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Research on Anti-monopoly Law Regulation of Platform Self-Preference

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The typical manifestation of the platform self-preference is to change the original behavior, give preferential treatment to the products or services of its own downstream market or the second market, and exclude the equally efficient competitors in the downstream market. Self-preference by dominant platform enterprises will have both positive and negative effects, which is a vague behavior suspected of monopoly. Therefore, the illegal judgment of this behavior has become the core issue of anti-monopoly law regulation, and there are disputes in the academic circle on this issue. There are other more restrictive damage theories between the two extreme viewpoints of requiring dominant platform enterprises to bear equal treatment of general obligations and pure effect analysis. However, these damage theories may not only have the risk of misjudgment but also the risk of missing judgment, so we should start from the Angle of leverage theory. Self-preferential treatment is actually a kind of leverage behavior; platform companies have no legitimate reason to change the original behavior, abuse the dominant position in the first market, and exclude equally efficient competitors in the second market. Therefore, by comparing the types of leverage behaviors such as tying, price squeezing and refusing to deal, it can be concluded that free preferential treatment constitutes an abuse of market dominance.

Keywords: self-preference, leverage theory, leveraged behavior

Introduction

The Internet economy is characterized by the integration of platform, data, and algorithm, in which platform economy plays a core role (Yang, 2020, p. 211). With the vigorous development of the Internet economy, the vertical integration degree of platform enterprises has gradually deepened, and platform enterprises play the dual role of both the maker of market rules and the operator in the market. As a result, platform enterprises frequently give preferential treatment to their downstream products or services, and the competition in the downstream market faces the risk of serious distortion, which has aroused widespread anti-competition concerns. Self-preference is separated from normal business behavior and behavior with the effect of excluding and restricting competition, and it is often defended as "competition on merit", which is difficult to grasp the boundary in the determination of anti-monopoly violations. Meanwhile, there are significant differences in behavior between self-preference and similar exclusive abuse such as refusing to deal, tying, and price squeezing. There is disharmony in the path of applying typed damage analysis methods forcibly. Therefore, the anti-monopoly law regulation of

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platform enterprises' self-preference has both urgent needs in reality and theoretical challenges, which is a digital market anti-monopoly problem that the anti-monopoly law needs to solve urgently.

The Behavior, Concept Definition, and Competitive Effect of Platform Self-Preference

Behavioral Expression

By analyzing the behavior of Google, Apple, and Amazon, the three technology giant platform companies that are often accused of implementing self-preference, it can be found that the behavior is mainly manifested as. First, platforms change the original behavior, favor the products or services of their own downstream market or the second market, and squeeze out the equally efficient competitors in the downstream market. For example, in the upstream general search market, Google changed its business strategy of showing search results based on equal ranking based on results relevance, and used a ranking strategy based on self-preference, which only used rich forms, such as special columns with pictures and price information, for its own comparison shopping service, and actively penalized competitors who were at least equally efficient through algorithms (United States, 2020, pp. 187-193). Second, refusing to supply inputs intended for internal use increases competitive advantage in downstream markets. For example, in the online retail market, Amazon uses the consumer data it collects as a platform manager for its own online retailer marketing, but does not provide it to other competitors, or demands to pay high prices (United States, 2020, pp. 283-287).

The author believes that the latter behavior should not be included in the extension of platform enterprises' self-preference. Because, if the input itself is to dominate the internal use of the enterprise, never given to competitors or other operators in the case of voluntary transactions, then such input may be the advantage of the enterprise's technological innovation, which belongs to the legitimate competitive advantage of competition based on ability, which is also conducive to stimulating competitors to increase investment in technological innovation and compete for market share. If antitrust intervention is made to require mandatory sharing, there is not only a risk of undue interference with the property rights of enterprises and the right to freedom of trade, which involves a fundamental principle of law, in the United States v. Colgate & Co. The United States Supreme Court also reviewed the validity of the principle that "if there is no intent to create or maintain a monopoly, private traders are free to independently determine their counterparties".[1]

