# Policy Analysis No. 739 October 22, 2013

## Antitrust Enforcement in the Obama Administration's First Term A Regulatory Approach

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### **Executive Summary**

During his presidential campaign, Sen. Barack Obama criticized sharply the lax antitrust law enforcement record of the George W. Bush administration. Subsequently, his first assistant attorney general for antitrust even went so far as to suggest that the Great Recession was, at least in part, caused by federal antitrust policy failures during the previous eight years. This paper sets out to investigate how and in what ways antitrust enforcement has changed since President Obama took office in 2009. We review four recent antitrust cases and the behavioral remedies that were imposed on the defendants in those matters in detail. We find that the Obama administration has been significantly more active in enforcing the antitrust laws with respect to proposed mergers than his two predecessors in the White House had been. In addition, the Federal Trade Commission, together with the Department of Justice, withdrew a thoughtful report on the enforcement of Section 2 of the Sherman Act and issued new merger guidelines and a new merger policy remedy guide, all of which have moved antitrust law enforcement away from traditional structural remedies in favor of very intrusive behavioral remedies in an unprecedented fashion. That policy shift has further transformed antitrust law enforcers into regulatory agencies, a mission for which they are not well-suited, resulting in the Department of Justice and Federal Trade Commission being more vulnerable to rent seeking.



Traditionally, agencies responsible for antitrust implementation have relied on "structural" remedies.

### Introduction

When President Barack Obama nominated Christine A. Varney to the post of Assistant Attorney General (AAG) at the head of the U.S. Department of Justice's Antitrust Division (the "DOJ" or "Antitrust Division") in early 2009, her stated aim was to clamp down on anti-competitive business practices and end a period of what she called "lax law enforcement" by the new president's predecessor, George W. Bush. In a speech at the Center for American Progress in May 2009, shortly after she was sworn into office, Varney highlighted the two main areas on which she would focus her attention, namely, the Antitrust Division's "Recovery Initiative," which targeted fraudulent and collusive activities with respect to funds distributed through the American Recovery and Reinvestment Act, and the anti-competitive practices in high-technology and Internet-based markets.<sup>2</sup>

Of particular concern to Varney was the prior enforcement (or purported lack thereof) of Section 7 of the Clayton Act, which prohibits combinations of former rivals ("horizontal" mergers) or companies operating at successive stages of the supply chain ("vertical" mergers), where the effect "may be substantially to lessen competition or tend to create a monopoly." She and other critics of earlier antitrust policy also objected to the Bush administration's policies relating to Section 2 of the Sherman Act—one of the main pillars of the statutory basis for U.S. antitrust policy—which targets allegedly anticompetitive business practices by large, market-dominant firms and which were laid out in a DOJ report-the Section 2 Report-released late in President Bush's second term.<sup>3</sup>

Christine Varney stepped down from her position at the Antitrust Division in July 2011 to return to private law practice. But she accomplished a great deal in her two years in office. The Section 2 Report was withdrawn officially within the first five months of President Obama's first term.<sup>4</sup>

The Obama administration also issued new guidelines for the analysis of horizontal mergers, which were promulgated jointly by the Department of Justice (DOJ) and Federal Trade Commission (FTC) on August 19, 2010, the first such formal revision to the guidelines since 1992.<sup>5</sup> In addition, the DOJ published a new policy guide for merger remedies in June 2011.<sup>6</sup>

In line with AAG Varney's second area of concern, the competition issues facing the information-based services sector, the DOJ reviewed three high-profile mergers proposed in high-tech and Internet-related industries during her tenure. In all of these cases-transactions between Live Nation and Ticketmaster, NBC and Comcast, and Google and ITA, respectively-the Justice Department included conditions that were regulatory in nature in the settlement agreements with the parties. The result of this has been to burden the DOJ with monitoring and compliance activities-activities for which it is not well-suited. Specifically, these negotiated settlements contained complex behavioral (or "conduct") remedies that go well beyond established practices for resolving antitrust concerns related to proposed mergers.<sup>8</sup>

Traditionally, agencies responsible for antitrust implementation have relied on simpler "structural" remedies, such as blocking transactions altogether or requiring that some of the assets that otherwise would have been combined instead be divested to third parties.

In what is perhaps the most important shift, however, four of five merger challenges issued by the DOJ and the FTC in the early days of the Obama Administration involved transactions that fell below the threshold requiring ex ante notification to federal antitrust authorities—a duty imposed by the Hart-Scott-Rodino (HSR) Act of 1976, as amended, 15 U.S.C. §18a. In each case, the merger agreements either were blocked by the agency responsible for reviewing them or were abandoned after antitrust concerns had been raised. Because thousands of pre-

merger notifications are submitted to the DOJ and the FTC every year, the Obama administration's decision to oppose mergers and acquisitions that did not require HSR notification is quite troubling.<sup>10</sup>

More recently, the Antitrust Division won a suit against Apple in the District Court for the Southern District of New York, which found that Apple and five major U.S. publishers of ebooks had conspired in restraint of trade by engaging in unlawful price fixing, thereby violating Section 1 of the Sherman Act. 11 Although that case did not involve a merger, the settlement with five of the defendants, as well as the proposed final judgment against Apple, also include behavioral remedies.<sup>12</sup> When the agencies adopt behavioral remedies in merger or acquisition cases, the transaction in question usually is allowed to proceed, provided the merging parties agree to follow a set of specific rules for operating the newly combined company. Such rules can take various forms, like erecting informational firewalls between business units, other restrictions regarding the internal operations of the new firm, and nonretaliation rules. The stated intention of behavioral remedies in mergers and other antitrust matters, such as the one involving Apple, is to prevent the use of possibly anti-competitive business acts and practices by the firm or firms targeted by antitrust complaints.

As noted above, the DOJ has issued new horizontal merger guidelines. 13 In addition, the Antitrust Division released a new policy guide for merger remedies, which shifts the DOJ's approach toward emphasizing behavioral over structural fixes, especially in vertical merger cases.<sup>14</sup> John Kwoka and Diana Moss contend that introducing behavioral remedies raises substantial problems for antitrust law enforcement, as did Frank Easterbrook before them. In line with Kwoka and Moss, we argue that such behavioral remedies are difficult to enforce and also are vulnerable to incentive and information problems, which are the principal causes of government failure. 15 We will show that antitrust enforcement during the Obama administration's first term has taken a new direction, and consider the consequences of that policy change using a public-choice framework.

### Merger Law Enforcement Activity: 1993–2011

Barack Obama campaigned for the presidency on a platform that promised a new direction for public policy. This new direction would end the "great recession" into which the U.S. economy had been plunged purportedly, in part, by the policies of his predecessor, George W. Bush, during his two terms in the White House. <sup>16</sup> A discussion of the respective fiscal and monetary policies of Presidents Bush and Obama are beyond the scope of this paper. Rather, our aim here is to compare and contrast, three years on, President Obama's antitrust policies with those of his two immediate predecessors.

Christine Varney and Jon Leibowitz, the two officials appointed by Obama to head the Antitrust Division and the FTC, respectively, entered office armed with presidential support for a more proactive and energetic competition policy. Indeed, they had their marching orders even before assuming office: in a statement prepared for the American Antitrust Institute for delivery on September 27, 2007, then-Senator Obama said that, "As president, I will direct my administration to reinvigorate antitrust enforcement." 17

Since 1976, federal enforcement of Section 7 of the Clayton Act, the law prohibiting mergers or acquisitions thought to undermine the competitive market process discussed below, has proceeded in two steps. The first step is for the parties involved in a proposed merger, tender offer, or other transaction (such as the formation of a joint venture) to notify the Antitrust Division and the FTC simultaneously of their plans, provided that the sales or assets that will be combined exceed the Hart-Scott-Rodino Act's

Behavioral remedies are difficult to enforce and are vulnerable to incentive and information problems.

thresholds. The second step is for one of the two agencies to review the information provided in the initial premerger notice. That review may result in an immediate decision to allow the transaction to be consummated (a so-called "early termination"), a decision to ask for additional information from the parties involved (that is, issue a "second request"), or a decision to challenge it or not at either of the two stages of the HSR process. 18 In principle, such law enforcement verdicts are reached under the merger guidelines in effect at the time the consolidation is proposed. Merger guidelines were first promulgated in 1968 and revised several times since then; the most recent version was published on August 19, 2010.<sup>19</sup>

In the run-up to Election Day 2008, articles by Jonathan Baker and Carl Shapiro and John Harkrider, published in the summer issue of Antitrust, an American Bar Association journal, suggested that, at least with respect to the law prohibiting anticompetitive mergers, the two federal antitrust agencies had been much less active during the Bush administration than they had been under the presidency of his predecessor, President Bill Clinton.<sup>20</sup> In particular, although they do not supply hard numbers on the rates at which notifications of proposed mergers submitted in accordance with the HSR Act were challenged, Baker and Shapiro assert that there was a "decline of enforcement by the Justice Department during the George W. Bush administration."<sup>21</sup> Referring to information they collected from a survey of 20 "experienced antitrust practitioners," the two authors conclude that the merger review process under President Bush was characterized by "fewer second requests, a greater likelihood that an investigation will be closed rather than lead to an enforcement action, and a willingness to accept weaker remedies in those cases where enforcement actions are taken."22

Based on agency enforcement actions the fraction of HSR premerger notifications that were litigated in federal court, in which settlement agreements were negotiated or ultimately abandoned in the face of antitrust concerns—Baker and Shapiro conclude that the enforcement of the merger law "bottomed out at only 0.4 percent-less than half the average—at the DOJ . . . during both terms of the George W. Bush administration."23 That low point apparently had been equaled only one time before, namely, in President Ronald Reagan's second term. As anecdotal evidence that "the enforcement policy at the DOJ today is almost surely inadequate," the authors point specifically to the Bush administration's failure to block the mergers of "XM and Sirius, the only two providers of satellite radio in the United States," and of Whirlpool and Maytag, the leading national manufacturers of clothes-washing machines and other household appliances.<sup>24</sup>

Harkrider echoes the charge that, relative to Bill Clinton's second term, merger challenges declined significantly under President Bush.<sup>25</sup> But in the same issue of *Antitrust*, Timothy Muris points out that comparing merger law enforcement activity across presidential administrations is problematic.<sup>26</sup> The four problems he identifies in the analyses of Baker and Shapiro are that:

- Not all 'enforcement' is created equal. According to Muris, one cannot treat a decision to challenge a proposed merger in federal court the same way as a decision to negotiate a settlement that allows the transaction "to proceed after some form of divestiture," as Baker and Shapiro do. 27 Some of those settlement negotiations may lead to what often are called "cheap' consents" that have "little effect on the economy, but [do] matter significantly when counting enforcement statistics."
- The DOJ and FTC investigate mergers in different industries. <sup>28</sup> In the wake of the "liaison agreement" forged between the two federal antitrust agencies in 1938, the two agencies apportion their joint responsibility for enforcing Section 7 of the Clayton Act such that, typically, the DOJ reviews mergers

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proposed in "telecommunications and airlines, while the FTC investigates pharmaceuticals and most consumer goods." Since the numbers and types of mergers proposed vary considerably both across industries and over time, "one agency may have more opportunities for challenges during any given period, even if the two agencies apply identical enforcement standards."<sup>29</sup>

- The nature of the mergers the two antitrust agencies are responsible for reviewing changes considerably over time. Recently, as mentioned above, many of the combinations proposed between former rivals or between entities located at different stages of the supply chain engage in high-technology and Internetrelated businesses. In the past, and for the most part, the antitrust authorities assessed the competitive effects of mergers involving companies engaged in the manufacture or distribution of physical goods, such as steel, aluminum, footwear, and groceries. Based on the number of "overlaps" in the markets deemed relevant for evaluating proposed mergers, Muris concludes that "there may be something fundamentally different between the mergers the agencies reviewed ten years ago and those the agencies are currently reviewing."30
- The two federal antitrust agencies apply different standards when evaluating mergers. Such differences arise because, for example, "some enforcers are inherently more cautious than others" or because the two agencies may not use the same yardstick for determining "how much evidence is required before accepting a [proposed] settlement." 31

We shall provide a bird's-eye view of policy stances toward mergers reviewed by the DOJ and the FTC from 1994 through 2011, the last year being the most recent for which such information is available. We began with the data reported by Harkrider,

extended it back in time from 1996 to 1994, and corrected Harkrider's numbers for the 24 merger challenges mounted by the FTC during 1996–2000 that he overlooked.<sup>32</sup>

Several other points should be kept in mind. First, more mergers tend to be proposed during a president's first term than during his second—and more of them may exceed the thresholds defined in the merger guidelines that typically raise anticompetitive concerns.<sup>33</sup> Perhaps this is because businesses are uncertain about a new administration's antitrust law enforcement standards and some of them thus may want to test the waters. Second, major changes in HSR reporting thresholds took effect in late 2001; Thomas Leary claims that the new rules reduced the number of premerger notification filings by 60 percent.<sup>34</sup> On the other hand, some practitioners see those same changes as having imposed additional compliance burdens on the filing parties, especially so for private equity firms.<sup>35</sup>

Leary supplies another reason for being cautious when comparing merger enforcement activities across presidential administrations: information on HSR premerger notifications is not reported on a calendar year basis, but rather for the U.S. government's fiscal year, which begins on October 1st and ends on September 30th the following year.<sup>36</sup> In addition, enforcement decisions with respect to merger notifications submitted in one fiscal year may not be taken until the next calendar year or later.<sup>37</sup> Hence, we follow Leary's lead and have adopted a one-year lag for assigning HSR filings and enforcement actions to individual presidential administrations. The "Clinton years" therefore begin in 1994, the "George W. Bush years" in 2002, and the "Barack Obama years" in 2010.<sup>38</sup>

Some basic information on merger activity in the U.S. economy during the past three presidential administrations is reported in Table 1. The 2001 decision to raise the sales and asset thresholds for notifying the two federal antitrust authorities of pending transactions, thereby reducing the num-

The Department of Justice and the Federal Trade Commission apply different standards when evaluating mergers.

Table 1
Premerger Notifications Received by the DOJ and the FTC, 1994–2011

Year	Transactions Reported	Filings Received	HSR-Relevant Filings <sup>a</sup>	
1994	2,305	4,403	2,128	
1995	2,816	5,410	2,612	
1996	3,087	6,001	2,864	
1997	3,702	7,199	3,438	
Annual average, Clinton I	2,977.50	5,753.25	2,760.50	
1998	4,728	9,264	4,575	
1999	4,642	9,151	4,340	
2000	4,926	9,941	4,749	
2001	2,376	4,800	2,237	
Annual average, Clinton II	4,168.00	8,289.00	3,975.25	
2002	1,187	2,369	1,142	
2003	1,014	2,001	968	
2004	1,428	2,825	1,377	
2005	1,675	3,287	1,610	
Annual average, Bush I	1,326.00	2,620.50	1,274.25	
2006	1,768	3,510	1,746	
2007	2,201	4,378	2,108	
2008	1,726	3,455	1,656	
2009	716	1,411	684	
Annual average, Bush II	1,602.75	3,188.50	1,548.50	
2010	1,166	2,318	1,128	
2011	1,450	2,882	1,414	
Annual average, Obama I	1,308.00	2,600.00	1,271.00	

<sup>&</sup>lt;sup>a</sup> Number of HSR premerger notifications for which second requests could have been issued. Sources: John D. Harkrider, "Antitrust Enforcement during the Bush Administration—An Economic Estimation," *Antitrust* 22, no. 3 (Summer 2008): 43–48; and authors' corrections based on data from the U.S. Department of Justice and Federal Trade Commission (1994–2012). As explained in the text, the data are assigned to presidential administrations with one-year lags.

ber of premerger notifications received by the two federal agencies, stand out starkly there.<sup>39</sup> In particular, the number of premerger notifications submitted to the DOJ's

Antitrust Division and to the FTC fell by more than one-half beginning in 2001, and declined by about another 50 percent in 2002. Although merger activity in the U.S.

economy rebounded somewhat during President Bush's second term, the chilling effects of the so-called Great Recession are evident beginning in 2009 and continue through the end of our data series in 2011. The agencies' merger-case workload clearly was lighter from 2001 on than it had been under President Clinton.

