

LESSONS FROM AN ANALYSIS OF THE ECONOMIC  
APPROACHES IN CHINA AND THE UNITED STATES IN  
RECENT AND EARLIER CROSS-JURISDICTIONAL  
MERGER CASES

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INTRODUCTION

It has been more than eight years since the implementation of the Chinese Merger Law (“AML”) in China.<sup>1</sup> As many businesses navigate today’s modern global economy, a significant number of mergers require filings in multiple jurisdictions.<sup>2</sup> Following the AML’s implementation, multi-national firms contemplating mergers have had to incorporate China’s merger review process into their planning.<sup>3</sup> Understanding the economic analyses undertaken in the AML merger review process, the similarities and differences between those analyses, and those undertaken in other jurisdictions, can help one to better anticipate concerns and outcomes. Moreover, an understanding of the similarities and differences between economic analyses in merger reviews across jurisdictions allows legal and economic teams working with the merging parties to analyze and address those concerns from day one. In many instances, competitive concerns in the United States may not be the concerns raised in China, and vice versa.<sup>4</sup> Working to understand those differences and tailoring potential solutions to each jurisdiction, including China, can allow the teams to provide the most helpful information to agency staff, and can

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<sup>1</sup> Zhonghua Renmin Gongheguo Fan Longduan Fa (中华人民共和国反垄断法) [Anti-Monopoly Law of the People’s Republic of China] (promulgated by the Standing Comm. of the Nat’l People’s Cong., Aug. 30, 2007, effective Aug. 1, 2008) 2007 Standing Comm. Nat’l People’s Cong. Gaz. 517 (China) translated in LAWINFOCHINA.COM, <http://www.lawinfochina.com/display.aspx?lib=law&id=6351&CGid=#> (last visited July 10, 2017) [hereinafter AML].

<sup>2</sup> Jérémie Jourdan & Sophie Sahlin, *The Globe-trotter’s Guide to Merger Control: How to Avoid Falling into Traps*, WHITE & CASE: PUBLICATIONS & EVENTS (Nov. 11, 2015), <https://www.whitecase.com/publications/insight/globe-trotters-guide-merger-control-how-avoid-falling-traps>.

<sup>3</sup> See Susan Beth Farmer, The Impact of China’s Antitrust Law and Other Competition Policies on U.S. Companies, 23 LOY. CONSUMER L. REV. 34, 34 (2010).

<sup>4</sup> See discussion, *infra* Section I.D.

help to move the merger review process along more efficiently and potentially to a better outcome.

As agencies across the world increasingly collaborate to share information and insights during each agency's investigations,<sup>5</sup> it becomes more important to synchronize efforts in conducting economic analyses relevant to each jurisdiction while also understanding the analysis likely undertaken in other jurisdictions. Merger review is not an isolated affair in each jurisdiction; it is connected and often interdependent.<sup>6</sup> For example, if the results of an analysis and the conclusions drawn are different in one jurisdiction versus another, merging parties might need to understand and be able to explain why.<sup>7</sup> Understanding the similarities and differences between the economic analyses and what they show between jurisdictions can help the merging parties to anticipate the review process, outcome, and timing of the overall transaction.

This Article analyzes economic evidence in merger cases that have been filed in both the United States and China. Since 2008, there have been cases where the articulated concerns, the analysis, and the remedy were very similar across the two jurisdictions, such as the NXP/Freescale merger in 2015.<sup>8</sup> On the other hand, there have also been cases where the concerns, analyses, remedies, and overall approaches have differed across the jurisdictions, such as in the Nokia/Alcatel Lucent merger in 2015, where the Ministry of Commerce of the People's Republic of China ("MOFCOM"), the authority in

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<sup>5</sup> See, e.g., FED. TRADE COMM'N, INTERNATIONAL COMPETITION AND CONSUMER PROTECTION COOPERATION AGREEMENTS, <https://www.ftc.gov/policy/international/international-cooperation-agreements> (last visited May 23, 2017). In particular, see FED. TRADE COMM'N, MEMORANDUM OF UNDERSTANDING ON ANTITRUST AND ANTIMONOPOLY COOPERATION BETWEEN THE UNITED STATES DEPARTMENT OF JUSTICE AND FEDERAL TRADE COMMISSION ON THE ONE HAND, AND THE PEOPLE'S REPUBLIC OF CHINA NATIONAL DEVELOPMENT AND REFORM COMMISSION, MINISTRY OF COMMERCE, AND STATE ADMINISTRATION FOR INDUSTRY AND COMMERCE, ON THE OTHER HAND (JULY 27, 2011), <https://www.ftc.gov/policy/cooperation-agreements/us-china-memorandum-understanding-antitrust-antimonopoly-cooperation> (last visited May 23, 2017).

<sup>6</sup> See, e.g., Lesli C. Esposito & John D. Huh, *The Rise of Cross-Border Antitrust Investigations: U.S., Canada and Mexico Enforcers Meet to Discuss Even Closer Collaboration*, DLA PIPER: PUBLICATIONS (June 24, 2015), <https://www.dlapiper.com/en/us/insights/publications/2015/06/the-rise-of-cross-border-antitrust/>.

<sup>7</sup> DIMITRIS LIAKOPOULOS & ARMANDO MARSILIA, TRANSNATIONAL MERGERS IN INTERNATIONAL AND EUROPEAN LAW 2–4, 109–11 (Mads Andenas ed., 2010).

<sup>8</sup> Compare MINISTRY OF COMMERCE PEOPLE'S REPUBLIC OF CHINA, MOFCOM ANNOUNCEMENT NO. 64 OF 2015 ON DECISIONS FROM ANTI-MONOPOLY REVIEW OF THE CONCENTRATION OF UNDERTAKINGS ON CONDITIONAL APPROVAL OF PROPOSED ACQUISITION OF ALL EQUITIES IN FREESCALE BY NXP, (Dec. 1, 2015, 2:54 PM), <http://english.mofcom.gov.cn/article/policyrelease/announcement/201512/20151201203768.shtml>, with FED. TRADE COMM'N, FTC REQUIRES NXP SEMICONDUCTORS N.V. TO DIVEST RF POWER AMPLIFIER ASSETS AS A CONDITION OF ACQUIRING FREESCALE SEMICONDUCTOR LTD., (Nov. 25, 2015), <https://www.ftc.gov/news-events/press-releases/2015/11/ftc-requires-nxp-semiconductors-nv-divest-rf-power-amplifier>.

charge of merger reviews in China, prescribed behavioral remedies.<sup>9</sup> This Article also compares the analyses, results, and outcomes in mergers analyzed in the United States and China in the early days of the AML to understand the trajectory of cross-jurisdictional differences since 2008. This Article seeks to understand: (1) how economics has informed regulatory analysis in the United States and in China about the potential effects of a proposed transaction on competition and consumers; (2) whether and to what extent economic analyses differed across the two jurisdictions; (3) how those differences have changed over time; and (4) what one can learn from these experiences to help anticipate concerns and outcomes going forward.

This Article finds that overall, economic analyses in the United States and China in recent cases are generally based upon similar principles.<sup>10</sup> This Article's analysis of the sample of cases suggests that there has been observable convergence between the United States and China in their economic analyses and conclusions.<sup>11</sup> In particular, MOFCOM decisions now appear to be more explicitly rooted in economics.<sup>12</sup> This is not surprising. Even though MOFCOM is a young antitrust agency, it has an exceptionally bright staff and the last eight years have given it an opportunity to build and expand its antitrust economic expertise and implementation experience. One can expect this trend to continue as the United States and China continue to share insights, information, and discussions with each other on merger reviews in their respective jurisdictions. However, there are still substantive differences in how agencies in the United States and in China analyze certain types of merger cases.

This Article finds that whether the approach or outcome is likely to conform or differ could depend on the following economics/competition factors:

- 1) The relevant geographic market delineated;
- 2) The relevant product market delineated, especially if the relevant geographic market is country-specific, rather than worldwide;
- 3) How comparable the competitive landscape is between the two jurisdictions, including the constraint the merging firms pose on each other, and the constraint the merging firms face from other firms in the relevant market;
- 4) Whether a structural versus behavioral remedy is possible or necessary. In cases where a structural remedy is prescribed the decisions and analyses appear to align more closely.<sup>13</sup>

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<sup>9</sup> MINISTRY OF COMMERCE PEOPLE'S REPUBLIC OF CHINA, MOFCOM APPROVES NOKIA'S ACQUISITION OF EQUITY OF ALCATEL-LUCENT CONDITIONALLY, (Oct. 21, 2015, 1:06 PM), <http://english.mofcom.gov.cn/article/newsrelease/significantnews/201510/20151001151049.shtml>.