Concept Definition

The characteristics of the platform self-preferential behavior include: (1) The identity of the platform enterprise is dual, and it has a dominant position in the first market; (2) change behavior in the first market to increase competitive advantage in the closely connected second market; (3) changes in behavior that crowd out equally efficient competitors in the secondary market. Therefore, self-preference of platform enterprises can be defined as the behavior of platform enterprises that have a dominant position in the first market or platform market, changing their original behavior to favor their own products or services in the second market and crowding out the behavior of equally efficient competitors in the second market. The European Union's Competition Policy for the Digital Age defines self-preference as "a special technique for leveraging the market power of a platform, i.e. giving preferential treatment to the platform's own products or services when it competes

[1] United States v. Colgate & Co., 250 U.S. 300, 307, 39 S. Ct. 465, 468 (1919).

with products offered by other entities using the platform" (European Union, 2019, p. 7). Although this definition points out the nature of the leverage of self-preference, it ignores the key feature of self-preference that antitrust law should focus on, that is, the change of behavior from the efficiency behavior previously granted voluntary implementation to the anti-competitive behavior of self-preference. This omission is apt to lead to confusion about the anti-competitive effects of self-preference, and to fall into the trap of the necessary facilities that Google's defence claims apply.

Analysis of the Competitive Effect of Platform Self-Preference

On the one hand, self-preferential behavior has the effect of promoting competition, and has a positive effect on improving efficiency or consumer welfare. First, it can promote product optimization. After vertical integration into other markets, platform enterprises can provide better technical support for products or services in the second market through their advantages in technology, innovation, capital, and data in the platform market, coordinate the technical design, interoperability, and compatibility of products or services between the two markets, provide product quality, and give play to the common ecological advantages between products. It also brings users a higher product experience. In addition, companies can be incentivized to gain competitive advantages through innovation. After vertical entry into the second market, it can also exert this competitive advantage to provide better product design, although it exerts a lot of competitive pressure on competitors, but in return it will encourage competitors to take innovation to improve product quality and compete for lost market share. Finally, the Chicago School believes that vertical integration has the effect of eliminating double marginalization, which can avoid the formation of two monopoly profits in two markets with marginal income equal to marginal cost. Even if vertical integration forms a dominant position in both markets, enterprises can only obtain one monopoly profit. It is therefore not profitable for firms to gain dominance in both markets by leveraging dominance in the first (Bork, 1993, p. 229; Posner, 1976, p. 173; Scherer, 1970, pp. 241-248).

On the other hand, it may also have the effect of restricting competition and not promoting efficiency or consumer welfare. First, self-preference can create high barriers to market entry. Platform enterprises abuse their dominant position in the first market and produce a blocking effect in the second market, so that potential competitors can only enter the two markets at the same time to have the minimum efficient competitive scale and carry out profitable business activities. This creates unnecessary barriers to entry for potential competitors. Second, it may exclude equally efficient competitors. Self-preference makes platform enterprises simply use their dominant position in the first market to seek competitive advantage in the second market through leverage. This competitive advantage is not based on efficiency, and competitors with the same efficiency cannot compete effectively. As a result, the second market is no longer a market that competes on merit, and the second market faces the risk of completely distorted competition. Finally, consumer welfare will be undermined. The implementation of self-preference is based on the premise of changing the original business strategy in the first market, and it is precisely because of the original business strategy that the enterprises implementing self-preference gain the recognition of consumers, increase their market share, and thus have dominant market power. Therefore, the self-preferential business strategy implemented after the change will harm the quality of the product or service and thus harm the interests of the consumer.

Theoretical Disputes and Comparative Analysis on the Illegal Identification of Platform Self-Preference

The Google case in 2017 is a typical case of platform enterprises' self-preference in recent years. Scholars have conducted in-depth explanations and heated discussions mainly on how to distinguish between pro-competition and anti-competitive self-preference. The essence of the problem lies in which analysis path to carry out illegal analysis of platform enterprises' self-preference. The analysis and determination of the illegality of Google's self-preference presents two extreme views, and between these two extreme views there are some more restrictive theories of harm, but they are more or less flawed.

