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Is EU Merger Control Used for Protectionism? An Empirical Analysis

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The European Commission has often used its merger-review power to challenge high-profile acquisitions involving non-EU companies, giving rise to concerns that its competition authority has evolved into a powerful tool for industrial policy. The Commission has been accused of deliberately targeting foreign—especially American—acquirers, while facilitating the creation of European national champions. These concerns, however, rest on a few famous anecdotes. In this Article, we introduce a unique dataset that allows us to provide the first rigorous examination of these claims. Our analysis of the over 5,000 mergers reported to the Commission between 1990 and 2014 reveals no evidence that the Commission has systematically used its authority to protectionist ends. If anything, our results suggest that the Commission is less likely to challenge transactions involving non-EU acquirers. Our analysis therefore challenges the common notion of European antitrust protectionism and shifts the burden of proof to those advancing this view.

1. Introduction[1]

The European Commission's merger-review power has been a subject of controversy among lawmakers and commentators for more than two decades.[2] One reason why is that the Commission has sometimes used its extensive competition authority to prohibit high-profile mergers involving non-EU firms—even where those same acquisitions are approved by other competition authorities. The Commission's 2001 decision to block the $42 billion acquisition of Honeywell by General Electric—a merger approved by the U.S. Department of Justice—is perhaps the most well-known of these cases, an anecdote that looms large in competition-law lore. But GE/Honeywell does not stand alone. In the name of competition law, the Commission has repeatedly blocked or forced significant restructuring of mergers involving a wide range of well-known American firms, including Boeing, MCI WorldCom, Time Warner and UPS.

[1] We are grateful to the European Commission for sharing data on its merger decisions and to Jo Seldeslachts for sharing data on measures of industry concentration. We benefited from helpful discussions with Jeffrey Gordon, Amit Khandelwal, Joshua Mitts, Janet Lu, and Christoph Engels, and participants at the American Law and Economics Conference, Comparative and International Administrative Law and Politics Workshop at UC Berkeley, the Conference on Empirical Legal Studies in Europe, the Conference on Empirical Legal Studies, and the Columbia Law School Faculty Workshop. We are grateful to Julian Beach, An Duong, Kevin Hennecken, Abraham Lowenstein, Sarah Mac Dougall, Gregory Swartz, Kate Thompson, Sara Thomson, Eliana Torrado Franco, and Claudie Tirefort for exceptional research assistance, and to the Columbia Law School Program on Corporate Law and Policy and Philippe P. Dauman Faculty Research Fund for financial support. This material is based upon work supported by the National Science Foundation Graduate Research Fellowship Program under Grant No. DGE-16-44869. Any opinions, findings, conclusions or recommendations expressed here are those of the authors and do not necessarily reflect the views of the National Science Foundation.

[2] We refer to the term "merger" throughout this article, even though many transactions that the Commission reviews under its merger control regulation consist of stock or asset acquisitions as opposed to statutory mergers. However, our terminology is consistent with the well-established practice in competition law literature, which systematically uses the term "merger control" to capture both mergers and acquisitions.

These high-profile interventions have raised concerns that the Commission is using its merger-review power to advance protectionist industrial policy rather than competition. In the wake of GE/Honeywell itself, for example, U.S. Treasury Secretary Paul O'Neill called the Commission's decision "off the wall," describing the Commission as "autocratic," and the Department of Justice's chief antitrust enforcement official noted the Commission's "divergence" from the principle that "the antitrust laws protect competition, not competitors." (Wilke, 2001.) Members of the U.S. Congress expressly accused the Commission of "using its merger-review process as a tool to protect and promote European industry at the expense of U.S. competitors." (Wilke, 2001.). Today, the primary concern is the European Commission's mounting antitrust investigations of US high-tech companies, including Google, Qualcomm, and Apple, which critics say reflect the EU's attempt to offset US technological edge and tilt the market in favor of their weaker European rivals (Scott, 2015.).

The notion that the Commission's merger-review authority is used to protect European firms from foreign competition should not be taken lightly. For one thing, the economic stakes are high: in Europe alone, the value of mergers and acquisitions in 2014 was about $900 billion. For another, the increasingly international focus of merger activity makes clear that only rarely—if ever—will a significant merger escape the Commission's antitrust mandate. Yet the idea that a critical gatekeeper for global merger activity is using its authority to protect favored firms rests largely on a few famous anecdotes. The Commission's decision-making has not been subjected to the kind of systematic empirical analysis that could rigorously test those intuitions.

In this Article, we introduce a unique dataset that permits us to provide the first careful examination of the determinants of the Commission's merger review policy. The data include information on all of the mergers reported to the Commission between 1990 and 2014—more than 5,000 proposed transactions—as well as detail on the industry, transaction value, and nationality associated with each transaction. Our data also include detailed variables describing whether, and to what extent, the Commission chose to intervene in each case. While previous analysis of the Commission's decisions (*e.g.* Lindsay et al. (2003), Aktas et al. (2012)) has relied on small, hand-drawn samples ranging from 96 to 245 cases, our novel data offer the unique opportunity to examine the Commission's enforcement record across more than 25 years and over 5,000 cases.[3]

We identify evidence that, contrary to policymakers' and practitioners' intuitions, the Commission has not intervened more frequently, or more extensively, in transactions involving a non-EU- or American-based firm's acquisition of a European target. Across several specifications, coefficients examining the responsiveness of the Commission's challenge rates to transactions involving non-EU acquirers remain negative. Of course, it may well be that protectionism plays an occasional role in European merger-review cases. We show, however, that the evidence does not support the claim that any such bias systematically affects merger-enforcement outcomes in the European Commission.

[3] Importantly, study of merger-review decisions in the European Union has an important advantage over similar study of U.S. authority in this area. In the United States, the Department of Justice and Federal Trade Commission publish only decisions relating to mergers they oppose, creating sample bias. By contrast, the European Commission is required to publish all of its decisions, including a decision *not* to oppose a merger, permitting analysis of the complete universe of transactions and outcomes.

The Article proceeds as follows. We first describe the legal and institutional background of Commission merger review. We then consider theoretical reasons why competition-enforcement authorities may use their merger-review power to pursue protectionist industrial policy. Next we describe our data and results. The final section briefly concludes.

2. Legal and Institutional Background

The European Union'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 established by the EU Treaty. Specifically, parties to a proposed merger must notify the Commission about their transaction whenever (1) the parties' combined annual worldwide revenue exceeds € 5 billion and each of at least two of the parties' annual EU-wide revenue exceeds € 250 million, or (2) the parties' combined annual worldwide revenue exceeds € 2.5 billion and each of at least two of the parties' annual EU-wide revenue exceeds € 100 million.[4] If these thresholds are not met, national competition authorities in individual EU member states may still have the power to review the merger as a matter of domestic law. In general, however, whenever a merger "affects trade between member states" in Europe, the Commission has the power to review that merger and, if it so chooses, intervene.

[4] A few additional conditions not relevant to our analysis must also be met in order for a particular merger to be reportable to the Commission.

The current Merger Regulation, adopted in 2004, 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.[5]

The Commission's merger-review process is divided into two phases. During Phase I, the Commission may either (1) clear the merger without subjecting it into any conditions, (2) approve it subject to conditions (such as requiring divestment of certain assets) or (3) decide that more information is needed and open an in-depth investigation (that is, initiate Phase II). During Phase II, the Commission may again (1) unconditionally clear the transaction, (2) conditionally clear it, or, (3) prohibit the transaction. The parties, of course, can also withdraw from the merger-review process, and may do so in order to preempt a negative decision or for independent economic reasons. The parties cannot, however, close their transaction before they obtain the Commission's clearance.

The Commission's merger-review authority is vast. Unlike the U.S. Department of Justice, the Commission need not go to court to enjoin a merger. Instead, the Commission can reach this decision without involving the European judiciary.[6] And, although the parties have the right to appeal the decision to the EU's General Court and, ultimately,

[5] The original 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". We separately test all results for the periods before and after 2004 but find no significant differences attributable to the altered wording of the Merger Regulation.

[6] Many critics have suggested that this procedure essentially renders the Commission the prosecutor, judge, and jury of merger review throughout Europe. See e.g., *Competition Policy: Prosecutor, judge and jury: Enforcement of competition law in Europe is unjust and must change* (The Economist, February 18, 2010); Tom Fairless, EU Displaces U.S. as Top Antitrust Cop(WSJ, September 3, 2015).

the European Court of Justice, strikingly few Commission decisions in this area are ever challenged in the courts. Thus, in virtually all cases—over 99% of mergers reviewed—the Commission has the final say, making the Commission perhaps the single most important player in worldwide antitrust. Yet, as we explain below, relatively little is known about the determinants of the Commission's decisions when reviewing those cases—and, in particular, whether protectionist policy intuitions systematically motivate them.