Four other points are worth making about Table 1. First, the language of HSR obligates the parties to a merger agreement to notify the DOJ and the FTC simultaneously of their consolidation plans. Second, each of the parties to such an agreement must submit premerger notification forms to the two federal agencies simultaneously. That requirement explains why the number of "filings received" always is roughly twice the number of "transactions reported." Third, as far as analyses of antitrust law enforcement activities with respect to mergers are concerned, the information shown in the last column ("HSR-Relevant Filings") is most salient. Those pending mergers comprise the subset of transactions reported to the DOJ and FTC that potentially raise antitrust concerns under the merger guidelines that were in effect at the time of review.<sup>40</sup> Fourth, however, the fact that the number of "transactions reported" in any given year exceeds the corresponding number of HSRrelevant filings suggests that premerger notifications are submitted even when the respective market shares of the merger partners, as well as the pre- and post-merger levels of concentration in the markets deemed relevant for antitrust analysis by the agencies, falls below the thresholds specified in the HSR Act and related guidelines.<sup>41</sup>

Table 2 shows how, over the same period, the federal antitrust authorities responded to the premerger notifications they received (categorized, with a one-year lag, by presidential administration, beginning with Bill Clinton's first term). The enforcement options are as follows: the two agencies can clear a proposed merger, either immediately or after closer evaluation of its competitive effects, thereby allowing the transaction to

proceed; they can issue a "second request" for information thought necessary to undertake a closer review of the antitrust-relevant market impact before reaching a final decision; or they can challenge the merger partners' consolidation plans by seeking to enjoin it in federal court. Based on the raw numbers shown in Table 2, the DOJ and FTC issued fewer second requests, challenged fewer mergers, and cleared more of them when George W. Bush occupied the White House than during either of President Clinton's two terms.

The outliers in Table 2 are the FTC during Clinton's first term and the DOJ during Bush's, which represent modern (since 1992) low points in merger law enforcement activity. Clinton's FTC challenged just 37 mergers (10 per year, on average) in the four years running from 1994 through 1997, fewer than the number challenged by that same agency in any administration since. During his first term, President Bush's DOJ was only modestly more active in opposing proposed consolidations-challenging a total of 38 of them. But the changes in merger law enforcement activity documented in Table 2 can be misleading, owing to the substantial decline in the number of premerger notifications submitted to the DOJ and the FTC, which began in 2001 and continued through 2011.

Table 3 supplies a sounder basis for assessing merger law enforcement activities across the three most recent presidential administrations. There, it is apparent that when the number of HSR-relevant premerger notification filings is taken into account, the two terms served by George W. Bush do not differ materially from those of his predecessor. Granted, during President Bush's first term in office, the DOJ seems to have challenged a little more than half of the mergers proposed than the same agency opposed either during his or his predecessor's second term. However, the reduction in merger enforcement activity at the DOJ from 2002 through 2005 was more than offset by the more vigorous rate of FTC-inInformation about changes in merger law enforcement activity can be misleading, owing to the substantial decline in the number of premerger notifications submitted.

Table 2 Disposition of Premerger Notifications Received, 1994–2011

	Second Requests		Challenges		Clearances	
Year	DOJ	FTC	DOJ	FTC	DOJ	FTC
1994	27	46	22	4	126	236
1995	43	58	18	5	108	270
1996	63	46	30	3	210	300
1997	77	45	31	28	N/A	N/A
Annual average, Clinton I	52.50	48.75	25.25	10.00	148.00	268.67
1998	79	46	51	33	174	278
1999	45	68	47	30	173	218
2000	55	43	48	32	150	189
2001	43	27	32	23	123	131
Annual average, Clinton II	55.50	46.00	44.50	29.50	155.00	204.00
2002	22	27	10	24	85	124
2003	20	15	15	21	83	148
2004	15	20	9	15	94	142
2005	25	25	4	14	120	183
Annual average, Bush I	20.50	21.75	9.50	18.50	95.50	149.25
2006	17	28	16	16	101	203
2007	32	31	12	22	95	201
2008	20	21	16	21	96	197
2009	16	15	12	19	56	98
Annual average, Bush II	21.25	23.75	14.00	19.50	87.00	174.75
2010	20	26	19	22	73	149
2011	34	24	20	17	94	163
Annual average, Obama I	27.00	25.00	19.50	19.50	83.50	156.00

Sources: John D. Harkrider, "Antitrust Enforcement during the Bush Administration—An Economic Estimation," *Antitrust* 22, no. 3 (Summer 2008): 43–48; and authors' corrections based on data from the U.S. Department of Justice and Federal Trade Commission (1994–2012). Clearances are not stated in the HSR Report for 1997.

stituted merger challenges, so that the Bush administration's first-term policies toward mergers were, on average, more activist than those adopted during the Clinton administration.

We emphasize that the two columns headed by the title "Both" in Table 3 supply the most accurate picture of merger enforcement activities since 1993, mainly because we don't know whether premerger notifica-

Table 3
Merger Law Enforcement Statistics, 1993–2011

	Ratio of Second Requests to HSR-Relevant Filings			Ratio of Challenges to HSR-Relevant Filings		
Presidential Term	DOJ	FTC	Both	DOJ	FTC	Both
Clinton I	0.0190	0.0158	0.0349	0.0091	0.0036	0.0128
Clinton II	0.0140	0.0116	0.0255	0.0112	0.0074	0.0186
Bush I	0.0161	0.0171	0.0332	0.0075	0.0145	0.0220
Bush II	0.0184	0.0206	0.0389	0.0121	0.0169	0.0290
Obama I	0.0205	0.0190	0.0395	0.0153	0.0153	0.0307

Source: Authors' calculations from Tables 1 and 2.

tion filings were assigned to the DOJ or to the FTC. Although the parties to proposed mergers notify both agencies at the same time, only one of the agencies ultimately will be responsible for evaluating a transaction's possible anticompetitive effects. The interagency allocation of the merger analysis workload is made either in accordance with the 1938 liaison agreement between them or, when both agencies want to be involved in the review process, through an informal but decisive understanding reached between the chairperson of the FTC and the Assistant Attorney General for Antitrust, by which one grants clearance to the other.

So, based on the analysis above and despite perceptions to the contrary, George W. Bush was more aggressive than Bill Clinton both in issuing second requests and in challenging mergers. The Clinton administration's antitrust law enforcers issued second requests for 3.49 percent of the filings the two agencies received in his first term and 2.55 percent of the filings they received in his second term. In comparison, the Bush administration's DOJ and FTC issued second requests for 3.32 percent of the filings submitted in his first term and 3.89 percent of the filings they received in his second term. The Bush administration also challenged 2.2 percent and 2.9 percent of all HSR filings received during his first and second terms,

respectively, while the corresponding figures for President Clinton were 1.28 percent and 1.86 percent. Hence, the belief that President Bush's antitrust authorities were more lenient in enforcing competition standards than those of his predecessor is not supported once the number of HSR-relevant premerger notifications is taken into account.

Although we have information on merger law enforcement only during the first two years of Barack Obama's presidency, a considerable number of policy changes are nevertheless evident at both the DOJ and the FTC. The Obama administration's antitrust authorities have issued second requests in nearly 4 percent of the premerger notification filings received and have challenged over 3 percent of them. No other recent president has been more active in the enforcement of U.S. antitrust provisions.

Challenging a proposed merger on the grounds that its consummation would interfere with competitive market forces by, for example, creating or allowing the newly combined firm to exercise undue market power, is only one step in the merger law enforcement process. <sup>42</sup> Such a challenge could cause the merger partners to walk away from the deal. More commonly, though, it triggers negotiations between the firms involved and the antitrust authorities, in the course of which company executives and

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their lobbyists and lawyers attempt to resolve the reviewing agency's concerns by offering concessions that permit the merger to go forward conditionally. Negotiations may have started already, but just as a hangman's noose focuses a condemned prisoner's mind, the negotiations generally become more serious following a governmental challenge. Those negotiations may or may not fail. The merger challenge is resolved in any event; that is, a remedy ultimately is adopted and then implemented.

### Structural versus Behavioral Antitrust Remedies

Traditionally, when evaluating the competitive effects of a merger between former rivals, if the responsible reviewing agency concluded that a merger would be anticompetitive, it would seek an injunction in federal court to prevent its consummation. In contrast, if no concerns about future competitive conditions in the relevant market were raised during the course of the antitrust investigation, the transaction was allowed to proceed. Prior to the passage of the HSR Act in 1976, many of those decisions were made after the fact (unless the staff members of the Antitrust Division or the FTC had learned of a merger that had been proposed or was underway through other channels, such as the trade press). Unscrambling eggs after an omelet has been cooked is, of course, very difficult, which accounts for the passage of the HSR Act. Since 1976, the parties to larger merger transactions have been required to notify the two federal antitrust agencies of their intentions and then to await approval or clearance before consummating their agreement.

Premerger notification does indeed avoid the problem of "unscrambling the eggs." After a merger deemed to be anticompetitive already has been consummated, one that is intended, for example, to exploit the cost savings associated with combining assets previously owned and operated independently, to consolidate redundant corporate headquarters, or to dispose of underutilized plant and equipment, costs can be reduced and workforces can be streamlined. Once such cost-saving opportunities have been exploited, though, it usually is difficult, if not impossible, to restore the status quo ex ante if a merger is later found to have caused an undue increase in market concentration and, hence, undermined the normal workings of a freely functioning competitive marketplace.

But premerger notification also has a negative aspect: Provision of information in advance of a planned merger means that unrelated individuals and groups who have a stake in the outcome of the merger, but are not otherwise directly involved, have time to mobilize in support or opposition to it. Such affected parties include public officials representing locations where the merger partners now operate, who face threats of plant closures, job losses, and shrinking local tax bases, as well as the merger partners' rivals, who face the prospect that a larger, more efficient competitor may emerge. If the merger instead creates a firm with sufficient market power to become a price-setter such that it can raise prices and profits at consumers' expense, either unilaterally or in concert with its remaining rivals, competitors may acquiesce silently. That is because they either could share in the industry's larger profits by raising their prices, too, or capture sales (and profits) from the newly merged enterprise by refusing to follow its price-raising lead.

In the context of antitrust enforcement, three types of structural remedies for mergers deemed to be anticompetitive are available and, as the historical record tells us, all have been used when appropriate given the circumstances presented by the specific case. The most drastic structural remedy is to block a proposed merger in its entirety prior to consummation. Such a remedy can be implemented if a court grants a request for a permanent injunction, or it can be achieved de facto if the parties involved abandon their

plans after an agency announces opposition to the merger. A second structural remedy is to attempt to undo the ostensible anticompetitive effects ex post by ordering the merger to be dissolved. Third, rather than walking away from their deal in its entirety, the firms involved can negotiate an agreement (a "consent order," which must be approved by a federal judge) with the agency responsible for reviewing the transaction, allowing the merger to be consummated, provided that some of the assets that otherwise would be owned by the combined company are sold to third parties in order to limit the merger's possible anticompetitive effects.

It is beyond the scope of this paper to include a discussion of all of the outcomes of the thousands of merger cases decided since 1890. Instead, our focus is on a few selected cases after 1950, the year Congress passed the Cellar-Kefauver Act, thereby closing a loophole in the original language of Section 7 of the Clayton Act. Prior to the passage of the Cellar-Kefauver Act, only those mergers consummated by one firm's purchase of another's common stock (equities), where the effect "may be substantially to lessen competition or tend to create a monopoly," were covered and therefore subject to review by the relevant antitrust authority. Transactions involving the acquisition of physical assets had escaped the Clayton Act's reach until then.<sup>43</sup>

In passing the Cellar-Kefauver amendment to Clayton Act, Congress voiced fears about a "rising tide of industrial concentration" in the United States. The U.S. Department of Justice responded to those congressional concerns by opposing a merger between the second- and third-largest banks serving Philadelphia, which would have had a combined market share of 36 percent of total deposits and 34 percent of loans granted in that metropolitan area. 44 Likewise, in 1966, the Department of Justice blocked a merger between two grocery store chains in the Los Angeles area, which, if consummated, would have accounted for 7.5 percent of total retail sales. 45 One year later, the federal

antitrust authorities also prevented a merger between the second- and third-largest national producers of glass containers.<sup>46</sup>

Preventing the consummation of proposed horizontal mergers may or may not limit the anticipated anticompetitive effects of business combinations, but such actions, at the very least, bring matters to an end and do not require the further involvement of the antitrust authorities, except, perhaps, for verifying that the merger has not been consummated in violation of a court's ruling.

The second structural remedy, namely imposing conditions ex post is quite another matter. In Brown Shoe, one of the leading precedents in post-1950 jurisprudence relating to enforcement of Clayton Act §7, the DOJ argued successfully in federal court that the prior combination of a manufacturer and wholesaler of footwear (that supplied just under 5 percent of the national shoe market, excluding canvas and rubber shoes) and G. R. Kinney Co., a shoe retailer that, at the time, accounted for 1 percent of national shoe sales, undermined competition.<sup>47</sup> Possible adverse effects from that merger were identified in 270 U.S. cities (out of the 315 in which Kinney operated retail outlets prior to the merger). Rather than reversing the merger, however, the DOJ allowed it to stand, but required the newly combined Brown-Kinney entity to divest some of its retail outlets in the 270 urban "submarkets" where, owing to post-merger increases in local market concentration, competition was thought to be weaker.48

A divestiture order likewise was issued in 1961 after the Justice Department successfully challenged Ford's acquisition of Autolite, a formerly independent manufacturer of spark plugs. 49 When the case reached the Supreme Court on appeal, Ford was ordered to sell Autolite's plant in Fostoria, Ohio, within 18 months, although Ford had by then owned and operated it for more than a decade. A few years earlier, after concluding that the United Fruit Company, owner of the "Chiquita Banana" trademark, had unlawfully monopolized the business of shipping

Preventing the consummation of a proposed horizontal merger does not require the further involvement of the antitrust authorities.

bananas to the United States from the Caribbean Islands and other banana-growing regions, the U.S. district court for the Eastern District of Louisiana ordered the company to spin off assets sufficient to create a new firm capable of handling 35 percent of U.S. banana imports.<sup>50</sup> And, in du Pont, the defendant was ordered, over a 10-year period, to divest the 23 percent stake in General Motors' stock (amounting to about 63 million shares) it had acquired previously.<sup>51</sup> The largest and most notorious of all dissolution decrees is, of course, the breakup of Standard Oil in 1911.<sup>52</sup> More recently, a 1982 court order broke up AT&T's nationwide, vertically integrated telephone monopoly by separating local from long-distance services and dividing the former into regional Bell operating companies.<sup>53</sup> Many of these entities subsequently were permitted to recombine and, given the emergence of competition from mobile cellular telephones, to reenter the long-distance market.