The General Obligation of Equal Treatment

Some scholars have criticized the European Commission's penalty decision, arguing that according to the traditional "leverage theory", it is tantamount to imposing a general or regulatory obligation on digital platform enterprises to treat their own and competitors' services equally, and this intervention has gone beyond the scope of competitive intervention to de facto regulation (Geradin & Katsifis, 2019, p. 2). In summary, leverage theory holds that a firm with a dominant position in one market leverages its dominant position in that market to seek dominance in another market, and thus to be dominant in both markets. The broadest understanding is that a dominant firm cannot gain a competitive advantage in the second market, that is, it has no intention of monopolizing the second market, and is liable because it has abused the market power it has acquired in the first market, not because it may form a monopoly in the second market (Howenkamp, 2009, p. 351). According to this understanding, platform enterprises can only be exempted from the antitrust risk of being identified as leverage abuse if they do not give themselves preferential treatment or equal treatment. Because of vertically integrated platform companies, if they already have a dominant market position in the first market, then their business strategy of favoring their own products in the second market will inevitably lead to the weakening of competitors' market share. This is tantamount to requiring platform companies to bear the general obligation of equal treatment.

This broad application of leverage theory to analyze self-preference is flawed. On the one hand, it makes the dominant enterprises have excessive anti-monopoly risk. It is tantamount to informing all dominant firms that there are antitrust risks when they adopt business strategies that support their own products and services, which is tantamount to imposing a general obligation on dominant firms not to support their own products and services. On the other hand, the imposition of equal treatment of general obligations conflicts with the fundamental principles of competition law. Competition law remedies require a proportion between the harm and the anti-competitive effects of the analytical settlement act (Commission "Competition Law 4.0", 2019, p. 74). In the case that the competitive harm of self-preference is not clear, requiring the dominant enterprises not to support their own products and services is equivalent to prohibiting the self-preferential behavior of the dominant enterprises, which is seriously disproportionate to the competitive harm caused by the behavior.

Pure Effect Analysis

If the obligation of equal treatment is the result of applying the complete analysis of illegal conditions to self-preference, then the path of pure effect analysis goes to the other extreme, that is, focusing only on the actual anti-competitive effect. Focusing on whether the behavior has an anticompetitive effect in a specific case,

although in line with the general path of antitrust analysis, comes at the cost of a great deal of controversy in theory and practice.

On the one hand, the threshold question, the anti-competitive effect in the second market does not require the exclusion of all competitors in the market, then the extent to which the anti-competitive effect is generated will be considered illegal. How many possibilities are there, when undermining a competitor's ability to compete is serious enough to be anti-competitive? Or is the behavior sufficient when it makes it harder for competitors to compete? Or it must prevent competitors from competing effectively, or even effectively exclude them from the market (Dunne, 2020, p. 100). These issues remain highly controversial.

On the other hand, it is difficult to make a decision if you only focus on the anti-competitive effects of specific cases in the determination of anti-monopoly violations. This approach calls for an in-depth analysis of the effects of the case to determine that self-preference is anti-competitive in some cases, but the Commission's penalty decision shows that it does not intend to conduct an in-depth analysis, nor does it intend to provide guidance to other platform companies on self-preference. Therefore, the pure effect analysis essentially does not propose any harm theory that can be applied to the illegal analysis of self-preference.

Alternative Damage Theory

When both of these extreme and general approaches are seriously flawed, a more restrictive injury theory can be proposed to provide more explicit conditions for finding self-preference illegal.

Essential facilities theory and denial of supply. The necessary facilities theory is often used to refute the European Commission's decision to punish Google for self-preference, but in essence, the necessary facilities theory is applied to analyze the misuse of self-preference. The necessary facilities theory applies to a very special case of refusing to trade. The dominant enterprise consistently refuses to use the product for its own internal use to other operators, and other operators are unable or difficult to obtain the product, while it is difficult for them to carry out normal business without using it. This is a profound intervention in the property rights and freedom of transaction of enterprises, and is an exception to the general extreme. Strict conditions therefore need to be applied. In Bronner case, the Court limited the application of the necessary facilities theory to (1) the elimination of any competition in downstream markets; (2) access to essential facilities is essential; (3) there is no reason for denying access to essential facilities[2]. According to these conditions, in the Google case, if the necessary facilities theory is to be applied to find that self-preference is illegal, at least it needs to be shown that: (1) Obtaining search results with specific rankings is objectively necessary to compete effectively in commerce; (2) Google's preferential strategy by visually highlighting its own services is likely to eliminate effective competition in the downstream search market; (3) denying equal treatment to all search results harms consumers. However, it is obviously difficult for Google's universal search service to meet the necessary facilities theory, especially the requirement of "indispensable". The downstream comparison shopping service can not only get traffic through Google's universal search, but also build its own website or application, or use Bing, Yahoo, and other search platforms. Or you can post ads on other platforms and so on and there are a variety of other possible ways to get

