed to insert advertisements concerning videos from Naver search without prior consultation with Naver. The KFTC determined such trading conditions to be an unfairly hindering the business activity of other undertakings. The KFTC regarded internet portals as two-sided platforms and defined relevant market as ‘internet portal users market’ by binding customer groups on the basis that most internet portal companies provide 1S-4C services (Search, Contents, Community, Communication, and Commerce) at the same time. Internet portal service is defined as one package service called 1S-4C services.

However, Korean courts found that market definition by the KFTC is not appropriate since mediating video suppliers and video users can be conducted by operators who do not cover all 1S-4C services [20]. Therefore, Naver is required to hold market dominance in ‘video contents market.’

In this regard, some claim that it is necessary to bind market of contents providers and market of contents users to reflect two-sidedness of this market [10]. On the other hand, there is a view that given the differences in competitive aspects of each service, relevant market definition should be conducted by each service. The counterparts and profit structures are also different by service. For example, search service, community service, and communication service hold features as an advertising-supported media platform, while e-commerce service features an exchange platform. Thus, in this case, the relevant market should be defined focused on a restriction of advertising from video contents suppliers’ side.

B. T-Broad Gangseo Broadcasting Case

T-broad Gangseo Broadcasting (System Operator, hereafter SO) made a program send agreement with Woori home shopping (Program Provider, hereafter PP). T-broad Gangseo Broadcasting asked Woori home shopping to increase send fees and Woori home shopping did not accept this proposal. At last, T-broad Gangseo Broadcasting changed channels of Woori home shopping. Home shopping enterprise such as Woori Home shopping is different from other contents providers in light of the fact that the sales of home shopping enterprises depend on directly possibility of exposure or extent of exposure to home shopping channel by viewers. In this regard, a two-sided market theory can be applied based on interdependencies between two markets. The KFTC and Korean courts defined relevant market by separate customer groups. Korean courts stated that T-broad Gangseo Broadcasting provide platform service. The KFTC stated that changing channel by T-broad Gangseo

Broadcasting comes under Article 3-2(1)3 of Monopoly Regulation Act. (Unfairly hindering the business activity of other undertakings) [21]. The KFTC defined relevant market as “program send market” where SOs send programs to program users. And it determined that channels be changed in program send market. And as a geographic market, the district of Gangseo-gu in Seoul is defined as SOs are allowed to enjoy local monopoly rights resulted from the authorization of minister of ICT. The KFTC did not regard service of T-broad Gangseo Broadcasting as a platform and did not reflect features of a two-sided market such as indirect network effect and multi-homing.

Meanwhile, the Seoul High Court defined the relevant market as “program send market,” and district of Gangseo in Seoul as the relevant geographic market [22]. The Seoul High Court defined not only “program send market” of Gangseo-gu in Seoul but also nationwide “program send service market.” In other words, “program send market” between SOs and charged subscribers should be distinguished from “program send service market” between SOs and PPs. The Seoul High Court defined relevant market as “program send service market” and the market dominance in program send market is leveraged to “program send service market” where channels were changed. There is a view that the decision of the KFTC has been criticised for not distinguishing the market with dominant market power (the position-related market, program send market) from the market where abuse of dominant power was committed (the behaviour-related market, program send service market) and accepted leveraging market dominant power based on relation between two markets [23].

However, the Supreme Court of Korea defined “program send service market” as its relevant product market and a nationwide market as its relevant geographic market [24]. Moreover, T- broad Gangseo Broadcasting does not hold market dominant power in program send service market where its dominant position was abused (channels were changed). In this case, the KFTC and Korean courts defined the relevant market by customer group. However, there is a view that relevant product market for this case should be one single relevant market by binding market where the home shopping undertakings supply programs and the market where SOs provide programs to viewers, T-Broad Gangseo Broadcasting sells not only channels to home shopping companies but also provides programs to viewers at the same time [25].

C. Gmarket Case

Gmarket, an open market operator in Korea, required seven sellers of Gmarket to raise prices which are paid by Mple online, a competitor of G market, or to decrease prices paid by Gmarket or to suspend transaction with Mple online. An open market is a typical example of exchange platforms. The KFTC decided that it is in violation with Article 3-2 (5) of Monopoly Regulation Act. (Transacting with the purpose of unfairly excluding competitors) [26].

As a relevant market, the KFTC defined “online open market” without mentioning some characters of a two-sided platform directly. Gmarket claimed that its relevant market should be defined including other similar services such as portal site, multiple shopping mall since consumers can have

access to open market or multiple shopping malls via portal site, and main characteristics also are same in terms of contracting parties, delivery preference of product, main profits sources, liability of damages caused by sales etc. However, the KFTC did not include portal sites on the basis that characteristics and function of service between open market and portal site are different. In particular, it is not easy for sellers being part of this open market to be a counterpart of many shopping malls. The Seoul High Court and the Supreme Court of Korea upheld the decision of the KFTC with regards to market definition [27]. These courts believe that characteristics of multiple shopping mall and internet portal site are different from those of open market. Therefore, there is no competitive relationship between them.