Fast forward to 2009: Ronan Harty identifies six merger proposals reviewed by the federal antitrust authorities during President Obama's first year in office that resulted either in asset divestitures, abandonment of the merger partners' plans, or in negotiated settlements. As mentioned earlier, four of these matters involved transactions for which premerger notifications were not required under the HSR Act.

In 2007, Lubrizol Corp. had acquired \$15.6 million worth of the assets of the Lockhart Company, a rival producer of industrial oxidizers. Two years later, the FTC challenged the already-consummated merger agreement, arguing that it had unlawfully undermined competition in the market for oxidates. An order based on a settlement negotiated between the Commission and the defendants, dated April 7, 2009, required Lubrizol to divest Lockhart's oxidizer production facilities and also to eliminate from the acquisition agreement a non-competition clause prohibiting Lockhart from reentering the oxidate market. The acquisition's asset value of \$15.6 million was substantially less than the new HSR thresholds for reporting proposed business combinations to the DOJ and FTC, adopted in 2001.<sup>55</sup>

Similarly, on July 30, 2009, the DOJ negotiated a settlement requiring Sapa Holding AB and Indalex Holdings Finance, Inc., to divest an aluminum sheathing plant Sapa had acquired in a merger consummated the previous year, as a condition for allowing the remainder of the \$150 million transaction to go forward. And in a settlement negotiated the following month, the DOJ announced that Microsemi Corp. had agreed to divest all of the assets it had acquired in 2008 from Semico, Inc., in order to resolve antitrust concerns about a possible reduction of competition in the market for "certain semiconductor devices essential to military and civilian space satellites."56 That transaction, valued at \$25 million, also fell below the HSR reporting thresholds.

An FTC complaint filed on June 2, 2009, caused CSL Ltd. to abandon its plans to acquire Talecris Biotherapeutics, Inc. <sup>57</sup> Also in June 2009, Endocare, Inc. walked away from its proposed acquisition of Galil Ltd. after the FTC had failed to grant clearance after a six-month-long investigation. That merger proposal had been submitted voluntarily, even though the transaction fell below the notification threshold under the HSR Act. <sup>58</sup>

The remedies ordered in the cases summarized above meant that the antitrust authorities had to monitor compliance with the recommendations the court's accepted. That said, ensuring compliance with a divestiture order is fairly straightforward: Were the assets sold to another party or not?<sup>59</sup> Even so, structural remedies have in many cases not been successful in achieving or restoring competitive market conditions and sometimes have been complete failures.<sup>60</sup> This is as a result of, among other things, the difficulty of finding a willing and qualified buyer that would "replace the competition lost as a result of a merger," thereby avoiding the loss of key employees and destroying the goodwill of the company whose assets are disgorged.<sup>61</sup>

Structural remedies have not been successful in achieving or restoring competitive market conditions.

Kenneth Elzinga's study, which examined the remedies imposed on mergers challenged and consummated prior to 1960, before premerger notification was the law, found that 35 of 39 divestiture orders had not created an independent competitor in a timely fashion.<sup>62</sup> Robert Rogowsky's analyses, based on a larger sample of divestiture orders issued between 1969 and 1980, thus comprising some post-HSR transactions, concluded that the structural remedies had been unsuccessful 80 percent of the time.<sup>63</sup> In a self-critical report covering 35 divestiture decrees handed down from 1990 through 1994, the staff of the FTC's Bureau of Competition found that "three-quarters [28] of the divestitures appear to have been successful."64 Nine (one-quarter) of them were not.

While structural remedies are not the cure-all for mergers deemed to be anticompetitive, behavioral remedies take ongoing enforcement and monitoring by agencies to a new level. In addition to ordering the divestiture of Autolite's Fostoria plant, for example, the Court, on the Justice Department's recommendation, also required Ford to transfer the Autolite brand name to the purchaser of that plant and prohibited Ford from (1) manufacturing spark plugs for 10 years and (2) using or marketing spark plugs bearing a Ford Motor Company name for 5 years. Ford also was ordered to buy half of its annual spark plug requirements from the new owner of the Fostoria plant for 5 years and to buy those plugs under the Autolite name. Much earlier, the decree in American Can ordered the company to limit to one year its contracts obligating customers that leased American's can-closing machinery also to purchase cans from American.

In reviewing the history of the remedial measures adopted in cases finding the defendant(s) guilty of violating the antitrust laws through 1979, Frank Easterbrook identified 53 decrees that he concluded were regulatory in nature.<sup>65</sup> Obviously, some body—the courts or the antitrust enforcement agencies themselves—must administer

such de facto regulatory regimes.

This can result in at least five "unintended consequences." First, the remedy phase of the process may not be implemented fully, so that even if the business practices at issue actually undermined the competitive market process, the penalty falls short of the one that would be optimal from the point of view of deterrence. Second, just the opposite may occur: an unwarranted burden can be imposed on the defendant(s) insofar as goodfaith efforts to comply with a behavioral relief order get bogged down in protracted negotiations with the officials responsible for supervising compliance, including preparing and submitting compliance reports, and awaiting approval. 66 Third, to the extent that time and resources must be devoted to compliance matters, the enforcement authorities and the courts are deflected from their stated mission of ferreting out and prohibiting possible antitrust law violations elsewhere in the economy—and the owners and managers of private firms are diverted from their primary goal of efficiently satisfying their customers' needs. Fourth, because behavioral remedies are based on assumptions about competitive market conditions at a point in time, they are static and fail to predict the ways in which competition may evolve in the future, or may lock the affected firms into technological or behavioral patterns that restrict their freedom to adapt to changing market conditions.

A key contributor to all of the just-identified problems with structural and behavioral remedies alike is that supervising compliance has been a backwater for the attorneys and economists employed by the federal antitrust agencies. Many of the lawyers in the Antitrust Division and at the FTC are on career paths that start soon after law school with five- or six-year stints on Pennsylvania Avenue, where they develop skills in the enforcement of the Sherman, Clayton, or FTC acts, which prepares them for much higher-paying jobs in private practice or in the legal departments of major corporations. <sup>67</sup> The most valuable experience they can gain is in

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Requiring the
Department
of Justice and
Federal Trade
Commission
to monitor
compliance
with behavioral
remedies converts
them from
law enforcers
into regulatory
agencies.

prosecuting antitrust defendants (whether in the courtroom or through negotiated pre-trial settlements). Most lawyers do not want to be involved with ensuring compliance with court orders—job assignments that rarely make headlines. Economists also value the skills they accumulate at the DOJ or FTC when associated with cases that either are litigated or settled. If they take faculty positions in academia later or move into jobs at private consulting firms, such experience can generate lucrative incomes as expert witnesses in antitrust proceedings. Consequently, behavioral remedies are frequently afterthoughts in antitrust cases, perhaps explaining why they often are ineffective-and sometimes perverse-in ensuring compliance with those orders.

### Behavioral Remedies in Four Recent Cases

In contrast to the aforementioned structural remedies-either blocking mergers altogether or approving them conditionally on selling assets to third parties—behavioral (or "conduct") remedies place the Antitrust Division and the FTC in the position of being traditional regulatory agencies, which monitor compliance on an ongoing basis, as opposed to being law enforcers. The noteworthy shift by the Obama administration away from structural remedies towards behavioral ones is not entirely a new innovation (Frank Easterbrook discussed the emergence of this trend as early as 1984), but behavioral remedies have been used more in recent years than in the past. That change in remedial emphasis was memorialized in the Antitrust Division's Policy Guide to Merger Remedies, which replaced the original guide published in October 2004.<sup>68</sup> The 2011 version largely rejects the 2008 version's preference for applying structural remedies in horizontal merger cases as well as its conclusion that behavioral remedies are appropriate only in limited circumstances (and only in the case of vertical mergers). It replaces this previous approach with a preference for adopting behavioral remedies in vertical merger cases as well as those involving consolidation along both horizontal and vertical lines.<sup>69</sup>

In what follows, we summarize three key merger cases and one matter involving a charge of unlawful monopolization instituted early in Obama's first term. These cases illustrate the concerns of the Obama antitrust appointees at the DOJ and the FTC about competitive conditions in the high-tech and Internet-based business sectors, as well as his administration's willingness to shift away from structural remedies and towards behavioral remedies to address those concerns.

### United States et al. v. Ticketmaster Entertainment, Inc. and Live Nation, Inc.

In February of 2009, Live Nation and Ticketmaster, two event-management and ticketing businesses for concerts and other live entertainment performances, entered into a merger agreement that would combine their operations, turning the two former competitors into one of the world's largest event promoters, venue operators, and ticketing outlets.<sup>70</sup> At the time, Live Nation owned or operated a large number of concert venues both in the United States and abroad and was the promoter or manager of a significant pool of talented artists, including U2, Madonna, and Jay-Z. In total, the firm handled approximately one-third of large U.S. concert events. With contracts covering more than 80 percent of the major venues in 2008, Ticketmaster was the dominant seller of tickets to live music performances. The company also provided talent-management services, but its primary business was arranging ticketing.

In the concert industry, managers or agents represent artists in negotiations with promoters (like Live Nation) over their appearances at scheduled events. Not unlike the producers and exhibitors of motion pictures, the promoters of live performances bear the financial risks of any given concert

and are responsible for scheduling days, times and locations, as well for marketing the events.<sup>71</sup> The owners of venues where live performances have been scheduled usually arrange for ticket sales in advance and may contract with primary ticketing companies (like Ticketmaster) to provide ticketing services (call-centers, websites, and brick-and-mortar and virtual retail networks). The merger between Live Nation and Ticketmaster was expected to vertically integrate artist handling, promotional activities, event scheduling and management, and ticketing services.

The British Competition Commission and the DOJ launched investigations into the merger proposal soon after its initial announcement, expressing concerns about the "union between two leading players in the supply chain of live music production: promotion, venue operation, and nascent self-ticketing for Live Nation; and primary ticketing and artist management for Ticketmaster."72 The primary antitrust concern was the potential reduction in competition in the business of ticketing services that could result from the merger. In addition, Live Nation had recently started to compete with Ticketmaster as a provider of ticketing services and the transaction would have eliminated this competitive threat to Ticketmaster, a threat that, given Ticketmaster's substantial share of that market, was seen as beneficial by many in the industry.

The British agency issued preliminary findings in October 2009 and initially suggested that the proposed merger would hurt competition, but it retracted its preliminary findings in December of that year after concluding that the merger "will not result in substantial lessening of competition in the market for live music ticket retailing or in any other market." For the DOJ, the Ticketmaster/Live Nation matter quickly became a "test case for the Obama administration's attitude towards mergers." The DOJ responded with a proposed settlement agreement on January 25, 2010, after 10 months of investigation. The proposed set-

tlement agreement required that the companies divest specific assets (as has often been the case historically when attempting to limit the exercise of market power acquired through merger). What is interesting is, that in addition to the divestiture requirements and structural remedies, the proposed settlement agreement contained a number of behavioral remedies that went far beyond the scope of the fixes usually adopted to resolve the competitive concerns raised by horizontal mergers.

The structural remedies were the following: First, Ticketmaster was required to license its core ticketing platform to the Anschutz Entertainment Group (AEG), in an effort to create a new vertically integrated competitor in the market for primary ticketing services to concert venues. At the time, AEG was the second-largest promoter of concert events in the country behind Live Nation. Second, the combined company agreed to divest Ticketmaster's "Paciolan" ticketing service branch, a venue-based division for selling tickets through a local venue's own website, to Comcast-Spectator, which then was a small regional ticketing service. That remedial measure was intended to "establish another independent and economically viable competitor in the market for primary ticketing services to major concert venues."

The agreement also included five narrowly tailored behavioral remedies, in effect for 10 years (from the date of the merger agreement). First was an anti-retaliation provision stipulating that the defendants, Live Nation and Ticketmaster, were prohibited from retaliating against venue owners that enter into contracts with a competing ticketing agency. Second, the joint venture was barred from conditioning the scheduling of live entertainment events in a particular venue on the use of its own ticketing platform by the same venue. Third, the defendants were prohibited from conditioning the provision of ticketing services to a venue on their simultaneous delivery of live entertainment events.<sup>75</sup>

The proposed [Ticketmaster] settlement agreement contained a number of behavioral remedies that went far beyond the scope of the fixes usually adopted to resolve competitive concerns.

The [Comcast]
judgment
included
provisions that
prohibited
behavior that
was considered
to discriminate
against other
internet service
providers.

The fourth behavioral remedy included in the final settlement agreement created a firewall blocking the disclosure of client ticketing data to employees of other branches of the Ticketmaster/Live Nation business entity. Another remedy required the disclosure of ticketing data to clients who chose to terminate their contracts with the newly merged company.

### United States v. Comcast Corp., General Electric Co., and NBC Universal, Inc.

Comcast Corporation (Comcast) and General Electric (GE), the parent companies of NBC Universal (NBCU), announced their plans to enter into a joint venture in late 2009. At the time of the announcement, Comcast was the largest U.S. cable-television provider, with roughly 23 million subscribers, the largest Internet service provider, with more than 16 million customers, and also owned a number of cable TV programming networks. NBCU was the owner of two broadcast television networks, NBC and Telemundo, and also owned two major motion picture companies, Universal Pictures and Universal Studios, as well as several theme parks and other Internet assets.

The joint venture was meant to combine Comcast's cable and regional sports networks as well as its digital media properties with NBCU's theme parks, movie and television entertainment subsidiaries, and its cable television network. Excluded from the agreement were Comcast's Internet websites, Hulu and Fancast, which aggregate and market video content, as well as Comcast's local cable TV systems.<sup>76</sup>

The Antitrust Division filed a complaint on January 18, 2011, 13 months after the announcement of the joint venture.<sup>77</sup> The Antitrust Division's opposition to the proposal rested on a concern that the joint venture would reduce competition in the market for the distribution of "video programming to residential customers (video programming distribution) in major portions of the United States" by combining the largest distributor of video content with one of

the most important producers of such content.<sup>78</sup> In particular, the DOJ's main objection was that rival direct broadcast satellite providers, telephone companies, and emerging online video distributors (OVDs) would be affected negatively by the joint venture because, among other things, access to NB-CU's content could be foreclosed.<sup>79</sup>

A final judgment was entered on September 1, 2011.80 The settlement agreement contained the following behavioral remedies: First, the joint venture was required to provide all of its video programming (or comparable video programming) to any unaffiliated multichannel video programming distributor (MVPD) or unaffiliated online video distributor that requests access to such content on "economically equivalent" terms. Economic equivalency was defined as "the price, terms, and conditions that, in the aggregate, reasonably approximate those on which Defendants [Comcast & NBCU] provide Video Programming to an MVPD." Second, if the OVD requesting video programming and the joint venture failed to agree on such "economically equivalent" terms, the OVD could apply to the DOJ for permission to initiate commercial arbitration proceedings.81 Third, the joint venture was required to relinquish any voting, veto, or other rights to Hulu, the online video distributor in which NBCU held a 32 percent ownership share at the time of the joint venture's announcement, and the parties were required to establish an informational firewall between Hulu and the joint venturers to prevent the transmission of competitively sensitive information from Hulu to them. Finally, the judgment included provisions that prohibited behavior that was considered to discriminate against other ISPs.