3. Theoretical Motivation

Governments' historical tendency to engage in trade protectionism is a well-accepted feature of international political economy. Protectionists' tool of choice has historically involved tariffs, but a generation of trade liberalization has dramatically diminished the use of tariffs to shield domestic industry from foreign competition. Thus, some argue, governments today pursue protectionism through alternative means that are harder to detect than explicit tariff policies (e.g., Kono, 2006).

One such alternative means, some critics have argued, is antitrust policy (Guzman 1998; Horn and Levinsohn 2001; Iacobucci 1997-1998; Richardson 1999; Williams and Rodriguez 1995).[7] These theorists contend that antitrust policy can offset both the

[7] 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). Thus, diligence regarding potential future use of antitrust for protectionist purposes may well be warranted. Meaningful study of any such use, however, should ultimately be motivated by empirical evidence. As we explain below, the evidence on European Commission antitrust decision-making offers no support for the proposition that the merger-review process has been used for protectionist purposes.

economic gains and distributive effects of trade liberalization.[8] 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 acquisitions by foreign-owned firms than companies that are locally owned.

There are several plausible reasons to believe that the merger-review process would be an attractive means of achieving protectionist policy goals. For one thing, opposing acquisitions of domestic companies by foreign firms is often politically popular. Mergers are frequently associated with employment losses, leading labor advocates to oppose mergers with an adverse effect on domestic labor markets. The public may also fear that foreign acquirers will move significant economic activity back to their home jurisdiction. Antitrust agencies might similarly 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. Finally, foreign acquisitions may also increase the political influence of foreign nations in the target's market, a particularly salient concern when the foreign nation's culture and political system differ significantly from the target's.

Nevertheless, there are also compelling reasons to be skeptical that merger-review authority is an effective tool for achieving protectionist economic policy. First,

[8] For a more extensive theoretical debate on whether countries set their antitrust policies in response to their trade flows, see Guzman (2004) and Bradford (2007).

systematic bias against foreign acquirers could undermine the interests of domestic firms if other merger-review authorities chose to retaliate. Such bias would also generate significant collateral damage, undermining the interests of many European firms as well as those of individual (European) shareholders and employees who stand to benefit from the merger. [9]

Moreover, three institutional characteristics unique to the Commission make protectionism an especially unlikely motivation for its merger-review decisions. First, the Commission is subject to an unusual degree of transparency, and is required to justify all of its merger-review decisions—whether or not it chooses to intervene—in detailed public decisions, making it difficult to disguise systematic protectionist bias. Second, although judicial review of Commission decisions is rare, it can be meaningful: in 2002, after a series of public defeats in court, the Commission significantly reformed its approach to merger review. Thus, systematic bias against foreign acquirers would raise a nontrivial risk of reversal in the courts.[10]

[9] Agencies outside the EU could also undermine the Commission's attempt to shield its local firms from rigorous merger scrutiny due to the "effects doctrine" that underlies most antitrust laws. The effects doctrine holds that every country may claim antitrust jurisdiction over any company as long as the company's activities have an "effect" on the domestic market of that country. Thus, even if the European Commission let an anticompetitive merger involving European companies proceed, the merger could face scrutiny in another jurisdiction in which merging parties have sales or assets. The Commission's ability to shield European firms from merger control is hence diluted by the prospect of concurrent and compensating jurisdiction exercised by other impacted states.

[10] It is possible, of course, that even systematically biased Commission decisions in service of protectionist goals could survive judicial review if European judges, too, were prepared to use its power to pursue those goals. We think it unlikely, however, that the judiciary would be coopted in this way, and are aware of no theoretical or empirical work suggesting that this is the case.

Finally, the Commission's governance structure makes it unlikely that policymakers could succeed in pursuing protectionism through the merger-review process. The Commission's case teams that prepare proposed decisions typically consist of lawyers and economists from across the European Union, only few of which will come from the target nation. Any final decision rests on the vote of the entire Commission, consisting of a Commissioner from each member state—only one being from the target nation. Any decision to challenge a welfare-enhancing merger to protect a particular nation's economic interests would hence require all twenty-eight Commissioners and a multinational case team to forego benefits to consumers across Europe to hand a protectionist benefit to a particular nation's industry. Arguably, the required level of European solidarity for such a strategy has never existed.

Nevertheless, whether the Commission's merger-review authority has systematically been used to protect European companies from competition abroad is ultimately an empirical question. In the next section, we describe the relatively limited empirical evidence that has been brought to bear on this important issue thus far.

4. Prior Empirical Work

Previous work on the determinants of Commission antitrust enforcement has produced decidedly mixed results. Bergman et al. (2005), relying on a sample of 96 mergers notified to the Commission between 1990 and 2002, find that political variables—such as the nationality of the merging firms—have no significant effect on the probability of an adverse ruling. Similarly, Lindsay et al. (2003), examining 245 Commission merger

decisions between 2000 and 2002, do not find the nationality of the bidder to be a statistically meaningful predictor of Commission action.

By contrast, Aktas et al. (2004, 2007, 2012) have published a series of papers seeking to establish whether Commission merger review reflects a pro-EU bias. In their initial 2004 study, the authors found that investors anticipate higher costs to merging parties when the Commission intervenes in a case involving a non-EU 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.[11] But in 2012, Aktas et al reevaluated that finding, concluding on the basis of an updated sample that the bidder's status as a foreign national is not a meaningful predictor of outcomes in the Commission merger-review process.

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 U.S. firms in the industry have high market share. Ozden concludes that the higher likelihood of merger review in

[11] Importantly, the nationality of the bidder alone was not statistically significant in Aktas et al (2007). Instead, a bias in Commission decision-making 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).

cases involving a European target reveals a political and economic tendency to protect European firms.[12]

None of this prior work, however, made use of a comprehensive sample of all mergers reported to the Commission since the inception of the merger-review process in 1990. Nor, for the reasons described below, did those studies feature covariates addressing significant variation over time, among industries, and among nations. In this Article, we introduce a novel dataset that offers the most comprehensive view of the Commission's antitrust decisions to date. We describe that dataset in detail in the next section.

5. **Data and Summary Statistics**

5.1 Description of the Data

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 August 2014.

The dataset was constructed by hand from six different sources. We begin with data from the Commission itself[13] on each transaction reported to the EU, including the parties, their roles in the transaction (such as seller or acquirer), their nationalities (as reflected by

[12] 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 barriers to entry, on Commission merger decisions (Plagnet 2005; Lindsay 2003). More recently, Clougherty and Seldeslachts (2012) have considered the effects of Commission policy on merger deterrence. None of these studies, however, was able to test their hypotheses using a dataset featuring the comprehensive longitude and control variables described below.

[13] We express our deep gratitude to the Commission for sharing these data with us.

the location of each firm's headquarters), and the industry or industries (identified by NACE code[14]) for each proposed transaction.[15] We merge this dataset by hand with the transactions in the Securities Data Company's (SDC) transactions database, which includes dozens of variables on transactions (including ones that fail to close) and their parties. We also hand-collect transaction values for each transaction from the FactSet Financial Services Dataset, Factiva, Zephyr, and other sources, to supplement and confirm those in the SDC database.[16]

We create variables on European relative market size and market concentration using sales data from Amadeus, which has European sales data for 21 million companies. As our measure of market concentration, we construct the Herfindahl-Hirschman index (HHI), in which market concentrations range from 0 to 1, for European-wide sales at the 2-digit industry level. As our measure of relative industry market size, we use industry sales divided by the total sales in that year across industries.

Over the period we consider, firms from 97 countries have been involved in transactions reviewed by the Commission. We use dummy variables signifying whether a party's nationality is among the member nations of the EU at the time the Commission received notice of the transaction—that is, whether the party is an "EU party" or "non-EU party",

[14] 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 or four-digit level.

[15] Occasionally, the dataset provided to us by the Commission was missing observations or information; in those cases, we supplemented the data by hand.

[16] Through the combination of these datasets as well as additional research, we were able to locate transaction values for more than two thirds of the transactions in our dataset.

as well as whether a party is U.S.-based. We assign the corporate nationality using the company's address as reported to the Commission when notifying the merger. As a robustness check, we re-create these variables using the primary place (nation) of business from the SDC database.

We identify the role of each party to the transaction (for example, acquirer or target) using a combination of the EU Commission's designations and independent research. For our variables of interest related to the nationalities of the parties, we define a merger as having a non-EU acquirer if at least one acquirer-side party was non-EU and an EU seller if at least one seller-side party had EU nationality.[17] For robustness, we include extensive alternative variable definitions in our regressions in the Appendix.

