China-EU Law Journal (2023) 9:97–109
https://doi.org/10.1007/s12689-023-00100-9

ARTICLE

Tying by statutory dominant firms under differentiated (stricter) scrutiny? Insights from economic theory and competition practice

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Accepted: 30 March 2023 / Published online: 20 April 2023

Abstract

Statutory dominant firms, different from dominant firms that have gained their market power through competition on the merits, have derived their market position from choices made by the state. From an economic perspective, tying by this kind of firm typically generates significant anti-competitive effects that are likely to outweigh the possible pro-competitive effects. Both in China and the EU, such tying practices have frequently taken place. Nevertheless, the economic findings have not been fully reflected in competition provisions and competition practice in these two jurisdictions. This may lead to error costs and enforcement costs, which is detrimental to consumer welfare. It is thus important for competition authorities and courts to carefully consider the economic findings, while taking into account also the principles of proportionality and legal certainty. To enhance the effectiveness of competition law, this study proposes potential ways of applying a differentiated (stricter) scrutiny of tying by statutory dominant firms to reduce error costs and enforcement costs.

Keywords Tying · Statutory dominant firms · Economic theory · Competition practice

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1 Introduction

Tying and bundling[1] are common business practices. Under competition law and economics, tying by dominant undertakings is regarded as a controversial practice that may generate both pro-competitive effects and leveraging effects.[2] Economists, therefore, suggest using a case-by-case assessment to deal with such behavior.[3] While there has been an increasing debate about whether statutory dominance should imply a lower threshold for assessing possible abusive conduct,[4] most economic literature and competition rules on tying do not distinguish between tying by statutory dominant firms and tying by other dominant firms.

To fill in this gap, this article looks at both economic theory and competition practice of tying by statutory dominant firms in China and the EU. The aim is to assess whether, why, and how a differentiated (stricter) scrutiny should be applied to address such behavior. In Sect. 2, we examine and compare the economic effects of tying by statutory dominant firms with the effects of tying by other dominant firms. Section 3 provides a law and economics analysis of whether and to what extent the legally protected market positions of statutory dominant firms have affected competition provisions and the assessment of tying cases in China and the EU. It highlights the shortcomings of the current approach, showing the value of applying a differentiated (stricter) scrutiny on such behavior. Based on Sect. 2 and Sect. 3, Sect. 4 explores potential ways of applying a differentiated (stricter) scrutiny of tying by statutory dominant firms to enhance the effectiveness of competition law. The last section concludes the findings of this article.

2 The economics of tying by statutory dominant firms

2.1 "Statutory dominant firms" as a double-edged sword

Ramos (2020) defines "statutory dominant firms" as firms that "owe their market positions to a discretionary choice of the State".[5] Different from other settings where the state intervenes but a process of competition is institutionalized in public auction processes or intellectual property rights, market power enjoyed by statutory dominant firms does not result from an *ex-ante* competitive process.[6] Once designated by the state, such firms are subject to little *ex-post* competition restraints from potential challengers.[7] According to this definition, all enterprises, regardless of whether they

[1] Langer 2007, pp. 4–6.
[2] Giannaccari and Van den Bergh 2017, pp. 316–325; Wu and Philipsen 2023.
[3] Evans et al. 2003.
[4] See e.g., D'Amico and Balasingham 2022.
[5] Ramos 2020, p. 36.
[6] Ramos 2020, p. 38.
[7] Ramos 2020, p. 38.

provide services of general economic interest or whether they are SOEs or private undertakings, could be designated as statutory dominant firms.[8]

Many jurisdictions attach importance to designating statutory dominant firms for social and public interests. State-owned enterprises have played a significant role and have accounted for a large part of the assets in both China's and the EU's economy.[9] Services of general economic interest, like gas, electricity, water, and postal services, may be operated by the state on the grounds of applying a pricing policy to ensure lower prices for life necessities and raw materials for consumers and manufacturers, responding to differences in income and elasticity of demand.[10] It is also possible for private enterprises, such as firms providing cremation services, to be permitted to operate exclusively in the relevant markets.