### United States v. Google, Inc. and ITA Software, Inc.

Google, Inc. (Google) entered into an agreement to acquire ITA Software, Inc. (ITA), the provider of the leading airline pricing and shopping system, QPX, on July 1, 2010.<sup>82</sup> At the time of the agreement, ITA's

QPX system supplied airline flight pricing, scheduling, and seat availability information to the principal Internet travel reservation sites, including Orbitz, Kayak, and Microsoft's Bing Travel. According to the Justice Department, QPX was the dominant travel search engine on the market at the time because of its superior speed and innovative functionality, despite the fact that other providers of such information to consumers, like Expedia, operated their own travel pricing and shopping systems. Google was the leading seller of Internet search advertising and the most widely used general Internet search provider. By acquiring ITA software, Google sought to expand its services into online travel search, which would put the company in direct competition with existing ITA customers.

The Justice Department's Antitrust Division started its investigation a few days after the initial merger announcement and filed a complaint in the U.S. District Court for the District of Columbia nine months later, on April 8, 2011.83 The DOJ's case was based on the argument that Google was planning to develop its own flight search product, which would eliminate a unique source of P&S software for competing online travel intermediaries (OTIs). By integrating the most widely used flight search software into Google's dominant Internet search portal, the merged company potentially would be in a position to use "its ownership of QPX to foreclose or disadvantage its prospective flight search rivals by degrading their access to QPX, or denying them access to QPX altogether." Further, the DOJ's complaint argued that the result of such anticompetitive behavior on the part of Google would likely be to reduce quality and variety, and to stifle innovation in flight search services more generally, therefore violating Clayton Act §7.

The proposed final judgment, which did not demand structural relief, included the following five behavioral remedies, to remain in effect for five years.<sup>84</sup> First, Google would be required to honor existing licenses for the QPX software product, renew exist-

ing licenses under similar terms and conditions, and offer licenses to any online travel sites that were not currently licensees of ITA on fair, reasonable, and nondiscriminatory terms. Second, Google would be required to continue to develop upgrades to QPX and invest the same resources in research and development as ITA had. Third, Google would be required to license InstaSearch, a QPX add-on that allows consumers to enter more flexible queries. Fourth, Google would have to observe strict internal firewall commitments to ensure confidentiality of QPX licensee information and prevent it from becoming available to Google's own travel search operations. And fifth, Google would be required to report complaints from online travel search providers who believed that Google had acted unfairly in its decisions regarding flight search advertising on its main search site, google.com. A final judgment, containing the behavioral remedies outlined above as well as a clause requiring Google to seek arbitration if it could not agree on licensing terms with any of its current or future QPX or InstaSearch licensees, was entered on October 5, 2011.85

#### United States v. Apple, Inc. et al.

On April 11, 2012, the Attorney General of the United States initiated antitrust action against Apple; the Hatchette Book Group; HarperCollins; Verlagsgruppe George von Holtzbrinck GmbH and Holtzbrinck Publishers, d/b/a Macmillan; the Penguin Group; and Simon & Schuster, charging them with violating Section 1 of the Sherman Act. <sup>86</sup> The DOJ's complaint argued that the defendants had conspired unlawfully to raise the retail prices of electronic books at consumers' expense.

Ever since the release of the first Kindle ebook reader by Amazon.com in 2007, ebook sales have expanded rapidly. This growth in sales has been attributed in part to Amazon's strategy of setting retail prices for ebook versions of best-sellers as low as \$9.99, substantially less than the \$15 it typically would otherwise have paid book pub-

As part of its settlement, Google is required to report complaints from online travel search providers who believe that Google has acted "unfairly" in its flight search advertising decisions.

lishers for each electronic copy of the titles it then resold to consumers. Those below-cost prices for ebooks in turn boosted sales of the Kindle. Amazon was able to adopt such a pricing policy because the business of publishing and selling books then operated under a wholesale model, whereby publishers sold books to bookstores and other retailers at a discount from their cover (list) prices and the retailers marked them up for resale. Book retailers, however, were free to set any resale price they chose, including offering discounts of any amount off a particular title's cover price or even selling some books at a loss.

By early 2009, Amazon accounted for about 90 percent of the ebooks sold in the United States and one-third of the major book publishers' U.S. sales overall. Although the publishers were still profitable, some were reportedly concerned about the industry's future trajectory, given that Amazon had taken steps to enter the book publishing area (by acquiring an inventory-free publishing and distribution company called Book-Surge's editing and promotional services).<sup>88</sup> The publishers likewise were worried about the impacts of low ebook prices on the prices of hardback and paperback copies of the same books as well as on the long-term viability of traditional brick-and-mortar bookstores, the publishers' "strongest ally in marketing."89 For their part, competing sellers of ebooks, such as Apple and Barnes and Noble, found the low prices and thin profit margins unattractive and were not interested in entering the market for ebooks under the then-prevailing conditions.

Enter Steve Jobs. In early 2009, he and five of the "Big Six" U.S. publishing houses agreed jointly to replace the existing wholesale model with an agency model, which allowed the publishers to take control of ebook retail pricing, thereby prohibiting retailers from reducing prices below those which the publishers themselves set. <sup>90</sup> In addition, the same publishing houses agreed to guarantee Apple, acting as their agent in the retail marketplace, a 30 percent com-

mission on any ebook it resold through its new iTunes bookstore. Apple's participation in the agency model it had proposed for adoption by the major U.S. book publishers hinged on four of them agreeing to join the program. John Sargent, Macmillan's CEO, apparently became the point man who ultimately convinced four of his rivals plus a reluctant Amazon.com to shift to the agency model. 91

The victory for the publishing houses was pyrrhic: "Under the agency model, many consumers paid higher prices, and Amazon made more money, while the publishers made less."92 Meanwhile, on the legal front, the Bush administration's Antitrust Division had in 2009 rebuffed the Hatchette Book Group's plea for relief from what the publishing house characterized as "Amazon's predatory practices." According to David Young, Hatchette's CEO, the DOJ "just turned around to us and said, 'Sorry, we can't help, because the consumer is the winner'." However, following the filing of a class-action lawsuit against Apple and five of the major U.S. book publishers in California two years later—and a change of tenants in the White House-President Obama's DOJ entered the fray, as did several state attorneys general and the European Commission.<sup>94</sup> In the months since the Antitrust Division initiated its lawsuit accusing the defendants with engaging in an illegal price-fixing conspiracy on April 11, 2010, all of the five publishing houses have agreed to settle the charges out of court. The settlement agreements with the different publishing houses contained the following behavioral remedies: First, publishers had to terminate any agreement with an ebook retailer that limited the retailers' ability to set prices or contained a most-favored-nation clause, which required the publisher to match retailer prices in case retailers were discounting their books. Second, publishers are required to notify the DOJ in advance should they enter "any joint ventures or other business arrangements relating to the [s]ale, development,

Publishers had to terminate any agreement with an ebook retailer that limited the retailers' ability to set prices or contained a mostfavored-nation clause.

Table 4
Behavioral Remedies in Four High-Tech Antitrust Cases

Behavioral Remedies	Live Nation/ Ticketmaster	Comcast/ General Electric/ NBCU	Google/ ITA Software	Apple et al.
Anti-retaliation provision	X	X		X
Anti-conditionality provision	X			
Non-disclosure agreement/firewall	х	X	x	X
Economic equivalency of contract terms		X	X	
R&D maintenance provision			X	
Licensing provision			X	
Reporting requirement for competitor complaints			x	
Existing contract termination provision				X

Source: Author's classification.

or promotion of Ebooks." Third, publishers are required to provide a copy of each agreement with an ebook retailer they enter after January 1, 2012. Fourth, for two years after the filing of the complaint by the DOJ, publishers are not allowed to restrict an ebook retailer's ability to reduce the retail price of any ebook, or enter agreements that contain most-favored-nation clauses. Fifth, publishers are not allowed to retaliate against ebook sellers who offer promotional discounts or lower prices. Sixth, publishers are not allowed to enter agreements with other ebook publishers that coordinate or fix prices. Seventh, publishers are not allowed to communicate competitively sensitive information regarding their business plans, pricing, or retail agreements to other publishers of ebooks.95 Hence, for at least two years publishers have lost the ability to set minimum prices for ebooks, meaning that Amazon.com, which was not named as a defendant in the DOJ's lawsuit, can still offer large discounts, provided that such discounts do not exceed its commission.<sup>96</sup>

### Incentive Problems created by Behavioral Remedies

The four antitrust cases summarized above share a number of similar behavioral remedies, as can be seen in Table 4. All of these behavioral remedies come with significant incentive problems, which we discuss in this section.

Several scholars have argued that antitrust policy, just like regulatory policy more generally, is likely to be influenced by special-interest-group politics.<sup>97</sup> They suggest that antitrust law enforcement therefore frequently will fail to fulfill its "statutory mandate to 'prevent and restrain" anticompetitive business practices, thereby mitigating the consumer welfare losses associated with monopoly or other unlawful exercises of market power.<sup>98</sup> Antitrust policy instead becomes just one more tool in the hands of well-organized lobby groups, including labor unions, local public officials, and competitors, who have significant financial stakes in the outcomes of antitrust process-

Antitrust policy, just like regulatory policy, is likely to be influenced by special-interest-group politics.

Because behavioral remedies require more continuous enforcement after the fact, they are more likely to result in asymmetric information problems between antitrust regulators and the companies.

es in general, and of the law enforcement decisions taken in particular cases.<sup>99</sup>

John Kwoka and Diana Moss suggest that the comparison between antitrust and economic regulation is particularly apt for antitrust remedies that impose constraints on the business behavior or conduct of the defendants. 100 While structural remedies may, plausibly, be captured by the firms on which they might be imposed, such relief results only in the reconfigurations of companies found guilty of antitrust law violations at one point in time and does not usually require further enforcement. Conduct remedies, on the other hand, are intended to modify the behavior of one or more specific defendant firms, ostensibly to promote more socially efficient market outcomes by channeling business acts and practices in directions that prevent or mitigate unlawful exercises of market power. Because they require more continuous enforcement after the fact, behavioral remedies are more likely to be subject to problems of asymmetric information between antitrust regulators and the companies subject to regulatory oversight and, hence, to the creation of incentives on the part of the regulated business entities that could undermine the stated purposes for which the remedies were imposed in the first place.

For all of the behavioral remedies listed in Table 4, target firms have an informational advantage over the antitrust agency, which makes enforcement of different aspects of settlement agreements almost impossible to implement. In particular, firewalls pose significant law enforcement challenges; all of the antitrust matters summarized above included such non-disclosure provisions. In cases involving mergers or joint ventures, firewalls are intended to prevent transfers of competitively sensitive information either between different operating units of a newly formed business entity, a consolidated enterprise and its customers, suppliers and rivals, or both.

The final judgment approving (in part) the merger of Ticketmaster and Live Na-

tion, required the company to "refrain from using certain ticketing data in [its] nonticketing business or provide that data to other promoters and artist managers." <sup>101</sup> In a transaction later characterized as a "match of complementary jigsaw pieces, creating a comprehensively integrated and dominant company in the live music business," the firewall's aim was to limit the combined company's ability to use its dominant position in ticketing services in ways that would harm competing concert promoters and venue managers, such as Anschutz Entertainment Group, to which Ticketmaster/Live Nation was required to license the rights to "host" the company's basic ticketing platform. 102 Specifically, given that, at the time of the consolidation, Live Nation ran one-third of the major concert events in the United States, the DOJ apparently was concerned that it would use its specialized knowledge about performers, venues, and fans to disadvantage rival promoters who sought to schedule events at sites serviced by Ticketmaster. In addition, Live Nation brought to the merger an artist management company, Front Line, which the DOJ believed might try to steer performers managed by other business entities to Front Line's stable or make it more difficult for venues that did not schedule events using Front Line's talent to gain access to other performers. 103

The firewall imposed as a condition for approving the joint venture between Comcast and NBCU was designed to block Comcast's access to information from and about Hulu, the online video distribution platform in which NBCU then held a 32 percent ownership stake. Since Comcast considered emergent OVDs to be competitive threats to its cable TV operations, any information transferred to Comcast from Hulu could, in the DOJ's view, be used to slow the development of that alternative means of delivering programming content to consumers through their computers, television sets or smart phones.

In the Google matter, a firewall provision was imposed in order to prevent Google

from using information from ITA Software's contracts with the operators of established flight search websites to enter the relevant market and subsequently to compete with those operators. 104 At the time the merger was announced, neither Google nor ITA offered online flight search services, but ITA owned the software that many existing travel search and reservation sites licensed and used. Google certainly had the ability and, perhaps, the intention to enter the market for travel-related "Pricing and Shopping" systems; and it may have been an effective competitor to Orbitz, Expedia, and other such companies in the future, but had not yet become one. 105 An example of the type of information that is covered by the nondisclosure provision included in the settlement agreement allowing Google to acquire ITA is information about specific configurations of ITA's QPX software that different online travel intermediaries have developed to customize their users' search options. As a potential new entrant to the flight search market, Google could have benefited greatly from more detailed information, which an independently owned ITA would not have revealed except under a mutually agreeable, arms-length contract.

Firewalls create perverse incentives for the antitrust defendants on which they are imposed. In all of the cases discussed above, transfers of information between the parties to a joint venture or the partners to a merger that have been separated by an antitrust firewall could improve overall profitability significantly. And the incentives to share information within or among business units are independent of whether or not a consolidation is driven by efficiency motives—that is, to reduce costs—or to raise prices and profits at consumers' expense. Any firewall blocking the sharing of information therefore has to withstand nearly irresistible incentives to let information flow freely between a company's various operating divisions. The greater is the potential profit from a free flow of information internally, the greater will be the pressures to breach the firewall. Needless to say, the strength of a firewall thus will depend critically on the effectiveness of its enforcement, which, as discussed above, is especially likely to fail in the realm of antitrust, wherein the lawyers and economists employed by the DOJ and FTC specialize in the enforcement of the Sherman, Clayton, and FTC acts; they are not hired to be the regulators of specific firms or industries, such as those scheduling and promoting live music concerts, supplying online travel search and reservation systems, providing online video content and distribution, or publishing and selling electronic books.