We construct a series of outcome variables that reflect the Commission's decision in each individual case. In response to a merger notification, the Commission can proceed in a number of ways. For our main specifications, we categorize the decision outcomes 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. Since a withdrawal of a merger is often a sign of the parties anticipating a challenge, we treat withdrawals as challenges as well.

In order to better capture the richness of the Commission's powers, however, and as a robustness check, we also create a numerical index, ranging from 1 through 6, assigning

[17] Throughout, we use "acquirer" to mean any acquirer-side party, and "seller" to mean any seller-side party (generally the target).

values to each class of merger decisions, as shown in the table below. 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 mergers. Each number corresponds to one or more decision articles referenced as the legal basis for the Commission's eventual decision. We also create binary variables reflecting different "cut-off" points as robustness checks.

Decision Outcome	Assigned value
Ruled beyond the scope of the Commission's authority.	1
Phase I clearance without conditions.	2
Phase I clearance with conditions and obligations and mergers withdrawn at Phase I.[18]	3
Phase II clearance without conditions.	4
Phase II clearance with conditions and obligations and mergers withdrawn at Phase II.	5
Absolute prohibition.	6

TABLE 1. NUMERICAL INDEX OF COMMISSION MERGER-REVIEW DECISION TYPES

In total, parties notified 5,499 transactions to the Commission from 1990 to August 2014. Of these, we could identify at least one party on the acquirer-side and at least one party on the seller-side for 5,259 transactions. The remaining transactions were mergers of equals or otherwise had a deal structure that made it impossible for us to identity an

[18] 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.

acquiring and selling party. We also exclude joint ventures given their different deal structure, leaving us with 3,924 transactions. The availability of key control variables, most notably the transaction value, further reduces the sample size. Our main specifications use the subset of 2,351 mergers for which we have transaction value, market structure information, and variables from the SDC. However, our results are robust to our choice of sample, including the use of all 5,259 mergers for which the structure is identifiable.

5.2 Summary Statistics

We begin with summary statistics describing the frequency of mergers, including those involving non-EU or U.S. parties, over time throughout our data. Figure 1 below describes those data from 1990 through 2013 (the last full year in our dataset):

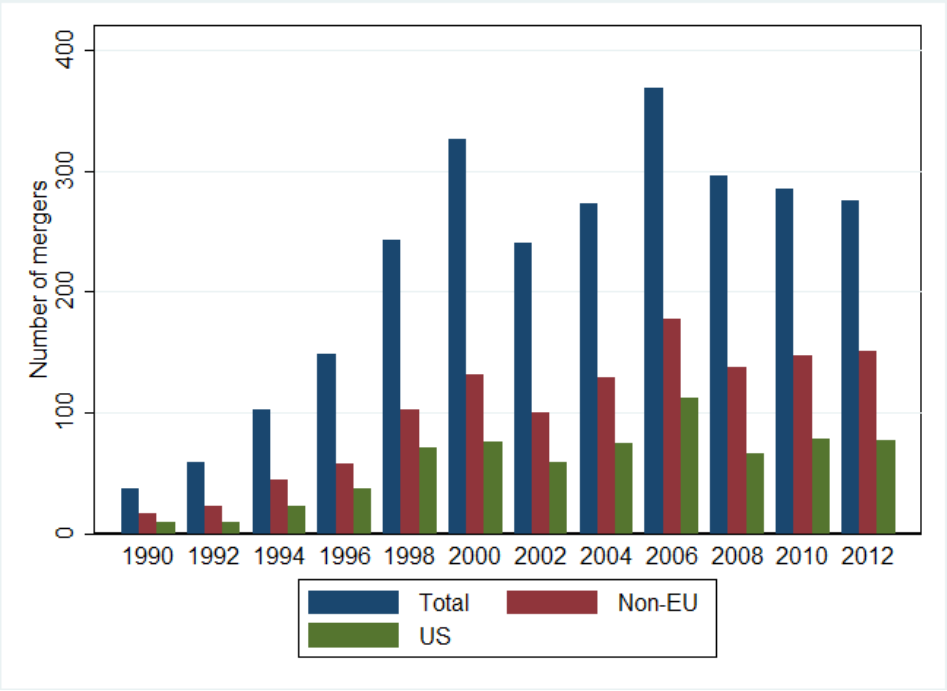

FIGURE 1. TOTAL MERGERS REPORTED TO EUROPEAN COMMISSION, 1990-2013

Notes: Number of mergers in every two-year period, based on full sample of mergers reported between 1991 and 2013. Non-EU (US, respectively) means at least one non-EU (US, respectively) party. Counts are two year averages. Partial year 2014 is omitted.

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 non-EU- or U.S.-headquartered parties has remained relatively steady over time. On average, 48.3% of the transactions had at least one non-EU party while 25.9% of the transactions had at least one US party.

We also observe the fraction of mergers that are challenged by the Commission over time. Figure 2 below describes the proportion of mergers in our dataset, including mergers with non-EU- or U.S.-headquartered parties, that are challenged by the Commission:

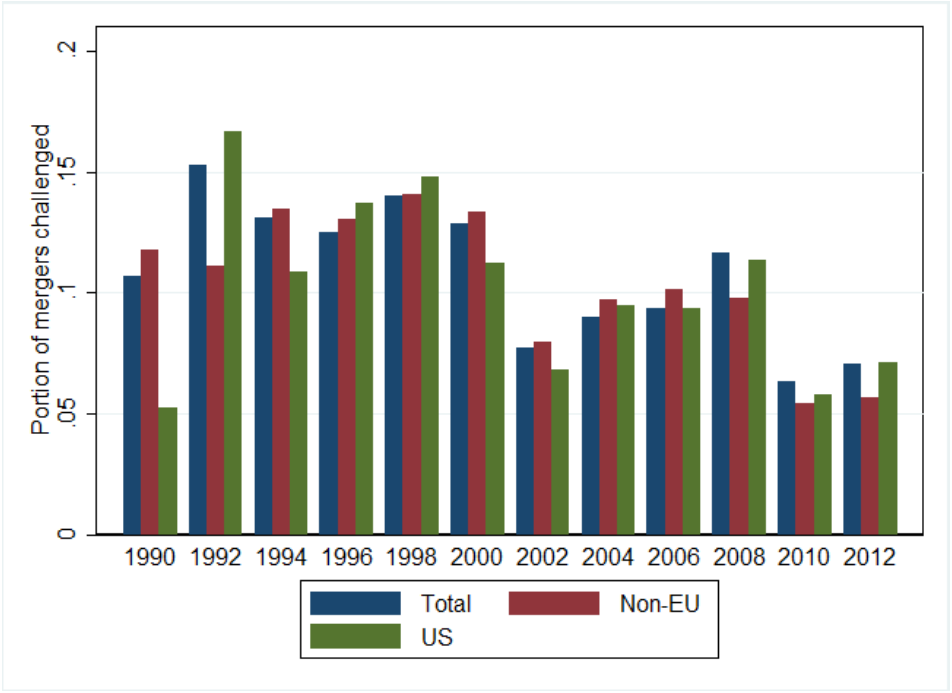

FIGURE 2. PERCENTAGE OF NOTIFIED MERGERS CHALLENGED BY EUROPEAN COMMISSION, 1990-2013

Notes: Percentage of mergers challenged in every two-year period, based on full sample of mergers reported between 1991 and 2013. Non-EU (US, respectively) means at least one non-EU (US, respectively) party. Counts are two year averages. Partial year 2014 is omitted.

Overall, 10.1% of the notified mergers in our dataset are challenged in some way by the Commission. The challenge rate has generally fallen over time: while 11.3% of mergers were challenged in 2001, only 5.9% were challenged in 2011. This graph also reveals that, across all years, mergers involving US and non-EU parties are not on average challenged at a higher rate than those featuring EU parties (before controlling for any aspects of individual transactions).

The binned scatterplot in Figure 3 confirms this significant downward shift in challenge rate over time. It also shows no apparent discontinuity as of 2004 following a significant revision of the EU Merger Control Regulation that year.