[2] Case C-7/97: Oscar Bronner GmbH & Co KG v. Mediaprint Zeitungs- und Zeitschriftenverlag GmbH & Co KG, ECLI:EU:C:1998:569, Para. 41.

traffic to do business (Vesterdorf, 2015, p. 8). The European Commission has also repeatedly said that the necessary facilities theory is not a theory of harm to Google's self-preferential punishment[3].

Differential treatment. The application of differential treatment to analyze self-preference can avoid the requirement of "indispensable" in necessary facilities. According to the differential treatment theory, under the premise of the lack of necessary facilities, dominant enterprises treat their products or services differently from those of their competitors in the downstream market and favor their own products or services. The transfer of leverage from one's dominant position in a related market to a neighbouring market also constitutes abuse and should be considered illegal. Although the differential treatment theory is applied to analyze self-preference, avoiding the threshold of "indispensable", and the anti-competitive damage of self-preference of platform enterprises has been analyzed from the perspective of leverage theory, it includes self-preference into the type of differential treatment, and it is equivalent to imposing the general obligation of equal treatment on platform enterprises, making this damage theory still flawed. First of all, there is an inherent competitive relationship between the search result pages that evaluate and sort the results and the connotation of differential treatment, because the search algorithm is essentially a method to distinguish, rank, and select winners through some selective indicators, which makes differential treatment in a general sense an inherent feature of the services provided by the search platform. The establishment of a general obligation of equal treatment is in tension with this inherent feature and it is difficult to define where the boundary lies. Secondly, especially for the search service provided by Google, the theory of differential treatment is applied to analyze its self-preferential behavior, and it is easy to conclude that Google search has a general obligation of equal treatment, but this broad obligation lacks restrictive conditions and clear scope of application, which is similar to granting competition authorities broad self-discretion in regulating platform enterprises' self-preference. Finally, it is the application of the theory of differential treatment that creates the general obligation that the dominant platform shall not give preferential treatment or equal treatment, which is equivalent to the method of regulating the platform's self-preference, which will restrict market competition and is not conducive to the development of platform enterprises and downstream markets.

A variant of traditional exclusive abuse. Others see Google's decision to penalize for self-preference as a variant of traditional exclusive abuse, such as price-squeezing or tying, an analytical approach that also does not require the strict conditions of the necessary facilities theory. Damage theory based on price squeeze: Low rankings and lack of attention can limit user acquisition, increase advertising costs, and result in a general increase in costs and prices, thereby reducing competitive pressure on the platform's own products or services (Bostoen, 2018, p. 374; OECDa, 2020). Under this theory of harm, if equally efficient competitors have to pay a price for prominence, then the dominant firm should be tested to see if it can offer its own product and compete effectively with end users. Damage theory based on tying: It argues that Google can induce consumers to choose the products they sell, such as comparison-shopping services, simply by visually highlighting them on its general search page (Iacobucci & Ducci, 2018; Petit, 2015, pp. 5-7). If the effect of inducements is similar to coercion in a given situation, and inducements can occur by exploiting status quo bias, then Google's actions can be tantamount to tying to block the market for comparison shopping services, and this also leads to other damaging consequences,

[3] See Google Shopping Decision, Para. 651; General Court, Report for the Hearing, Paras. 300, 303.

such as inhibiting innovation, low-quality search, and reducing consumers' chances of choosing related services. In addition, there is another variant of the theory based on tying, that is, Google's self-preference is equivalent to illegal platform envelopment, which believes that anti-competitive behavior can occur when platform enterprises enter another platform market and combine their own functions with those of the target market. Because digital platforms create multi-platform bundling levers that can share user relationships or other parts. Specific situations in which this theory has an anticompetitive effect include self-preferenceitism, especially when a dominant platform in a market distorts trading conditions in the target market by changing the rules in the first market to favor its own products or services in the target market (Condorelli & Padilla, 2020; OECD, 2020b).