<sup>10</sup> See discussion, *infra* Section I.C.

<sup>11</sup> See discussion, *infra* Section II.

<sup>12</sup> See, e.g., Charles River Assocs., *MOFCOM Takes a More Sophisticated and Transparent Approach to Economic Analysis in Recent Decision* 1–2, (Feb., 2014), <http://www.crai.com/sites/default/files/publications/China-Highlights-0214.pdf>.

<sup>13</sup> Aside from competition factors, non-competition factors can also play a role in China. As this Article describes in Section I.D., the AML's goal reaches beyond protecting consumers from diminished

A primary area of departure is the relevant geographic market, which is not surprising, as each jurisdiction may have its unique characteristics in the competitive environment, market participants, supply conditions, and consumer preferences.<sup>14</sup> Additionally, while neither the U.S. agencies nor MOFCOM has described its competitive effects analysis, and, in particular, its unilateral effects analysis, in much detail, the decisions suggest a reliance on such analysis.<sup>15</sup> The decisions make clear that the analytical framework in both jurisdictions goes beyond a pure structural analysis, such as market shares, concentration, and number of competitors.<sup>16</sup> In particular, the degree of closeness of competition between the merging parties and vis-à-vis other competitors is frequently referenced.<sup>17</sup> Additionally, entry barriers are also almost always discussed.<sup>18</sup>

In Part I, this Article begins its cross-jurisdictional comparisons by understanding the similarities and differences in the framework of merger analyses in the United States and China, as presented in statutes and guidelines. Part II examines the articulated economic evidence in merger cases that have been filed in both the United States and China. Finally, this Article closes with concluding thoughts.

## I. MERGER ANALYSIS IN THE UNITED STATES VERSUS CHINA

This Part begins with a comparison of the framework of the merger analyses in the United States and China. Although there are a number of striking similarities in the frameworks, understanding whether there are fundamental differences in the law and the analytical frameworks set out by the law may help to inform one of the reasons why the analyses between the two

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competition due to mergers. The impact on the development of the national economy is a factor that China considers when reviewing a merger. Although economics and competition factors can help to anchor merger analysis and explain a large part of the variations in the outcome of merger reviews, non-competition factors can have an impact on the outcome.

<sup>14</sup> Compare, e.g., Pfizer, Inc., No. 091 0053, at 21 (F.T.C. Oct. 14, 2009), <https://www.ftc.gov/sites/default/files/documents/cases/2009/10/091014pwyethdo.pdf>, with Guanyu Fu Tiaojian Pizhun Huirui Gongsi Shougou Huishi Gongsi Fan Longduan Shencha Jueding de Gonggao (关于附条件批准辉瑞公司收购惠氏公司反垄断审查决定的公告) [Notice on Conditions of Approval of Pfizer's Acquisition of Wyeth Company's Antitrust Review Decision], No. 77, <http://fdj.mofcom.gov.cn/article/ztxx/200909/20090906541443.shtml> (Zhonghua Renmin Gongheguo Shangwu Bu Gonggao (中华人民共和国商务部公告) [Ministry of Commerce of the People's Republic of China] 2009) [hereinafter MOFCOM Pfizer/Wyeth].

<sup>15</sup> See, e.g., U.S. FED. TRADE COMM'N, ANALYSIS OF PROPOSED AGREEMENT CONTAINING CONSENT ORDERS TO AID PUBLIC COMMENT 6 (2009) [hereinafter FTC PFIZER/WYETH ANALYSIS], <https://www.ftc.gov/sites/default/files/documents/cases/2009/10/091014pwyethanal.pdf>; MOFCOM Pfizer/Wyeth, *supra* note 14.

<sup>16</sup> See FTC PFIZER/WYETH ANALYSIS, *supra* note 15, at 6; MOFCOM Pfizer/Wyeth, *supra* note 14.

<sup>17</sup> See, e.g., FTC PFIZER/WYETH ANALYSIS, *supra* note 15, at 2.

<sup>18</sup> *Id.*

jurisdictions can be necessarily different, at times leading to different outcomes. Section A summarizes the merger analysis framework under the U.S. antitrust laws, and in particular, Section 7 of the Clayton Act. Section B summarizes merger related articles in the AML. Section C analyzes the similarities between the United States and China's analytical frameworks. Section D then examines the differences between the two theoretical frameworks. Finally, Section E considers possible reasons for the differences between the two frameworks.

#### A. *Merger Analysis in the United States*

The statute that governs merger review in the United States is Section 7 of the Clayton Act.<sup>19</sup> Among other things, Section 7 prohibits mergers and acquisitions where the effect “may be substantially to lessen competition, or to tend to create a monopoly.”<sup>20</sup> In practice, merger analysis in the United States is set out in significant detail by the Horizontal Merger Guidelines published by the Department of Justice and the Federal Trade Commission (“Guidelines”).<sup>21</sup> The Guidelines describe: (1) market definition; (2) market participants, shares, and concentration; (3) unilateral effects; (4) coordinated effects; (5) entry (timeliness, likelihood, and sufficiency); and (6) efficiencies. Analysis of each of these key areas as a whole helps to inform regulators of the potential effects of a proposed transaction.

#### B. *General Structure of Merger-Related Articles in China's AML*

Chapter IV of China's AML, “Concentrations of Undertakings,” establishes a general scheme for merger reviews.<sup>22</sup> In particular, Article 20 defines the concentrations of undertakings, which includes mergers.<sup>23</sup> Articles 21 and 22 list the criteria as to which the merged parties are required to declare their merger activities to the relevant authority.<sup>24</sup> Articles 23 through 26 present in detail the documents required for and the process of the merger review.<sup>25</sup> Articles 27 through 30 further exhibit the factors the authority should consider in reviewing a merger; these are also the core of the theoretical framework adopted by the authority to evaluate merger effect.<sup>26</sup> Article 31 requires extra

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<sup>19</sup> See Pub. L. No. 63-212, 38 Stat. 730 (1914) (codified as amended at 15 U.S.C. § 18 (2012)).

<sup>20</sup> *Id.*

<sup>21</sup> See U.S. DEP'T OF JUSTICE & FED. TRADE COMM'N, HORIZONTAL MERGER GUIDELINES § 1 (2010), <http://www.justice.gov/atr/public/guidelines/hmg-2010.pdf> [hereinafter GUIDELINES].

<sup>22</sup> See AML, *supra* note 1, ch. IV.

<sup>23</sup> See *id.* at art. 20.

<sup>24</sup> See *id.* at arts. 21–22.

<sup>25</sup> See *id.* at arts. 23–26.

<sup>26</sup> See *id.* at arts. 27–30.

review if the merger involves foreign investors that are related to national security concerns.<sup>27</sup> Article 53, although not under Chapter IV, requires additional administrative reconsiderations before filing lawsuits against authorities' decisions on proposed merger transactions.<sup>28</sup>

C. *Similarities between the Theoretical Frameworks in the United States and China*

Certain similarities exist between the United States and China's theoretical frameworks, such as the factors that each country's agencies consider in merger reviews and the agencies' ability to prescribe restrictive conditions on mergers to remedy any competition concerns.

1. Like the U.S. Guideline, the AML Directs the Authority to Examine Market Definition, Market Shares, Concentration, Targeted Consumers, and Entry Barriers.

In Article 27, the AML presents a list of factors for the authority to consider in merger reviews.<sup>29</sup> The factors include the merged parties' market shares and controlling power, the degree of concentration, the merger-specific influence on market access and technological progress, the merger-specific influence on consumers and rivals, and the merger-specific influence on national economic development.<sup>30</sup> The first four factors are also found in the U.S. Horizontal Merger Guidelines.<sup>31</sup> For instance, Chapter 5 of the Guidelines suggests that the agency should examine market participants, shares, and the degree of concentration when reviewing a merger.<sup>32</sup> This echoes Article 27(1) and (2) of the AML.<sup>33</sup> In addition, Chapter 6.4 and Chapter 9 of the Guidelines, instruct the agency to examine the unilateral effects on innovation and the effects on entry, which echoes Article 27(3) of the AML.<sup>34</sup> Article 27(4) of the AML broadly directs the Chinese agency to examine the merger-specific impact on consumers and other competitors, and can be compared to Chapter 6.1–6.3, Chapter 7, Chapter 8, and Chapter 10 of the Guidelines.<sup>35</sup>

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<sup>27</sup> See AML, *supra* note 1, at art. 31.

