Draft, January 19, 2016

Determinants of Antitrust Enforcement in the European Union: An Empirical Analysis

Anu Bradford and Robert J. Jackson, Jr.[1]

PRELIMINARY AND INCOMPLETE DRAFT. PLEASE DO NOT CITE OR CIRCULATE.
COMMENTS WELCOME!

Introduction

The European Commission's willingness to shape global M&A activity though its merger control review power has been a subject of controversy among lawmakers and commentators for the past two decades. That is true, in part, because the Commission has often used its power to intervene in high-profile mergers and acquisitions involving foreign companies. The Commission's 2001 decision to ban the $42 billion proposed acquisition involving two US companies, General Electric and Honeywell, is perhaps the most famous example of a case where the EU overrides the decision by US authorities. But the GE/Honeywell decision does not stand alone. The Commission has intervened in other proposed mergers involving well-known American firms, including Boeing/McDonnell Douglas, MCI WorldCom/Sprint, EMI/Time Warner, UPS/TNT express and GE/Alstom.

---

[1] Henry L. Moses Professor of Law and International Organization and Professor of Law, Columbia Law School. We are grateful to the European Commission for sharing data on its merger decisions and trade statistics. We also benefited from helpful discussions with Jeffrey Gordon, Amit Khandelwal, and Joshua Mitts, from excellent research assistance by Julian Beach, Kevin Hennecken, Abraham Lowenstein, Gregory Swartz, Eliana Torrado Franco, and Claudie Tirefort, and from support for Ira M. Millstein Center at Columbia Law School.

The Commission has also vigorously pursued large US technology giants—such as Microsoft, Intel and, most recently, Qualcomm and Google—accusing these companies of abusing their dominant position to the detriment of European consumers.

These high-profile cases against foreign companies have earned the EU a reputation of the world's "antitrust cop" but also aroused suspicions of its motivations. Critics portray the Commission as a protectionist regulator that has converted its competition authority into a powerful tool for industrial policy.[2] The Commission is accused of deliberately targeting US technology giants and aggressively pursuing foreign bidders while facilitating the creation of European national champions. Fears that the EU is deploying its antitrust policy as a tool for economic nationalism often rest on a few famous anecdotes. Yet its decision-making has not yet been subjected to the kind of systematic empirical analysis that could test those intuitions.

In this Article, we introduce a unique dataset that allows us, for the first time, to systematically examine the determinants of the Commission's use of its authority. The data include information on all of the mergers reported to the Commission between 1990 and 2014—more than 3,500 proposed transactions—as well as detail on industry, transaction

[2] Tom Fairless, *France Feeds New European Economic Nationalism: Experts See Anti-American Sentiment in Mood Swing*, WSJ (June 27, 2014); Tom Fairless and Don Clark, *EU Slaps Qualcomm With Antitrust Charges*, WSJ (Dec 8, 2015); Tom Fairless, *EU Displaces U.S. as Top Antitrust Cop*, WSJ (September 3, 2015); Joe Nocera, *Europe's Google Problem*, NYT (April 28, 2015); Michael Orey, *M&A: Behind the Heat on Global Deals*, BusinessWeek (March 25, 2009); *Interview with U.S. Senator Herb Kohl [D-WI], Chairman, Antitrust Subcommittee*, SPG Antitrust (2007); *European Takeovers: To the Barricades*, The Economist (Mar 2, 2006); Jeff Compo, *U.S. Senators Warn EU Against Protectionism When Reviewing Mergers*, International Securities Outlook Online Archive (2000).

value, and nationality associated with each transaction.[3] The dataset also includes, for each transaction, variables describing whether, and to what extent, the Commission intervened. These data allow us to examine systematically several prominent intuitions about the operation of the Commission. The data also allow us to consider the extent to which the Commission has been responsive to the courts' oversight of its use of its considerable power.

Given the extent of the Commission's authority, the stakes in this debate are high; in Europe alone, the value of mergers in acquisitions in 2014 was some $901 billion.[4] While the Commission does not investigate every transaction, it does investigate every significant transaction that has an effect on the European market. In 2013 alone, for example, the Commission examined 276 mergers, 37% percent of which involved at least one foreign company. Only rarely, if ever, would a significant global M&A deal escape the EU's regulatory review. This makes the EU an important gatekeeper with an unparalleled ability to shape global M&A activity with its regulatory review.

Our study offers three principal, albeit preliminary, findings regarding the determinants of the Commission's use of its authority. First, we find little evidence that the Commission has systematically used its authority to intervene more frequently or more extensively in transactions involving a foreign firm's acquisition of an EU-based firm, or transactions

[3] As explained below, for simplicity in this preliminary draft we consider only bilateral and trilateral mergers reported to the Commission during this period. In future work we plan to examine mergers reported to the Commission by more than three parties.
[4] *See* http://www.statista.com/statistics/408938/value-of-european-merger-and-acquisition-deals/.

involving a firm based in the United States.[5] Second, we find preliminary support for the hypothesis that a Commission challenge is more likely where all of the parties to a transaction are headquartered in the EU—and are headquartered in the *same* EU member nation. Finally, we provide preliminary causal evidence that, following a series of high-profile defeats in the European courts in 2002, the Commission intervenes less frequently, and less extensively, than it did prior to those developments.

The Article proceeds as follows. We first describe the legal and institutional background of Commission merger review. We then examine potential theoretical determinants of the Commission's use of that authority as well as the (relatively scant) prior work on this question. Next we describe the principal hypotheses we test, our data, and our preliminary results. Finally, we briefly conclude by describing future work we intend to conduct in this area.

Legal and Institutional Background

The EU's merger regulation was adopted in December 1989 and entered into force in September 1990. Pursuant to that regulation, the EU's main executive body, the European Commission, reviews every merger that exceeds the revenue threshold set in the EU Treaty. Parties are obligated to notify their transaction to the Commission whenever the parties' combined annual worldwide revenue exceeds € 5 B (5.43B $) and when at least two of the

[5] As explained below, although there is a weak association between the presence of a US-based company and the Commission's response, that association loses significance once we introduce controls for the size of the transaction, which is significantly correlated with both the presence of US party and the likelihood and magnitude of a Commission intervention.

parties' annual EU-wide revenue exceeds € 250 M (271.26 $) each.[6] Alternatively, the notification threshold is met if the merging parties' combined annual worldwide revenue exceeds € 2.5 B (2.71B $) and each of at least two of the parties' annual EU-wide revenue exceeds € 100 M (108.5 $).[7] If these thresholds are not met, national competition authorities in individual EU member states may still have the power to review the merger under national merger regulations. The Commission's jurisdiction is tied to the merger having an "effect" on EU market. Every time merger "affects trade between member states," the Commission has the power to intervene. The nationality of the merging party is irrelevant for the purpose of exercising jurisdiction.