The Application of Leverage Theory to the Illegal Analysis of Platform Self-Preference

The General Structure of Leverage Behavior

Although the application of leverage theory is often misunderstood by people as imposing the general obligation of equal treatment, the restrictive application of leverage theory is still the appropriate way to solve the illegal identification of self-preference. The leverage theory first appeared in 1948, when the Supreme Court of the United States declared that an enterprise should not use its monopoly power in one market to gain competitive advantage in another market[4]. After that, the leverage theory was used to analyze various behaviors involving the transmission of market power between two related markets with anti-competitive effects, which were collectively referred to as leveraged behaviors.

According to the EU Guidelines on Abuse of Market Dominance, the types of leverage that have been dealt with include: (1) tying, which means that a firm with a dominant position in a related market requires customers to purchase its products in another independent related market when purchasing products in that market, in order to increase its competitive advantage in that market; (2) price squeezing: A dominant firm that provides key inputs in the upstream market provides inputs at very high prices to competitors that produce end products in the downstream market so that their profit margins are completely compressed; (3) refusal to trade refers to the refusal of a dominant supplier producing a particular primary product to supply an essential product that enables third parties to compete in the latter market, or the refusal of a vertically integrated supplier to continue to supply raw materials used in the production of derivatives on the secondary market in order to promote vertical entry of the supplier into the derivatives market. Based on the analysis of the structural characteristics of the three kinds of leveraged behavior, the general structure of leveraged behavior can be found: First, a firm has a de facto dominant position in the first market that provides a specific product, the specific product is referred to as P1, and the first market is referred to as P2; secondly, the firm then enters the second market of producing independent products through vertical integration to pursue the maximization of benefits, in which the independent product is referred to as P2 and the second independent market is referred to as M2. Finally, at the same time, the company restricts the competitors in M2 by changing the business strategy for P1, which makes the competitors unable to deal with the sudden change in a timely and effective manner. In summary, in all cases of leverage, it is generally

[4] United States v. Griffith, 334 U.S. 100, 107-109, 68 S. Ct. 941, 945-947 (1948); United States v. Paramount Pictures, 334 U.S. 131, 174, 68 S. Ct. 915, 937 (1948).

the case that a firm with a dominant position in a particular market hopes to increase its market share in a separate market where it has not yet gained a dominant position by leveraging.

Self-Preference Is an Act of Leverage

According to the general structure of leveraged behavior, three conditions should be met if the vertically integrated firm's behavior is identified as leveraged behavior. First, it changes its behavior in the upstream or first market; second, the change in behavior excludes competition in the downstream or secondary market and is not justified; third, equally efficient downstream or second-market competitors are unable to respond to changes in behavior upstream or in the first market. Taking the alleged preferential treatment of its own comparison shopping service in the Google case as an example, self-preference has the general structure of leveraged behavior and should be identified as a leveraged behavior.

Change behavior in upstream markets. In the Google case, Google has a dominant market position in the general search service market, which is the first market, and in order to ensure its dominant position in the general search service market, Google enters the neighboring comparison shopping service market through vertical integration to pursue maximum profit, and the comparison shopping service market is the second market[5]. In order to achieve the goal of promoting vertical integration, Google has changed its previous business strategy in the general search service market, that is, it ranks and displays relevant search results equally based on relevance. This change is fundamental. By systematically giving preferential treatment to its own comparison shopping services and demoting those of competitors, Google has gained competitive advantages in the downstream comparison shopping service market and increased market share in downstream markets.

The change in behavior excludes competition in downstream markets and is not justified. Google's change in behavior from equal treatment to self-preference has no justification other than to increase its overall monopoly profits by squeezing out competitors. First, this change in behavior degrades the quality of the universal search service. Google's self-preference makes the results of the general search service no longer have good relevance, and it is precisely because higher relevance will attract more users, so the competition in the general search service market mainly lies in the relevance of search results. Higher relevance will bring better user experience and more users will use it. More revenue is generated by network effects. However, Google argues that displaying search results based on relevance because the bar has a rich format (including product images and prices) enhances the user's general search experience and thus improves the product (Dolmans, 2019). However, this argument fails to explain why Google reserved these rich formats exclusively for its own services, rather than using all relevant results equally as before. For example, Google displays product images and price information for all relevant results from comparison shopping services. And, as the Commission made clear in its penalty decision, it was not because of the way Google organized and presented its search results page, but because Google abandoned its previous strategy of ranking and presenting all search results equally, giving preferential treatment to its own products in search results, even when there were more relevant products from competitors[6]. In addition, the change in behavior has increased Google's overall monopoly profits. Google's change in behavior from equal treatment to self-preference risks a significant reduction in upstream market share,