<sup>28</sup> See *id.* at art. 53.

<sup>29</sup> See *id.* at art. 27.

<sup>30</sup> *Id.*

<sup>31</sup> See GUIDELINES, *supra* note 21, §§ 5–7, 9.

<sup>32</sup> See *id.* § 5.

<sup>33</sup> See AML, *supra* note 1, at art. 27.

<sup>34</sup> See GUIDELINES, *supra* note 21, §§ 6, 9; AML, *supra* note 1, at art. 27.

<sup>35</sup> See GUIDELINES, *supra* note 21, §§ 6–8, 10; AML, *supra* note 1, at art. 27.

2. AML Allows Authorities to Prescribe Restrictive Conditions to Remedy Anti-Competitive Concerns

In some cases, when the authority raises concerns with respect to the negative impact of a proposed merger but decides not to fully block the deal, Article 29 of the AML allows it to impose additional, restrictive conditions on the merged parties to clear the deal.<sup>36</sup> Similarly, the U.S. agencies are allowed to negotiate with the merged parties to reach an agreement, including remedies, which will restore competition during the waiting period.<sup>37</sup>

D. *Differences between the Theoretical Frameworks in the United States and China*

In spite of their similarities, some differences still exist between the United States and China's theoretical frameworks. These differences are discussed more fully below, including aspects such as each framework's varying themes and goals, and variation in regulation of monopsony power.

1. The AML's Goal is Beyond Protecting Consumers from Diminished Competition Due to Mergers

The theme of the analytical framework under the Guidelines and U.S. federal antitrust law is that mergers should not be permitted if they will enhance market power by harming consumers as a result of diminished competition.<sup>38</sup> In contrast, Article 1 of the AML states its goal is "preventing and restraining monopolistic conducts, protecting fair market competition, enhancing economic efficiency, safeguarding the interests of consumers and the interests of the society as a whole, and promoting the healthy development of the socialist market economy."<sup>39</sup> Notably, Article 27 of the AML states that "the impact . . . on the development of the national economy" should be considered when reviewing a merger.<sup>40</sup> Article 28 further states that "[if] the concentration is in the public interest, the authority . . . may decide not to prohibit their concentration."<sup>41</sup> Although it is not clear how to interpret the meaning of "public interest," the authority is supposed to take

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<sup>36</sup> See AML, *supra* note 1, at art. 25.

<sup>37</sup> See U.S. FED. TRADE COMM'N, *PREMERGER NOTIFICATION AND THE MERGER REVIEW PROCESS*, <https://www.ftc.gov/tips-advice/competition-guidance/guide-antitrust-laws/mergers/premerger-notification-and-merger>.

<sup>38</sup> See GUIDELINES, *supra* note 21, § 1.

<sup>39</sup> AML, *supra* note 1, at art. 1.

<sup>40</sup> *Id.* at art. 27.

<sup>41</sup> *Id.* at art. 28.

into consideration not just the merger-specific impact on the consumer welfare, but the socialist market economy when evaluating a horizontal merger, which potentially involves political concerns as well.<sup>42</sup>

## 2. The AML Has No Explicit Discussion about Merger-Specific Unilateral and Coordinated Effects

According to Article 27 of the AML, the authority should consider the impact of a proposed merger on the access to the market and technological advance, on consumers and the other relevant undertakings concerned, and on other factors relevant to market competition.<sup>43</sup> However, the law does not explicitly discuss what types of impact a proposed merger would have on the market structure.<sup>44</sup> For instance, it is unclear how the authority would estimate the potential price increase and/or output reduction after a horizontal merger.<sup>45</sup> More importantly, although Chapter II of the AML regulates certain monopoly agreements such as price fixing,<sup>46</sup> the law does not explicitly guide the authority to examine the merger-related coordinated interactions.<sup>47</sup>

## 3. The AML Lacks Clarity in Evaluating Merger-Specific Efficiencies

Mergers sometimes help firms achieve scale economies by reducing their costs, which may benefit consumers or even the society as a whole.<sup>48</sup> In Article 28, the AML states that if the merging parties can prove that “the

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<sup>42</sup> See Xiaoye Wang, *Highlights of China's New Anti-Monopoly Law*, 75 ANTITRUST L.J. 133, 142–43 (2008); see also D. Daniel Sokol, *Merger Control Under China's Anti-Monopoly Law*, 10 N.Y.U.J.L. & BUS. 1, 22 (2013).

<sup>43</sup> See AML, *supra* note 1, at art. 27.

<sup>44</sup> See *id.* at arts. 17–19 (providing an explicit definition of “dominant market position” based on market shares but offering only generalities for market dominance based on market structure effects).

<sup>45</sup> See *id.* at art. 18.

<sup>46</sup> See *id.* at arts. 13–14.

<sup>47</sup> See *id.* at art. 27 (containing no direction for the enforcement authority to examine coordinated interactions related to the merger).

<sup>48</sup> See GUIDELINES, *supra* note 21, § 10 (“Nevertheless, a primary benefit of mergers to the economy is their potential to generate significant efficiencies and thus enhance the merged firm’s ability and incentive to compete, which may result in lower prices, improved quality, enhanced service, or new products.”).

advantages of such concentration to competition obviously outweigh the disadvantages,” then the proposed merger may not be blocked.<sup>49</sup> The “advantages” mentioned might include efficiency gains from merger, but the law does not specify what type of evidence qualifies to show such advantages.<sup>50</sup>

#### 4. The AML Does Not Regulate Monopsony Power

Overly powerful buyers may hurt the welfare of upstream suppliers. In Article 17, the AML identifies monopsony behavior, such as “buying commodities at unfairly low prices,” as an abuse of dominant market position.<sup>51</sup> Article 17 of the AML prohibits such behavior, but it does not discuss the merger-specific effect on upstream suppliers if the merged parties enjoy monopsony power.<sup>52</sup> In contrast, the U.S. Horizontal Merger Guidelines has a chapter describing principles for agencies to evaluate enhanced monopsony power due to merger.<sup>53</sup>

#### E. *Possible Reasons for Differences in the Approaches or Conclusions*

The reasons for the differences in the theoretical framework between the AML and the U.S. antitrust laws are two-fold. First, as others have noted, China is an emerging economy with unique institutional settings.<sup>54</sup> Thus, the antitrust law framework differs from its U.S. counterpart in both its general objectives and the factors considered in economic analyses.<sup>55</sup>

Second, since the AML came into effect in 2008 and is relatively new, it is not surprising to see gaps in the economic approaches and topics it covers compared to the relatively more mature U.S. framework, which has had over a century to develop.<sup>56</sup> Moreover, Section 7 of the Clayton Act only offers what it sets out to accomplish and prevent (i.e., substantial lessening of competition), and does not provide much specific guidance regarding merger review analysis.<sup>57</sup> As discussed, such guidance is set out in the Guidelines,

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<sup>49</sup> AML, *supra* note 1, at art. 28.

<sup>50</sup> *See id.* (containing no standard for evidence to prove that the advantages of the merger outweigh the disadvantages).

<sup>51</sup> *Id.* at art. 17.

<sup>52</sup> *See id.* (containing no further mention of monopsony behavior or effects).

<sup>53</sup> *See* GUIDELINES, *supra* note 21, § 12.

<sup>54</sup> *See* JONES DAY, *JONES DAY COMMENTARY: NEW CHINESE ANTI-MONOPOLY LAW* 1–3 (2017), [http://www.jonesday.com/New\\_Chinese\\_Anti-Monopoly\\_Law/](http://www.jonesday.com/New_Chinese_Anti-Monopoly_Law/).

<sup>55</sup> *See* discussion, *supra* Section 1.D.

<sup>56</sup> *See* Clayton Act § 7, Pub. L. No. 63–212, 38 Stat. 730 (1914) (codified as amended at 15 U.S.C. § 18 (2012)).