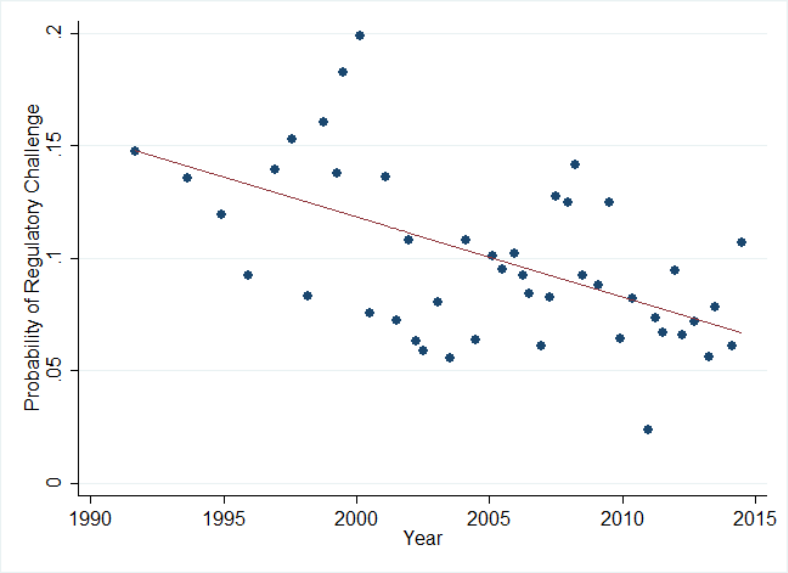

FIGURE 3. PERCENTAGE OF NOTIFIED MERGERS CHALLENGED BY EUROPEAN COMMISSION BY YEAR

Notes: Each point represents the mean challenge rate each half-year period.

Table 2 contains summary statistics on the transactions in the subset of the data comprising our sample. It shows that 12.9% of mergers in our sample experience some sort of intervention by the Commission or a withdrawal following notification. It also reveals other characteristics of the transactions, including that 34% of the deals are financial-sponsor-related, and that 40% of them can be described as horizontal and thereby mergers between competitors.

[Insert Table 2 Here.]

6. Results

6.1 Factors in Commission Decision

Before proceeding to test directly for the role of protectionism, we seek to explain the factors that appear to drive the European Commission merger decisions. The binned scatterplot in Figure 4 shows that, as one would expect, the likelihood of Commission challenge increases with transaction value (along the x-axis), decreases for large markets (large triangles, as opposed to small circles), and increases for highly concentrated (that is, high HHI) industries (solid red, as compared to hollow blue).[19] Table 3 shows similar results from a logistic regression, which also includes extensive control variables. This is by far the most comprehensive evaluation of the factors of EU Commission decision-making, both in terms of the number of observations and the number of regressors, to date.

[19] Big markets and markets with large HHI, respectively, are defined as those above the median in those measures.

Further, using our preferred specification (column 2) and holding all other variables to their sample means, we show that a deal that involves a financial sponsor (for example, an acquisition by a private equity company) is 7.1 percentage points less likely to be challenged; a transaction valued at $1.2 billion is 1.4 percentage points more likely to be challenged than one valued at $623 million, the geometric mean; and a deal that the SDC database identifies as a hostile acquisition is 9.7 percentage points more likely to be challenged. These statistics are consistent with our expectations. Transactions involving a financial sponsor typically do not raise competition concerns in the absence of any overlap between the products on the buyer and seller side. Similarly, large deals invoke greater scrutiny due to the sheer prominence of such cases and the extent of harm that an anti-competitive deal would generate. Hostile takeovers may be more commonly challenged because of the difficulties associated in persuading the (reluctant) outgoing management to produce needed documentation to the Commission.

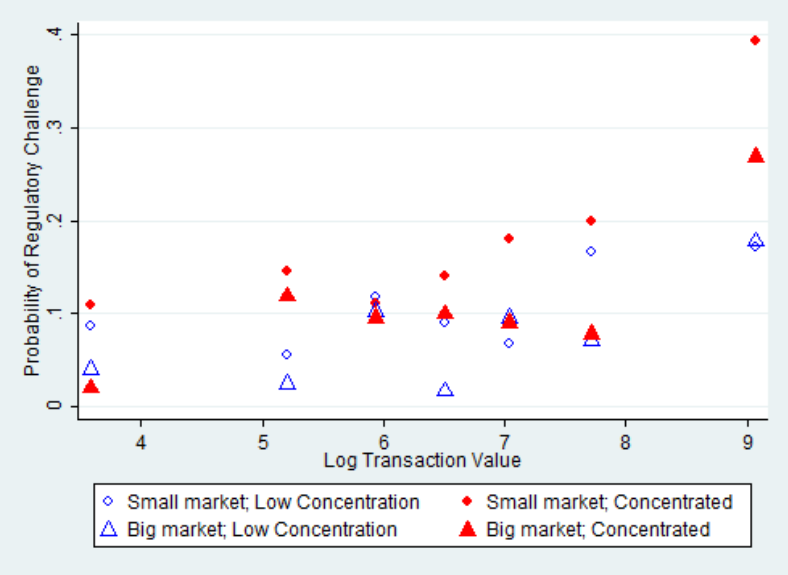

FIGURE 4. PERCENTAGE OF NOTIFIED MERGERS CHALLENGED BY EUROPEAN COMMISSION BY TRANSACTION VALUE, MARKET SIZE AND HHI

Notes: Each point represents the mean challenge rate within one of seven quantiles of log transaction value. Small market (or big market, respectively) is defined as below (or above, respectively) median relative

market size, which is in turn defined as the European-wide industry sales divided by total European sales in that year. Low HHI (or large HHI, respectively) is defined as below (or above, respectively) median HHI, calculated using European-wide businesses and sales.

[Insert Table 3 Here.]

6.2 Protectionism against Foreign Firms

Antitrust protectionism is difficult to test rigorously, which may explain the paucity of 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 predictor of the Commission's merger challenge after we control for a number of key factors that we expect to be relevant in the analysis.

We estimate the Linear Probability Model,

$$Challenge_i = NonEU\ Acquirer_i * EU\ Seller_i * \gamma + X_i'\beta \qquad (1)$$

where *Challenge* is a binary variable indicating a Commission challenge, *NonEU Acquiror*EU Seller* is a binary variable indicating the presence of both a non-EU acquirer and an EU seller, and X_i is a vector-valued set of control variables.[20] If the Commission were engaged in protectionism of domestic targets against foreign acquirers, we would expect the coefficient γ to be positive.

We use the Linear Probability Model to allow for inclusion of industry fixed effects in some of our specifications. The Linear Probability Model also facilitates the

[20] We estimate a logit model with the same variables and find nearly identical t-statistics. We use the Linear Probability Model in the main text, with some logit specifications in the Appendix for robustness, to facilitate interpretation of the magnitude of our estimated coefficients.

interpretability of confidence intervals, which convey important information, given our non-significant results. However, all of our results are fully robust to use of the logit model. For our main specification, we include the logit results in our robustness tables to demonstrate this.

Table 4 shows the results of our estimation of Equation (1).

[Insert Table 4 Here.]

The coefficient on non-EU-acquirer and EU-seller mergers represents the difference in the challenge rate for such mergers as compared to all other mergers, controlling for covariates and including fixed effects. Across all combinations of covariates and fixed effects, we find that the coefficient is (insignificantly) negative, whereas we would expect to find a positive coefficient if there were protectionism. Column (2) contains our preferred specification, which includes all covariates which are significant or nearly significant for our outcome variable—Commission challenges—or our variable of interest—acquirer and target nationality. Column (3) contains all variables that are fully populated for our sample.[21] Columns (4) and (5) include 2-digit and 4-digit industry fixed effects (and omit other industry-level variables), with similar results. We estimate a

[21] The additional covariates included in column 3 are: whether the acquirer is in a high tech industry; whether the acquirer is a governmental entity; whether the acquisition is of a subsidiary of a larger company as opposed to an acquisition of the entire company; whether the target's ultimate parent is a publicly traded company; whether the acquirer fully or partially owns the target after the transaction; whether the target was in bankruptcy at the time of the transaction; and whether the acquirer is a special purpose vehicle. We have several other covariates, including acquirer firm size and seller firm size, which we omit because they are not significant when controlling for transaction value and because they are not well-populated in the data, reducing our sample sizes. Other covariates, such as whether the stated purpose of the merger is "synergies," are highly predictive but too poorly populated to be included in our specifications.

95% confidence interval on the effect of non-EU acquirer-EU seller of -4.0 percentage points to 1.6 percentage points.

Table 4 compares mergers with non-EU acquirers and EU sellers to all other mergers in the sample. However, an alternative, and perhaps more relevant, comparison group consists of mergers involving EU acquirers and EU sellers. Thus, Table 5 estimates

$$Challenge_i = Foreign\ Acquirer_i * EU\ Seller_i * \gamma_1 + Foreign\ Acquirer_i * Foreign\ Seller_i * \gamma_2 + EU\ Acquirer_i * Foreign\ Seller_i * \gamma_3 + X_i'\beta$$

with separate coefficients for mergers with (i) non-EU acquirer and EU seller, (ii) non-EU acquirer and non-EU seller, and (iii) EU acquirer and non-EU seller. Because the nationality categories cleanly partition the sample, the estimated coefficients γ represent comparisons to the *omitted* category: the set of transactions involving an EU acquirer and EU seller. If the Commission had a tendency to protect domestic acquirers from non-EU sellers, we would expect γ_1 to be positive; if it had a tendency to intervene in purely non-EU deals, such as GE-Honeywell, we would expect γ_2 to be positive. Table 5 shows that neither has a positive coefficient—in fact, in column (4), non-EU acquirer-non-EU seller transactions have a marginally significantly negative challenge rate as compared to EU acquirer – EU seller transactions.