Firewalls often have been used in the financial services industry to prevent the transfer of information between companies' brokerage and investment banking divisions to mitigate potentials for profiting from insider trading opportunities. In that context, Thomas Cargill writes: "Given the ability of the financial system to circumvent binding regulation that limits profit, it is not likely that regulatory firewalls, unless they are very thick, will be effective." 106 Ricki Helfer, chairman of the Federal Deposit Insurance Corporation (FDIC), noted similarly in an oral statement before the Subcommittee on Capital Markets in 1997 that "these firewalls are not impenetrable under all circumstances. In times of stress, firewalls tend to weaken. Our experience is that in such times, funding pressures can be exerted on the insured bank by its holding company as well as by subsidiaries of the bank." <sup>107</sup>

It should be obvious that similar limitations apply to the firewall provisions employed in the antitrust cases summarized above. Adam Smith's famous quote applies to joint ventures with even greater force than to independently owned companies: "People of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices." However, the many scholars who quote that passage rarely continue on to the next sentence: "It is impossible indeed to prevent such meetings, by any law which

Firewalls create perverse incentives for the antitrust defendants on which they are imposed.

either could be executed, or would be consistent with liberty and justice."<sup>109</sup> As long as information is available that potentially can increase a business's profit, it is difficult to see how any reasonable regulatory provision could prevent a new joint venture from using it in some way.

Firewall provisions in antitrust cases come with additional complications. While firewall provisions in the financial services industry are generally enforced by the Securities and Exchange Commission, the body also monitors insider trades and has the capacity to observe unusual trading activity to ferret out the possibly unlawful use of inside information. No obvious mechanism for uncovering firewall breaches exists in any of the antitrust cases discussed above, except perhaps for complaints by competitors, whose reports are clearly suspect. It is therefore difficult to conceive how the Department of Justice would ever discover or be able to prove that its firewall provisions had been violated.

Information Problems Created by Behavioral Remedies

F. A. Hayek famously argued that the price mechanism facilitates information aggregation across time and space, which makes it central to the efficient allocation of resources in any given society. 110 The price mechanism can function fully and properly only in an unregulated context, however. Just like other regulatory provisions, behavioral antitrust remedies can get in the way of information aggregation, particularly if they make it difficult for the defendant firm(s) to adapt to new market conditions. It bears reiterating in this context that enforcement of the antitrust laws, especially so in matters involving mergers that have not yet been consummated, requires the Department of Justice or the FTC to forecast the future effects, rather than the actual effects, of business practices. Such forecasts are likely to be error-prone in any event, but even more so in rapidly changing high-technology industries, where competition arises from new ideas, often originating not from established companies, but from entrepreneurial start-ups. <sup>111</sup>

Take, for example, the provision in the Google/ITA merger agreement, which requires the merged company to continue to provide software updates for ITA's QPX platform and to maintain premerger research and development efforts for software innovation. 112 The intention of this provision obviously is to prevent Google from slowly abandoning the market for travel search software products by reducing product development investments and lowering the relative attractiveness of QPX as a software solution compared to competing solutions, perhaps even one that it decides to develop in-house at some future time by adopting Microsoft's "embrace and extend" strategy of buying the owner of a software application and then making it its own.

Assuming static market conditions, the newly merged company may still be the most efficient provider of an airline pricing and shopping system, which would suggest that Google should continue to invest in the QPX platform. However, market conditions change rapidly, especially in the software industry, and new competitors may come along that could improve on the newly merged company's product and make it a less efficient provider of a travel search platform. If that were indeed true, the requirement to continue to provide software updates and to maintain R&D levels similar to those of ITA before the merger would hamper, rather than improve, Google's ability to remain profitable, and so resources would be misallocated.

The provision requiring the defendants to provide economically equivalent contract terms to new and existing customers, which the Justice Department applied in both the Comcast and Google cases, also entails potentially negative consequences for firm ef-

Just like other regulatory provisions, behavioral remedies can get in the way of information aggregation, particularly if they make it difficult for the defendant firm(s) to adapt to new market conditions.

ficiency and consequently for the overall effectiveness of information aggregation through the price mechanism. <sup>113</sup> Preventing businesses from adapting the terms of their contracts to new and unforeseeable market conditions is comparable to preventing them from adjusting to changing price signals. This provision can therefore function like a regulatory price control and thus will have all of the well-known negative social welfare consequences associated with such policies.

The requirement for maintaining an antitrust regime through which aggrieved parties can submit complaints concerning possible violations of the terms of the Google/ ITA or any other settlement is a virtual invitation for competitors to bog the new company down in future compliance disputes. Arbitration of such disputes is required in the consent orders settling the DOJ's challenge to that merger, as well as to the joint venture between Comcast and NBCU. In the latter case, it was not clear to the federal judge who evaluated and ultimately approved the settlement agreement how the DOJ and the Federal Communications Commission (FCC) will coordinate the reporting and resolution of third-party complaints. The judge in that matter wrote pointedly that, in a remarkable burst of frankness "the government, at the public hearing, freely admitted that '[we] can't enforce this decree.' In addition, it is undisputed that neither the FCC nor the DOJ has any experience yet in administering either course of arbitration in the online-video-distribution context." 114

Nonretaliation provisions contained in the agreements that settle governmental challenges to mergers or joint ventures proposed between private business entities are equally problematic. In resolving their concerns about proposed consolidations in that way, the antitrust authorities must determine whether or not, after the fact, a particular business act or practice violates the constraints imposed on the defendants, complaints about which presumably will be lodged by competitors or customers. We agree with John Kwoka and Diana Moss that "it takes little creativity to envision

the various ways in which a particular action might be interpreted differently under" such a settlement clause. 115 Just like the previously discussed remedies, nonretaliation remedies hamper the ability of defendant firms to operate in profit-maximizing ways and therefore impose severe constraints on the efficient functioning of the price mechanism, as outlined by F. A. Hayek.

### The Obama Administration's New Antitrust Initiatives

The Obama administration launched three related antitrust policy initiatives, which we summarize here. We start with a discussion of the withdrawal of the DOJ's report on enforcement of Section 2 of the Sherman Act (the Section 2 Report) issued under President George W. Bush, followed by a discussion of the Obama administration's new approaches to merger remedies, the Antitrust Division Policy Guide to Merger Remedies (Remedies Guide), and the enforcement of the DOJ and FTC's Horizontal Merger Guidelines (Guidelines). 116

#### Sherman Act §2

On May 11, 2009, shortly after Christine Varney had taken office as President Obama's assistant attorney general at the head of the DOJ's Antitrust Division, she announced that the DOJ was withdrawing a report relating to the enforcement of Section 2 of the Sherman Antitrust Act, which had been issued just eight months before under the leadership of Thomas O. Barnett, the AAG who had been appointed by George W. Bush in 2005. 117 Section 2 of the Sherman Act addresses single-firm conduct and, in particular, the potential anticompetitive behavior of a firm with a significant market share; it has played a minor role in antitrust enforcement since the 1970s. 118

Consistent with the statements then-U.S. Senator Obama had made during the 2008

Nonretaliation remedies hamper the ability of firms to operate in profitmaximizing ways, imposing severe constraints on the efficient functioning of the price mechanism.

Varney went so far as to suggest that the Great Recession was the result of a failure of adequate antitrust enforcement during the Bush era.

presidential campaign, suggesting that the Bush administration's antitrust enforcement had been too lax, the revocation of the Section 2 Report did not come as a surprise. 119 In her announcement, Christine Varney explained that the Section 2 Report raised too many hurdles for antitrust law enforcers and relied too much on self-correcting market forces as constraints on monopoly behavior. In a set of remarks given at the Center for American Progress on the day of the withdrawal announcement, Varney went so far as to suggest that the Great Recession was, at least in part, the result of a failure of adequate antitrust enforcement during the Bush administration.<sup>120</sup>

One of the more prominent contributions of the DOJ's Section 2 Report was to outline a baseline test for liability under Section 2 of the Sherman Act. The test was one of disproportionality and stipulated that a firm's conduct would be condemned as anticompetitive under Section 2 only if its demonstrable anticompetitive effects were disproportionately greater than its pro-competitive potential. This test was based on a legal merits' brief, published jointly by the FTC and the DOJ in 2004.<sup>121</sup> The Section 2 Report mentions, as strengths of the test, that it provides clarity for firms while also lowering administrative costs. 122 The report specified a variety of similar tests for more specific types of conduct, such as predatory pricing, loyalty discounts, product bundling, tying arrangements, refusals to deal with rivals, and exclusive dealing. 123 Those tests were meant to help clarify and normalize inconsistencies in the treatment of various business practices that had emerged over time as the courts moved gradually away from declaring most of them as illegal toward weighing their possible pro- and anti-competitive effects.

The publication of the Section 2 Report in September 2008 was accompanied by strong dissents from a majority of the five federal trade commissioners. The DOJ and the FTC initially had launched a collaborative analysis of dominant firm conduct in 2006, expecting eventually to produce a joint

report. However, the 2008 report was issued solely by the DOJ, accompanied by a set of statements by four FTC commissioners who explained their reasons for writing separate opinions. FTC chairman William E. Kovacic wrote that existing legal precedents already favored very little intervention in dominant firm conduct, and he therefore saw no reason to "conclude that future doctrine would be less hospitable," essentially rendering the DOJ's Section 2 Report superfluous. 124 In a separate statement, a majority of the five FTC commissioners, Commissioners Harbour, Leibowitz, and Rosch, identified and took issue with four fundamental premises they thought were at the bottom of the DOI's Section 2 enforcement intentions: First, that the promise of monopoly profits drives firms to innovate and compete. 125 Second, that the risk of over-enforcement of Section 2 is greater than the risk of underenforcement. Third, that the costs of administration are a factor that weighs against enforcement of Section 2. And fourth, that there is a need for clear and administrable rules regarding such enforcement. The three commissioners argue in their statement that, while those premises may be legitimate, they do not reflect the consensus of "Section 2 stakeholders"; they therefore conclude that the DOI's report underplays the harm to consumers that monopoly power exercised unilaterally by a dominant firm can cause.

Despite the fact that the withdrawal of the report in 2009 was accompanied by much criticism of the Bush administration, the DOJ's announcement did not contain any guidance on the new administration's enforcement standards. Effectively, the status quo ex ante was restored. Former Attorney General Edwin Meese therefore suggests that the Varney Antitrust Division returned Section 2 enforcement to a standard that was less intrusive than the one that would have been followed if her predecessor's Section 2 Report had been allowed to stand. 126

The intrusiveness of relevant legal precedent is sometimes in the eye of the beholder, however. Herbert Hovenkamp argues that the law enforcement agencies and the courts already had been moving away from older ideas that a dominant firm can use its monopoly power in one market as leverage to obtain a monopoly in some other, related market, toward theories focusing on actions that threatened to foreclose rivals from those markets. <sup>127</sup> Some of the antitrust cases brought by the Obama administration, summarized earlier, including those involving combinations of ticketing services and venue management, and electronic distributors of programming content and the providers of that content, were predicated on foreclosure theories.

Had the Obama Administration not withdrawn the Section 2 Report, the DOJ's lawyers "very likely would have ended up litigating against their own report." The withdrawal thus was a calculated political decision, foreshadowing the new president's activist law enforcement agenda. Given the difficulties of enforcing the types of behavioral remedies adopted to resolve the antitrust concerns raised in the cases summarized in this study, however, it is not at all clear that a reversion to the pre–Section 2 status quo will generate benefits for consumers.

### Revised Horizontal Merger Guidelines and Merger Policy Guides

The DOJ, together with the FTC, published a revised version of the agencies' guidelines in 2010, which replaced the 1992 version. The 2010 Guidelines document was intended to describe more accurately the actual practice of merger law enforcement policy as it had evolved since 1992. The most prominent change in the 2010 Guidelines was to signal movement away from evaluating the likely effects of mergers in terms of "coordinated effects," that is, assessing the likelihood that a merger will facilitate collusion between the newly combined business entity and other independently owned firms that

remain active in the industry going forward, toward the consideration of "unilateral effects," such as assessing the likelihood that the merging of two firms in and of itself constitutes a lessening of competition because, for example, the merged firm acquires, and can then exercise, its new market power to raise prices, exclude rivals, or both.

As a result of this analytical shift, the definition of a relevant antitrust market, along with calculations of market share and market concentration (previously the first and most important step in evaluating the competitive effects of a proposed merger) have been deemphasized. That is because the market share and market concentration metrics are relevant to merger analysis only to the extent they measure harm to competition based on coordinated effects. Concepts like upward pricing pressure, on the other hand, have taken on a greater significance in the 2010 Guidelines because of the new emphasis on unilateral effects. Upward pricing pressure deals with the likelihood that a merger will cause an increase in quality-adjusted, or "hedonic" utility-based measures of consumer satisfaction or of the prices of one good relative to others sold in a market characterized by product differentiation. Suppose that prior to a merger, two firms sell products that differ in terms of quality (high-end versus low-end household furniture or televisions, for instance). Consumers in that market self-select between the two firms based on their tastes for quality and willingness to pay, some making their purchases from the seller of the higher quality good and others buying from the seller of the lower quality good. Upward pricing pressure might then result from a merger that combines the differentiated products under common ownership, allowing the merged firm to raise prices on the higher quality good and capture any sales lost at that higher price as some consumers shift to the lower quality substitute good. Prior to the merger, the seller of the higher quality good had no incentive to worry about the impact of its price on sales of the lower quality good. After the merger, the

Given the difficulties of enforcing behavioral remedies it is not at all clear that a reversion to the pre–Section 2 status quo will generate benefits for consumers.

Limitations make it impossible, even for antitrust experts, to weigh the potential negative competitive consequences of upward pricing pressure.

prices of the two quality versions of the same good can be adjusted unilaterally and optimally; profits therefore rise overall.