V. CONCLUSION

The ICT sector of Korean economy accounts for 10.4% of value added, which is by far the most significant share across the OECD [28]. Korean industries have been affected by the Internet and the way in which consumers purchase goods and service has changed reflecting digitalized economic environments in Korea. In this regard, there are already several competition law enforcement cases dealing with multi-sided platform market between different platforms can be possible. With regards to market definition for multi-sided platforms, there are several suggestions to reflect features of multi-sided platform market. Two-sided market theory suggests binding each customer group to limit market power of multi-sided platforms. However, there are many problems with the methods binding customer groups. If relevant market is defined as one market, market share should be described by specified figures. It means market dominance of online platforms is assessed equally in every side. But market-dominating power of multi-sided platform operators is not equal in terms of each customer group. In addition, it is a very challenging work to assess market power of all sides of the market simultaneously [29]. In addition, in terms of assessing market share of a platforms, a market share is calculated based on weighted average of market share of each customer group. There remains uncertainty regarding how weight can be assessed in real cases. [30] In addition, a multi-sided platform such as internet portal provides different services to each customer group. If the relevant market definition for an internet portal is conducted as one single relevant market by binding each customer group, a mega-competitor such as Google can be excluded if Google cannot cover all services which the internet portal provides [31]. Some authors claim that ‘more lenient relevant market definition’ should be applied to reflect externalities and network effects from interrelated markets [32]. However, sometimes network effects can strengthen market dominant position and in this case, it is not appropriate [32].

Each approach above mentioned has its strengths and weaknesses. It depends on the specific circumstances of a sector and the nature of the services each platform deal with. Therefore, the relevant market should be defined by customer group and one relevant market can be defined only in a particular situation depending on platform types. For example,

in the case of advertising platforms, defining a separate market for each distinct customer group seems more reasonable. And defining one single market is appropriate if a platform mediates each customer group to make a direct observable transaction between different groups. OECD suggests conditions for this as follow; (i) a firm's service necessarily involves all groups and (ii) the set of substitutes and their respective relevance from the perspective of each customer group does not differ significantly across groups [11].

Market definition is just a tool for market analysis. Therefore, each approach can be applied to multi-sided market analysis so long as it can reflect interdependencies [11]. Moreover, it is beyond the realms of possibility to suggest SSNIP test model that can be applied to multi-sided markets uniformly. Thus, competition authorities are not allowed to apply traditional to multi-sided platform markets mechanically, i.e. the approach towards market definition should be chosen on a case-by-case basis [34]. And it is more important to consider characteristics of multi-sided market in the phase of assessing market dominant power than in the phase of market definition, because the interaction between both sides acts as a competitive pressure even if the market share of one side is high and it impedes a firm from establishing or maintaining market dominance [31]. Therefore, the relevant market should be defined by customer group and one relevant market can be defined only in a particular situation based on platform type. In addition, multi-sidedness can be considered throughout the processes of relevant market definition, assessment of market dominant power and determination of abuse of market-dominating position.

In Korea, the KFTC stated that the relevant product market could be defined as one relevant market or separate relevant product markets depending on the situations each platform encounters [35]. Therefore, it should be examined case by case basis that to what extent two-sidedness affects firms' behaviour and market outcomes. The KFTC and Korean Courts suggested different approaches to relevant market definition with regards to multi-sided platform cases. In the eBay and Gmarket case, the KFTC suggested one single relevant market on the condition that other platforms substitute the two-sided platform. However, if other platforms cannot substitute all services of a two-sided platform in question, relevant market for a platform in question should be defined separately by customer group based on the idea that each market should be considered reflecting its feature thoroughly. Moreover, in Naver case, Korean courts found that relevant market for a platform in question should be defined separately by customer group based on the idea that each market should be considered reflecting its feature thoroughly. Also, in T-broad Gangseo broadcasting case, the KFTC and courts defined relevant market separately by customer group as usual. And in the Gmarket case, relevant market definition was conducted based on characteristics and function of service. In Korea, multi-sided market theory with regards to relevant market definition is being progressed and various attempts to reflect multi-sidedness are being made by the KFTC and Korean courts. However, the prevailing view in Korea seems to be that relevant market of platforms should

be defined by customer group based on related regulation and its interpretation dealing with demand substitutability

To conclude, the relevant market definition for multi-sided platforms can be conducted based on traditional tools, and the modification of traditional tools is required in the case of particular platform types. Also, unique features of multi-sided platform market can be considered throughout the processes of relevant market definition, assessment of market dominant power and determination of abuse of market-dominating position to fit in with multi-sided platform business.