The 2004 Merger Regulation directs the Commission to oppose the transaction in cases where "[the] concentration would significantly impede effective competition, in particular by the creation or strengthening of a dominant position, in the common market or in a substantial part of it." Such mergers are considered "incompatible with the common market" and hence prohibited. The old EU Merger Regulation, adopted in 1990, prohibited mergers that "create or strengthen a dominant position as a result of which effective competition would be significantly impeded".

After the merging parties notify their transaction to the Commission, the Commission has 25 days to reach a decision. After this initial "Phase I" review, the Commission can either clear the merger without subjecting it into any conditions or approve it subject to conditions. The conditions can be behavioral, such as an obligation to issue a license to a third party, or structural, such as an obligation that the combined firm divest part of its

[6] Conversion rate on January 13, 2016.
[7] Some additional conditions, not relevant to our analysis, must also be met.

operations. The Commission can also decide that more information is needed and open an in-depth investigation (Phase II). This Phase II investigation extends the review by additional 90 days and ends with an unconditional clearance, conditional clearance or, in the most extreme cases, a decision to prohibit the merger. At times, parties withdraw the merger after its notification either in Phase I or Phase II. This could be because the economic climate has changed or the rationale for the merger no longer exists. The parties may also decide to abandon the merger after learning about the Commission's objections to pre-empt a negative decision. As a matter of law, the merger-review process has a suspending effect: the parties are not permitted to close the transaction before obtaining a clearance from the Commission.

The Commission enjoys vast powers to review mergers. Unlike the U.S. Department of Justice, the EU Commission does not need to go to the court to enjoin a merger. Instead, it has the power to reach this decision without involving the European judiciary. Many critics have noted that this procedure essentially renders the Commission "the prosecutor, the jury and the judge" of merger review in Europe. However, the parties have the right to appeal the decision to the EU's General Court (GC) and, ultimately, the European Court of Justice (ECJ). But, as in the United States, the costs of judicial review for the parties are considerable: the merger is further delayed during the pendency of litigation.

Of the total of 5,602 mergers that were notified in the time period we consider,[8] only 50 distinct mergers were appealed to the GC,[9] in 68 different legal proceedings, and only nine

[8] As discussed earlier, at this stage we have only analyzed 3,535 of those transactions.
[9] This includes cases appealed to its predecessor court, The Court of First Instance.

made it all the way to the EU's highest court, the ECJ.[10] Of these cases before the GC, only 41 directly challenged the Commission's decision on the merits of the merger's compatibility with the common market (the "primary" cases),[11] with the remaining 27 pertaining to secondary issues of interim relief, divestiture, requests for release of documents, and other procedures. Of those primary challenges to a Commission decision, the court found 32 admissible, meaning the challenging party had standing.[12] Importantly, of the admissible cases, the Commission was wholly victorious in 25, while the Commission has been defeated in court only seven times. The Commission also lost three times to the applicant in the appellate proceedings before the ECJ.[13] Although the losses in court are hard-felt, these numbers suggest that in almost all cases—over 99% of mergers reviewed—the Commission has the final say. Yet, as we explain below, relatively little is known about the determinants of the Commission's action when reviewing those cases.

Theoretical Motivation and Prior Work

In this Part, we consider two potential theoretical explanations for Commission decisions and previous work related to those explanations. As explained below, our dataset permits

[10] *See* Competition Law Handbook, ECJ Decisions; CURIA webpage, *available at* http://curia.europa.eu/juris/recherche.jsf?cid=661979.

[11] In fact, among those 41 cases, four involved challenges to the Commission's decision *not* to render a decision on the merger, while in the remaining 37 the court ruled on the compatibility or incompatibility of the merger directly. For example, in the Gas Natural/Endesa hostile takeover, the Commission had found that the merger lacked community dimension and issued a full referral to the Spanish competition authorities pursuant to Article 9(3). See M.3986 Gas Natural/Endesa. The General Court upheld the Commission's decision. See Case T-417/05. In another decision that reached the appellate level at the Court of Justice, applicants were competitors in the Austrian media sector that sought to force the Commission to initiate proceedings where it had not even assigned a merger number or opened a preliminary investigation. See T-3/02 [2001], Verlagsgruppe News/Kurier-Magazine.

[12] As to the demographic of parties challenging the Commission's decision in court, 25 have been from competitor parties, 11 from the merging parties themselves challenging a decision to prohibit, and a handful from outside interests such as labor unions or independent industry groups.

[13] *See* C-68/94 [1998], SCPA v Commission; C-12/03 P [2004], Tetra Laval v Commission (I); C-413/06 P [2008], Independent Music Publishers and Labels Association v Commission.

us for the first time to evaluate these theories systematically across thousands of Commission decisions over more than two decades.

Protectionism

Governments' innate tendency to engage in trade protectionism is a well accepted feature of international political economy. Traditionally, governments have utilized tariffs as a way to shield their industries from foreign competition. However, subsequent rounds of trade liberalization have dramatically diminished the governments' ability to supply these traditional instruments of protection. Protectionism did not, however, end with the removal of tariffs. Instead, governments have increasingly turned to alternative ways to protect their domestic interests from foreign competition, including adopting various quantitative and qualitative non-tariff barriers. Today, protectionism is often obscured and hence harder to detect (Kono 2006). It is exercised through domestic laws and regulations that are either discriminatory in their nature or, while facially neutral, are enforced in a way that results in the suppression of foreign competition.

Critics have suggested that antitrust policy is increasingly used as a tool to offset the gains from trade liberalization (Guzman 1998; Horn and Levinsohn 2001; Iacobucci 1997-1998; Richardson 1999; Williams and Rodriguez 1995). Protectionist antitrust policy can manifest itself, for example, in the form of a biased enforcement strategy that applies different standards to domestic and foreign firms, with antitrust agencies applying more stringent standards to foreign-owned acquisitions than their own. And there are reasons to think that governments might seek to pursue protectionism through merger control. For

example, mergers are frequently associated with employment losses, leading labor unions and local politicians to oppose mergers with an adverse effect on domestic labor conditions. In addition, antitrust agencies might have reason to be responsive to public demand to protect domestic brands. Just as many Americans may be unwilling to contemplate Coca Cola as a foreign-owned company, Europeans might have strong opposition to allowing Siemens or Mercedes-Benz be associated with anything but European industrial might.