Carl Shapiro, one of the members of the joint DOJ/FTC Horizontal Merger Guidelines working group and, at the time, Deputy Assistant Attorney General for Economics at the DOJ's Antitrust Division, discusses the changes to the Guidelines in the Antitrust Law Journal. 130 In that article, Shapiro likens the new approach to horizontal mergers to Isaiah Berlin's fox who "knows many things," and suggests that the 1992 Guidelines had been influenced by an approach to antitrust that was more akin to Berlin's hedgehog, who "knows one big thing" only. 131 He argues that, in the past, antitrust enforcement focused on the competition-lessening effects of market concentration, but that "in recent years [merger enforcement] has become increasingly eclectic, reflecting the enormous diversity of industries in which the Agencies review mergers and the improved economic toolkit available."132

The analogy of the hedgehog and the fox is usually interpreted as an illustration of the limits of expert knowledge and predictive power. 133 The hedgehog, which knows only one thing, is willing to make bold predictions and therefore often is wrong, while the fox, which knows many things, is cautious, accepts ambiguity, and is therefore less likely to make bold predictions that turn out to be wrong. In the case of the 2010 Guidelines and the 2011 Remedies Guide, the full meaning of the analogy seems to have been lost. While the two publications certainly allow the law enforcement agencies and the courts to "look at a wide variety of evidence and use a wide variety of methods to determine whether mergers may substantially lessen competition," which may be the fox's approach, the kinds of merger analysis and behavioral remedies that are encouraged rely on hedgehog-like bold judgments and suggest a lack of modesty when it comes to the agencies' self-perceived ability to predict and remedy any possible anticompetitive effects of a proposed merger or joint venture. 134

Commentary on the 2010 Guidelines is cautious in the currently available scholarship. Robert Willig concludes an assessment that is favorable overall by remarking that, while the inclusion of the new upward pricing pressure tool in the merger guidelines is exciting from the perspective of economic theory, its empirical relevance of that approach is limited because the price changes that can result from such unilateral effects will tend to be small, impossible to quantify, and may just as well reduce prices as to raise them, depending on local market circumstances. 135 He argues that these limitations make it impossible, even for antitrust experts, to weigh the potential negative competitive consequences of upward pricing pressure "against the possibilities of dynamic market-place features and reactions, such as product repositioning, entry, various forms of efficiencies, and other rivals' and customer's reactions to their merger in their supplies and demands." <sup>136</sup>

Similarly, James Keyte and Kenneth Schwartz argue that the marginalization of the market metrics in the 2010 Guidelines in favor of the upward pricing pressure test, which lacks "any objective threshold for applying 'unilateral effects'," is both inconsistent with Section 7 of the Clayton Act and also incapable of providing practical guidance to the business community. 137 In the same vein, John Lopatka criticizes the replacement of market definition and concentration in merger analysis with upward pricing pressure. 138 He describes upward pricing pressure analysis as having "various theoretical and measurement limitations" and cautions that it has not been tested empirically. 139 In the same issue of the Review of Industrial Organization, Keith Hylton warns that: "the new enforcement guidelines represent an additional step in the ratcheting process that expands the enforcement agencies' scope of authority and minimizes that of the courts." <sup>140</sup>

While the 2010 Guidelines propose bold new analytical tools despite their questionable or limited empirical application, the 2011 Remedies Guide goes one step further on the path of the hedgehog by shifting the focus of antitrust enforcement from structural to behavioral remedies. The previous remedies guide, which had been issued in 2004, emphasized a preference for structural over behavioral remedies and cautioned against the latter because they are "difficult to craft, more cumbersome and costly to administer, and easier than a structural remedy to circumvent." The 2004 guide lists four specific types of substantial costs associated with behavioral remedies: monitoring costs, evasion costs, restraint of potentially pro-competitive behavior, and finally the cost of potentially preventing a firm from responding efficiently to changing market conditions. The 2011 Remedies Guide drops this discussion of the relative merits of each type of remedy completely and instead encourages the use of either type of remedy depending on the circumstances. In addition to the greater significance the 2011 Remedies Guide attaches to behavioral remedies, it also specifies additional types of behavioral remedies, such as mandatory licensing, anti-retaliation, prohibition of specific contracting practices, and arbitration requirements, and discusses the enforcement of these new types of behavioral remedies. 142 As outlined in the previous sections of this paper, we support Kwoka and Moss in their general critique of this recent shift towards more complex and difficult-to-enforce behavioral remedies. 143

#### Harmonization

The goal of creating more harmony in the enforcement of the antitrust laws precedes the Obama administration. Indeed, it would not be too far from the truth to say that that goal has been pursued since the FTC was established in 1914. Both it and its older sibling, the Antitrust Division of the DOJ, were given explicit authority to enforce the Clayton Act, also passed in 1914. While only the DOJ can bring criminal charges against violations of the Sherman Act, and the FTC

has its own mandate under Section 5 of the FTC Act to ferret out and sanction unspecified "unfair methods of competition," the courts held over time that, except for penalty provisions, the FTC can attack any business acts and practices that also would violate the Sherman Act. <sup>144</sup> A system of dual antitrust law enforcement is unique to the United States and, not surprisingly, has from time to time created conflicts between the two agencies, including episodes wherein both agencies brought charges against the same defendants. <sup>145</sup>

Nowadays, those conflicts have largely but not completely been resolved by the afore-mentioned liaison agreement negotiated in 1938 between the DOJ and the FTC, the adoption of informal clearance procedures that assign to one agency or the other responsibility for evaluating mergers proposed in compliance with the Hart-Scott-Rodino Act and, perhaps what is most important, the promulgation of merger guidelines that, since 1982, have been issued jointly by the Antitrust Division and the FTC.

Nevertheless, some commentators, including Judge Richard Posner, have questioned why it is that the United States exposes businesses to two very different antitrust law enforcement regimes. One regime, at the DOJ, involves the federal courts immediately in dispute resolution; the other, at the FTC, involves hearings before an administrative law judge initially and ends up in federal court only if the defendant appeals an adverse ruling by a majority of the sitting commissioners or if the Commission votes to seek an injunction against a proposed merger. Harmony in the antitrust law enforcement process may have been achieved in the outcomes of individual cases, but it has not been fully achieved in practice.

The harmony on which we focus here, however, relates to congruence between antitrust law enforcement in the United States versus the rest of the world, most especially as it is evolving in Britain, where such policies are enforced by the Competition Commission, and in Europe, where the European

A system of dual antitrust law enforcement is unique to the United States and, not surprisingly, has created conflicts between the two agencies.

Commission, headquartered in Brussels, has responsibility for sanctioning anti-competitive business acts and practices occurring within the borders of the nations that have joined the European Union. Although the U.S. antitrust authorities and those in Europe operate under similar laws-indeed, the antitrust statutes adopted in the rest of the world largely have been patterned on the laws here—until recently, one important difference was that European antitrust authorities have expressed more concern with the "abuse of dominant market positions" than has been true in the United States historically, which, as we have seen, has focused more on "coordination effects," at least in merger cases.146 That difference can be explained by noting that many of Europe's largest companies got their start as state-owned enterprises during the wave of nationalization that swept the continent after the Second World War.

The quest for harmony in antitrust law enforcement derives in part for avoidance of bureaucratic embarrassment when the competition authorities in the United States and in Europe reach completely different conclusions with respect to the same business acts and practices: that is, when one competition agency challenges a merger and the other does not. But competition among different legal jurisdictions is as critical as competition between firms within the same marketplace. Interjurisdictional harmony between legal regimes may promote certainty for the firms concerned, but it also can short-circuit a key dimension of rivalry if business entities face the same legal standards everywhere. As Virginia Postrel writes: "Although policies can in theory be harmonized to maintain openness and competition, in many cases the goal is to protect detailed [local] regulations from international challengers."147 She goes on to say that: "Western governments that once offered different approaches are now determined to adopt a single standard.... Harmonization can stamp out the competition that protects innovators from the tyranny of the status quo. . . . Such a 'level playing field' not only disregards local knowledge, it discourages new ideas" as well as innovative business practices. 148

Harmony in the realm of antitrust law enforcement generates another adverse consequence, namely, that U.S. and European companies are exposed to double jeopardy in the sense that they can be penalized both at home and abroad. Google, for example, currently is mired simultaneously by investigations launched into allegations of its possible anticompetitive behavior by the FTC and the European Commission. 149 The company may end up paying sizeable fines to both competition authorities, although a proposal from Europe to adopt a global solution has been put on the table. 150 We think that exposure to such double jeopardy has been magnified by the Obama administration's promulgation of the 2010 Guidelines, which focus on unilateral effects and therefore shifts antitrust attention to the conduct of a dominant firm.

Harmony in the enforcement of the antitrust laws is not necessarily a good thing. What seems to be going on between Europe and the United States nowadays harkens to the conflicts that emerged between the DOJ and the FTC early in the 20th century.

It would be better to recognize that the antitrust laws worldwide were flawed at their conception and are even more problematic when viewed in light of a world characterized by rapid technological progress. Government bureaucrats operate under insuperable information constraints, making it difficult or impossible for them to distinguish competitive from anti-competitive business behavior and, even if they could identify acts and practices that are anti-competitive, the remedies they impose are unlikely to result in better products and services for the consumer.

### Conclusion

In the wake of the Obama administration's efforts to reinvigorate antitrust policy, the DOJ and FTC have shifted from mere structural intervention to more comprehen-

Interjurisdictional harmony may promote certainty for the firms concerned, but it can short-circuit a key dimension of competition if business entities face the same legal standards everywhere.

sive applications of very intrusive behavioral remedies. We argue that, as a result of this shift in the approach to antitrust policy, the settlement agreements in three merger cases and one involving charges of unlawful price fixing discussed above require more stringent oversight and thus are more likely to generate unintended consequences with regard to the incentives they create and the informational hurdles they raise for the bureaus charged with antitrust law enforcement.

The bottom line is that the effects of antitrust law enforcement are the same as those of ordinary economic regulation of prices and conditions of entry into specific industries, such as the commercial airlines; telecommunications; trucking, pipelines and other modes of ground transportation; offshore drilling; the production and distribution of electricity, cable television services; and, even more prosaically, local taxicabs and cosmetology, including hair braiding for African-American customers.

The economic analyses of the actual effects of such industry-specific regulatory regimes have shown their primary effects have been to limit consumers' choices and to raise the prices they are forced to pay. Because the antitrust laws are not directed to narrowly defined industries, but apply to all business more generally, the presumption has been that their enforcement is not subject to capture by the firms to which they can be applied. But our review of the activist antitrust policies adopted by the Obama administration during the president's first term suggests that special interests, especially the competitors of the companies targeted by antitrust complaints, can continue to expect to prevail. Moreover, the Obama administration's shift away from structural remedies and toward behavioral remedies means that in the future the U.S. Department of Justice and the Federal Trade Commission will look more like traditional regulatory agencies than they may want to.

A modest sea change in federal antitrust law enforcement policy seems to be under-

way at the beginning of President Obama's second term in the White House. The most noteworthy event was Jon Liebowitz's resignation as FTC chairman shortly after Inauguration Day in January 2013.

On the other hand, perhaps owing to the American economy's anemic recovery from the Great Recession, a perceptible shift toward structural remedies surfaced early in 2013. After having cleared Universal Music Group's acquisition of EMI Music in the fall of the previous year, <sup>151</sup> the U.S. Department of Justice challenged the merger proposed between Anheuser-Busch InBev and the Mexican company that owns the Corona brand of imported beer, <sup>152</sup> and is now opposing a proposed consolidation of American Airlines and U.S. Airways. <sup>153</sup>

Some additional evidence of a return to "bread-and-butter" antitrust surfaced recently when a U.S. District Court ordered a group of Chinese manufacturers to pay a fine of \$163.3 million after being found guilty of unlawful fixing of the price of vitamin C charged to U.S. food processors. 154

No matter what direction President Obama's antitrust law enforcers take over the next four years—whether emphasizing structural or behavioral remedies in the cases before them—it is abundantly clear that the antitrust laws are now, as in the past, being used to shape the organization of industry and to manage the competitive market process in ways that the administrators think would result in better outcomes than would materialize if left to play out without interference.

We remain skeptical of that conclusion.

### Notes

We benefitted from the comments on an earlier draft of our colleagues Randy Simmons, Michael Thomas, Roberta Herzberg, and Damon Cann, as well as those of the faculty members and students who participated in a spring 2012 economics department seminar at San José State University. We also thank Isaac Bennion for able research assistance and Hilary Shughart for her proofreader's eagle eye. As is customary, however, we accept full responsibility for any remaining errors.

Industry-specific regulatory regimes have been shown to limit consumers' choices and to raise the prices they are forced to pay.

- 1. Christine A. Varney, "Vigorous Antitrust Enforcement in this Challenging Era," remarks as prepared for the Center for American Progress (May 11, 2009).
- Ibid.
- 3. Ibid. Christine Varney's objections to the Bush Administration's report on Section 2 of the Sherman Act are summarized in her remarks to the Center for American Progress. See also, U.S. Department of Justice, Competition and Monopoly: Single-firm Conduct under Section 2 of the Sherman Act (Washington: September 2008), http://www.justice.gov/atr/public/reports/236681.pdf.
- 4. Ronan P Harty, "Federal Antitrust Enforcement Priorities under the Obama Administration," *Journal of European Competition Law & Practice* 1, no. 1 (2010): 55.
- 5. U.S. Department of Justice and Federal Trade Commission, *Horizontal Merger Guidelines* (Washington: U.S. Department of Justice and Federal Trade Commission, 2010).
- 6. U.S. Department of Justice, Antitrust Division, Antitrust Division Policy Guide to Merger Remedies (2011), http://www.justice.gov/atr/public/guidelines/272350.pdf. The DOJ's Policy Guide to Merger Remedies defines effective merger remedies as either blocking a transaction or "settling under terms that avoid or resolve a contested litigation while protecting consumer welfare."
- 7. Frank Easterbrook, "The Limits of Anti-trust," *Texas Law Review* 63, (1984): 1–40; William F. Shughart II, *The Organization of Industry*, 2nd ed. (Houston: Dame Publications, 1997).
- 8. Our use of the term "merger" includes joint ventures, whereby two or more firms plan to combine for limited times and purposes some business activity (e.g., research and development) under collective management, by creating a new entity to which each party contributes equity and then shares its operating revenues and expenses.
- 9. Harty, 58.
- 10. The Hart-Scott-Rodino Act's notification thresholds were raised in 2001, thereby reducing the number of premerger filings dramatically—by 60 percent or more.
- 11. United States v. Apple Inc. 12-cv-02826, http://www.justice.gov/atr/cases/f299200/299275.pdf.
- 12. Federal Register 77: 79 (April 24, 2012), 24530-24532.
- 13. U.S Department of Justice and Federal Trade

- Commission, Horizontal Merger Guidelines.
- 14. U.S. Department of Justice, Antitrust Division Policy Guide to Merger Remedies.
- 15. John E. Kwoka Jr. and Diana L. Moss, *Behavioral Merger Remedies: Evaluation and Implications for Antitrust Enforcement* (2011), http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=1959588); F. A. Hayek, *The Road to Serfdom* (Chicago: University of Chicago Press, 1944); and F. A. Hayek, "The Use of Knowledge in Society," *American Economic Review* 35, no. 4 (1945): 519–30.
- 16. In her May 2009 speech before the Center for American Progress, Assistant Attorney General Varney assigned some of the blame to President Bush's DOJ and FTC, going so far as to baldly claim that "inadequate antitrust oversight |had| contributed to the current economic conditions" (see note 1). For recent evidence showing that antitrust law enforcement has no detectable effects on the macroeconomy, see Robert W. Crandall and Clifford Winston, "Does Antitrust Policy Improve Consumer Welfare? Assessing the Evidence," Journal of Economic Perspectives 17, no. 4 (2003): 3–26; and Andrew T. Young and William F. Shughart II, "The Consequences of the US DOJ's Antitrust Activities: A Macroeconomic Perspective," Public Choice 142, no. 3-4 (2010): 409-22.
- 17. Herbert J. Hovenkamp, "The Obama Administration and Section 2 of the Sherman Act," *Boston University Law Review* 90, no. 4 (2010): 1613
- 18. "Second requests," that is, subpoenas, are issued under the Hart-Scott-Rodino Act when the federal agency responsible for reviewing a proposed merger concludes that additional information from the parties involved is needed fully to evaluate the transaction's competitive effects.
- 19. U.S. Department of Justice and Federal Trade Commission, *Horizontal Merger Guidelines*.
- 20. Jonathan B. Baker and Carl Shapiro, "Detecting and Reversing the Decline in Horizontal Merger Enforcement," *Antitrust* 22, no. 3 (Summer 2008): 29–35; and John D. Harkrider, "Antitrust Enforcement during the Bush Administration—An Economic Estimation," *Antitrust* 22, no. 3 (Summer 2008): 43–48.
- 21. Baker and Shapiro, 29.
- 22. Ibid., 30.
- 23. Ibid. The authors note that, "the shift [in merger law enforcement activity during President Bush's administration was] . . . much more pronounced at the DOJ than at the FTC."