[Insert Table 5 Here.]

We note that our finding that firm nationalities are not correlated with Commission merger decisions is consistent across even the largest of mergers, as shown in Figure 5 below:

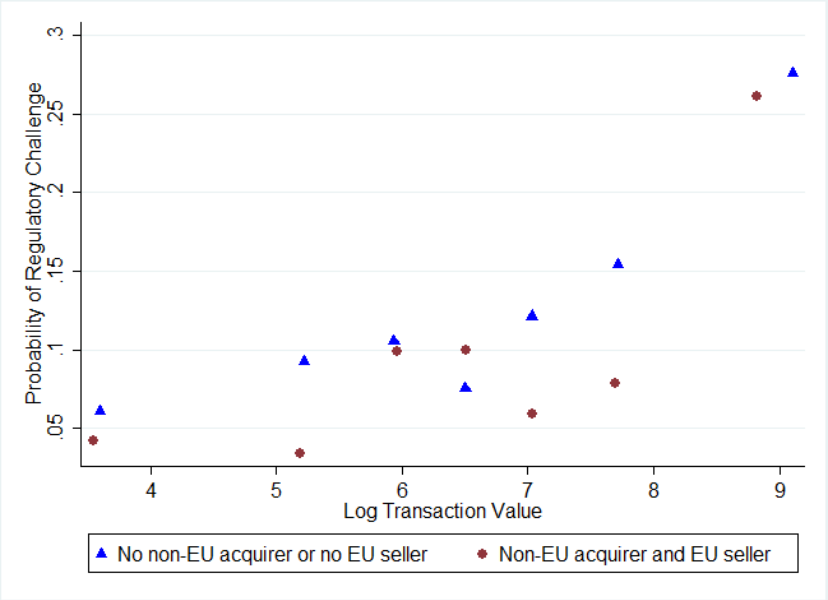

FIGURE 5. PERCENTAGE OF NOTIFIED MERGERS CHALLENGED BY EUROPEAN COMMISSION BY TRANSACTION VALUE

Notes: Each point represents the mean challenge rate within one of seven quantiles of log transaction value. A transaction has a non-EU acquirer and EU seller if at least one acquirer is from a non-EU nation and at least one seller is from an EU nation.

As Figure 5 shows, there is no pattern in bias with respect to transaction size, and, in unreported results, the results hold similarly when we subset our regressions only for larger deals. This finding is quite stable over time, and does not appear to show any industry-specific variation beyond random noise. Comparing non-EU acquirers versus EU acquirers in the subsamples of transactions involving EU targets (or foreign targets, respectively) also yields insignificantly negative results.

In Table 6, we run three additional tests. In column 1, we include interactions with a dummy for high-tech industry, to evaluate concerns that the Commission is particularly aggressive towards foreign technology acquirers in an effort to protect European technological laggards from their more innovative foreign rivals. In column 2, we use the

primary place of business of the acquirer and target (as determined by SDC) rather than their nationality as determined by the Commission. Column 3 mirrors column 2 except we use the primary place of business of the acquirer's ultimate parent. All show no evidence of protectionism.

6.3 Endogeneity Concerns

We acknowledge that our specification is endogeneous, and therefore cannot be interpreted causally. In particular, to have a causal interpretation, our regression specification would have to make the strong assumption that any omitted variables with explanatory power are uncorrelated with the variable of interest. Since the ideal experiment—random assignment of nationalities to parties who have entered a merger agreement—is impossible, we cannot fully address endogeneity concerns. We note, however, that once transaction value and the presence of a financial sponsor in the transaction are controlled for, the addition of 14 variables, many of which have substantial explanatory power, does not materially shift our estimates. The R^2 of our regressions is also quite high for a binary microdata regression, reaching 31% when 4-digit industry fixed effects are included, leaving less room for additional explanatory variables not captured by the existing covariates.

One potential omitted variable relates to the true concentration of each of the product markets involved in the merger. We cannot fully control for the true market concentration, which would require company-level sales data for each of the specific products involved in the merger and accurate data on the geographic boundaries of the

(potentially overlapping) product markets. Omitted variable bias would occur to the extent that the portion of true market concentration not captured by our market concentration variables is correlated with the party nationalities.

One possible proxy for market concentration could be extracted from Commission merger decisions, which sometimes, but not always, delineate the relevant product and geographic markets.[22] However, since the definitions of the relevant product and geographic market are themselves discretionary Commission decisions, using Commission determinations would introduce new and severe endogeneity concerns. We are therefore hesitant to examine motivations for Commission behavior by relying on the Commission's own subjective definition of the boundaries of the market and the concentration ratios associated with such discretion, for fear of magnifying endogeneity concerns. Instead, we proxy for these features of each transaction by using market concentration and market size calculated from extensive European-wide sales data or, as an alternative, by relying on industry fixed effects. The significant loadings on these proxies suggest that they are indeed capturing some of the true market concentration. Our findings remain robust when we derive the concentration ratios from the target country-wide sales data for the subset of mergers that involve a EU target. Yet, we concede that we cannot fully eliminate the possibility of omitted variable bias in this regard.

[22] Commission often offers multiple market definitions or leaves the definition of the relevant market open when it is not necessary to choose among the various plausible definitions as competition concerns either arise or fail to arise under any plausible definition. When providing market information, the Commission generally provides an estimated range of company market share for certain products and certain geographic market.

Another specific source of bias would arise if the parties did not merge in the first place because they anticipated a Commission challenge. This selection effect would create bias if non-EU acquirers and EU sellers were less likely to merge (as compared to other nationality combinations). Again, this issue is inherent in the nonexperimental design and cannot be fully resolved. We note, however, that the data provides some evidence this is not driving our results. Controlling for financial sponsors, non-EU acquirers make, on average, significantly larger acquisitions than EU acquirers; the HHI is similar for deals with non-EU acquirers than for those with EU acquirers. There is thus no evidence that fear of Commission bias is deterring riskier non-EU acquirer EU seller deals.

We offer two additional observations regarding the reliability of our results. First, since our sample comprises half the entire population (or the entire population, in a robustness check), there is little chance that the Commission's results exhibited nationality preference that we failed to capture due to sampling error.

Second, we acknowledge that protectionism could manifest itself in the *type* of mergers that the Commission intervenes in—for example, aggressiveness towards financial-sponsor deals because those are associated with US acquirers. If so, adding covariates could obfuscate, rather than reveal, protectionism. Since financial-sponsor deals are significantly less likely to be challenged, and since we fail to find a positive coefficient on having non-EU acquirer and EU seller across any combination of covariates, we find this unlikely.

6.4 Additional Robustness Checks

Table 10 in our Appendix performs a series of additional robustness checks on the analysis in Table 6. In our main regressions in Tables 4 and 5, we define a transaction as having a non-EU acquirer if at least one acquirer is non-EU. Similarly, we define a transaction as having an EU seller if at least one seller is from the EU. To ensure that our results are not driven by this choice of how to partition the sample into groups, in the "Reversed Partition" row, we repeat the analysis with the precise opposite partition: defining a transaction as having a non-EU acquirer if, and only if, all acquirers are non-EU, and as having an EU seller if, and only if, all sellers are from the EU. As an additional robustness check on our choice of partitioning, in the "Fraction of Parties" row, we assign the nationality to the acquirer and to the seller based on the fraction of acquirers that are non-EU, and the fraction of sellers that are from the EU. The results remain robust to these alternative specifications.

In our main regressions, we exclude any transactions involving joint ventures. To ensure that this choice does not introduce a bias, in our "Inclusion of Joint Ventures" row, we include such parties, treating the joint venture itself as the target and the parents as the acquirers. The inclusion of joint ventures does not change the direction or the magnitude of the results.

Our main regressions use a Linear Probability Model because they allow for inclusion of industry fixed effects. To ensure that our results are not being driven by the assumptions

of the Linear Probability Model, we repeat our tests with a logit model in the "Logit Specification" row and find that our results are qualitatively similar.