But there are reasons to be skeptical that the Commission would use its merger authority to achieve protectionist aims.[14] For one thing, a systematic bias against foreign acquirers would generate significant collateral damage, undermining the interests of many European firms as well as those of individual (European) shareholders and employees. For another, if the Commission attempted to pursue protectionist ends by way of antitrust enforcement—for example, by disproportionately targeting industries where the EU has a trade deficit—doing so would harm European firms that rely on production of imported goods as inputs or raw materials. Moreover, while the Commission's enforcement history hardly reveals an unyielding commitment to economic efficiency, targeting foreign firms has unlikely been the Commission's first priority (Bradford 2013). Across the range of regulatory policies, the Commission has followed its tendency to build and enhance the functioning of a single European market. Its outlook is first and foremost internal, dedicating its resources to eradicating any barriers to intra-community trade (Bradford 2013). Thus, rather than protecting the European market from non-European competitors,

[14] We acknowledge, of course, that the eradication of one source of protectionism may well lead governments to seek another way to protect labor markets from the effects of free trade (Bhagwati 2000). For the reasons given below, however, we are skeptical that the Commission's antitrust authority has been a meaningful mechanism for protectionism.

the Commission is more likely to use its merger policy either to facilitate pan-European mergers as a tool for greater integration and ensure that individual member states are not able to use their national merger regimes as a tool against mergers than span across several member states. These, together with other arguments against protectionism (e.g., Bradford (2007)) developed elsewhere, suggest to us that antitrust is a blunt instrument to deploy in service of protectionist goals.

Previous empirical work on these questions has generated mixed results. Bergman et al. (2005), relying on a sample of 96 mergers notified to the Commission between 1990 and 2002, consider various factors that can be expected to increase the probability of an adverse decision by the Commission. They find that the probability of Commission enforcement action increases with parties' market share, high entry barriers or the presence of a (post-merger) market structure that is conducive to collusion. In contrast, they find that political variables—like the nationality of the merging firms—have no significant effect on the probability of an adverse ruling. Similarly, Lindsay et al. (2003) examine 245 Commission merger decisions between 2000 and 2002, concluding that high market share, high entry barriers and the involvement of a large number of geographical markets increase the likelihood of a merger challenge—while, they suggest, the nationality of the bidder is statistically irrelevant.

Aktas et al (2004, 2007, 2012) have published a series of papers seeking to establish whether Commission merger review harbors a pro-EU bias. In their initial 2004 study, the authors found that investors anticipate higher costs to merging parties when the

Commission intervened in a case involving a foreign bidder. In a 2007 follow-up piece, the authors examined a sample of 290 Commission merger decisions between 1990 and 2000, finding that the Commission is more likely to oppose a merger when the bidder is a foreign national and when the merger adversely affects European competitors.[15] But in 2012, Aktas et al reevaluated their protectionism finding. Based on an updated sample, they found that, between 2001 and 2007, the Commission no longer evinced bias against foreign bidders. Atkas et al suggest, but do not show, that this change is due to the setback the Commission experienced when the General Court overturned three of its decisions in 2002.

By contrast, Ozden (2005) studies the 209 largest mergers between 1995 and 1999 involving at least one US firm. That study finds that more extensive merger review is more likely if, among other things, the target is European or all US firms in the industry have high market share. Ozden concludes that the higher likelihood of merger review in cases involving a European target reveals a political and economic tendency to protect European firms, and similarly argues that the tendency to review mergers where all US firms have high market share can be interpreted as a manifestation of industrial policy.[16]

[15] Importantly, the nationality of the bidder alone was not statistically significant in Aktas et al (2007). Instead, a bias in Commission decisionmaking materialized only when two conditions were met: first, when the bidder was a foreign firm, and second, when local competition is harmed (as measured by negative competitor returns at the time the merger is announced).

[16] Other empirical work on European merger control has focused on establishing the decisions' error rate (Duso et al 2003) or effectiveness (Duso et al. 2011). These studies are often structured as event studies, comparing stock market reactions at the time of the transaction's announcement date to their stock market reaction when the decision is reached. Other papers have considered the relative influence of various factors, such as market share or entry barriers, on Commission merger decisions (Plagnet 2005; Lindsay 2003). More recently, Clougherty and Seldeslachts (2012) have considered the effects of Commission policy on merger deterrence. Finally, other work, such as Dinc and Erel (2013), has focused on enforcement at the EU member-state level. That work often assumes the Commission to be the guardian of neutral competition policy, exercising its powers to rein in member-state tendencies to favor domestic companies in antitrust enforcement.

Judicial Oversight

In addition, the Commission's enforcement activity may respond to judicial review before the European courts. Judicial review of EU mergers is rare. Unlike in the US, where the Department of Justice and Federal Trade Commission must challenge a merger in the federal courts, the European Commission has the power to enjoin the merger without involving the judiciary. European courts only get involved if the Commission's decision is appealed, which happens in less than 1% of all transactions. Given the infrequency of judicial involvement, it may seem doubtful that Commission merger review would take place in the shadow of judicial review. Not only is such review rare, but the Commission rarely loses in court. Out of the over 3,500 mergers studied here, only ten cases ultimately resulted in a Commission defeat.

Although as noted above Aktas et al (2007) suggest that the Commission may be responsive to the courts, others have argued that the Commission is unlikely to be constrained by the fear of a defeat in court because of the typical career path of EU Competition Commissioners in Europe (Kovacic, Mavroidis and Neven 2014). After completing their term, Competition Commissioners typically do not pursue careers in antitrust law; instead, they generally return to domestic politics. Thus, Commissioners' standing among senior antitrust practitioners and enforcers after their term is not thought to be a principal concern among sitting Commissioners.

Nevertheless, the Commission's relationship to the European courts presents an unusual setting for empirical study. The reason is that, in 2002, the courts suddenly departed from their traditional practice of restrained review of EU merger control. In that year, the European courts annulled three Commission merger decisions within a span of five months (*Airtours/First Choice, Schneider/Legrand* and *Tetra Lava/Sidel*). The Commission had prohibited these transactions between 1999 and 2001. These consecutive reversals were viewed as a humiliating rebuke to the Commission, with the courts criticizing the Commission harshly, citing "errors, omissions and inconsistencies of utmost gravity" in its analysis.[17] The Commission responded to this criticism by reforming its approach to merger review, both in terms of substance and procedure.