- 24. Ibid., 32–33. In support of the evidence they set forth, the authors write, "not surprisingly, one of our survey respondents stated that he/she was advising, 'if you want to do a dicey [merger] deal, get it done before the [2008] election."
- 25. Harkrider, 43.
- 26. Timothy J. Muris, "Facts Trump Politics: The Complexities of Comparing Mergers Enforcement Over Time and Between Agencies," *Antitrust* 22, no. 3 (Summer 2008): 37–38.
- 27. Ibid., 37.
- 28. Ibid.
- 29. Ibid. For further details see: Richard S. Higgins, William F. Shughart II, and Robert D. Tollison, "Dual Enforcement of the Antitrust Laws," in *Public Choice and Regulation: A View from Inside the Federal Trade Commission*, ed. Robert J. Mackay, James C. Miller III, and Bruce Yandle (Stanford, CA: Hoover Institution Press, 1987): 154–80.
- 30. Muris calculates that, "during the last two administrations, the highest number of overlaps reported was 70.4 percent in 1996; the lowest was 49.2 percent in 2007. Overall, the Clinton administration's average was 68.3 percent, and the Bush average was 55.5 percent." See Muris, p. 38. These data imply that the apparent "decline" in antitrust enforcement during President Bush's administration can be explained, at least in part, by having fewer mergers to review for which competitive concerns could be raised on the basis of commonalities in the markets served by the companies proposing to combine. One must keep in mind, however, that the extent to which overlaps exist in the markets served by the parties to a proposed merger hinges on the definition of the market deemed relevant for antitrust analysis. The methodologies for defining relevant antitrust markets, in turn, are central to scholarly criticisms of the practice of antitrust law enforcement. See also: William F. Shughart II, Antitrust Policy and Interest-Group Politics (New York: Quorum, 1990); and Fred S. McChesney and William F. Shughart II, eds., The Causes and Consequences of Antitrust: The Public-Choice Perspective (Chicago: University of Chicago Press, 1995).
- 31. Muris, 37-38.
- 32. The information on merger law enforcement contained in Harkrider was crosschecked against the reports submitted every year to the U.S. Congress by the Antitrust Division of the Department of Justice and the Federal Trade Commission in compliance with the Hart-Scott-Rodino Act of 1976. See Federal Trade Commission and Department of Justice Antitrust Division, "Hart-Scott-

- Rodino Annual Report," (Fiscal years 1994–2012), http://www.ftc.gov/bc/anncompreports.shtm.
- 33. Muris calculates that market overlaps for merger partners were higher in Clinton's and Bush's first terms—68.3 percent versus 58.7 percent—"than in their second terms (Clinton, 60.9 percent; Bush, 51.3 percent)." See Muris, 38.
- 34. Thomas B. Leary, "The Essential Stability of Merger Policy in the United States," *Antitrust Law Journal* 70, no. 1 (2002): 105–42.
- 35. Fried Frank, FTC and DOJ Adopt Amendments to the HSR Form, Antitrust & Competition Law Alert No. 11-06-28, (2011), www.martindale.com/members/Article\_Atachment.aspx?od=122131&id=1311958&filename=asr-1311960.FTC.pdf.
- 36. Leary, 122. This mismatch between the calendar year and the federal fiscal year means that almost four full months of premerger notifications and agency reviews will have gone by before a new administration takes office on Inauguration Day.
- 37. We supply several examples of delayed merger reviews below. The Hart-Scott-Rodino Act specifies waiting periods of 30 days for initial decisions (15 days if a tender offer is made only in cash) and the same waiting periods at the next stage whenever the responsible federal agency requests additional information from the merger partners. However, the clock can be reset after the parties respond to a second request if the agency determines that the submission is incomplete. Such determinations of "unresponsiveness" to subpoenas demanding more information can, if deemed necessary, be repeated after every subsequent submission. Obviously, no time limits apply to challenges to mergers consummated in the past.
- 38. The general conclusions we draw below differ only in minor ways if we start each presidential term of office one year earlier, that is, 1993 for Clinton, 2001 for Bush, and 2009 for Obama.
- 39. As amended in 2010, the Hart-Scott-Rodino Act requires premerger notification filings to be submitted if the transaction affects interstate commerce and if, in addition, one or both of the following two conditions hold: (1) the annual sales or total assets of one of the firms involved are valued \$136.4 million or more and those of the other exceed \$13.6 million; or (2) the common stock of the acquiring firm is valued at \$272.8 million before the proposed merger and the postmerger value of the other would be at least \$68.2 million. The upshot is that a premerger notification is required if the acquiring firm would hold more than \$272.8 million in equities or assets if the merger were consummated. Although we ig-

nore many mind-numbing but possibly salient (to prospective merger partners) details here, it is worth noting that the 2010 amendment contains provisions that index the asset and share values spelled out above for inflation (unlike the original Hart-Scott-Rodino Act). The law also imposes nontrivial filing fees on the merger partners, tied to the size of the transaction and ranging from \$45,000 to \$280,000. For more information, see Federal Register 77 (18) (January 27, 2012): 4323–24.

- 40. Scholars who have studied merger law enforcement in practice conclude that the DOJ and FTC frequently oppose business consolidations that fall below the policy guidelines that were first announced in 1968. Rogowsky, for example, finds that 21 percent of the horizontal and vertical mergers challenged by the federal antitrust authorities after 1967 fell below the guidelines' market share standards. Relevant Markets in Antitrust, ed. Robert Rogowsky and Kenneth Elzinga (New York: Federal Legal Publications, 1984): 220–21. Moreover, none of those below-guidelines' cases could be explained by the special exceptions spelled out in the document that might otherwise justify governmental challenges. Harty contends that conclusion still holds.
- 41. As Harty also observes, some premerger notifications are submitted "voluntarily," perhaps because the merger partners want to have dotted all of their *is* and crossed all of their *ts* in order to avoid legal liability later on. As we shall see below, however, voluntary Hart-Scott-Rodino submissions verify the old saw that one should be careful about what one wishes for.
- 42. Removing a "maverick" from the market-place by acquiring a particularly aggressive competitor is one strategy for acquiring and then exercising market power, as highlighted by Baker and Shapiro. Also see §2.1.5 of the U.S. Department of Justice and the Federal Trade Commission *Horizontal Merger Guidelines*. Other types of evidence of adverse competitive effects from mergers identified in the *Guidelines* include large "market shares and concentration in a relevant market" and "substantial head-to-head competition" between merger partners prior to their proposed consolidation.
- 43. Prior to 1950, mergers involving asset acquisitions could be challenged under the Sherman Act. They rarely were, however.
- 44. United States v. Philadelphia National Bank, 374 U.S. 321 (1963).
- 45. United States v. Von's Grocery Co., 384 U.S. 270 (1966).
- 46. United States v. Continental Can Co., 378 U.S.

- 441 (1964). The Court handed down its ruling after concluding from the evidence presented that metal cans and glass jars, but not plastic containers, properly could be included in the same relevant product market. William F. Shughart II, *The Organization of Industry*, 2nd ed. (Houston, TX: Dame Publications, 1997): 674.
- 47. Brown Shoe Co. v. United States, 370 U.S. 294 (1962). That ruling established "indicia" for defining relevant economic markets and, possibly, submarkets thereof. Hovenkamp writes that the antitrust concept of submarkets—now more commonly called "market segments"—is a legal red herring: "the term 'submarket' states only that the smaller grouping of sales is in fact a relevant market." Herbert Hovenkamp, Antitrust, 3rd. ed. (St. Paul, MN: Thompson West Publishing Company, 1999): 88. Brown Shoe previously had acquired two other retailers, the Wohl and Regal shoe companies (see Shughart 239–40).
- 48. See John L. Peterman "The Brown Shoe Case," *Journal of Law and Economics* 18, no. 1 (1975), 81–146, for an exhaustive (and to date uncontested) analysis of *Brown Shoe*, including evidence that many of the 270 submarkets the DOJ identified as areas of competitive concern were in fact based on erroneous sales data and, hence, overestimated market concentration at the retail level.
- 49. Ford Motor Co. v. United States, 405 U.S. 562 (1972).
- 50. United States v. United Fruit Corp. CCH 1958 Trade Cases, 68,941.
- 51. United States v. E. I. du Pont de Nemours & Co., 366 U.S. 316 (1961).
- 52. Standard Oil of New Jersey, Inc. v. United States, 221 U.S. 1 (1911). In that famous (or infamous) ruling, the Supreme Court refused to condemn all restraints of trade, but only those that it deemed to be "unreasonable." For recent analyses of the case, see Michael Reksulak and William F. Shughart II, "Of Rebates and Drawbacks: The Standard Oil (N.J.) Company and the Railroads," Review of Industrial Organization 38, no. 3 (2011): 267–83; and Michael Reksulak and William F. Shughart II, "Tarring the Trust: The Political Economy of Standard Oil," Southern California Law Review 85, no. 23 (2012): 23–32.
- 53. *United States v. AT&T Co.*, 552 F. Supp. 131 (D.D.C. 1982) (Modification of Final Judgment).
- 54. Harty, 57-58.
- 55. *United States v. Lubrizol and Lockhart*, FTC File No. 071 0230, Docket No. C-4254 (2009), http://www.ftc.gov/os/caselist/0710230/index.shtm.

- 56. Harty, 58.
- 57. CSL Ltd., "CSL and Talecris Biotherapeutics Agree to Terminate Merger Agreement," press release, September 6, 2009, http://www.csl.com.au/s1/cs/auhq/1196562649899/news/1242703994967/prdetail.htm.
- 58. Ibid.
- 59. In that vein, it is important to emphasize that the law on mergers, at least since 1976, is forward-looking, frequently requiring the antitrust authorities to predict the possible competitive effects of proposed business consolidations ahead of time.
- 60. See: Kenneth G. Elzinga, "The Antimerger Law: Pyrrhic Victories," *Journal of Law and Economics* 12, no. 1 (April 1969): 43–78; Robert A. Rogowsky, "The Economic Effectiveness of Section 7 Relief," *Antitrust Bulletin* 31, no. 1 (Spring 1986): 187–233; Robert A. Rogowsky, "The Pyrrhic Victories of Section 7: A Political Economy Approach," in *Public Choice & Regulation: A View from Inside the Federal Trade Commission*, ed. Robert J. Mackay, James C. Miller III, and Bruce Yandle (San Francisco: Hoover Institution Press, 1987), pp. 220–239.
- 61. Federal Trade Commission, *A Study of the Commission's Divestiture Process* (Washington: Bureau of Competition, Federal Trade Commission, 2010), http://www.ftc.gov/os/1999/08/divestiture.pdf.
- 62. Elzinga.
- 63. Rogowsky, "The Economic Effectiveness of Section 7 Relief" and "The Pyrrhic Victories of Section 7: A Political Economy Approach."
- 64. Federal Trade Commission, A Study of the Commission's Divestiture Process, p. 9.
- 65. Easterbrook.
- 66. As noted by Kwoka and Moss, "behavioral remedies require ongoing oversight, monitoring, and compliance enforcement on the part of the government and a parallel compliance organization within the merged company." See Kwoka and Moss, p. 22.
- 67. Suzanne Weaver, The Decision to Prosecute: Organization and Public Policy in the Antitrust Division (Cambridge, MA: MIT Press, 1977); and Robert A. Katzmann, Regulatory Bureaucracy: The Federal Trade Commission and Antitrust Policy (Cambridge, MA: MIT Press, 1980).
- 68. U.S. Department of Justice, Antitrust Division,

- Antitrust Division Policy Guide to Merger Remedies, http://www.justice.gov/atr/public/guidelines/272350.pdf, 2011.
- 69. Kwoka and Moss, pp. 2-4.
- 70. The United States was joined as plaintiff by the attorneys general of the following 19 states: Arizona, Arkansas, California, Florida, Illinois, Iowa, Louisiana, Massachusetts, Nebraska, Nevada, New Jersey, Ohio, Oregon, Pennsylvania, Rhode Island, Tennessee, Texas, Wisconsin, and Washington.
- 71. For a discussion of the allocation of risk between exhibitors and motion picture producers, see Arthur De Vany and W. David Walls, "Price Dynamics in a Network of Power Markets," Paper 97-98-14, California Irvine–School of Social Sciences (1997), as well as Shughart.
- 72. Christine A. Varney, *The Ticketmaster/Live Nation Merger Review and Consent Decree in Perspective* (Washington: Department of Justice, 2009), http://www.justice.gov/atr/public/speeches/263320.htm.
- 73. Chris V. Nicholson, "British Regulator Supports Live Nation-Ticketmaster Merger," *New York Times*, December 22, 2009.
- 74. Also see "Live Nation, Ticketmaster Working out Deal with US," Reuters, October 16, 2009.
- 75. U.S. et al. v. Ticketmaster Entertainment, Inc. and Live Nation, Inc., Final Judgement, 1:10-cv-00139 (D.D.C., January 25, 2010), p. 6.
- 76. United States v. Comcast Corp., General Electric, and NBC Universal, Inc., Case No. 1:11-c-00106, Competitive Impact Statement (D.D.C., January 18, 2011).
- 77. Because the Federal Communications Commission is charged with responsibility for regulating the nation's radio and television broadcasting industry, the DOJ and FCC coordinated their separate investigations of the proposed joint venture as well as the crafting of remedies. See Kwoka and Moss, p. 16.
- 78. United States v. Comcast Corp., General Electric, and NBC Universal, Inc., Case No. 1:11-c-00106, Competitive Impact Statement (D.D.C., January 18, 2011).
- 79. It turns out, however, that, in the recent legal battles between Apple, Microsoft, Facebook, Google, and the U.S. antitrust authorities, access to "content—books, music, movies, TV shows, newspapers, and magazines"—is a sideshow, generating less than half of those companies' revenues. "The real fight is elsewhere,", namely,