[5] Google Search (Shopping) (n 1).
[6] Google Search (Shopping)—Factsheet (n 2).

and its behavior can only be interpreted as increasing Google's overall monopoly profit by increasing downstream market share. As Google advertises in shopping ads, advertisers typically get two to three times the click-through rate[7]. Because advertising in comparison shopping services is more efficient, merchants are willing to pay higher prices than text ads in general search services. This means that Google gets more revenue from users clicking on shopping ads than from users clicking on text ads for the same search. That made shopping ads Google's biggest revenue growth tool in 2016, far surpassing text ads (Taylor, 2016).

Therefore, only when Google has or is close to having a dominant market position in the general search service market can it deal with the risk that self-preference will reduce the relevance of general search results and leave users disappointed to look for alternatives. Due to the lack of competition in the general search service market, users are unlikely to switch to other search engines in a large scale. This, in turn, means that precisely because of Google's dominant position in the first market, the upstream market for universal search services, its self-preference in the downstream market for comparison shopping services is to be condemned, because it does not compete on merit in the comparison shopping service market, but through anti-competitive leverage to gain an unfair competitive advantage.

Downstream competitors with the same efficiency cannot respond to changes in upstream market behavior. In the Google case, competitors in downstream comparison shopping services were similarly unable to respond promptly and effectively to Google's abrupt shift from equal treatment to self-preference in its general search service. Because comparison shopping services mainly rely on traffic competition[8], in the case of Google's protection of their own services, competitors want to get the same traffic advantage, they have to vertically enter the upstream general search service market, and more importantly, have the same user size as Google search. However, because of strong network effects in the universal search service market, other companies have struggled to achieve the same scale of users as Google. In addition, operators in the competitive market for comparison shopping services enjoy more visibility before Google's change in strategy, but Google's abrupt change in strategy confuses their reasonable expectations of Google search as a source of traffic. Based on this expectation, they would invest in traffic through search engines, such as Google's specialized search engine optimization, which is now stalled. Conversely, the fact that Google's success with the universal search service preceded its change in strategy meant that the original system's neutral rankings provided an adequate return on investment. This also implies that Google's actions are driven by anti-competitive motives regarding the second market.

Conclusion

The condemnation of leverage behavior comes from a basic principle of competition law, that is, the market power of the firm in the first market should not be transmitted to the second independent market, and such behavior does not belong to the competition on merit in the second market, that is, the condemnation of leverage behavior lies in its abuse of the dominant position in the first market, and not because it might become dominant in a second, independent market. In practice, leverage constitutes abuse and is prohibited because it restricts

[7] See https://support.google.com/adwords/answer/2454022?hl=en&co=ADWORDS.IsAWNCustomer.
[8] Google Search (Shopping) (n 1).

competition in a second market without a reasonable economic justification, as the Court of Justice of the European Union has explained:

> In the absence of any other reasonable economic and objective justification, such conduct can only be interpreted as an attempt by the dominant firm to prevent competition in downstream markets in order to strengthen its position or gain dominance, and the practice of such conduct in downstream markets is not competition on merit[9],

and the practice of leverage is particularly condemned in the context of vertical integration of the dominant firm. Self-preference is also a leveraged behavior, so the following conditions need to be considered when determining whether self-preference constitutes abuse: (1) The firm has a dominant position in a real relevant market (as opposed to a mere potential or hypothetical market) and voluntarily provides products or services; (2) the firm changes its original business practices in this market to increase its competitive advantage in a separate but connected secondary market; (3) this change in behavior has an exclusive anticompetitive effect in the second market by crowding out equally efficient competitors; (4) there is no reasonable reason for the change in behavior.

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[9] C-52/09—TeliaSonera Sverige (n 24) Para. 88.