Many commentators have speculated that Commission decision making has become more "economically sound" or "less stringent" after the 2002 reversals, noting that the Commission has prohibited fewer proposed transactions since 2002—and singling out a number of high profile mergers that the Commission failed to challenge (Levy 2009). Others have suggested that the Commission has become more cautious, extending the time it takes the review even straight forward mergers that do not adversely affect competition (Leddy et al 2010). We find it plausible, even highly likely, that the 2002 losses affected the Commission's decision-making. However, we are unaware of any previous rigorous empirical study measuring whether the Commission systematically adjusted its behavior in response to the rebuke and, if it did, the magnitude of this change.

[17] *See* para 404 of the Airtours judgment.

Data and Summary Statistics

As the above discussion indicates, empirical research on the drivers of the European Commission merger policy has been limited. While these studies shed some light on Commission's decision patterns and motivations, they have important shortcomings. Previous work, for example, has been limited to a small sample of cases, ranging from 90 to 295 decisions. Several of these studies also suffer from significant data and design limitations.[18]

In this Article, we introduce a novel dataset that includes *every* merger reported to the Commission between 1990—the first year of the current EU merger-control regime— and 2014.[19] We merge these data with separately obtained information on the transaction value to systematically evaluate the determinants of Commission merger-control outcomes.

The dataset is drawn from four different sources. We begin with Commission-provided[20] data on each transaction reported to the EU, including a transaction identifier, the parties to the transaction, the role of each party, and the industry (identified by NACE code[21]) for each proposed transaction. We then combine that information with data on trade, including

[18] For example, the previous work described above obtains many of its independent variables, such as the market share of the parties, from the Commission's own decisions. Because those decisions are likely written in a fashion designed to best support the Commission's outcomes, it is far from clear that such data are a reliable basis for determining the underlying drivers of Commission decisionmaking.
[19] We obtained the dataset from the Commission itself, and again express our deep gratitude to the Commission for sharing these data with us.
[20] Occasionally, the dataset provided to us by the Commission was missing observations or information; in those cases, we supplemented the data by hand.
[21] NACE, which refers to "**n**omenclature statistique des **a**ctivités économiques dans la **C**ommunauté **e**uropéenne," is the statistical classification of economy activity used by the European Union. It builds on the United Nations' industry classification, known as ISIC, and is comparable to the SIC codes used in the United States for similar purposes. In our dataset, we record NACE industry at the six-digit level but, for simplicity, conduct our analysis at the two-digit level.

Europe-wide exports and imports by industry.[22] Next, we merge those data with information on the value of each proposed transaction obtained by hand from the FactSet Financial Services Dataset.[23] These three datasets were merged by linking the available transaction values from FactSet to each Commission transaction (using the company names and transaction dates as identifiers), linking the relevant trade and other economic data to the merger data (using the industry classification codes as identifiers) and, finally, combining a dataset on all mergers that are part of our dataset and that were subject to an appeal before European courts.

We then constructed several additional variables of interest. First, we identify the nationality of each party to each transaction as reflected by the location of each firm's headquarters. Over the period we consider, firms from 97 countries have been involved in transactions reviewed by the Commission. We separately identify, and create dummy variables signifying, the presence of a U.S.-based party for each transaction; the dataset includes nearly 1,500 U.S. entities, many among the world's best-known brands.[24] We also identify and create dummy variables signifying whether a party's nationality is among the nations admitted to the EU at the time the Commission received notice of the transaction—that is, whether the party is an "EU party".

[22] EU-specific trade data were also provided to us by the Commission; we supplemented those data with information provided by the World Bank and the United Nations Industrial Development Organization.
[23] Unfortunately, because many of the transactions reported to the Commission over this time period involved private firms, we were able to locate transaction values for just one-third of our transactions through FactSet. In future work, however, we plan to supplement those data with information from more extensive searches.
[24] These companies range in size from the largest in the world by gross revenue to small regional firms, and ranging in industry from airlines (Delta) to television and film (LucasFilm and Warner Brothers) to the financial sector (Goldman Sachs).

We also attempt to identify the complexity of each reviewed merger by measuring the number of days that pass between the date on which the merger is notified to the Commission and the date on which the Commission renders its decision. For the average merger notified in our dataset, 38.6 days pass between the notification and decision (median: 34 days). To be sure, this *ex post* measure of merger complexity is imperfect; but, for the reasons described below, it offers a useful means of distinguishing between the types of mergers notified to the Commission over time.

In addition, to reflect the shifting composition of the Commission, we also collected data on various political variables, including the identity, the nationality as well as the political party affiliation of the Competition Commissioner that presided over each decision. We also gathered these same variables for the President of the Commission, together with recording the overall political leaning of the Commission as well as the European Parliament. Although we principally use these variables as controls in this paper, we intend to examine determinants of Commissioner decisions more closely in future work.

Finally, we construct two dependent variables that reflect the Commission's decision in each individual case. In response to a merger notification, the Commission can proceed with one of seven different (relevant) classes of outcomes.[25] The notified merger can be unconditionally cleared in Phase I, unconditionally cleared in Phase II (55 in total), conditionally cleared in Phase I (228 in total), conditionally cleared in Phase II (105 in

[25] Our dataset contains 17 different decision categories that we've consolidated across 7 categories that are relevant in the analysis. We have removed decision categories which inevitably lead to a duplicate entry in the dataset. This happens, for instance, when the Commission first considers the file incomplete but renders a subsequent decision based on a subsequent filing under the same case number.

total), prohibited (22 in total), or withdrawn at either Phase I or II (147 in total). Alternatively, in some instances, the decision consists of the Commission declaring the notification incomplete, referring (completely or partially) the merger to an EU member state or concluding that it does not have jurisdiction over the merger for some other reason (99 in total). If the notification is declared incomplete, the case typically enters the dataset again due to a subsequent notification by the same parties.

One simple, yet intuitively powerful, way to categorize the decision outcomes is to treat them in binary fashion as constituting or not constituting a "challenge." We consider any decision that imposes costs or delays to the parties as a challenge—whether in terms of a prohibition, conditional clearance or the decision to extend the review by opening an in-depth Phase II investigation. Also a withdrawal of a merger is often a sign of the parties anticipating a challenge and abandoning the merger for that reason. In other words, unless the Commission clears the merger unconditionally in Phase I or concludes that it will not review it at all (as the merger falls outside the scope of its jurisdiction), we treat the merger as "challenged."