<sup>57</sup> *See id.* (containing no specific guidance on how to determine whether competition has been substantially lessened).

which took many years after the initial enactment of the Clayton Act to develop.<sup>58</sup> The very first Guidelines did not come into existence until 1968,<sup>59</sup> after many years of experience in implementing the Clayton Act. Even so, the Guidelines have been updated five times since their initial promulgation, based on further enforcement experience and the latest analytical tools, and they are expected to be updated again in the future.<sup>60</sup> As this history demonstrates, merger enforcement and analysis is an ongoing, evolving endeavor, especially considering commercial evolution, and how economists and lawyers continue to further our understanding of the way competition works in a variety of industries and business models.

It is important to recognize that economic analysis can help explain much and can help anticipate merger review concerns and outcomes in China versus the United States and elsewhere. There are some fundamental differences in the law and the analytical frameworks set out by the laws that explain why the analyses between the two jurisdictions can be necessarily somewhat different, leading to different outcomes at times.<sup>61</sup> Still, notwithstanding the differences this Article discusses, one sees a converging trend in the economic analyses that agencies in China and their counterparts in the United States typically employ, which is discussed in more detail in the subsequent section.<sup>62</sup> Realistic expectations on how far economic evidence can go, how it can help, and where there may still be gaps in anticipating concerns and outcomes, can help to prevent frustrations during a merger review process.

## II. CASE STUDY: THE USE OF ECONOMIC EVIDENCE IN A SAMPLE OF FOUR CASES

This Part analyzes the articulated economic evidence in merger cases that have been filed and reviewed in both the United States and China. In particular, a sample of recent and early cases was chosen, including cases that required structural versus behavioral remedies.<sup>63</sup> One can observe cases where the articulated concerns, the analysis, and the remedy are very similar between the United States and China, such as in the NXP/Freescale merger

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<sup>58</sup> See U.S. DEP'T OF JUSTICE, 1968 MERGER GUIDELINES § 1 (1968), <http://www.justice.gov/atr/hmerger/11247.pdf> (outlining for the first time the Justice Department's approach to enforcing the Clayton Act).

<sup>59</sup> See *id.*

<sup>60</sup> See Carl Shapiro, *The 2010 Horizontal Merger Guidelines: From Hedgehog to Fox in Forty Years*, 77 ANTITRUST L.J. 49, 50 (2010).

<sup>61</sup> See discussion, *supra* Section I.D.

<sup>62</sup> See Cunzhen Huang and Fei Deng, *Convergences with Chinese Characteristics? A Cross-Jurisdictional Comparative Study of Recent Merger Enforcement in China*, ANTITRUST, Spring 2017, at 44; discussion, *infra* Part II.

<sup>63</sup> See discussion, *infra* Section II.A.

in 2015.<sup>64</sup> On the other hand, one also sees cases where the concerns, analysis, remedies, and overall approaches differed across the jurisdictions, such as in the Nokia/Alcatel Lucent merger in 2015, in which MOFCOM prescribed behavioral remedies.<sup>65</sup>

This Part also compares the analyses, results, and outcomes in the mergers analyzed in the United States and China in the early days of the AML to understand the trajectory of cross-jurisdictional differences since 2008. These case studies seek to understand: (1) how economics has informed regulators in the United States and China about the potential effects of a proposed transaction on competition and consumers; (2) how the economic analyses were different in the two jurisdictions; (3) how that difference has changed over time; and (4) what can be learned from these experiences to help anticipate concerns and outcomes going forward. Section A offers a cross-jurisdictional comparison of the economic evidence utilized in United States versus China merger review. Section B considers how the usage of economic evidence in China has changed vis-à-vis the United States over time.

#### A. *Cross-Jurisdictional Comparison of the Economic Evidence in United States and China Merger Review*

This Section reviews two recent cases examined by both the United States and Chinese jurisdictions; in particular, the NXP/Freescale merger prescribed a structural remedy, while the Nokia/Alcatel Lucent merger prescribed a behavioral remedy. For each case, this Article outlines how the economic evidence was presented and used cross-jurisdictionally.

##### 1. Recent Case that Involved a Structural Remedy: *NXP/Freescale* (2015)

In March 2015, the NASDAQ-listed, Netherland-based NXP Semiconductors NV announced that it planned to pay \$11.8 billion to acquire the private equity-backed, Austin, Texas-based Freescale Semiconductor Ltd.<sup>66</sup> The deal would create a combined company worth about \$40 billion that would account for more than 60 percent of the market for radio frequency power

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<sup>64</sup> See discussion, *infra* Section II.A.1.

<sup>65</sup> See discussion, *infra* Section II.A.2.

<sup>66</sup> See Press Release, NXP Semiconductors N.V., NXP and Freescale Announce \$40 Billion Merger (March 2, 2015), <http://media.nxp.com/phoenix.zhtml?c=254228&p=irol-newsArticle&ID=2118033>.

amplifiers, with Infineon Technologies AG being the only other significant competitor, according to the Federal Trade Commission (“FTC”).<sup>67</sup>

In November 2015, the FTC approved the deal on the condition that NXP divest its radio frequency power amplifier assets to a Chinese private equity firm, and NXP was required to refrain at least two years from soliciting its former employees and managers.<sup>68</sup> In December 2015, MOFCOM issued a similar divestiture condition to the deal,<sup>69</sup> and in September the European Commission gave the approval under the divestiture promise by NXP.<sup>70</sup>

The FTC defined the relevant product market as no broader than radio frequency power amplifiers or transistors, and the relevant geographic market for these products as worldwide, as “the three major RF power amplifier suppliers . . . manufacture[d] the products in facilities around the world, and ship[ped] products from those facilities to customer locations worldwide.”<sup>71</sup> Further, the FTC pointed to the low transportation cost, and to the absence of “regulatory barriers, tariffs, or technical specifications that impede[d] worldwide trade” for these products.<sup>72</sup>

The FTC expressed concern over the merger’s impact on the market structure.<sup>73</sup> Specifically, it calculated an increase of over 1,800 in the Herfindahl-Hirschman Index (“HHI”) within this already highly concentrated market, and this number far exceeded the threshold set out in the guidelines.<sup>74</sup> In addition, the FTC believed the parties were closest competitors.<sup>75</sup> Further, the FTC argued that the merger would worsen the entry conditions, given that the products needed substantial time and investment to develop, and given significant customer switching costs.<sup>76</sup> Consequently, the FTC stated that the merger would induce anticompetitive “unilateral effects in the form of higher prices and reduced innovation.”<sup>77</sup> The FTC did not mention any potential efficiency gains from the merger.<sup>78</sup>

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<sup>67</sup> See *id.*; Press Release, U.S. Fed. Trade Comm’n, FTC Requires NXP Semiconductors N.V. to Divest RF Power Amplifier Assets as a Condition of Acquiring Freescale Semiconductor Ltd. (Nov. 25, 2015), <https://www.ftc.gov/news-events/press-releases/2015/11/ftc-requires-nxp-semiconductors-nv-divest-rf-power-amplifier>.

<sup>68</sup> See Press Release, U.S. Fed. Trade Comm’n, *supra* note 67.

<sup>69</sup> See MOFCOM Announcement No. 64, *supra* note 8.

<sup>70</sup> Press Release, European Comm’n, Mergers: Commission approves NXP’s acquisition of Freescale, subject to conditions (Sep. 17, 2015), [http://europa.eu/rapid/press-release\\_IP-15-5674\\_en.htm](http://europa.eu/rapid/press-release_IP-15-5674_en.htm).

<sup>71</sup> U.S. Fed. Trade Comm’n, Analysis of Agreement Containing Consent Orders to Aid Public Comment 2 (2015), <https://www.ftc.gov/system/files/documents/cases/151125nxpanalysis.pdf>.

<sup>72</sup> *Id.*

<sup>73</sup> See Complaint at 2, NXP Semiconductors N.V., No. 151 0090 (FT.C Nov. 25, 2015) (C-4560), <https://www.ftc.gov/system/files/documents/cases/151125nxpcmnt.pdf>.

<sup>74</sup> See *id.*

<sup>75</sup> See U.S. FED. TRADE COMM’N, ANALYSIS *supra* note 71, at 3.

<sup>76</sup> See *id.* at 2.