Despite the public and social interests (Ai and Philipsen 2023) involved, statutory dominant firms may, at the same time, create challenges and raise anti-competitive concerns. In the absence of both *ex-ante* and *ex-post* challenges to their market positions, statutory dominant firms enjoy a static life with absolute advantages over other undertakings.[11] Their legally protected market positions grant these firms absolute advantages when they compete with firms in other markets. Their leveraging of market power into other markets has become a substantial challenge for competition law.[12] In the following two sections, we examine the economic effects of tying by statutory dominant firms and compare these effects with tying by other dominant firms.

2.2 "Pernicious" tying by statutory dominant firms

Unlike dominant undertakings that have gained their market power through competition on the merits, for whom price mechanisms play an essential role in restraining excessive pricing (because a high price makes it more likely that rival firms will enter the market),[13] the designation of statutory dominant firms does not result from an *ex-ante* competitive process, and they are not subject to potential competition. As warned by Laffont and Tirole (2001), "in the absence of competition for the market, 'winning' generates no information."[14] In order to avoid excessive prices being charged to consumers, the prices of goods offered by statutory dominant firms may be subject to certain types of state control. For life necessities and raw materials

[8] Ramos 2020, p. 39.

[9] Directorate-General for Economic and Financial Affairs of European Commission 2016, State-Owned Enterprises in the EU: Lessons Learnt and Ways Forward in a Post-Crisis Context, https://ec.europa.eu/info/sites/default/files/file_import/ip031_en_2.pdf . Accessed 10 Oct 2022; China Institute and University of Alberta 2018, State-Owned Enterprises in the Chinese Economy Today, https://www.ualberta.ca/china-institute/media-library/media-gallery/research/policy-papers/soepaper1-2018.pdf Accessed 10 October 2022.

[10] See e.g., Gal 2013. Gal discusses the moral justification of fairness in section II, C.

[11] Ramos 2020, p. 39; Van Den Bergh et al. 2017, p. 167.

[12] Ramos 2020, p. 70; OECD 2009.

[13] Gal 2013.

[14] Laffont and Tirole 2001, p. 49.

for consumers and manufacturers, these firms are often granted subsidies to ensure lower prices for the fulfillment of social needs. Under these circumstances, tying can be used as a profitable method to evade such control in the tying product.[15] Through the combined sales of tying products and tied products, the "uncollected consumer surplus" of the tying products, benefiting from state regulation and subsidies, will now be directly transferred to capture the tied product. In particular, statutory dominant undertakings may also have incentives to use tying as a cross-subsidization method to raise prices in the tied market in order to compensate for the loss of revenue in the tying market.[16]

Furthermore, statutory dominant firms often offer public necessities or raw materials with inelastic demand that can only be operated by designated firms in the relevant market. The more inelastic the demand, the less possible it is for consumers to reject the bundle, and the less likely it is for competitors to survive in competition. As a result, it is nearly impossible for an efficient stand-alone competitor to compete with the unique advantages enjoyed by statutory dominant firms. Namely, such practices can seriously restrict consumers' choices, while the dominant firms can easily leverage their market power to a competitive tied product market and charge monopolistic prices for the tied products.

Given the significant anti-competitive effects of tying by statutory dominant firms, even if pro-competitive effects may also exist, it is unlikely that the pro-competitive effects can outweigh the anti-competitive effects. Typically, one can regard such behavior as presumptively anti-competitive.

2.3 Comparing tying by statutory dominant firms with "normal" tying

For tying conduct applied by other (i.e. non-statutory) dominant firms, according to the Chicago school, it is not possible to achieve double monopolistic profits since any price increase for the tied product above the competitive price will cause a reduction in demand for the tying product. The firm has to reduce its package price in the end.[17] The Chicago School scholars thus argue that tying can only be employed for efficiency reasons.[18] However, their argument is based on assumptions that make it not as robust as it seems. The Post-Chicago School scholars have challenged those views, holding that tying may lead to significant foreclosure effects.