In order to better capture the richness of the Commission's powers, however, we also create a numerical index, ranging from 1 through 6, assigning values to each class of merger decisions. These numbers correspond approximately to the deterrent effect of the Commission's activity on the progress of the merger—or, in other words, the more granular

degree of opposition between cleared and prohibited.[26] We assign as "1" mergers that are never analyzed on the merits, because the Commission determines that they fall beyond the scope of its authority. Category 2 includes mergers declared compatible in the first phase without conditions; these mergers were cleared entirely by the Commission. We identify as "3" cases in which the Commission took steps that disrupted the merging parties in a non-negligible way at Phase I. This encompasses clearances with conditions and obligations and mergers withdrawn at Phase I.[27] Category 4 includes cases that reach a Commission Phase II investigation that results in clearance at that stage without further conditions attached. This process takes more time and reflects a more significant obstacle to the completion of a successful merger than Category 3 decisions, especially given the importance of temporal factors in a competitive mergers and acquisitions space. Category 5 involves Commission Phase II investigations that *do* result in the imposition of additional conditions, or mergers withdrawn at that later stage. Lastly, we identify as "6" mergers that the Commission absolutely prohibits—the most severe legal action that the Commission can take.[28]

---

[26] We used "decision articles"—that is, references to the legal basis for the Commission's eventual decision—provided directly to us by the European Commission to place each outcome into the categories described here.

[27] The Withdrawn (N/1) decision article was placed within Category 3 to account for the balance between unconditionally cleared Phase I mergers in Category 2 and Phase II mergers in Category 4. If the parties withdrew the merger after or during a Phase I evaluation, the merger presumably faced a degree of opposition beyond an automatic clearance. A parties notifies the Commission, the Commission may apply conditions or otherwise cause a delay in Phase I, causing the parties abandon the merger. From a temporal and degree of opposition point of view, this places mergers withdrawn at Phase I as most comparable to mergers where the Commission applied Art. 6(1)(b) with conditions and obligations. It's possible that parties withdraw the merger for purely economic reasons unrelated to regulatory intervention, but the Decision Articles don't permit us to distinguish the cause of withdrawal. Similarly, as Category 4 refers to Phase II mergers, placing mergers Withdrawn in Phase I would be inappropriate. The same reasoning applies to why Withdrawn (N/2) mergers have been placed within Category 5.

[28] As suggested in the text, a number of the Merger Regulation's decisional articles are not included in our index. That is because these are generally decisions that precede the Commission's ultimate judgment. For example, where the Commission engages in what is known as an Article 9(3) refusal of referral, the Commission declines to refer the case to national authorities but then reaches a separate decision on the

We begin with summary statistics describing the frequency of mergers, including those involving foreign or U.S. parties, over time throughout our data. Figure 1 below describes those data from 1990 through 2014:

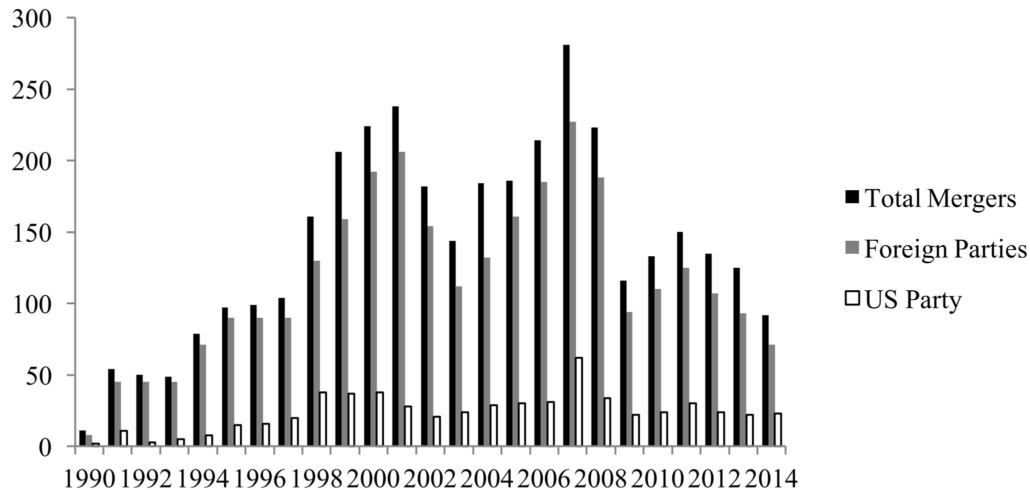

FIGURE 1. TOTAL BILATERAL AND TRILATERAL MERGERS REPORTED TO EUROPEAN COMMISSION, 1990-2014

As Figure 1 shows, the number of mergers reported to the Commission has fluctuated with the well-known merger waves of the late 20th and early 21st centuries. In general, the proportion of mergers including foreign- (that is, non-EU) or U.S.-headquartered parties has remained relatively steady over time.

We also observe the fraction of mergers that are delayed, modified or prohibited—or, to use the language of our constructed variable, "challenged"—by the Commission over time.

merits. Entries matched with decision articles like these are removed from our analysis to avoid double-counting and maintain accuracy and consistency in data collection.

Figure 2 below describes the proportion of mergers in our dataset, including mergers with foreign or U.S.-headquartered parties, that are challenged by the Commission:

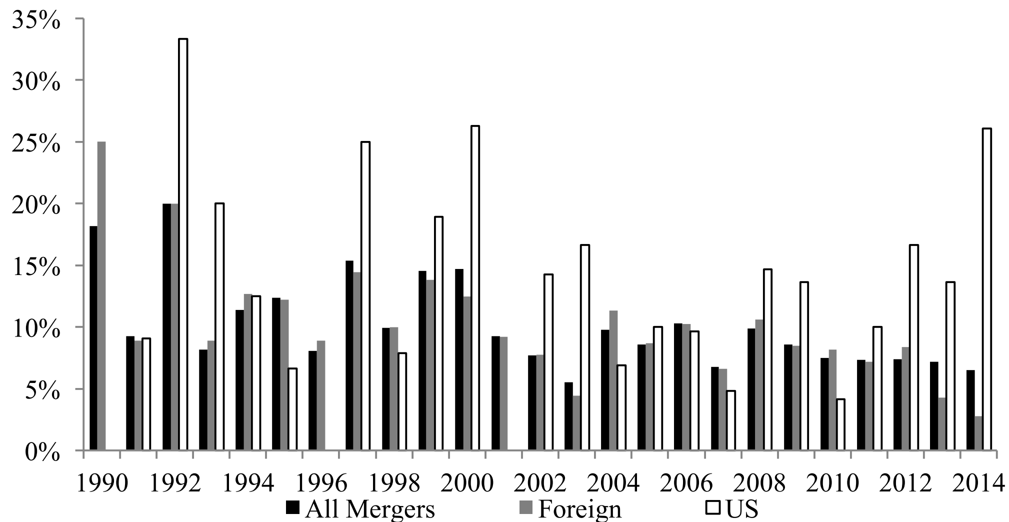

FIGURE 2. PERCENTAGE OF NOTIFIED BILATERAL AND TRILATERAL MERGERS CHALLENGED BY EUROPEAN COMMISSION, 1990-2014

Overall, 9.6% of the noticed mergers in our dataset are challenged in some way by the Commission. The challenge rate has generally fallen over time: while 9.2% of mergers were challenged in 2001, just 7.3% were challenged in 2011.