<sup>77</sup> *Id.* at 3.

<sup>78</sup> See *id.* (failing to mention any efficiencies as an effect of the merger).

The economic evidence MOFCOM presented in its statement suggested MOFCOM conducted similar types of analyses in reaching its conclusions.<sup>79</sup> MOFCOM identified the relevant product markets as the general microcontroller, automotive power-use analog integrated circuit, and radio frequency power transistor that amplifies radio signals of communication devices.<sup>80</sup> MOFCOM further identified the global markets for these products as the relevant geographic market, citing no regulatory barriers, and stating that transportation costs accounted for less than one percent of the product price.<sup>81</sup>

MOFCOM also expressed concerns with respect to the high combined post-merger market share (i.e., greater than 50 percent), that the merging parties were the top two players in the already highly concentrated global market, and that the merger would lead to a significant increase in concentration.<sup>82</sup> Further, MOFCOM indicated that NXP and Freescale were “two close leading competitors” and that customers would have reduced options.<sup>83</sup> The merger might also have affected R&D and innovation, as both merging parties competed in R&D and were leaders with technical advantages that other competitors did not possess.<sup>84</sup> Lastly, MOFCOM indicated concern with respect to entry barriers—that they would worsen because of the parties’ ownership of relevant patents.<sup>85</sup>

Throughout its analysis, MOFCOM did not explicitly express concerns with the potential impact on the parties’ competitors or the development of the national economy.<sup>86</sup> Similar to the FTC’s complaint, it did not mention the possible efficiency gains from the merger.<sup>87</sup> It clearly stated that the merger would eliminate competition, but there was no further discussion about unilateral price, quantity, or R&D effects post-merger.<sup>88</sup> In the conditional clearance announcement, MOFCOM quoted Articles 23 and 30 of the AML with respect to the procedure of reviewing the filing.<sup>89</sup>

The FTC and MOFCOM made similar restrictive decisions requiring the merged parties to divest one business to a Chinese private equity firm.<sup>90</sup>

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<sup>79</sup> See MOFCOM Announcement No. 64, *supra* note 8.

<sup>80</sup> *See id.*

<sup>81</sup> *See id.*

<sup>82</sup> *See id.* Interestingly, MOFCOM noted that the number of competitors would exceed eight. In general, eight competitors in a relevant market would be a high number of competitors. *See* AML, *supra* note 1, at art. 19 (describing market shares only for up to three top firms, as opposed to eight). Although it is not explicitly explained, given MOFCOM’s expressed concerns, one might infer that at least a number of these competitors were small and competitively insignificant.

<sup>83</sup> See MOFCOM Announcement No. 64, *supra* note 8.

<sup>84</sup> *See id.*

<sup>85</sup> *See id.*

<sup>86</sup> *Id.*

<sup>87</sup> *See id.*; Complaint, NXP Semiconductors, *supra* note 73.

<sup>88</sup> See MOFCOM Announcement No. 64, *supra* note 8.

<sup>89</sup> *Id.*

<sup>90</sup> *See id.*; Decision and Order at 8, NXP Semiconductors N.V., (FTC 2016) (No. C-4560), <https://www.ftc.gov/enforcement/cases-proceedings/151-0090/nxp-semiconductors-nv-matter>.

Although it is not revealed in much detail, the economic evidence utilized appears to be similar between the two jurisdictions. Both the United States and China began their discussion with the relevant product and geographic markets, followed by an analysis of market shares, concentration, and the competitive significance of the merging parties vis-à-vis other market participants.<sup>91</sup> Both jurisdictions point to competitive effects analysis, and in particular, entry barriers and closeness of competition between the merging parties, although neither jurisdiction shared details of their estimated unilateral effect of this transaction.<sup>92</sup> This case demonstrates that, although differences exist in the AML articles and the U.S. antitrust economic framework, in practice the procedure and conclusion can converge between the two jurisdictions.

## 2. Recent Case Involving Behavioral Remedy in China: *Nokia/Alcatel Lucent* (2015)

In April 2015, the Finland-based company Nokia announced its intention to buy the France-based Alcatel-Lucent.<sup>93</sup> The value of the deal was approximately \$16.6 billion, and the combined entity would become the second largest mobile equipment manufacturer in the world, with global revenues of \$27 billion across Asia, Europe, and North America.<sup>94</sup>

In June 2015, the DOJ granted early termination of the waiting period.<sup>95</sup> In October 2015, MOFCOM announced its conditional approval of the deal and accepted the parties' proposed remedies, which included Nokia's commitment to abide by the "Fair, Reasonable, and Non-Discriminatory" ("FRAND") licensing rules with respect to Standard-Essential Patents ("SEPs"), to cease its pursuit of an SEP injunction, and to pursue licensing rates renegotiation by Chinese licensees.<sup>96</sup>

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<sup>91</sup> MOFCOM Announcement No. 64, *supra* note 8; Complaint at 2–3, NXP Semiconductors, *supra* note 73.

<sup>92</sup> MOFCOM Announcement No. 64, *supra* note 8; Complaint at 2–3, NXP Semiconductors N.V., *supra* note 73.

<sup>93</sup> See Parmy Olson, *Nokia Buys Alcatel-Lucent for \$16.6 Billion*, FORBES (Apr. 15, 2015), <https://www.forbes.com/sites/parmyolson/2015/04/15/nokia-buys-alcatel-lucent-for-16-6-billion/#3185ba245aae>.

<sup>94</sup> Mark Scott & David Jolly, *Nokia Agrees to \$16.6 Billion Takeover of Alcatel–Lucent*, N.Y. TIMES (April 15, 2015), [https://www.nytimes.com/2015/04/16/business/dealbook/nokia-and-alcatel-lucent-takeover-deal-announced.html?\\_r=0](https://www.nytimes.com/2015/04/16/business/dealbook/nokia-and-alcatel-lucent-takeover-deal-announced.html?_r=0).

<sup>95</sup> Press release, Nokia, U.S. Department of Justice Permits Nokia and Alcatel-Lucent to Proceed with Proposed Combination (June 17, 2015), <https://www5.alcatel-lucent.com/press/2015/us-department-justice-permits-nokia-and-alcatel-lucent-proceed-proposed-combination>.

<sup>96</sup> MOFCOM Approves Nokia's Acquisition of Equity of Alcatel-Lucent Conditionally, *supra* note 9.

MOFCOM identified four relevant product markets: the wireless network access equipment, the core network system equipment, the network infrastructure service, and the licensing market for communication technology-related standard-essential patents.<sup>97</sup> MOFCOM further identified China as the relevant geographic market, as the competitors were not competing fully on a global scale, there were still differences in telecommunication standards and technologies across countries, and China itself had its own particular features with respect to the telecommunication standard-essential patent market.<sup>98</sup>

MOFCOM did not express competitive concerns for the first three product markets listed above, since the combined market shares would all have been less than 35 percent post-merger, and strong competitors existed, such as HUAWEI, ZTE, and Ericsson, that would have effectively restricted the competitive effect of the proposed merger.<sup>99</sup>

However, MOFCOM did express concerns with the merger-specific competitive effect in the licensing market for communication technology-related standard-essential patents.<sup>100</sup> First, the merged parties would have become number one in the market in all 2G, 3G, and 4G telecommunication standard-essential patent markets, and would gain up to a 35 to 45 percent share in the 2G and 3G telecommunication SEP market, thus expanding its gap with the number two player, Qualcomm, which would in turn increase the degree of market concentration.<sup>101</sup>

MOFCOM also examined the potential impact of the merger on the downstream customers.<sup>102</sup> According to MOFCOM, Nokia would significantly enhance its patent licensing bargaining power against the downstream firm after the merger, since Alcatel held strong SEP combinations in 2G and 3G telecommunication technologies.<sup>103</sup> This fact was crucial, as in China the 2G and 3G networks were still the mainstream, and because wireless telecommunication network equipment manufacturers were weak in patent ownership and had no basis for cross-licensing with Nokia.<sup>104</sup> MOFCOM examined the merger's impact on the downstream market's entry conditions and

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<sup>97</sup> MINISTRY OF COMMERCE PEOPLE'S REPUBLIC OF CHINA, MOFCOM ANNOUNCEMENT No. 44 OF 2015 ON THE ADDITION OF RESTRICTIVE CONDITIONS APPROVED BY NOKIA'S ACQUISITION OF ALCATEL-LUCENT EQUITY CASE OPERATORS FOCUS ON ANTI-MONOPOLY REVIEW DECISION (Oct. 19, 2015), <http://www.mofcom.gov.cn/article/b/c/201510/20151001139748.shtml>.