REFERENCES

- [1] Commission Notice on the definition of relevant market for the purpose of Community competition law, 97/C 372/03, para. 2.
- [2] B. E. Lee, "A study on the concept of ICT platform and the implication of competition law," LEG (Law and Economics Analysis Group) Symposium Report, p. 10, 2015
- [3] D. S. Evans, *Platform Economics: Essay on multi-Sided Business*, Competition Policy International, p. 163, 2011.
- [4] C. Ewald, "Der SIEC-test im deutschen Recht: Grundansatz, materielle Detailfragen und praktische Auswirkungen aus ökonomischer Sicht," *Wirtschaft und Wettbewerb*, vol. 3, pp. 261-281, 2014.
- [5] T. Valletti, "Mobile call termination: A tale of two-sided market," *Communications and Strategies*, no. 61, p. 68, 2006.
- [6] D. S. Evans and M. D. Noel, "The analysis of mergers that involve multi-sided platform business," *Journal of Competition Law and Economics*, pp. 16, 35, 2008.
- [7] R. B. Hesse, "Two-sided platform markets and the application of the traditional antitrust analytical framework," *Competition Policy International*, vol. 3, no. 1, p. 193, 2007.
- [8] E. Emch and T. S. Thompson, "Market definition and market power in payment card networks," *Review of Network Economics*, vol. 5, no. 1, 2006.
- [9] Bundeskartellamt, *Guidance on Substantive Merger Control*, para. 77-78, 2012.
- [10] H. S. Kim, "Market definition and dominance analysis in two-sided markets," *Anam Law Review*, vol. 34, pp. 763-785, 2011.
- [11] OECD, "Market definition in multi-sided markets," DAF/COMP/WD (2017) 33/FINAL, para. 5-23, 2017a.
- [12] Case COMP/AT.39740 Google Search shopping. [Online]. Available: http://europa.eu/rapid/press-release_IP-17-1784_en.htm
- [13] K. W. Lee, "Review on issues relevant to M&A in internet open market," KFTC report, p. 18, 2008.
- [14] L. Filistrucchi, G. Van Damme, and Affeldt, "Market definition in two-sided markets: Theory and practice," *Journal of Competition Law and Economics*, vol. 10, no. 2, p. 307, 315, 2014.
- [15] L. Filistrucchi, "A SSNIP test for Two-Sided Markets: The case of media," NET Institute working paper No. 08-34, p. 10, 2008.
- [16] P. L. Parcu, M. S. Stasi, and M. Botta, "Antitrust enforcement in traditional v. online platforms," European University Institute, p. 1, 2015.
- [17] N. Zingales, "Product market definition in online search and advertising," *Competition Law Review*, vol. 9, issue 1, p. 37, 2013.
- [18] C. Pleatsikas and D. Teece, "The analysis of market definition and market power in the context of rapid innovation," *International Journal of Industrial Organization*, vol. 19, pp. 41-44, 2001.
- [19] R. Dewenter, U. Heimeshoff, and F. Low, "Market definition of platform markets," Helmut Schmidt University, Working Paper Series no. 176, p. 3, 2017.
- [20] Seoul High Court, Case 2008 27102 (8 October 2009); Supreme Court, Case 2009 Du 20366 (13 November 2014).
- [21] KFTC Decision No. 2007-460 (8 October 2007, T-broad Gangseo Broadcasting case).
- [22] Seoul High Court, Case 2008 27102 (8 October 2009).
- [23] D. S. Hong, "Improvement scheme of standard for determining abuse of market-dominant position," *Journal of Korean Competition Law*, vol. 21, pp. 120-123, 2010.
- [24] Supreme Court, Case 2009 Du 20366 (13 November 2014).
- [25] S. J. Choe, "T-broad case and applicability of two-sided market theory," *Journal of Competition*, pp. 78, 86-87, 2009.
- [26] KFTC Decision No. 2007-555 (18 December 2007, Gmarket case).
- [27] Seoul High Court, Case 2008Nu2851 (20 August 2008); Supreme Court, Case 2008 Du 16322 (10 June 2011).
- [28] OECD, *Digital Economy Outlook 2017; Spotlight in Korea*, p. 2, 2017.

- [29] OECD, "Measuring market power in multi-sided markets," DAF/COMP/WD (2017)35/FINAL, para. 19, 2017b.
- [30] S. K. Rhee, "The definition of two-sided market and its condition," International Telecommunication policy review, vol. 17, no. 4, p. 103, 2010.
- [31] C. S. Hwang, "Antitrust law enforcement on multi-sided platform businesses," *Journal of Korean Information Law*, vol. 13, no. 2, p. 113, 2009.
- [32] S. Broos and J. M. Ramos, "Google shopping and Amazon: The importance of competing business models and two-sided intermediaries in defining relevant markets," *The Antitrust Bulletin*, vol. 62, issue 2, pp. 11, November 2015.
- [33] H. Schmidt, "Taming the shrew: There's no need for a new market power definition for the digital economy," Stockholm University Research Paper No.17, p. 12, 2017.
- [34] D. Auer and N. Petit, *Two-Sided Markets and the Challenge of Turning Economic Theory into Competition Policy*, p. 53, 2016.
- [35] KFTC Decision No.2009-146 (25 June 2009), p. 24.



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