To our knowledge, ours is the first longitudinal dataset that links industry- and nationality-level data on EU merger control decisions to industry-level trade data and transaction value data. In the section that follows, we use these data to develop and test several hypotheses on the determinants of Commission decisionmaking.

Hypothesis Development and Preliminary Results

We begin by describing why we think the Commission's responses to merger notifications represent an especially appealing setting for empirical study of antitrust policy. Every

proposed transaction that exceeds the notification thresholds in the EU is subjected to review and included in our dataset. Unlike in the United States—in which the Department of Justice and Federal Trade Commission publish only decisions of mergers they oppose, the European Commission is required to publish all of its decisions, including a decision *not* to oppose the merger. Thus, unlike in the United States—where it is far more difficult to observe the characteristics of mergers that the authorities do not contest—the EU offers a complete universe of transactions and outcomes for analysis.

In addition, as described in further detail below, judicial review of Commission decisions in this area has led to an unusual research opportunity. After more than a decade of relatively lax judicial oversight of its work, the Commission suffered a series of surprising and high-profile defeats in the courts. Because those decisions likely surprised the Commission and market participants, we can examine how the Commission responded to the courts—and how that response was manifested in its merger-control policy.

Protectionism

Antitrust protectionism is difficult to test rigorously, which may explain the paucity of the attempts to date to do so. We acknowledge the complexities involved in distinguishing cases that were driven by protectionist or other motivations. What we can test, however, is whether the nationality of merging firms is a statistically significant predictor of whether the Commission is more likely to oppose the merger. Similarly, it is possible to test whether the Commission directs its enforcement activity disproportionately to industries where EU

firms are facing significant foreign competition. Specifically, we can test whether the Commission is more likely to oppose a merger in industries where the EU's trade balance with the rest of the world is negative—that is, where the EU faces a trade deficit.

If the Commission disproportionately targets foreign companies in enforcement actions, we would expect the outcomes to vary according to two variables: (1) the nationality of the parties to the proposed merger and (2) the role of the parties in the transaction. Specifically, the Commission would likely pursue aggressive enforcement in cases where foreign companies seek to acquire EU targets (foreign-EU mergers). These considerations lead to the following hypothesis:

> *Hypothesis 1*: Where a foreign bidder seeks to acquire an EU-based target company, there is a higher probability of the proposed merger being challenged; and, conditional on a merger challenge, where a foreign bidder seeks to acquire an EU-based target, there will be more extensive enforcement action.

We examine Hypothesis 1 in the multivariate regression analysis described in Table 1. We find little evidence to support the proposition that, where a non-EU acquirer proposes to acquire an EU-based firm, a challenge to the proposed merger is more likely or any challenge is likely to be more extensive. If anything, we see preliminary evidence that challenges are *less* likely in these cases. Those findings, however, are not sufficiently robust to provide systematic evidence.

As noted above, the Commission has routinely been criticized for being especially interventionist when a firm based in the United States is a party to the transaction. That claim, too, leads to a rather obvious hypothesis:

> *Hypothesis 2:* Where a firm based in the United States is a party to a proposed merger, there is a higher probability of the proposed merger being challenged; and, conditional on a merger challenge, where a U.S.-based firm is party to a proposed merger, there will be more extensive enforcement action.

We consider Hypothesis 2 in the multivariate regression analysis described in Table 2. As shown there, we find little evidence to support the claim that the presence of a U.S.-based party has a meaningful effect of the probability or magnitude of a Commission challenge. Again, if anything we see suggestive evidence of a *negative* relationship between the presence of a U.S.-based firm and our decisional outcome variables, although again this evidence is not robust to alternative specifications.

Finally, it may be that the Commission is especially likely to challenge a merger, or to intervene in more significant fashion, when two firms based in the European Union merge—and those two firms are based in the *same member nation.* The reason is that many view the Commission's mandate as encouraging further integration and hence Union-wide trade. This tendency would lead the Commission to view mergers confined to a single European nation less favorably than mergers spanning across two or more member states. That argument leads to our third hypothesis:

Hypothesis 3: Where the parties to a proposed merger are both headquartered in the European Union, and are headquartered in the same member state, the Commission is more likely to challenge the proposed transaction.

We consider Hypothesis 3 in the multivariate regression analysis described in Table 3. As that Table shows, we identify preliminary evidence supporting this hypothesis: the probability of a challenge is economically and statistically significantly more likely for the transactions in our dataset involving firms from the same EU member state, and that result is robust to quarterly and industry fixed effects as well as controls for transaction size.[29] We stress that this result is merely preliminary: in future work, we intend to examine more closely the dynamics underlying this finding.[30] Nevertheless, we note that this finding is consistent with the intuition that the Commission's mandate is to encourage competition across Europe—and, thus, that the Commission should marginally disfavor economically significant mergers within a single member state.[31]

[29] In unreported analysis, we conduct the same tests described in Table 3 for transactions involving firms from the same *foreign* nation—that is, firms from the same nation that was not an EU member state at the time the Commission was notified of the transaction. We find no statistically significant relationship between this dummy variable and the probability of a Commission challenge.

[30] In particular, some have argued that the Commission is especially aggressive when considering mergers involving parties from the same member state when that member state is not among the few largest, and most powerful, EU member nations. In future work we intend to consider this possibility among other mechanisms driving this result.

[31] In unreported analysis, we separately considered the hypothesis that the probability of a Commission challenge, or the magnitude of such a challenge, is related to the European Union's trade surplus or deficit in the industry that is the subject of the transaction, either in the period in which the merger is noticed or in the previous period. We find no evidence—robust or otherwise—to support such a relationship.

Effects of the Commission's 2002 Judicial Losses

As noted above, commentators and lawmakers have extensively debated whether the Commission is responsive to the European courts' oversight of its work. After years of lax judicial review of Commission antitrust decisions, in 2002 the courts dealt the Commission three successive and unprecedented losses on critical, high-profile cases. These decisions, and our dataset, offer an unusual opportunity to consider the effects of these decisions on antitrust policy, and they lead to our fourth and final hypothesis:

> *Hypothesis 4*: After its 2002 defeats in the courts, the Commission is less likely to challenge proposed mergers; and, conditional on a merger challenge, is less likely to pursue more extensive interventions.