<sup>98</sup> See *id.*; Michael Gu, *Nokia/Alcatel-Lucent Highlights Competition Effects of Standard-Essential Patents*, LEXOLOGY (Jan. 14, 2016), <http://www.lexology.com/library/detail.aspx?g=9f64fe81-0ac0-4b60-970d-f5b62c4f2d3b>.

<sup>99</sup> MOFCOM Announcement No. 44 of 2015, *supra* note 97.

<sup>100</sup> *Id.*

<sup>101</sup> *Id.*

<sup>102</sup> *Id.*

<sup>103</sup> *Id.*

<sup>104</sup> *Id.*

concluded that Nokia might distort or restrict competition by refusing to license, by charging high license fees, etc., given that SEPs were prerequisites for downstream firms' entry.<sup>105</sup>

In this analysis, MOFCOM did not examine the closeness of competition between the merged parties, nor did it mention the potential efficiency gains from the merger.<sup>106</sup> To the contrary, it explicitly expressed concerns with the unilateral effect on the downstream firms after the merger, and its prescribed remedies were directly related to these concerns.<sup>107</sup>

This case is an example where MOFCOM and the U.S. antitrust agencies diverged in their economic perspectives when reviewing a merger. It demonstrates that MOFCOM pays close attention to industries where their domestic customers are weak as opposed to the merged parties and that MOFCOM acts more proactively to protect its national economy in these cases. It echoes the conclusion in Section I that AML's goal is beyond protecting consumers from diminished competition due to mergers, and includes the healthy development of a socialist market economy as a whole.<sup>108</sup>

Moreover, the relevant geographic market differed between the two jurisdictions, which explains in part the divergent outcomes of this merger in the United States and in China.<sup>109</sup> The relevant geographic market delineates the geographic scope of competition affected by the merger, which is bounded if either the customers' or the suppliers' willingness or ability to substitute away or serve customers is limited by geography.<sup>110</sup> Because the relevant geographic scopes are different, the impact that each jurisdiction believed the merger would have on the jurisdiction is disparate. In particular, in this case, China pointed to the reality of wireless telecommunication in China, where 2G and 3G networks were still the mainstream, which made the impact of a merger that consolidated patents on 2G and 3G networks likely larger than in a jurisdiction where its wireless telecommunications had shifted more to 4G.<sup>111</sup> Further, the fact that wireless telecommunication network equipment manufacturers were weak in patent ownership and had no basis for cross-licensing with Nokia was also specific to China.<sup>112</sup>

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<sup>105</sup> MOFCOM Announcement No. 44 of 2015, *supra* note 97.

<sup>106</sup> *See id.*

<sup>107</sup> *Id.*

<sup>108</sup> *See* discussion, *supra* Section I.D.1.

<sup>109</sup> Although we do not know for certain the relevant geographic market defined by the DOJ in its review of this case, it was likely to be defined as the United States and/or worldwide, and not China.

<sup>110</sup> *See* GUIDELINES, *supra* note 21, § 4.2.

<sup>111</sup> MOFCOM Announcement No. 44 of 2015, *supra* note 97.

<sup>112</sup> *Id.*

B. *A Then and Now Comparison of Economic Evidence Utilized in U.S. and China Merger Review*

This Section reviews two earlier cases examined by both the United States and China; similar to Section II.A, a structural remedy was prescribed for Pfizer/Wyeth, while a behavioral remedy was prescribed for the Novartis/Alcon merger.<sup>113</sup> For each case, this Section outlines how the economic evidence was presented and used; one can learn how the cross-jurisdictional economic analyses were different when the AML first went into effect.

1. *An Early Case that Involved a Structural Remedy: Pfizer/Wyeth (2009)*

In January 2009, the world's largest drug maker, Pfizer, announced its intention to acquire its rival, Wyeth, for \$68 billion.<sup>114</sup> The deal would be the largest in its transaction amount since 2006 in the United States.<sup>115</sup>

In October 2009, the FTC conditionally approved the deal, requiring Pfizer to divest about half of Wyeth's Fort Dodge U.S. animal health business to a third party competitor and to return its exclusive distribution rights to a manufacturer of tapeworm treatments.<sup>116</sup> In late September 2009, MOFCOM announced its conditional approval of the deal, requiring Pfizer to divest one of its animal vaccine businesses to a third party competitor.<sup>117</sup> Neither of the two agencies was concerned about competition in the human pharmaceutical market<sup>118</sup> The European Commission made a similar decision in July 2009.<sup>119</sup>

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<sup>113</sup> See MINISTRY OF COMMERCE OF THE PEOPLE'S REPUBLIC OF CHINA, MOFCOM ANNOUNCEMENT NO. 77 OF 2009, NOTICE ON CONDITIONS OF APPROVAL OF PFIZER'S ACQUISITION OF WYETH COMPANY'S ANTITRUST REVIEW DECISION (Sep. 29, 2009), [http://fdj.mofcom.gov.cn/article/zt\\_xx/200909/20090906541443.shtml](http://fdj.mofcom.gov.cn/article/zt_xx/200909/20090906541443.shtml); Announcement, Ministry of Commerce of the People's Republic of China, Announcement No. 53, 2010 of the Ministry of Commerce of the People's Republic of China Announcement on the Proposal to Approve the Decision of the Company to Acquire Alcon's Antitrust Review (Sep. 20, 2010), <http://www.mofcom.gov.cn/aarticle/b/g/201009/20100907150641.html>.

<sup>114</sup> Andrew Ross Sorkin & Duff Wilson, *Pfizer Agrees to Pay \$68 Billion for Rival Drug Maker Wyeth*, N.Y. TIMES (Jan. 25, 2009), <http://www.nytimes.com/2009/01/26/business/26drug.html>.

<sup>115</sup> *Id.*

<sup>116</sup> Press Release, Fed. Trade Comm'n, FTC Order Prevents Anticompetitive Effects from Pfizers Acquisition of Wyeth (Oct. 14, 2009), <https://www.ftc.gov/news-events/press-releases/2009/10/ftc-order-prevents-anticompetitive-effects-pfizers-acquisition>.

<sup>117</sup> MOFCOM Announcement No. 77 of 2009, *supra* note 113.

<sup>118</sup> See *id.*; Press Release, Fed. Trade Comm'n, *supra* note 116.

<sup>119</sup> See Press Release, European Comm'n, Mergers: Commission Clears Pfizer's Proposed Acquisition of Wyeth, Subject to Conditions (July 17, 2009), [http://europa.eu/rapid/press-release\\_IP-09-1161\\_en.htm](http://europa.eu/rapid/press-release_IP-09-1161_en.htm).

The FTC identified twenty-one relevant product markets, including human, killed- and live-cattle vaccines and treatment products, and further identified the United States as the relevant geographic market.<sup>120</sup> When defining the relevant markets, the FTC paid particular attention to markets where prices had been increasing and customers had expressed concerns with their weakened bargaining power post-merger.<sup>121</sup>

In terms of the merger-specific impact on the market structure, the FTC asserted that all of the relevant markets were highly concentrated, and the merged parties would become or remain the largest firm, accounting for over 50 percent of the market shares in almost all of the relevant product markets.<sup>122</sup> In particular, the merged parties would become a complete or near monopoly in four product markets (i.e., lactating-cow and dry-cow mastitis treatments, dairy cattle broad-spectrum antibiotics, canine monovalent leptospira vaccines, and joint-injected steroids for joint inflammation); the merged parties would become part of a duopoly in two markets (i.e., benzimidazole parasiticides and equine tapeworm parasiticides containing praziquantel); and the merger would reduce the market participants from four to three in seven of the remaining product markets.<sup>123</sup> Even in markets with more than four competitors pre-merger, the FTC examined the combined market share or the increase in HHI should the merger be approved, and concluded that the merger would significantly lessen competition.<sup>124</sup> The FTC also believed that new entry and expansion by smaller competitors into the relevant markets was difficult due to the lengthy process of R&D and obtaining the approval from relevant US agencies.<sup>125</sup> Lastly, the FTC expressed their concerns with the unilateral price effects, innovation effects, and coordinated effects related to the merger.<sup>126</sup>

Throughout the analysis, the FTC considered the merged parties as directly competing in most relevant markets.<sup>127</sup> For instance, in the U.S. cattle macrocyclic lactone parasiticides market, the companies were two of the only three branded players, with other generic players unable to seriously impose any competitive constraints on the branded ones.<sup>128</sup> However, there was no explicit discussion about merger-specific efficiency gains in the analysis.<sup>129</sup>

MOFCOM identified two broad categories of relevant product markets: (1) human pharmaceuticals, including broad spectrum antibiotics and antidepressant drugs; and (2) animal health products, including swine mycoplasma

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<sup>120</sup> Complaint at 2–3, NXP Semiconductors, *supra* note 73.