[15] Sagi 2014, p. 11; Li 2006, p. 169.

[16] See Communication from the Commission, Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings, COM/2008/0832, adopted in December 2008, para 57. Another commonly seen type is that statutory dominant firms may also use the monopoly rent to cross-subsidize other activities and raise rivals' operating costs. OECD 2009, pp. 26–35.

[17] Namely, the monopolist can only exploit one monopolistic profit by pricing the tying product at a monopolistic price and cannot gain additional monopolistic profit from the tied product. Evans et al. p. 44; Posner 2001, p. 197.

[18] Tying may be used by undertakings to achieve efficiencies, such as cost savings, quality improvements, welfare-enhancing forms of price discrimination, and avoidance of double marginalization, either in competitive markets or in monopoly markets. See Langer 2007, pp. 7–17; Garcés 2012, p. 148.

For example, Whinston (1990) considers the situation that the tied good market is oligopolistic and subject to fixed costs of entry and economies of scale, showing that tying may still be profitable through successfully inducing the exit of rivals in the tied market.[19] Despite these challenges, under the influence of the Chicago School, tying by non-statutory dominant undertakings is believed to be a controversial topic that can generate both significant anti-competitive effects and significant pro-competitive effects.[20]

Comparing the economic effects of tying by statutory dominant firms with those of tying by other dominant undertakings, considerable differences can be observed. First, the incentives for statutory dominant firms to employ exploitative and exclusionary ties are more significant than tying by other dominant undertakings. Second, after the Chicago School's theory, tying by other dominant undertakings is believed to generate both significant anti-competitive effects and pro-competitive effects, whereas the Chicago School by virtue of the pricing mechanisms does not account for tying by statutory dominant undertakings. Overall, from an economic perspective, it seems reasonable to regard the more "pernicious" tying by statutory dominant firms as presumptively anti-competitive, with a distinction between the more "ambiguous" tying by other dominant undertakings that deserves a case-by-case analysis.

3 A law and economics analysis of competition rules in China and the EU

3.1 The differentiated but incomplete competition provisions in China and the EU

Examining the competition provisions in China and the EU, we find that both jurisdictions tend to treat tying practices by statutory dominant firms differently from tying practices by other dominant undertakings.

In China, the central competition authority (SAMR) released *Interim Provisions on Prohibiting Abuse of a Dominant Market Position*[21] that are applicable to all sectors and markets, which include, on the one hand, general tying rules in Article 18, and on the other hand, a separate provision in Article 22 regarding public utilities' abusive behaviors.

Article 18 provides that,

> Dominant undertakings shall be prohibited from tying practices without justifiable reasons if these practices are in violation of trading practices and consumption habits, or in disregard of the functions of the commodities; and the justifiable reasons include reasons in line with proper industry practices and

[19] Whinston 1990.

[20] For further details, see Wu and Philipsen 2023.

[21] 禁止滥用市场支配地位行为暂行规定(Interim Provisions on Prohibiting Abuse of a Dominant Market Position), adopted by the SAMR in June 2019 and revised in March 2022.

> trading habits; reasons necessary to meet product safety requirements; reasons necessary to realize specific technology; and other reasons that can justify the conduct.
>
> Article 22 regarding public utilities' abusive behavior states that,
>
> Operators of public utilities such as water supply, power supply, gas supply, heat supply, telecommunications, cable television, postal services, and transportation shall operate according to law and shall not abuse their dominant market position to harm the interests of consumers.

The separate provision in Article 22 seems to suggest that the SAMR might follow a differentiated approach to assessing abusive behavior by public utilities from those by other undertakings. Nevertheless, the SAMR only separately lists abusive behavior by public utilities and does not incorporate detailed economic analysis, which may lead to several problems. First, it does not consider tying by other statutory dominant firms, e.g., undertakings under public regulation. Second, this provision does not clarify whether, why, and how tying by statutory dominant firms deserves a differentiated scrutiny.

Also in the EU, with regard to the assessment of abuse of dominance, in December 2008, the Commission published the *Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings*.[22] In this guidance, the Commission lists several criteria that may help to identify anti-competitive effects of tying and bundling.