We begin by noting that, conveniently, these decisions occurred near the midpoint of our longitudinal dataset—in 2002. This provides us with rich and balanced data on transactions reported to the Commission both before and after the decisions. We also note that there is substantial heterogeneity in the transactions, especially as to their complexity; the number of days the Commission takes to reach a decision for the cases in our dataset ranges from 1 to 378. We therefore pursue an identification strategy in which we assume that cases of similar complexity before and after the judicial decisions are, essentially, counterfactuals,[32]

[32] We think this assumption is sound because, although parties certainly have control over the nature of the mergers that the Commission considers, there is no reason to expect that the decisions induced the parties to select transactions with a different relationship between transactional complexity and the optimal enforcement outcome after the transaction than they did before. That is: other than the effects of the decisions themselves, there is little reason to think that the relationship between transaction complexity and enforcement outcomes should have meaningfully changed after the decisions occurred.

and consider whether the relationship between merger complexity and the Commission's response changes as a result of the courts' interventions in 2002.

Specifically, we examine Hypothesis 4 through the difference-in-difference analysis described in Table 4. As that Table shows, we identify strong evidence supporting a slightly more nuanced version of this hypothesis. In particular, the data suggest that, after the 2002 judicial decisions, the relationship between the length of time the Commission took to consider a proposed merger and the probability (or extent) of a merger challenge significantly weakened.[33] That is: harder cases, and those presumably raising more substantial questions of antitrust concern, were less likely to be challenged, and if challenged, likely to be less extensively challenged, after the courts' intervention.

A natural interpretation of this finding is that its 2002 losses in the courts led the Commission to pursue more permissive antitrust enforcement policy—that is, to treat cases raising similar antitrust concerns differently before and after the decisions. In future work, we intend to examine more carefully the mechanism driving that result. For example, one mechanism might be that the recommendations and individual judgments of the Commission's staff shifted in response to the courts' rebuke, leading to different outcomes for similar cases. Another could be the series of reforms that the Commission undertook in response to the courts' critique: by the end of 2002, the Commission had drafted a revised Merger Control Regulation, which came into effect in 2004. The Commission also carried

[33] We visually confirm the assumption of common pre-treatment trends by examining the relationship between the days each merger is under consideration and the challenge outcome, or magnitude-of-challenge measure, before the 2002 decisions occurred. We detect no shift in pre-treatment trends before the 2002 decisions.

out a series of institutional reforms geared at improving the economic analysis and thereby the soundness of its decisions. These included the establishment of the position of a chief economist and the system of a devil's advocate panel to internally scrutinize every decision before it is adopted. We are keen to identify research designs that will help us better understand the source of the shift in antitrust enforcement policy revealed by our dataset.

Future Work

In this Article, we have sought to introduce a unique dataset including all mergers reported to the European Commission between 1990, the first year of Union-wide antitrust enforcement policy, and 2014. Our data allow us to examine systematically several long-hypothesized relationships between protectionist policy intuition and antitrust enforcement. The data also permit us to consider the causal relationship between the European courts' unusual intervention in this area in 2002 and European antitrust policy. We show that, since 2002, the Commission has, on the margin, intervened less frequently, and less extensively, when facing complex antirust cases.

In separate work, we plan to use these data to consider a broader set of questions relating to the effect of Commission decisions on merger activity in Europe and around the world. In the meantime, we hope to further identify the mechanisms through which the Commission has shaped European antitrust policy over the last two decades.

Table 1: Foreign Acquirers of EU-Based Firms. We explore the relationship between a dummy variable for proposed mergers involving a foreign acquirer of an EU-based firm and a dummy variable indicating a Commission challenge to that merger (or, in models *(e)* through *(f)*, the extent of that challenge, as signified by the index of challenge magnitude from 1 through 6 described in the text) by specifying the ordinary least-squares models described below. Robust standard errors are described in parentheses. Models without industry and quarterly fixed effects include linear controls for both.

	Merger Challenge			Extent of Merger Challenge		
	(a)	*(b)*	*(c)*	*(d)*	*(e)*	*(f)*
	(.097)	*(.097)*	*(.097)*	*(2.14)*	*(2.14)*	*(2.14)*
Foreign-EU Acquisition Dummy	-.029*	-.019	-.047	-.12	.01	-.06
	(0.15)	*(0.15)*	*(0.33)*	*(.025)*	*(0.25)*	*(0.05)*
Days from Notice Until Decision	.006***	.006***	.005***	.016***	0.16***	.015
	(0.00)	*(0.00)*	*(0.00)*	*(0.01)*	*(0.01)*	*(0.01)*
Log (Proposed Transaction Value)			.031***			.043***
			(0.01)			*(0.01)*
Industry Fixed Effects?	No	Yes	Yes	No	Yes	Yes
Quarterly Fixed Effects?	No	Yes	Yes	No	Yes	Yes
N	3,420	3,420	924	3,420	3,422	924
R^2	.34	.40	.52	.57	.61	.74

Table 2: Presence of U.S.-Based Firms. We explore the relationship between a dummy variable indicating that a U.S.-based firm is a party to the proposed merger and a dummy variable indicating a Commission challenge to that merger (or, in models *(e)* through *(f)*, the extent of that challenge, as signified by the index of challenge magnitude from 1 through 6 described in the text) by specifying the ordinary least-squares models described below. Robust standard errors are described in parentheses. Models without industry and quarterly fixed effects include linear controls for both.

	Merger Challenge			Extent of Merger Challenge		
	(a)	*(b)*	*(c)*	*(d)*	*(e)*	*(f)*
	(.097)	*(.097)*	*(.097)*	*(2.14)*	*(2.14)*	*(2.14)*
U.S.-Based Party Acquisition Dummy	-.006	-.008	-.031	-.13	-.011	-.033
	(0.11)	*(0.10)*	*(0.03)*	*(.017)*	*(0.18)*	*(0.03)*
Days from Notice Until Decision	.005***	.006***	.005***	.016***	0.15***	.015
	(0.00)	*(0.00)*	*(0.00)*	*(0.01)*	*(0.01)*	*(0.01)*
Log (Proposed Transaction Value)			.034***			.045***
			(0.01)			*(0.01)*
Industry Fixed Effects?	No	Yes	Yes	No	Yes	Yes
Quarterly Fixed Effects?	No	Yes	Yes	No	Yes	Yes
N	3,420	3,420	924	3,420	3,420	924
R^2	.34	.40	.52	.57	.61	.74

Table 3: Intra-Member-Nation Mergers. We explore the relationship between a dummy variable indicating that parties to the proposed transaction are headquartered in the same EU member state and a dummy variable indicating a Commission challenge to that merger by specifying the ordinary least-squares models described below. Robust standard errors are described in parentheses. Models without industry and quarterly fixed effects include linear controls for both.