Further, our main regressions are limited to the subsample of 2,351 transactions for which we have data on transaction value and other covariates. Whether or not we are able to retrieve the relevant data for a given transaction on, for example, transaction value is likely non-random; thus we recognize that our main sample might be a biased subsample of the full population. To ensure that our results are not being driven by our partial subsample, we run a regression in the "Full Set of Transactions" row using virtually every transaction (5,259 deals in total) in the dataset—excluding only the small number of mergers for which we are unable to determine accurate details of the transaction structure. This specification necessarily excludes covariates other than fixed effects for time and the number of parties. In this specification, that the Commission is statistically significantly less likely to block mergers with a non-EU acquirer and an EU seller.

Our primary specifications use as their outcome variable a simple binary dummy for whether the Commission challenges the merger or not. Recognizing that the Commission decisions vary in their relative significance, in the "Numerical Index Outcome" row, we use as a robustness check the simple linear index ranging from 1 to 6 that we introduced in Section 5.1. This specification, of course, makes the unrealistic assumption that the severity of Commission decisions scales linearly. As an alternative robustness check, the "Stricter Challenge Threshold" row changes the threshold of our challenge variable so

that mergers withdrawn or cleared at Phase I count as non-challenges. In unreported results, we use a series of different thresholds with qualitatively similar results.

Finally, to ensure that our decision to cluster by industry is not driving our results, we also cluster at the nation-pair level (that is, the combination of acquirer nation and target nation) in the row titled "Cluster by Nation-Pair." Our results hold also under this robustness check.

In unreported results, we also examine the coefficients by time period, and find no significant trends or differences with respect to particular years, or the identity of Competition Commissioners or EU Commission Presidents whose differential ideologies, nationalities or temperaments could lead to differential enforcement priorities.

6.5 Protectionism against US Firms

As noted above, the Commission has routinely been criticized for being particularly interventionist when a firm based in the United States is a party to the transaction. This could be, for instance, because of the inevitable economic and political rivalry between two major economic powers that (combined) host the majority of the world's major companies. Some critics also suggest that the EU is particularly envious of the US technological dominance and the demonstrated success of the many IP-rich US firms that risk leaving less innovative European companies behind.[23]

[23] See, for example, *The case against Google: Tie breaker* (The Economist, April 23, 2016) noting that many technology companies attribute EU Commission's interventions to the EU having "no successful technology companies on it own," which is "why Eurocrats spend their time hassling American tech giants instead."

We therefore repeat our above regressions with a constructed dummy variable for whether the merger has a US-based acquirer and an EU-based seller. Table 7 mirrors Table 4 and compares mergers with US acquirers and EU sellers with all other mergers in the sample. Again, we find nothing but negative effects of US-based acquirer and EU-based seller on probability of Commission challenge, which suggest that, if anything, mergers with US acquirers and EU sellers are *less* likely to be challenged.

[Insert Table 7 Here.]

It is again instructive to further partition the dataset. In Table 8, we partition the mergers with non-EU acquirers and EU sellers into those with US acquirers and those with non-US non-EU acquirers, and compare these different categories against the baseline of mergers with EU acquirers and EU sellers. The table shows that, compared to mergers with EU acquirers and EU sellers, neither the acquisitions of EU firms by US-based acquirers nor the acquisitions of US firms by US-based acquirers face greater likelihood of Commission intervention.

[Insert Table 8 Here.]

In Table 9, we find no evidence of protectionism when we include an interaction term with high-tech industries. The lack of evidence of protectionism remains when we perform the analysis using the primary place of business instead of the Commission's designated nationality, or when we designate the nationality of the firms based on the acquirer's ultimate parent's place of business instead of that of the direct acquirer's. Appendix Table 11 contains additional robustness checks.

[Insert Table 9 Here.]

7. Conclusion

In this Article, we have introduced a unique dataset including all mergers reported to the European Commission between 1990—the year when EU merger control was established—and August 2014. Our data has allowed us, for the first time, to examine systematically several long-hypothesized assumptions of the protectionist foundations of EU competition policy.

Our finding challenges the conventional wisdom that portrays the European Commission as a protectionist institution that deploys its vast merger control powers as a tool for industrial policy. We find no 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 involving a firm based in the United States. If anything, our results suggests that the Commission is less likely to challenge transactions involving foreign acquirers. While we cannot claim to have conclusively proven that protectionism is absent from Commission merger control, we argue that our analysis has, at the minimum, turned the tables and shifted the burden of proof to those entertaining these claims.

Our results have significant implications, both theoretical and practical. Beyond their direct contribution to the debate on the drivers of European merger policy, our findings provide an important corrective to the broader public debate regarding the behavior of one of the most powerful regulatory institutions in the world. Our analysis also makes a

contribution to the more general academic debates on international spillovers of domestic regulatory policies, regulatory constraints on global M&A deals, as well as modern manifestations of economic protectionism.

Further, the insights from this study may lead the Commission, the firms, as well as the Commission's critics to adjust their views and behavior. The perception of a foreign-bias may have led some companies to refrain from merging or, alternatively, structure their deals overly cautiously (and hence inefficiently) in an effort to pre-empt a challenge that they expected as forthcoming—perhaps unnecessarily, as our results would suggest. Portraying the Commission as a protectionist regulator may also have undermined the legitimacy of the Commission or even led the Commission to undertake measures to counter this narrative, such as investing extra resources in research on foreign transactions to bolster its arguments or giving some foreign firms an easier review in some instances to rebut any such harmful public perception. Finally, if the fears of protectionist competition policy are unwarranted, the persistent public focus on those fears may misguide the critics' attention from other policy areas where such bias may still be prominent and considerably more harmful to consumers and broader society. These critics may hence decide to look outside of competition policy instead. After all, we certainly do not advance a view that protectionism would not exist in any domain of the Commission. The question is rather what form it takes and which particular policies permit its existence.

Finally, a question arises whether one can extrapolate anything from our analysis of EU merger control to other areas of EU competition policy, including investigations in the behavior of dominant companies or the Commission state aid decisions. Those areas are considerably harder to test empirically as the entire universe of (potential) unilateral conduct cases or instances of state aid is not known.[24] However, if the Commission were a protectionist antitrust enforcer, we would expect those tendencies to feature particularly prominently in the merger control area, which involves large companies, high stakes and where concerns about the job losses are distinctly salient. It is, after all, the very same institution—the Directorate General for Competition—that engages in investigations across mergers, antitrust and state aid cases alike. There would hence need to be some reason why the protectionist Commission would rein in its protectionist tendencies in the merger area while engaging in biased enforcement elsewhere. That said, we are hesitant to draw too broad conclusions from our empirical findings, which are based on EU merger control alone.

[24] Unlike in merger control, where all transactions exceeding a certain threshold must be notified to the Commission, and the Commission must issue an decision on each of them, we do not know of the antitrust cases that the Commission fails to pursue.

TABLE 2—SAMPLE CHARACTERISTICS

	Full Sample	
	Mean	Std. Dev.
Transaction Characteristics		
Commission Challenge (probability)	0.129	0.336
Log Transaction Value (US dollars)	6.553	1.637
European HHI	0.138	0.210
European Relative Market Size	0.028	0.042
Asset Acquisition (probability)	0.355	0.479
Stock Acquisition (probability)	0.299	0.458
Horizontal Transaction (probability)	0.399	0.490
Hostile (probability)	0.022	0.146
Acquirer Characteristics		
Financial Sponsor (probability)	0.336	0.472
Acquirer High Tech Industry (probability)	0.207	0.405
Public Acquirer (probability)	0.583	0.493
Target Characteristics		
Public Target (probability)	0.703	0.457
Target Bankrupt (probability)	0.007	0.082
Observations	2351	

Notes: Sample consists of transactions for which there is an identified acquirer and seller and for which data is available on the main covariates. Sample characteristics expressed as means. Standard deviations in parentheses.