Among these criteria, the Commission explicitly and separately considers certain differentiated incentives and effects of tying by statutory dominant firms, stipulating that,

> If the prices the dominant undertaking can charge in the tying market are regulated, tying may allow the dominant undertaking to raise prices in the tied market in order to compensate for the loss of revenue caused by the regulation in the tying market.[23]

Although the EU notices the cross-subsidization effects of tying by statutory dominant firms, it does not incorporate a full-fledged economic analysis.

[22] Communication from the Commission, Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings, COM/2008/0832, adopted in December 2008

[23] Communication from the Commission, Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings, COM/2008/0832, adopted in December 2008, para 57.

3.2 The emerging but inefficient competition practice in China and the EU

Both China and the EU[24] have condemned many tying cases by statutory dominant firms. In particular, in China, a majority of illegal tying cases condemned by competition authorities are about tying by statutory dominant firms while only very limited tying cases by other dominant firms are deemed as illegal.[25] These cases involve not only tying by public utilities operating in natural monopoly industries, such as operators of water,[26] gas,[27] and digital television[28]; but also tying by firms operating under strong levels of regulation or administrative licenses, such as firms providing products and services of tobacco,[29] salt,[30] medical insurance payment software,[31] and cremation.[32] Chinese courts also follow a stricter approach in addressing tying by statutory dominant firms than tying by non-statutory dominant undertakings.[33]

[24] 2002/180/EC: Commission Decision of 5 December 2001 relating to a proceeding under Article 82 of the EC Treaty (COMP/37.859—De Post-La Poste); Spanish Competition Court, Ferrocarril de Sóller / Excursiones Marítimas Puerto de Sóller, Case 611/06, 3 April 2007 (Spanish); Aviscom v. La Montagne, Paris Commercial Court, 7 January 2014; Aviscom v. La Montagne, Paris Court of Appeals, 7 December 2016.

[25] Ma, through open sources, found 21 tying cases addressed by competition authorities until Dec 2020. It is apparent that most of the punishments of tying under public enforcement are about tying by statutory dominant firms. Ma 2020.

[26] 竞争执法公告 2014 年第 13 号 广东惠州大亚湾溢源净水有限公司滥用市场支配地位案 (The Guangdong Dayawan Yiyuan Water Supply Case), 广东省工商行政管理局 (Guangdong AIC). 竞争执法公告2016年第4号内蒙古自治区阿拉善左旗城市给排水公司滥用市场支配地位案 (The Alxa Left Banner Water Supply Case), 内蒙古自治区工商行政管理局 (Neimenggu AIC).

[27] 竞争执法公告2014年第19号 重庆燃气集团股份有限公司垄断行为案 (The Chongqing Natural Gas Case), 重庆市工商行政管理局 (Chongqing AIC).

[28] 竞争执法公告2016年 第5号 内蒙古广播电视网络集团有限公司锡林郭勒分公司滥用市场支配地位案 (The XilinGol League Broadcast Television Case), 内蒙古自治区工商行政管理局(Neimenggu AIC).

[29] 竞争执法公告2014年第 16号 内蒙古自治区烟草公司赤峰市公司滥用市场支配地位案 (The Inner Mongolia Chifeng Tobacco Case), 内蒙古自治区工商行政管理局(Neimenggu AIC). 竞争执法公告2015年第 7号 辽宁省烟草公司抚顺市公司滥用市场支配地位案 (The Liaoning Fushun Tobacco Case), 辽宁省工商行政管理局(Liaoning AIC).

[30] 竞争执法公告2016年14号 湖南盐业股份有限公司 永州市分公司垄断行为案 (The Yongzhou Salt Industry Case), 湖南省工商行政管理局 (Hunan AIC).

[31] 竞争执法公告2017年12号 四川久远银海畅辉软件有限公司滥用市场支配地位案(The Sichuan Jiuyuan Yinhai Software Case), 四川省工商行政管理局(Sichuan AIC).