<sup>121</sup> U.S. Fed. Trade Comm’n, Analysis, *supra* note 71, at 2.

<sup>122</sup> Complaint at 4–7, NXP Semiconductors, *supra* note 73.

<sup>123</sup> *Id.*

<sup>124</sup> *Id.* at 5–7.

<sup>125</sup> *Id.* at 7.

<sup>126</sup> *Id.* at 7–8.

<sup>127</sup> *Id.* at 4–7.

<sup>128</sup> Complaint at 5, NXP Semiconductors, *supra* note 73.

<sup>129</sup> *See id.*

pneumonia and pseudorabies vaccine and canine combination vaccines.<sup>130</sup> The relevant geographic market was identified as mainland China.<sup>131</sup>

MOFCOM examined the merger-specific effects on the relevant markets and only raised concerns with the swine mycoplasma pneumonia vaccine market.<sup>132</sup> In particular, the combined market share would have been 49.4 percent, far exceeding the shares of the other competitors.<sup>133</sup> As a result, the merged parties might have unilaterally controlled market prices. MOFCOM further computed the increase in HHI to be 336, which indicated lessened competition in the market.<sup>134</sup> In addition, MOFCOM believed that the entry conditions were difficult due to high cost and the lengthy cycle of pharmaceutical R&D.<sup>135</sup> After the merger, Pfizer might have restricted the smaller competitors' expansion using various means.<sup>136</sup>

MOFCOM explicitly quoted Article 27 of the AML in its conditional clearance decision, which lists the five factors that it considered when examining the deal, but it did not cover all of them in the conditional clearance announcement.<sup>137</sup> It did not discuss the merger-specific impact on consumers, nor on the national economy.<sup>138</sup> Further, it did not explicitly discuss the degree of head-to-head competition between the merged parties in the swine mycoplasma pneumonia vaccine market.<sup>139</sup> It also did not appear to have examined any potential efficiency gains from the merger.<sup>140</sup> In the conditional clearance announcement, MOFCOM also quoted Article 30 of the AML with respect to the procedure of reviewing the filing.<sup>141</sup>

This case was one of MOFCOM's early decisions, and both the economic analysis framework and the prescribed remedies were similar between MOFCOM and the FTC.<sup>142</sup> Compared with the 2015 *NXP/Freescale* merger review, here MOFCOM did not examine the closeness of competition between the merged parties or the merger-specific impact on innovation.<sup>143</sup> Therefore, it would seem that MOFCOM has been developing its economic analysis skillset over time, and that it is converging more towards the U.S.

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<sup>130</sup> MOFCOM Announcement No. 77 of 2009, *supra* note 113.

<sup>131</sup> *Id.*

<sup>132</sup> *Id.*

<sup>133</sup> *Id.*

<sup>134</sup> *Id.*

<sup>135</sup> *Id.*

<sup>136</sup> MOFCOM Announcement No. 77 of 2009, *supra* note 113.

<sup>137</sup> *See id.*

<sup>138</sup> *See id.*

<sup>139</sup> *See id.*

<sup>140</sup> *See id.*

<sup>141</sup> *Id.*

<sup>142</sup> Compare MOFCOM ANNOUNCEMENT NO. 77 OF 2009, *supra* note 113, with Complaint, NXP Semiconductors, *supra* note 73.

<sup>143</sup> Compare MOFCOM Announcement No. 64 of 2015, *supra* note 8, with MOFCOM ANNOUNCEMENT NO. 77 OF 2009, *supra* note 113.

framework, especially when a structural remedy is considered.<sup>144</sup> Lastly, while the FTC laid out its concerns about unilateral and coordinated price effect in the analysis, MOFCOM did not discuss this matter.<sup>145</sup> As described in Section I, one departure of the AML analytical framework from its U.S. counterpart is that AML did not explicitly mention any consideration of such effects.<sup>146</sup>

## 2. An Early Case that Involved a Behavioral Remedy in China: *Novartis/Alcon* (2010)

In January 2010, the giant Swiss-based drug maker, Novartis AG, announced its intention to acquire full ownership of Alcon Laboratories Inc., a Texas-based company and global leader in the eye care industry, at an estimated total cost of \$38.5 billion, including a previous purchase of a 77 percent majority stake from Nestle in 2008.<sup>147</sup>

In July 2010, Australia's competition regulator approved the deal, conditioned on Novartis selling off Alcon's injectable miotic assets.<sup>148</sup> Later in August, the Canadian Competition Bureau approved the deal under the condition that Novartis sell the Canadian rights, along with other contact lens and anti-allergy products to a third party.<sup>149</sup> The European Commission made a similar decision, asking Novartis to sell some of its businesses in the EU region.<sup>150</sup> MOFCOM required Novartis to withdraw from the Chinese ophthalmological anti-infection products market for at least five years and to terminate its partnership with a Taiwan-based contact lens maker.<sup>151</sup> Soon after, the FTC made a conditional approval decision that Novartis should sell all

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<sup>144</sup> See also AML, *supra* note 1, at arts. 23–26.

<sup>145</sup> Compare MOFCOM ANNOUNCEMENT NO. 77 OF 2009, *supra* note 113, with Complaint at 7–8, NXP Semiconductors, *supra* note 73.

<sup>146</sup> See discussion, *supra* Section I.

<sup>147</sup> *Novartis to acquire majority control of Alcon, a global leader in eye care, and proposes merger for full ownership*, FIERCEBIOTECH (Jan. 4, 2010), <http://www.fercebiotech.com/biotech/novartis-to-acquire-majority-control-of-alcon-a-global-leader-eye-care-and-proposes-merger>.

<sup>148</sup> Press Release, Australian Competition and Consumer Commission, Novartis Pharmaceutical Acquisition allowed (July 29, 2010), <https://www.accc.gov.au/media-release/novartis-pharmaceutical-acquisition-allowed>.

<sup>149</sup> Press Release, Competition Bureau, Competition Bureau Secures Divestitures in Novartis' Acquisition of Alcon (Aug. 9, 2010), <http://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/eng/03274.html>.

<sup>150</sup> Press Release, European Comm'n, Mergers: Commission Clears Planned Acquisition of Alcon by Novartis, Subject to Conditions (Aug. 9, 2010).

<sup>151</sup> Ministry of Commerce People's Republic of China, MOFCOM Announcement No. 53 of 2010 on Decisions from Anti-monopoly Review of the Concentration of Undertakings on Conditional Approval of Proposed Acquisition of Alcon by Novartis (Aug. 13, 2010), <http://www.mofcom.gov.cn/aarticle/b/g/201009/20100907150641.html>.

its Milchol-E related assets to B&L, a third party firm, within ten days of the transaction.<sup>152</sup>

The FTC defined the relevant market as the research, development, manufacture, and sale of injectable miotics in the United States.<sup>153</sup> The FTC viewed this market as highly concentrated, as the merged parties were the only two players and would create a monopoly when merged.<sup>154</sup> Furthermore, timely entry into the markets was unlikely because of the small scale of the market demand, the lengthy process of R&D, and because the FDA's approval would take at least two years.<sup>155</sup> The FTC was particularly concerned that the merged parties would unilaterally increase price or exercise their monopolistic market power through other channels.<sup>156</sup>

MOFCOM did not explicitly list the relevant product market.<sup>157</sup> Instead, it stated the merger-specific competitive concerns with two products: the ophthalmological anti-inflammatory/anti-infective product market, and contact lens care product market.<sup>158</sup> MOFCOM analyzed both the global and Chinese markets in their analysis, but it remained unclear which one they viewed as the relevant geographic market.<sup>159</sup> MOFCOM indicated that the merged parties would enjoy a combined share of over 55 percent globally and over 60 percent domestically in the ophthalmological anti-inflammatory/anti-infective product market, and combined they would hold nearly 60 percent global share and 20 percent domestic share in the contact lens care product market, making the merged parties the second largest player in China.<sup>160</sup> MOFCOM was further concerned that Novartis' commitment to entirely exit the ophthalmological anti-inflammatory/anti-infective market was not credible, and that it might unilaterally exploit its market power to lessen competition after the merger.<sup>161</sup> In the contact lens care product market, since Novartis had a distribution agreement with the market leader, Hydrion, MOFCOM was concerned about post-merger coordinated effects between the two in

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<sup>152</sup> Press Release, Fed. Trade Comm'n, FTC Order Protects Consumers in U.S. Market for Eye Care Drug Used in Cataract Surgery (Aug. 16, 2010), <https://www.ftc.gov/news-events/press-releases/2010/08/ftc-order-protects-consumers-us-market-eye-care-drug-used>.