- in the realm of platforms that provide access to such content. See Ken Auletta, "Paper Trail: Did Publishers and Apple Collude against Amazon?" *New Yorker*, June 25, 2012, p. 41.
- 80. United States v. Comcast Corp., General Electric, and NBC Universal, Inc., Case No. 1:11-c-00106, Final Judgment (D.D.C., September 1, 2011).
- 81. Approval of the government's proposed final judgment was delayed by the presiding judge owing to concerns that the DOJ's decisions to accept or deny applications for binding arbitration could not be appealed and might not be enforceable. The judge eventually resolved those concerns by requiring the parties to report for a period of two years their experiences with the arbitration request process. See Kwoka and Moss, p. 18.
- 82. Google Inc., "Google and ITA Sign Acquisition Agreement," Google Inc. Investor Relations (2010), http://investor.google.com/releases/2010/0701.html.
- 83. Brad Stone, "Regulators Prepare to Dig into Google-ITA Deal," *New York Times*, July 7, 2010, http://dealbook.nytimes.com/2010/07/07/reg ulators-prepare-to-dig-into-google-ita-deal, 2010; *U.S. v. Google, Inc. and ITA Software, Inc.*, Complaint, Case No. 1:11-cv-00688 (D.D.C., April 8, 2011).
- 84. *U.S. v. Google, Inc. and ITA Software, Inc.*, Competitive Impact Statement, Case No. 1:11-cv-00688 (D.D.C., April 8, 2011).
- 85. *U.S. v. Google Inc. and ITA Software Inc.*, Final Judgment, Case No. 1:11-cv-00688 (D.D.C., October 5, 2011).
- 86. U.S. v. Apple, Inc., Hatchette Book Group, Inc., Harpercollins Publishers L.L.C., Verlagsgruppe George von Holtzbrinck GmBH, Holtzbrinck Publishers, LLC d/b/a Macmillan, The Penguin Group, a division of Pearson PLC, Penguin Group (USA), Inc., and Simon & Schuster, Inc., Complaint, Case No. 1:12-cv-02826 (D.C.S.D.N.Y., April 11, 2012).
- 87. Ken Auletta, "Paper Trail: Did Publishers and Apple Collude against Amazon?" *New Yorker*, June 25, 2012, pp. 36–41. According to its website (www.booksurge.com/info/About\_Us), BookSurge is an "inventory-free book publishing, printing, fulfillment and distribution" service.
- 88. Ibid.
- 89. Ibid., 38.
- 90. Apparently happy with the wholesale model, which was more lucrative for publishers if not for retailers, Random House was the only one of the

- six major U.S. book publishers that refused to participate. See Auletta, p. 37.
- 91. Ibid, 36-37.
- 92. Ibid., 37.
- 93. Ibid., 36.
- 94. Ibid., 38.
- 95. United States v. Apple, Inc. et al., Final Judgment as to Defendants Hachette, HarperCollins, and Simon & Schuster; United States v. Apple, Inc. et al., Final Judgment as to Defendants The Penguin Group; United States v. Apple, Inc. et al., Final Judgment as to Defendants Verlagsgruppe George von Holzbrinck GmbH & Holtzbrinck Publishers, LLC D/B/A Macmillan, 1:12-cv-02826-DLC, http://www.justice.gov/atr/cases/applebooks.html#macmillan.
- 96. Ibid.
- 97. See, for example: William F. Shughart II, Antitrust Policy and Interest-Group Politics (New York: Quorum, 1990); Fred S. McChesney and William F. Shughart II, eds., The Causes and Consequences of Antitrust: The Public-Choice Perspective (Chicago: University of Chicago Press), 1995); Fred S. McChesney, Michael Reksulak, and William F. Shughart II, "Competition Policy in Public Choice Perspective," in The Oxford Handbook on International Antitrust Economics, ed. Roger D. Blair and D. Daniel Sokol (Oxford and New York: Oxford University Press, forthcoming 2014).
- 98. Hovenkamp, "The Obama Administration and Section 2 of the Sherman Act," p. 1617.
- 99. In an antitrust case brought by private plaintiffs who have standing to sue under Sherman Act §1, the parties recently negotiated a settlement, pending approval by a federal court in Brooklyn, New York, with the operators of the MasterCard and Visa credit card networks, in which they and the major commercial banks that issue those cards, including JPMorgan Chase and Bank of America, agreed to settle the lawsuit in return for paying a fine of \$5.2 billion for unlawful price fixing and a promise to for an eightmonth moratorium on the fees assessed on retailers for processing credit card transactions (a reprieve estimated to be worth \$1.2 billion). The lawsuit, brought on behalf of roughly seven million merchants, was initiated in 2005. Retailers who accept MasterCard and Visa as a means of payment are now caught in a Catch-22. If they pass through to consumers some or all of the costs they pay for credit card "swipes" (of about 2.5 percent to 3 percent of the value of each retail purchase) they obviously will lose sales. As Dave Ramsey has often remarked, people tend to spend

more when they pay by credit card instead of by cash or check. If retailers instead offer discounts for payments in cash, many consumers will have to carry larger money balances while shopping. And the settlement may help orchestrate a retail cartel. One merchant was quoted as saying that "he might add a surcharge for plastic if his competitors adopt the practice." More revealingly, a spokesperson for the American Bankers Association said, "Let's be clear—retailers, not consumers, benefit from" the proposed settlement. For more details, see Robin Sidel and Andrew R. Johnson, "Card Giants to Pay \$6 Billion," Wall Street Journal, July 14, 2012, http://online.wsj.com/article/SB10 0014240527023039195045775252842730067 06.html?mod=WSJ\_hps\_LEFTTopStories; and Jessica Silver-Greenberg, "MasterCard and Visa will Pay Billions to Settle Antitrust Suit," New York Times, July 13, 2012, http://www.nytimes. com/2012/07/14/business/mastercard-and-visasettle-antitrust-suit.html?ref=business). This is just one of many examples in which private interests evidently are at play in antitrust law enforcement processes.

#### 100. Kwoka and Moss.

101. U.S. v. Ticketmaster Entertainment, Inc. and Live Nation, Inc., Competitive Impact Statement, Case No. 1:10-cv-00139 (D.D.C., January 25, 2010), p. 17. Recall that the consent order compelled the merger partners to divest their venue-based ticketing division, Paciolan, to Comcast-Spectator.

102. Ironically, or perhaps not, "AEG has been slow to undertake ticketing" and "has bypassed Host in favor of the start-up Outbox in developing ticketing services." See Kwoka and Moss, pp. 13–15.

103. Ibid.

104. U.S. v. Google, Inc. and ITA Software, Inc., Competitive Impact Statement, Case No. 1:11-cv-00688 (D.D.C., April 8, 2011), p. 13.

105. Kwoka and Moss, p. 19.

106. Thomas F. Cargill, "Glass-Steagall Is Still Needed," *Challenge* 31, no. 6 (1988): 26–30.

107. Ricki Helfer, "Oral Statement of Ricki Helfer, Chairman, Federal Deposit Insurance Corporation, before the Subcommittee on Capital Markets, Securities and Government Sponsored Enterprises, Committee on Banking and Financial Services, U.S. House of Representatives," March 5, 1997, http://www.fdic.gov/news/news/speeches/archives/1997/sp05mar97b.html.

108. Adam Smith, An Inquiry into the Nature and the Causes of the Wealth of Nations, Volume 1 (Indianapo-

lis: Liberty Fund, [1776] 1976), 145.

109. Ibid.

110. F. A. Hayek, "The Use of Knowledge in Society." *American Economic Review* 35, no. 4 (1945): 519–30.

111. Joseph A. Schumpeter, Capitalism, Socialism, and Democracy (New York: Routledge, [1943] 1996).

112. U.S. v. Google Inc. and ITA Software Inc., Final Judgment, Case No. 1:11-cv-00688 (D.D.C., October 5, 2011).

113. "Economically equivalent terms" is a phrase of art in the realm of the economic regulation of specific industries, such as telecommunications. The idea is to prevent the owner of an "essential facility"-a switch required for transferring long-distance calls to local telephone customers, for example-from degrading the priorities assigned to, or the qualities of transmissions received from, the users of rival long-distance telephone services as well as from charging differentially higher prices to them for access to the local switch. Ensuring such nondiscriminatory access (i.e., preventing the foreclosure of competitors) is a nightmare for specialized regulatory agencies. It promises to be even more frightening for nonspecialist antitrust law enforcers.

114. *U.S. v. Comcast Corp.*, Memorandum Order, Case No. 1:11-cv-00106 (D.D.C., September 1, 2011), pp. 6–7.

115. "Retaliation" is defined in the Ticketmaster-Live Nation merger as "refusing to provide live entertainment events to a venue owner, or providing live entertainment events to a venue owner on less favorable terms, for the purpose of punishing or disciplining a venue owner because the venue owner has contracted for or is contemplating contracting with a company other than defendant for primary ticketing services. The term 'retaliate' does not mean pursuing a more advantageous deal with a competing venue owner" (quoted in Kwoka and Moss, p. 23). "A more advantageous" deal in an unfettered marketplace is one that either reduces the deal-maker's costs or raises consumers' willingness to pay, either one of which is pro-competitive.

116. U.S. Department of Justice and Federal Trade Commission, *Horizontal Merger Guidelines* (Washington: U.S. Department of Justice and Federal Trade Commission, 2010); U.S. Department of Justice, Antitrust Division, *Antitrust Division Policy Guide to Merger Remedies*, http://www.justice.gov/atr/public/guidelines/272350.pdf, 2011.

117. See U.S. DOJ press release, May 11, 2009,

http://www.justice.gov/atr/public/press\_releas es/2009/245710.pdf. The report was issued by the DOJ without the support of the FTC in September 2008; three FTC commissioners, including Jon Leibowitz (soon to become the FTC's chairman), wrote vigorous dissenting statements. See Hovenkamp, p. 1613.

118. Kovacic argues that Section 2 enforcement has been very limited since the 1970s as a result of a "double helix" of academic work from both the University of Chicago and Harvard University, which emphasizes the risk of over-enforcement and the potential pro-competitive effects of monopoly profits. Hovenkamp notes that the Antitrust Division "brought only three, relatively minor Section 2 cases during" George W. Bush's two terms in the White House. Hence, he writes that "the Division's most prominent contribution on the issue of single-firm conduct was its Section 2 Report. . . . " See Federal Trade Commission, "Statement of Federal Trade Commission Chairman William E. Kovacic: Modern U.S. Competition Law and the Treatment of Dominant Firms: Comments on the Department of Justice and Federal Trade Commission Proceedings Relating to Section 2 of the Sherman Act," Federal Trade Commission, 2008, http://www.ftc.gov/os/2008/ 09/080908section2stmtkovacic.pdf; Hovenkamp, p. 1612.

- 119. American Antitrust Institute, Statement of Senator Barack Obama for the American Antitrust Institute (Washington: September 26th, 2007).
- 120. Christine A. Varney, "Vigorous Antitrust Enforcement in this Challenging Era," *Center for American Progress*, May 11, 2009.
- 121. Verizon Communications, Inc. v. Law Offices of Curtis V. Trinko, Brief for the United States and the Federal Trade Commission as Amici Curiae Supporting Petitioner, No. 02-682 (2004).
- 122. U.S. Department of Justice, Antitrust Division, Competition and Monopoly: Single-Firm Conduct Under Section 2 of the Sherman Act (Washington: 2008), http://www.justice.gov/atr/public/reports/236681.pdf.
- 123. Many of the items on the list also could be (and had been) challenged as illegal under various provisions of the Clayton Act, as well as under §5 of the FTC Act.
- 124. Federal Trade Commission, Statement of Federal Trade Commission Chairman William E. Kovacic: Modern U.S. Competition Law and the Treatment of Dominant Firms: Comments on the Department of Justice and Federal Trade Commission Proceedings Relating to Section 2 of the Sherman Act (Washington: Federal Trade Commission, 2008), http://www.ftc.gov/os

/2008/09/080908section2stmtkovacic.pdf.

125. Federal Trade Commission, Statement of Commissioners Harbour, Leibowitz, and Rosch on the Issuance of the Section 2 Report by the Department of Justice (Washington: Federal Trade Commission, 2008), http://www.ftc.gov/os/2008/09/080 908section2stmt.pdf.

126. Edwin J. Meese, "Section 2 Enforcement and the Great Recession: Why Less (Enforcement) Might Mean More (GDP)," *Fordham Law Review* 80, no. 4 (2012): 1644.

127. Hovenkamp, "The Obama Administration and Section 2 of the Sherman Act," p. 1613.

128. Ibid.

129. See Varney for a description of the review and revision process.

130. Carl Shapiro, "The 2010 Horizontal Merger Guidelines: From Hedgehog to Fox in Forty Years," *Antitrust Law Journal* 77 (2011): 701–59.

131. Isaiah Berlin, *The Hedgehog and the Fox: An Essay on Tolstoy's View of History* (New York: Simon and Schuster, 1953).

132. Shapiro, p. 704.

133. See, for example, Philip E. Tetlock, *Expert Political Judgment* (Princeton: Princeton University Press, 2005), p. 2, who writes, "If we want realistic odds on what will happen next, coupled to a willingness to admit mistakes, we are better off turning to experts who embody the intellectual traits of Isaiah Berlin's prototypical fox—those who 'know many little things,' drawn from an eclectic array of traditions, and accept ambiguity and contradiction as inevitable features of life—than we are turning to Berlin's hedgehogs—those who 'know one big thing,' toil devotedly within one tradition, and reach for formulaic solutions to ill-defined problems."

134. Berlin.

135. Robert Willig, "Unilateral Competitive Effects of Mergers: Upward Pricing Pressure, Product Quality, and other Extensions," *Review of Industrial Organization* 39 (2011): 36.

136. Ibid.

137. James A. Keyte and Kenneth B. Schwartz, "'Tally-Ho!': UPP and the 2010 Horizontal Merger Guidelines," *Antitrust Law Journal* 77, no. 2 (2011): 649.

138. John E. Lopatka, "Market Definition?" Re-

view of Industrial Organization 39, no. 1-2 (2011): 69-93.

139. Ibid., 91.

- 140. Keith N. Hylton, "Brown Shoe versus the Horizontal Merger Guidelines," *Review of Industrial Organization* 39, nos. 1–2 (2011): 95–106.
- 141. U.S. Department of Justice, Antitrust Division, Antitrust Division Policy Guide to Merger Remedies.
- 142. See Kwoka and Moss for a more detailed discussion of the changes in the 2011 Remedies Guide.

143. Ibid.

- 144. Richard Posner, Antitrust Law: An Economic Perspective (Chicago: University of Chicago Press, 1976), 212.
- 145. Higgins et al., "Dual Enforcement of the Antitrust Laws," pp. 154-80.
- 146. McChesney, Reksulak, and Shughart (Forthcoming, 2014).
- 147. Virginia Postrel, The Future and Its Enemies: The Growing Conflict over Creativity, Enterprise, and Progress (New York: Simon & Schuster, 1998), 207.

148. Ibid., 208.

- 149. David Streitfeld and Edward Wyatt, "U.S. Escalates Google Case by Hiring Noted Outside Lawyer," *New York Times*, April 26, 2012, http://www.nytimes.com/2012/04/27/technology/google-antitrust-inquiry-advances.html.
- 150. Paul Geitner, "E.U. Seeking Global Settlement in Case against Google," *New York Times*, July 25, 2012, http://www.nytimes.com/2012/07/26/technology/eu-seeking-global-remedy-in-complaint-against-google.html.
- 151. Ben Sisario, "U.S. and European Regulators Approve Universal's Purchase of EMI," *New York Times*, September 21, 2012.
- 152. Brent Kendall and Valerie Bauerlein, "U.S. Sues to Block Big Beer Merger," Wall Street Journal, January 31, 2013; Brent Kendall, "US Fights AB Inbev with Tested Game Plan," Wall Street Journal, February 3, 2013; Brent Kendall; "Antitrust: Coming to a Court Near You," Wall Street Journal, February 4, 2013; and "America's Beer Duopoly," New York Times, February 9, 2013.
- 153. "American Airlines Bulks Up," New York Times, February 14, 2013.
- 154. David Barboza, "U.S. Court Fines Chinese Vitamin C Makers," *New York Times*, March 13, 2013.

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