[32] 浙市监案〔2020〕8号 江山市殡仪馆滥用市场支配地位案(The Jiangshan Cremation service Case), 浙江省市场监督管理局 (Zhejiang AMR).

[33] Liu and Wu surveyed the 119 cases (between 2008 and 2020) about abuse of dominance under private enforcement. They find that in only 4 out of 119 civil lawsuits, the plaintiff's claims were fully or partially supported by the courts, including three successful tying cases by statutory dominant firms (*Wu Xiaoqin v.Shanxi Broadcast*, *Wuzongli v Yongfu Water Supply*, *Wuzongqu v Yongfu Water Supply*). Liu and Wu 2021. 吴小秦与陕西广电网络传媒 (集团) 股份有限公司捆绑交易纠纷申请再审民事判决书 [2016] 最高法民再98号 (Wu Xiaoqin v Shaanxi Broadcast), 最高人民法院 (The SPC). 吴宗区诉永福县供水公司: (2018) 桂01民初1190号 (Wuzongli v Yongfu Water Supply), 广西壮族自治区南宁市中级人民法院 (Intermediate People's Court of Nanning City in Guangxi Zhuang Autonomous Region). 吴宗礼诉永福县供水公司: (2018) 桂01民初1191号 (Wuzongqu v Yongfu Water Supply), 广西壮族自治区南宁市中级人民法院 (Intermediate People's Court of Nanning City in Guangxi Zhuang Autonomous Region).

Despite the emerging tying practices by statutory dominant firms, competition authorities and courts in both China and the EU usually do not explicitly consider the role of the differentiated position of statutory dominant firms in the assessment of the concerned exploitative and exclusionary effects, which may lead to both error costs and enforcement costs in practice. Taking the Chinese case of *Wu Xiaoqin v.Shanxi Broadcast*[34] as an example, the plaintiff Wu Xiaoqin was charged an additional fee for television programs when paying a basic maintenance fee for watching television by the only public firm carrying on broadcaster public obligations in the relevant market. The SPC held that as the only operator legally engaged in cable TV transmission business and centralized broadcast controller of TV programs in a specific region, the firm had advantages in market access, market share, business status, and business scale that could be regarded as holding a dominant market position in the relevant market. This firm, taking advantage of its dominant market position, restricted consumers' right to choose by tying basic viewing and maintenance fees of digital TV and the paid program fees and was not conducive to other service providers entering the digital TV service market. Such behavior constituted tying prohibited by the AML.

From a law and economics perspective, both the exploitative and exclusionary effects of this behavior are obvious. On the one hand, the basic viewing and maintenance fees of TV are regulated by the state for the benefits of consumers. Tying additional fees to these basic fees makes price regulation ineffective[35]. On the other hand, TV services could be regarded as life necessities with inelastic demand, at least, at that time; irrespective of the increased prices, counterparties generally have very few options but to accept the bundle. Such practices can seriously restrict consumers' choices with significant leveraging and exclusionary effects. These two kinds of effects, relating to the protected market position of a statutory dominant undertaking, are, nevertheless, not reflected in the case rulings. Failing to consider the relevant economic theory may lead to error costs and enforcement costs: although the anti-competitive effects could have been demonstrated clearly from an economic perspective, this case has gone through the first instance, the second instance, and the retrial proceeding.

3.3 Why is a differentiated (stricter) scrutiny important?

The above law and economics analysis shows that it is important to apply a differentiated scrutiny on tying by statutory dominant firms. On the one hand, a differentiated scrutiny will reduce false negatives and be unlikely to lead to false positives. On the other hand, tying has become a frequently employed method by statutory dominant firms to undermine economic reform, as it allows those firms to evade price control, compensate for the loss of revenue in the tying product, leverage and

[34] 吴小秦与陕西广电网络传媒 (集团) 股份有限公司捆绑交易纠纷申请再审民事判决书 [2016] 最高法民再98号 (Wu Xiaoqin v Shaanxi Broadcast), 最高人民法院(The SPC).