<sup>153</sup> Complaint at 2, Matter of Novartis AG (Fed. Trade Comm'n Oct. 1, 2010) (C-4296), <https://www.ftc.gov/enforcement/cases-proceedings/101-0068/novartis-ag-matter-alcon-inc>.

<sup>154</sup> *Id.*

<sup>155</sup> *Id.* at 3.

<sup>156</sup> *Id.*

<sup>157</sup> MOFCOM Announcement No. 53 of 2010, *supra* note 151.

<sup>158</sup> *Id.*

<sup>159</sup> *Id.*

<sup>160</sup> *Id.*

<sup>161</sup> *Id.*

terms of prices, quantities, distribution regions, and others competitive factors.<sup>162</sup>

In the analysis MOFCOM did not discuss the degree of concentration in these relevant markets, nor did it discuss the entry conditions pre- and post-merger, the degree to which the merged parties competed with each other, or any potential efficiency gains from the merger.<sup>163</sup> MOFCOM prescribed a set of behavioral remedies to clear the deal, as opposed to its U.S. counterpart.<sup>164</sup> MOFCOM covered most topics that the AML directed it to consider when reviewing the case, but it lacked clarity in certain aspects like market definition.<sup>165</sup> In addition, it did not fit its consideration into an economic analytical framework, like the concerns about the coordinated effect between the merged parties.<sup>166</sup> Compared with the 2015 Nokia/Alcatel Lucent merger review, though in both cases MOFCOM prescribed behavioral remedies, it is clear that MOFCOM's decision in the more recent case is more rooted in economics.<sup>167</sup>

## CONCLUSION

This Article analyzed the economic evidence in merger cases that have been filed in both the United States and China to understand how they compare between the two jurisdictions. One sees cases where the articulated concerns, analyses, and remedies are analogous across the two jurisdictions, and others where they diverge. This Article also compared the analyses, results, and outcomes in the mergers analyzed in the United States and China in the early days of the AML to understand the trajectory since 2008 of cross-jurisdictional differences in the economic evidence considered.

One finds that the agencies consistently rely on the market definition to identify the scope of competition.<sup>168</sup> The agencies also rely on market shares, concentration, the competitive significance of the merging parties, the number of competitors, and whether entry barriers are high.<sup>169</sup> Moreover, closeness of competition between the merging parties is frequently discussed, as

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<sup>162</sup> *Id.* See also Hogan Lovells, *MOFCOM Issues Conditional Clearance of Novartis/Alcon transaction* (August 17, 2010), <http://www.lexology.com/library/detail.aspx?g=6eb78fe5-407d-4062-908e-d6a72680ef62> (last visited May 11, 2017).

<sup>163</sup> MOFCOM Announcement No. 53 of 2010, *supra* note 151.

<sup>164</sup> *Compare id.*, with Matter of Novartis AG (Fed. Trade Comm'n Oct. 1, 2010), <https://www.ftc.gov/enforcement/cases-proceedings/101-0068/novartis-ag-matter-alcon-inc>.

<sup>165</sup> MOFCOM Announcement No. 53 of 2010, *supra* note 151.

<sup>166</sup> *Id.*

<sup>167</sup> *Compare* MOFCOM ANNOUNCEMENT NO. 77 OF 2009, *supra* note 113, with MOFCOM ANNOUNCEMENT NO. 53 OF 2010, *supra* note 151.

<sup>168</sup> Matter of Novartis, *supra* note 164; MOFCOM ANNOUNCEMENT NO. 53 OF 2010, *supra* note 151.

<sup>169</sup> *Id.*

well as the effect that the merger would have on innovation.<sup>170</sup> One also finds that overall, the framework of economic analyses in the United States and China in recent cases are mostly based on similar economic principles.<sup>171</sup> This Article's review of sample cases suggests that there has been observable convergence in American and Chinese economic analyses and the conclusions drawn based on those analyses. In particular, MOFCOM's decisions on recent cases are more explicitly rooted in economics.<sup>172</sup> This is not surprising. As a young agency, MOFCOM has moved swiftly to build and expand its antitrust economic expertise and implementation experience. One can expect this trend to continue as the United States and China continue to share insights, information, and discussions with each other on merger reviews. However, there are still substantive differences in how American and Chinese agencies analyze certain types of merger cases.

The two jurisdictions' alignment in their overall conclusions can depend heavily on the relevant geographic market delineated, the relevant product market delineated, how much the competitive landscape between the two jurisdictions differ, and whether a structural or behavioral remedy is possible or necessary.<sup>173</sup> In cases where a structural remedy is prescribed the decisions and analysis appear more aligned.<sup>174</sup>

A primary area of departure is the relevant geographic market, which is not surprising, as each jurisdiction may have its unique characteristics in the competitive environment, market participants, supply conditions, and consumer preferences.<sup>175</sup> Additionally, while neither the U.S. agencies nor MOFCOM have described their competitive effects analyses in much detail, the decisions suggest a reliance on such analyses. The decisions make clear that the analytical framework goes beyond a pure structural analysis, such as market shares, concentration, and number of competitors. As mentioned earlier, the degree of closeness of competition between the merging parties and vis-à-vis other competitors is frequently referenced, as is a merger's impact

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<sup>170</sup> *Id.*

<sup>171</sup> *Id.*

<sup>172</sup> See, e.g., MOFCOM ANNOUNCEMENT NO. 53 OF 2010, *supra* note 151; MOFCOM ANNOUNCEMENT NO. 64 OF 2015, *supra* note 8.

<sup>173</sup> Compare Yiqiang Li, *Guidelines on Definition of Relevant Market*, FAGRE BAKER DANIELS UPDATES & EVENTS (Sept. 1, 2009), <https://www.faegrebd.com/guidelines-on-the-definition-of-relevant-market>, with Fed. Trade Comm'n, *Markets*, <https://www.ftc.gov/tips-advice/competition-guidance/guide-antitrust-laws/mergers/markets> (last visited July 23, 2017).

<sup>174</sup> See, e.g., DIRECTORATE FOR FIN. AND ENTER. AFFAIRS COMPETITION COMM'N., REMEDIES IN CROSS-BORDER MERGER CASES (Org. for Econ. Co-operation and Development, Working Party No. 3, 2013); W. Stephen Smith, Xiaohu Ma & Tej Srimushnam, *InBev-Anheuser-Busch: China's First Public Merger Decision Under the AML*, Morrison Foster Legal Updates (Dec. 2008), <http://www.jdsupra.com/post/documentviewer.aspx?fid=d58b5146-def4-4890-8cd3-6985b034978e>.

<sup>175</sup> See, e.g., JONES DAY, *CHINA MOFCOM USES NEW MARKET DEFINITION IN AB INBEV'S ACQUISITION OF SABMILLER* (Aug. 8, 2016), <http://www.lexology.com/library/detail.aspx?g=13454f92-868f-4e14-8c50-486263999c29>.

on innovation.<sup>176</sup> As merging parties prepare multi-jurisdictional filings, development of economic analyses that speak to these issues and understanding the results in each jurisdiction can help one to anticipate concerns and outcomes. It can also facilitate productive conversations with agency staff in each jurisdiction.

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<sup>176</sup> See *infra* Section II.A.1.