	Merger Challenge		
	(a)	*(b)*	*(c)*
	(.097)	*(.097)*	*(.097)*
Same-EU-Member-State Dummy	.024**	.025***	.041*
	(0.10)	*(0.10)*	*(0.02)*
Days from Notice Until Decision	.006***	.006***	.005***
	(0.00)	*(0.00)*	*(0.00)*
Log (Proposed Transaction Value)			.032***
			(0.01)
Industry Fixed Effects?	No	Yes	Yes
Quarterly Fixed Effects?	No	Yes	Yes
N	3,420	3,420	924
R^2	.34	.40	.52

Table 4: The Effects of the Commission's Judicial Defeats in 2002. The table below describes the results of a difference-in-difference specification in which the dependent variable is a dummy variable indicating a Commission challenge to that merger (or, in models *(e)* through *(f)*, the extent of that challenge, as signified by the index of challenge magnitude from 1 through 6 described in the text). *Days* reflects a proxy for merger complexity, and *post* is a dummy variable indicating whether the Commission rendered its decision after the last of its three high-profile losses in 2002. The variable of interest is the interaction between *days* and *post*. Robust standard errors are described in parentheses; all models include both industry and quarterly fixed effects.

	Merger Challenge			Extent of Merger Challenge		
	(a)	*(b)*	*(c)*	*(d)*	*(e)*	*(f)*
	(.097)	*(.097)*	*(.097)*	*(2.14)*	*(2.14)*	*(2.14)*
Days from Notice Until Decision	.006***	.008***	.008***	.018***	0.23***	.023***
	(0.00)	*(0.00)*	*(0.00)*	*(0.00)*	*(0.00)*	*(0.00)*
Dummy for Post 2002 Judicial Losses	.078*	.148***	.470*	.025	.342***	.298*
	(0.03)	*(0.06)*	*(.251)*	*(.091)*	*(0.08)*	*(0.18)*
Days * Post		-.002***	-.002***		-.009***	-.008***
		(0.00)	*(0.00)*		*(0.00)*	*(0.00)*
Log (Proposed Transaction Value)			.026***			.045***
			(0.01)			*(0.01)*
Industry Fixed Effects?	Yes	Yes	Yes	Yes	Yes	Yes
Quarterly Fixed Effects?	Yes	Yes	Yes	Yes	Yes	Yes
N	3,410	3,410	924	3,408	3,408	921
R^2	.43	.44	.55	.69	.72	.82

References

Aktas, Nihat, Eric de Bodt, Marieke Delanghe, and Richard Roll. 2012. *Market reactions to European merger regulation*: *A reexamination of the protectionism hypothesis*. Working Paper, AFFI Conference. http://papers.ssrn.com/sol3/papers.cfm?abstract_id= 2083645.

Aktas, Nihat, Eric de Bodt, and Richard Roll. 2007. Is European M&A Regulation Protectionist? *The Economic Journal* 117:1096-1121.

Bergman, Mats, Maria Jakobsson, and Carlos Razo. 2005. An econometric analysis of the European Commission's merger decisions. *International Journal of Industrial Organization* 23:717-737.

Bhagwati, Jagdish. 1968. The Theory and Practice of Commercial Policy: Departures from Unified Exchange Rates. *Special Papers in International Economics* no. 8

Bradford, Anu. 2013. The Brussels Effect. *Northwestern University Law Review* 107:1-67.

Clougherty, Joseph and Jo Seldeslachts. 2013. The Deterrence Effects of US Merger Pollicy Instruments. *Journal of Law, Economics and Organization* 29:1114-1144.

Dinc, Serdar and Isil Erel. 2013. Economic Nationalism in Mergers and Acquisitions. *The Journal of Finance* 68:2471-2514.

Duso, Tomaso, Klaus Gugler, and Florian Szucs. 2006. An Empirical Assessment of the 2004 EU Merger Policy Reform. *The Economic Journal* 123:596-619.

Guzman, Andrew T. 1998. Is International Antitrust Possible? *New York University Law Review* 73:1502-1548.

Guzman, Andrew T. 2004. The Case for International Antitrust. *Berkeley Journal of International Law* 22:355-374.

Horn, Henrik and James Levinsohn. 2001. Merger policies and trade liberalization. *Economic Journal*. 111:244-76.

Iacobucci, Edward. 1997. The Interdependence of Trade and Competition Policies. *World Competition* 21:5-22.

Jones, Alison and John Davies. 2014. Merger control and the public interest: balancing EU and national law in the protectionist debate. *European Competition Journal* 10:453-497.

Kono, Daniel Y. 2006. Optimal Obfuscation: Democracy and Trade Policy Transparency. *American Political Science Review* 100:369-384.

Kovacic, William E, Mavroidis, Petros C. and Neven Damien J. 2014. Merger Control Procedures and Institutions: A Comparison of EU and U.S. Practice, *Antitrust Bulletin* 59:1.

Leddy, Mark, Cook, Christopher and Abell, James. 2010. Transatlantic Merger Control: The Courts and the Agencies, *Cornell International Law Journal* Vol. 43: Iss. 1, Article 2.

Levy, Nicholas. 2005. Mario Monti's Legacy in EU merger Control. *Competition Policy International*, Vol. 1, No. 1.

Lindsay, Alistair, Emanuela Lecchi and Geoffrey Williams. 2003. Econometric Study into European Commission Merger Decisions since 2000. *European Competition Law Review* 14:673-682.

Nourry, Alex and Nelson Jung. 2014. Protectionism in the European Union: EU State Measures against Foreign Takeovers: "Economic Patriotism" in all but name. *Competition Policy International* 8:10

Ozden, Caglar. 2005. International Dimensions of Competition Policies: European Responses to American Mergers. *Revue économique* 56:1413-42.

Plagnet, M.-A. 2005. *Use of benchmarking methods in Europe in the electricity distribution sector*. Working Paper, EDF R&D.

Richardson, Martin. 1999. Trade and Competition Policy: concordia discors? *Oxford Economic Papers* 51:649-664.

Williams, Mark D. and A. E. Rodriguez. 1995. Antitrust and Liberalization in Developing Countries. *International Trade Journal* 9:495-518.