[35] See Li 2022, p. 107.

gain additional profits in the liberalized product markets.[36] To ensure that consumers can benefit from state regulation and economic reforms, a differentiated scrutiny on tying by statutory dominant firms is both reasonable and valuable.[37]

Furthermore, applying a differentiated (stricter) scrutiny can serve as an effective deterrent for tying by statutory dominant undertakings, which is in line with the principle of proportionality that requires competition enforcement to choose proportionate measures according to the severity of the concerned behavior.[38] In addition, the application of more explicit and clearer rules can also reduce the uncertainties during the enforcement.

4 Policy recommendations

Based on the above analysis, we propose several policy recommendations to achieve this differentiated (stricter) scrutiny with regard to the identification of statutory dominant firms, the assessment of anti-competitive effects, and the assessment of pro-competitive effects.

As a precondition, competition authorities and courts could first identify the differentiated position of statutory dominant firms through two essential elements: (1) the findings of lawful exclusive status and (2) dominance deriving from such differentiated positions. Once a statutory position has been confirmed, competition authorities and courts can lower the threshold of establishing a dominant position for the undertaking concerned.[39]

[36] China and the EU both stress the importance of economic reforms in state-controlled industries to enhance consumer welfare. Effective unbundling of competitive businesses and enhanced efficiencies of primary business are regarded as central methods to promote economic reform and consumer welfare in these two jurisdictions. For example, in 2022, the Chinese National Development and Reform Commission and National Energy Administration issued a Guidance on Accelerating the Construction of a National Unified Electricity Market System, which promoted the accounting unbundling of transmission/distribution business and purchase/sale business of electricity. In the EU, Directive 2019/944 of the European Parliament and of the Council of 5 June 2019 on common rules for the internal market for electricity also prescribes ownership unbundling of transmission system operators from production/supply interests. 国家发展改革委国家能源局关于加快建设全国统一电力市场体系的指导意见, 发改体改〔2022〕118号 (Guidance on Accelerating the Construction of a National Unified Electricity Market System), adopted by the Chinese National Development and Reform Commission and National Energy Administration in January 2022; Directive 2019/944 of the European Parliament and of the Council of 5 June 2019 on common rules for the internal market for electricity and amending Directive 2012/27/EU (recast), OJ [2019] L 158/125, adopted by the European Parliament and the Council in June 2019.

[37] For more information about the interplay between industry regulation and anti-monopoly law, see Wang 2014; Wang et al. 2022; He 2023.

[38] See Jiao 2020.

[39] For example, they can affirm the dominant position of the defendant in a certain market according to the market structure and competition situation, except where there is contrary evidence to reverse it. See Article 9 of Provisions of the Supreme People's Court on Several Issues Concerning the Application of Law in the Trial of Civil Dispute Cases Arising from Monopolistic Acts issued by the SPC, "if public enterprises or other operators with lawful exclusive status abuse a dominance position, the people's court may affirm the dominant position of the defendant in a certain market according to the market structure and competition situation, except where there is contrary evidence to reverse it." 最高人民法院关于审理因垄断行为引发的民事纠纷案件应用法律若干问题的规定, 法释〔2012〕5号 (Provisions of the

Then, as the anti-competitive effects and welfare-reducing effects of such behavior are clear and obvious, it is sufficient for policymakers to adopt a simpler assessment to presume the anti-competitive effects with no need for develop further economic analysis, as long as some 'formalistic' criteria of tying are satisfied. Typically, such criteria include the finding of a dominant undertaking, separate products (i.e. in the tying product market and the tied product market), and an element of coercion (i.e. that the undertaking forces consumers who want to purchase one product to buy another product). At least, the findings of statutory dominant firms should lower the thresholds of establishing harm to competition in specific case assessments.