TABLE 3—COMMISSION CHALLENGES ON COVARIATES

	(1)	(2)	(3)
Main Covariates			
Log transaction value	0.308***	0.220***	0.243***
	(0.059)	(0.058)	(0.058)
Financial Sponsor	--1.071***	-0.918***	-0.988***
	(0.212)	(0.224)	(0.241)
European HHI		0.865*	0.847*
		(0.350)	(0.347)
European Relative Market Size		-11.850***	-11.996***
		(3.304)	(3.428)
Public Acquirer		0.229	0.299
		(0.174)	(0.197)
Hostile		0.826*	0.852*
		(0.344)	(0.356)
Asset Acquisition		-0.153	-0.165
		(0.173)	(0.177)
Stock Acquisition		-0.372*	-0.606**
		(0.189)	(0.234)
Horizontal Transaction		0.358*	0.368*
		(0.146)	(0.158)
Additional Covariates	No	No	Yes
Industry FE	No	No	No
N	2351	2338	2338
Psuedo R^2	.0896	.1206	.1244

Note: Logit results for regression of commission challenges. All specifications include fixed effects for year and number of acquirers. Column 3 contains covariates for whether the acquirer is in a high tech industry; whether the acquirer is a governmental entity; whether the acquisition is of a subsidiary of a larger company as opposed to an acquisition of the entire company; whether the target's ultimate parent is a publicly traded company; whether the acquirer fully or partially owns the target after the transaction; whether the target was in bankruptcy at the time of the transaction; and whether the acquirer is a special purpose vehicle. Standard errors (in parentheses) clustered at 2-digit industry level.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

TABLE 4—COMMISSION CHALLENGES BY NATIONALITY CATEGORY

	(1)	(2)	(3)	(4)	(5)
National Indicators					
Non-EU Acquirer & EU Seller	-0.012	-0.012	-0.013	-0.018	-0.009
	(0.015)	(0.014)	(0.014)	(0.016)	(0.019)
Main Covariates					
Log transaction value	0.033***	0.023***	0.025***	0.023***	0.022***
	(0.006)	(0.006)	(0.006)	(0.005)	(0.006)
Financial Sponsor	-0.096***	-0.073***	-0.079***	-0.071***	-0.065**
	(0.018)	(0.017)	(0.019)	(0.016)	(0.020)
European HHI		0.096*	0.097*		
		(0.044)	(0.044)		
European Relative Market Size		-0.691***	-0.697***		
		(0.197)	(0.202)		
Public Acquirer		0.025	0.028	0.022	0.024
		(0.016)	(0.018)	(0.017)	(0.016)
Hostile		0.182**	0.184**	0.173*	0.180*
		(0.067)	(0.068)	(0.070)	(0.076)
Asset Acquisition		-0.023	-0.024	-0.029	-0.027
		(0.018)	(0.018)	(0.015)	(0.017)
Stock Acquisition		-0.042*	-0.058**	-0.030	-0.011
		(0.019)	(0.022)	(0.021)	(0.023)
Horizontal Transaction		0.040*	0.042*	0.019	0.024
		(0.018)	(0.019)	(0.016)	(0.017)
Additional Covariates	No	No	Yes	No	No
Industry FE	No	No	No	2-digit	4-digit
N	2351	2338	2338	2338	2338
R2	.0651	.0892	.0913	.1577	.3177

Note: All specifications include fixed effects for year and number of acquirers. Column 3 contains covariates for whether the acquirer is in a high tech industry; whether the acquirer is a governmental entity; whether the acquisition is of a subsidiary of a larger company as opposed to an acquisition of the entire company; whether the target's ultimate parent is a publicly traded company; whether the acquirer fully or partially owns the target after the transaction; whether the target was in bankruptcy at the time of the transaction; and whether the acquirer is a special purpose vehicle. Standard errors (in parentheses) clustered at 2-digit industry level.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

TABLE 5—COMMISSION CHALLENGES (BASELINE: ALL-EU TRANSACTIONS)

	(1)	(2)	(3)	(4)	(5)
National Indicators					
Non-EU Acquirer & EU Seller	-0.017	-0.021	-0.020	-0.031	-0.023
	(0.016)	(0.016)	(0.015)	(0.017)	(0.021)
Non-EU Acquirer & Non-EU Seller	-0.018	-0.029	-0.024	-0.041*	-0.039
	(0.023)	(0.021)	(0.019)	(0.018)	(0.020)
EU Acquirer & Non-EU Seller	-0.006	-0.016	-0.012	-0.029	-0.035
	(0.032)	(0.033)	(0.034)	(0.034)	(0.045)
Main Covariates					
Log transaction value	0.034***	0.024***	0.025***	0.025***	0.024***
	(0.007)	(0.006)	(0.006)	(0.006)	(0.007)
Financial Sponsor	-0.096***	-0.072***	-0.078***	-0.072***	-0.066**
	(0.018)	(0.017)	(0.019)	(0.016)	(0.020)
European HHI		0.101*	0.100*		
		(0.046)	(0.045)		
European Relative Market Size		-0.699***	-0.702***		
		(0.201)	(0.205)		
Public Acquirer		0.027	0.029	0.023	0.025
		(0.016)	(0.018)	(0.018)	(0.016)
Hostile		0.178**	0.181**	0.166*	0.174*
		(0.066)	(0.067)	(0.069)	(0.076)
Asset Acquisition		-0.025	-0.025	-0.031*	-0.029
		(0.018)	(0.018)	(0.015)	(0.017)
Stock Acquisition		-0.045*	-0.060**	-0.033	-0.014
		(0.019)	(0.022)	(0.021)	(0.023)
Horizontal Transaction		0.039*	0.042*	0.018	0.023
		(0.018)	(0.019)	(0.016)	(0.017)
Additional Covariates	No	No	Yes	No	No
Industry FE	No	No	No	2-digit	4-digit
N	2351	2338	2338	2338	2338
R2	.0654	.0901	.0919	.1595	.3191

Note: All specifications include fixed effects for year and number of acquirers. Column 3 contains covariates for whether the acquirer is in a high tech industry; whether the acquirer is a governmental entity; whether the acquisition is of a subsidiary of a larger company as opposed to an acquisition of the entire company; whether the target's ultimate parent is a publicly traded company; whether the acquirer fully or partially owns the target after the transaction; whether the target was in bankruptcy at the time of the transaction; and whether the acquirer is a special purpose vehicle. Standard errors (in parentheses) clustered at 2-digit industry level.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

TABLE 6—COMMISSION CHALLENGES—ADDITIONAL TESTS

	High-tech industry	Primary Place of Business	Ultimate Parent Primary Place of Business
	(1)	(2)	(3)
Non-EU Acquirer & EU Seller	-0.015	-0.000	-0.005
	(0.017)	(0.017)	(0.017)
Acquirer High Tech	0.031		
	(0.032)		
Acquirer High Tech * Non-EU Acquirer & EU Seller	0.015		
	(0.048)		
N	2351	2338	2338
R2	.0651	.0892	.0913

Note: All specifications include fixed effects for year and number of acquirers, as well as the following covariates: log transaction value; European industry HHI; European industry relative market size; public acquirer; hostile transaction; acquisition of assets; acquisition of stock; financial-sponsor-related; and horizontal transaction. Standard errors (in parentheses) clustered at 2-digit industry level.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

TABLE 7—COMMISSION CHALLENGES BY US NATIONALITY CATEGORY

	(1)	(2)	(3)	(4)	(5)
National Indicators					
US Acquirer & EU Seller	-0.003	-0.003	-0.003	-0.002	-0.001
	(0.018)	(0.017)	(0.017)	(0.018)	(0.020)
Main Covariates					
Log transaction value	0.033***	0.023***	0.025***	0.023***	0.022***
	(0.006)	(0.006)	(0.006)	(0.005)	(0.006)
Financial Sponsor	-0.097***	-0.074***	-0.080***	-0.073***	-0.066**
	(0.019)	(0.017)	(0.019)	(0.017)	(0.021)
European HHI		0.096*	0.097*		
		(0.044)	(0.044)		
European Relative Market Size		-0.692***	-0.698***		
		(0.196)	(0.202)		
Public Acquirer		0.024	0.027	0.021	0.024
		(0.016)	(0.017)	(0.017)	(0.017)
Hostile		0.182**	0.184**	0.172*	0.179*
		(0.067)	(0.068)	(0.070)	(0.076)
Asset Acquisition		-0.024	-0.025	-0.029	-0.027
		(0.018)	(0.018)	(0.015)	(0.017)
Stock Acquisition		-0.042*	-0.058**	-0.030	-0.012
		(0.019)	(0.022)	(0.021)	(0.023)
Horizontal Transaction		0.041*	0.043*	0.020	0.024
		(0.018)	(0.019)	(0.016)	(0.017)
Additional Covariates	No	No	Yes	No	No
Industry FE	No	No	No	2-digit	4-digit
N	2351	2338	2338	2338	2338
R2	.0648	.0889	.0911	.1572	.3176

Note: All specifications include fixed effects for year and number of acquirers. Column 3 contains covariates for whether the acquirer is in a high tech industry; whether the acquirer is a governmental entity; whether the acquisition is of a subsidiary of a larger company as opposed to an acquisition of the entire company; whether the target's ultimate parent is a publicly traded company; whether the acquirer fully or partially owns the target after the transaction; whether the target was in bankruptcy at the time of the transaction; and whether the acquirer is a special purpose vehicle. Standard errors (in parentheses) clustered at 2-digit industry level.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