As for the assessment of pro-competitive effects, given the limited possibilities of efficiencies as analyzed before, policymakers can impose high evidence standards in the assessment process. For example, they can require five cumulative conditions to be demonstrated by dominant undertakings: "(1) the efficiencies have been, or are likely to be, realized as a result of the conduct; (2) the conduct is indispensable to the realization of those efficiencies: there must be no less anti-competitive alternatives to the conduct that are capable of producing the same efficiencies; (3) the likely efficiencies brought about by the conduct outweigh any likely negative effects on competition and consumer welfare in the affected markets; (4) the conduct does not eliminate effective competition, by removing all or most existing sources of actual or potential competition;"[40] (5) consumers shall receive a fair share of the resulting benefits of the claimed efficiencies.[41] It is also noteworthy that the high standards for economic reasons of efficiencies shall not affect the assessment of non-economic reasons, including e.g., the consideration of transaction habits, health and safety reasons.

These policy recommendations could be incorporated as soft forms of governance in competition law, e.g., in the forms of guidelines and judicial interpretations[42]. Based on sound economic analysis, the differentiated scrutiny is not only not against, but more in line with, the trend to apply competition economics to competition practice to reduce error costs. As a result, the savings on enforcement costs can be used to handle more controversial competition cases.

Footnote 39 (continued)
Supreme People's Court on Several Issues Concerning the Application of Law in the Trial of Civil Dispute Cases Arising from Monopolistic Acts), adopted by the SPC in January 2012 and enforced in June 2012, Article 9.

[40] These four conditions are required by the EU Commission in the assessment of efficiencies of exclusionary conduct. Communication from the Commission, Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings, COM/2008/0832, adopted in December 2008, footnote 30.

[41] Similar requirements can be found from Article 101(3) TFEU.

[42] See Wu and Zheng (2021); Zheng and Snyder (2023).

5 Conclusions

In this article we explained that, from an economic perspective, tying by statutory dominant firms is more "pernicious" and therefore should be regarded as presumptively anti-competitive, different from tying by other dominant undertakings that deserves a case-by-case analysis. Nevertheless, these economic findings have not been fully reflected in competition provisions and competition practice, at least in China and the EU, which may lead to both error costs and enforcement costs and negatively affect consumer welfare. To deal with this, we proposed policy recommendations on how to achieve a differentiated (stricter) scrutiny, to reduce error costs and enhance the effectiveness of competition law. Given that the differentiated scrutiny of tying by statutory dominant firms stems from solid economic discussions, the findings of this article are in line with the tendency of incorporating more economic analysis into competition law.

It is also noteworthy that this study relates to a broader discussion regarding the application of a differentiated scrutiny on (other types of) abuses by statutory dominant undertakings in China and the EU. As discussed above, the SAMR provided a separate legal basis for abuses by public firms in Article 22 in the *Interim Provisions on Prohibiting Abuse of Dominant Market Positions*. In the EU, the Commission claimed to apply a lower threshold to assess predatory practices by legal monopolies, holding that,

> The Commission will be more likely to find such an abuse of predatory practices in sectors where activities are protected by a legal monopoly, since it may use the profits gained in the monopoly market to cross-subsidize its activities in another market and thereby threaten to eliminate effective competition in that other market.[43]

In the assessment of retroactive rebates in the case *Post Danmark II*, the CJEU held the following,

> In a situation characterized by the dominant undertaking of a very large market share and by structural advantages conferred, inter alia, by that undertaking's statutory monopoly, which applied to 70% of mail on the relevant market, applying the as-efficient-competitor test is of no relevance inasmuch as the structure of the market makes the emergence of an as-efficient competitor practically impossible.[44]

Given the tendencies of applying a lower threshold to assess abuses by statutory dominant undertakings, we recommend further research on these topics.

Acknowledgements This paper is based on our presentation at the seminar of Recent developments in competition law and policy in China and the EU, organized by METRO (Maastricht University) and the

[43] Communication from the Commission, Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings, COM/2008/0832, adopted in December 2008, footnote 39.

[44] Post Danmark II (Retroactive Rebates), Case C-23/14 (2015), para 59.

universities CUFE and CUPL. We would like to thank the participants for their valuable comments on earlier drafts of this article. This research has also been financially supported by the China Scholarship Council (No. 201807070066).

Declarations

Conflict of interest We declare no conflict of interest. All errors lie with the authors alone.

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