TABLE 8—COMMISSION CHALLENGES BY US NATIONALITY (BASELINE: ALL-EU TRANSACTIONS)

	(1)	(2)	(3)	(4)	(5)
National Indicators					
US Acquirer & EU Seller	-0.011	-0.015	-0.013	-0.020	-0.018
	(0.019)	(0.018)	(0.018)	(0.020)	(0.023)
US Acquirer & US Seller	-0.028	-0.041	-0.035	-0.046	-0.040
	(0.030)	(0.028)	(0.026)	(0.025)	(0.028)
EU Acquirer & US Seller	-0.060	-0.072	-0.066	-0.082	-0.086
	(0.043)	(0.044)	(0.045)	(0.045)	(0.063)
Other Non-US Non-EU	-0.009	-0.015	-0.013	-0.032	-0.026
	(0.018)	(0.018)	(0.018)	(0.016)	(0.022)
Main Covariates					
Log transaction value	0.034***	0.025***	0.026***	0.026***	0.024***
	(0.007)	(0.006)	(0.006)	(0.006)	(0.007)
Financial Sponsor	-0.097***	-0.073***	-0.079***	-0.075***	-0.067**
	(0.019)	(0.017)	(0.019)	(0.016)	(0.020)
European HHI		0.102*	0.102*		
		(0.045)	(0.045)		
European Relative Market Size		-0.702***	-0.705***		
		(0.201)	(0.204)		
Public Acquirer		0.027	0.028	0.022	0.024
		(0.016)	(0.018)	(0.018)	(0.017)
Hostile		0.176**	0.178**	0.165*	0.175*
		(0.066)	(0.067)	(0.069)	(0.075)
Asset Acquisition		-0.026	-0.026	-0.031*	-0.029
		(0.018)	(0.018)	(0.016)	(0.017)
Stock Acquisition		-0.048*	-0.062**	-0.035	-0.016
		(0.020)	(0.022)	(0.021)	(0.023)
Horizontal Transaction		0.040*	0.042*	0.019	0.024
		(0.018)	(0.019)	(0.016)	(0.017)
Additional Covariates	No	No	Yes	No	No
Industry FE	No	No	No	2-digit	4-digit
N	2351	2338	2338	2338	2338
R2	.0662	.0912	.0928	.1603	.3198

Note: All specifications include fixed effects for year and number of acquirers. Column 3 contains covariates for whether the acquirer is in a high tech industry; whether the acquirer is a governmental entity; whether the acquisition is of a subsidiary of a larger company as opposed to an acquisition of the entire company; whether the target's ultimate parent is a publicly traded company; whether the acquirer fully or partially owns the target after the transaction; whether the target was in bankruptcy at the time of the transaction; and whether the acquirer is a special purpose vehicle. "Other Non-US Non-EU" consists of transactions with non-US and non-EU acquirer or seller. Standard errors (in parentheses) clustered at 2-digit industry level.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

TABLE 9—COMMISSION CHALLENGES—ADDITIONAL TESTS FOR US

	High-tech industry	Primary Place of Business	Ultimate Parent Primary Place of Business
	(1)	(2)	(3)
US Acquirer & EU Seller	-0.013	0.004	0.005
	(0.020)	(0.016)	(0.016)
Acquirer High Tech	-0.035		
	(0.029)		
Acquirer High Tech * US Acquirer & EU Seller	0.054		
	(0.050)		
N	2338	2338	2338
R2	.0904	.0889	.089

Note: All specifications include fixed effects for year and number of acquirers, as well as the following covariates: log transaction value; European industry HHI; European industry relative market size; public acquirer; hostile transaction; acquisition of assets; acquisition of stock; financial-sponsor-related; and horizontal transaction. Standard errors (in parentheses) clustered at 2-digit industry level.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

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Appendix

TABLE 10—COMMISSION CHALLENGES—ROBUSTNESS CHECKS

	Coefficient on Non-EU Acquirer, EU Seller	N	R^2
(1) Reversed Partition	-0.008 (0.017)	2338	0.089
(2) Fraction of Parties	-0.012 (0.012)	2338	0.089
(3) Inclusion of Joint Ventures	-0.013 (0.013)	2639	0.086
(4) Logit Specification	-0.122 (0.157)	2338	
(5) Full Set of Transactions	-0.036*** (0.009)	5259	0.022
(6) Numerical Index Outcome	-0.009 (0.028)	2338	0.064
(7) Stricter Challenge Thresholds			
(a) Cleared at Phase II	-0.001 (-0.15)	2338	0.0374
(b) Conditions at Phase II or withdrawal at Phase II	-0.001 (0.009)	2338	0.0391
(c) Absolute prohibition	-0.000 (-0.16)	2338	0.0179
(8) Cluster by Nation-Pair	-0.005 (0.017)	2338	0.089

Note: Row (1) reverses the variable definitions in the partitioning of the dataset, counting a merger as non-EU acquirer and EU seller if all acquirers are non-EU and all sellers are EU-based. Row (2) replaces the categorical nationality variables with fractions—that is, the share of acquirers that are non-EU times the share of sellers that are EU-based rather than a simple binary dummy; Row (3) includes joint venture parties, counting them as sellers; Row (4) estimates a logit specification; Row (5) uses the entire set of

5,259 mergers, rather than limiting to those for which we have covariates; Row (6) replaces the binary dependent variable with our numerical index outcome variable, which takes the values 1-6 depending on the degree of the challenge; Row 7 increases the minimum threshold for a challenge: (7a) counts mergers cleared or withdrawn at Phase I as non-challenges; (7b) counts mergers cleared at phase II as non-challenges; (7c) counts mergers with conditions or withdrawal at Phase II as non-challenges. Standard errors (in parentheses) clustered at 2-digit industry level; and Row (8) clusters at the Acquiror Ultimate Parent Nation-Target Nation level (using SDC's primary place of business as the variable of interest so that each transaction has one acquirer and one target). All specifications include fixed effects for year and number of acquirers, and all but Row (4) include the following covariates: log transaction value; European industry HHI; European industry relative market size; public acquirer; hostile transaction; acquisition of assets; acquisition of stock; financial-sponsor-related; and horizontal transaction. Row (4) includes an indicator variable for joint ventures. Standard errors (in parentheses) clustered at 2-digit industry level except for Row (8).

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

TABLE 11—COMMISSION CHALLENGES—US ROBUSTNESS CHECKS

	Coefficient on US Acquirer, EU Seller	N	R^2
(1) Reversed Partition	0.006 (0.021)	2338	0.089
(2) Fraction of Parties	-0.002 (0.020)	2338	0.089
(3) Inclusion of Joint Ventures	-0.004 (0.017)	2639	0.086
(4) Logit Specification	-0.011 (0.191)	2338	
(5) Full Set of Transactions	-0.027* (0.011)	5259	0.021
(6) Numerical Index Outcome	-0.012 (0.030)	2338	0.064
(7) Stricter Challenge Thresholds			
(a) Cleared at Phase II	-0.001 (0.008)	2338	0.0374
(b) Conditions at Phase II or withdrawal at Phase II	-0.006 (-0.006)	2338	0.0391
(c) Absolute prohibition	-0.000 (-0.003)	2338	0.0179
(8) Cluster by Nation-Pair	0.005 (0.022)	2338	0.089

Note: Row (1) reverses the variable definitions in the partitioning of the dataset, counting a merger as US acquirer and EU seller if all acquirers are US-based and all sellers are EU-based. Row (2) replaces the categorical nationality variables with fractions—that is, the share of acquirers that are US times the share of sellers that are EU-based rather than a simple binary dummy; Row (3) includes joint venture parties, counting them as sellers; Row (4) estimates a logit specification; Row (5) uses the entire set of 5,259 mergers, rather than limiting to those for which we have covariates; Row (6) replaces the binary dependent variable with our numerical index outcome variable, which takes the values 1-6 depending on the degree of the challenge; Row 7 increases the minimum threshold for a challenge: (7a) counts mergers cleared or withdrawn at Phase I as non-challenges; (7b) counts mergers cleared at phase II as non-challenges; (7c) counts mergers with conditions or withdrawal at Phase II as non-challenges; and Row (8) clusters at the Acquiror Ultimate Parent Nation-Target Nation level (using SDC's primary place of business as the variable of interest so that each transaction has one acquirer and one target). All specifications include fixed effects for year and number of acquirers, and all but Row (4) include the following covariates: log transaction value; European industry HHI; European industry relative market size; public acquirer; hostile transaction; acquisition of assets; acquisition of stock; financial-sponsor-related; and horizontal transaction. Row (4) includes an indicator variable for joint ventures. Standard errors (in parentheses) clustered at 2-digit industry level except for Row (8).

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$