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Anu Bradford
*Columbia Law School*, abradf@law.columbia.edu

Adam S. Chilton
*University of Chicago Law School*, adamchilton@uchicago.edu

Katerina Linos
*University of California, Berkeley*, klinos@berkeley.edu

Alex Weaver
*Linklaters*, alxwever@gmail.com

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The Global Dominance of European Competition Law Over American Antitrust Law

Anu Bradford\textsuperscript{1} Adam Chilton\textsuperscript{2} Katerina Linos\textsuperscript{3} Alexander Weaver\textsuperscript{4}

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\textbf{Abstract.} The world’s biggest consumer markets—the European Union and the United States—have adopted different approaches to regulating competition. This has not only put the EU and US at odds in high-profile investigations of anticompetitive conduct, but also made them race to spread their regulatory models. Using a novel dataset of competition statutes, we investigate this race to influence the world’s regulatory landscape and find that the EU’s competition laws have been more widely emulated than the US’s competition laws. We then argue that both “push” and “pull” factors explain the appeal of the EU’s competition regime: the EU actively promotes its model through preferential trade agreements and has an administrative template that is easy to emulate. As EU and US regulators offer competing regulatory models in domains as diverse as privacy, finance, and environmental protection, our study sheds light on how global regulatory races are fought and won.

\textsuperscript{1} Henry L. Moses Professor of Law and International Organization, Columbia Law School (abradf@law.columbia.edu).

\textsuperscript{2} Professor of Law and Walter Mander Research Scholar, University of Chicago Law School (adamchilton@uchicago.edu).

\textsuperscript{3} Professor of Law and Faculty Co-Director, Miller Institute for Global Challenges and the Law, University of California, Berkeley, School of Law (klinos@berkeley.edu).

\textsuperscript{4} Associate, Linklaters LLP; JD, Columbia Law School, 2016 (alex.weaver@linklaters.com).

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1. INTRODUCTION

Competition laws are critical in balancing the relative role of private and public power in the marketplace. These laws shape global business conduct and often determine which products are produced and consumed. Yet the world’s two biggest competition regulators—the European Union and the United States—often find themselves at odds in high-profile investigations of anticompetitive conduct.

EU regulators typically take a more aggressive stance than American regulators reviewing the very same conduct under their respective competition laws. For example, in 2017 the European Commission imposed a record-high $2.3 billion fine on Google for, allegedly, manipulating its search results to favor its own shopping comparison service to the detriment of its rivals. In contrast, the US Federal Trade Commission found no “search bias” and concluded instead that Google’s behavior benefited consumers. In 2018, the EU doubled down on Google with an even higher fine of $5 billion in another competition law case involving Google’s operating system Android, followed by a 2019 fine of $1.7 billion in a case involving Google’s AdSense online advertising program. Again, equivalent conduct has not been challenged in the US to date. Other recent targets of the EU’s competition enforcement include Qualcomm and Apple. These prominent cases against US companies are not a new phenomenon. They build on a series of

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1 We use the term “competition law” as opposed to “antitrust law” unless we are specifically referring to US antitrust law. While antitrust law is commonly used in the US to denote a law that regulates market competition, we opt for “competition law” because it is more commonly around the world.

2 Google Search (Shopping) [C (2017) 4444 OJ C (2018)].


5 The Commission fined Qualcomm $1.2 billion for its exclusive dealing contracts with Apple on the computer chips market. Case AT.40220 – Qualcomm (exclusivity payments), Commission Decision of 24/01/2018 (No public version available as of March 25, 2018).

decisions against US corporate giants—including Intel, Microsoft, and General Electric—over the past several decades. In all these instances, US regulators have either taken no action or intervened with a more modest remedy. While these examples all involve US companies, the EU regulators have also targeted EU companies with similar fervor. For example, in a 2016 acquisition involving the world’s largest and second largest brewer, the Commission required the Belgian acquirer of Anheuser-Busch InBev to sell practically their entire UK-based beer business as a condition for approving AB InBev’s over $100 billion acquisition of SABMiller.

The EU and the US not only have their regulatory differences, but they also want the rest of the world to follow their respective regulatory models. Both jurisdictions have actively promoted their competition laws as “best practices” abroad, urging developed and developing countries alike to adopt domestic competition laws and build institutions to enforce them (Kovacic 2015; Tappan and Byers 2013; Kovacic 2008; Fox 1997). They promote their models through a specialized network of competition regulators—the International Competition Network (ICN)—and also more general bodies—notably the Organization for Economic Cooperation and Development (OECD) and the United Nations Conference on Trade and Development (UNCTAD) (Tritell and Kraus 2018). They also employ bilateral tools in their promotion effort—including offering technical assistance to emerging competition law jurisdictions (Tritell and Kraus 2018). In its trade agreements, the EU also explicitly conditions access to its markets on the adoption of a competition law, exporting its own law in the process (Bradford and Chilton 2019), while the US relies primarily in its persuasive powers rather than on formal treaties in exporting its laws (Kovacic 2015).

There are multiple motivations for states to seek export their laws abroad. For one, having the rest of the world replicate one’s regulatory framework lowers the costs of entering foreign

7 Commission Decision of 13 May 2009 relating to a proceeding under Article 82 of the EC Treaty and Article 54 of the EEA Agreement (COMP/C-3/37,990 - Intel) (finding that exclusivity rebates were an abuse of its dominant position). In September 2017, the European Court of Justice overturned the fine levied by the Commission in its decision. Case C-413/14 P.

8 Commission Decision of 24.03.2004 relating to a proceeding under Article 82 of the EC Treaty (Case COMP/C-3/37,792 Microsoft) (“Microsoft”) (finding that Microsoft had abused its dominance as it related to interoperability of its systems and tying of its Windows Media Player application, both to the detriment of its competitors).

9 Commission Decision of 03/07/2001 declaring a concentration to be incompatible with the common market and the EEA Agreement Case No COMP/M.2220 - General Electric/Honeywell.

markets. The regulatory similarity with the EU is expected to lower the entry costs for EU companies to those third markets given that the EU companies already comply with similar standards at home. For the same reason, the US prefers to export its model and hence avoid adjustment costs that its companies may face when confronted with regulatory differences. For another, exporting one’s rules ensures that competition takes place on “optimal,” “efficient,” or “fair” terms across the global markets—as defined by the jurisdiction that successfully exports its laws. Finally, the winner of the regulatory race is able to export its economic philosophy to third countries, which serves as a testament to the appeal of that jurisdiction’s value system. In case of competition law, the countries’ choice of aligning themselves with the EU or the US reflects a more fundamental choice between an ideology that either places greater trust in the governments’ ability to improve outcomes through intervention (EU model) or, alternatively, trust in the markets’ ability to self-correct (US model).

These efforts to globalize competition law appear, at first glance, largely successful: today, over 130 jurisdictions have a domestic competition law, making competition law one of the most widespread forms of economic regulation around the world. But, because the EU and US competition laws differ in key respects, understanding the type of competition law a country has adopted is critical to understanding which country is having greater influence. For example, whereas promoting consumer welfare is the goal of US antitrust law, EU competition law has historically allowed additional goals to enter the analysis, including the protection of small and medium enterprises, employment, regional development, and, most critically, market integration. Moreover, the EU is generally more likely to find that a company is abusing its dominant position in a market and to challenge vertical and conglomerate mergers. In addition, the EU and US competition enforcement institutions differ dramatically: EU law is dominated by administrative actions and US law is dominated by private litigants. And whereas the EU relies on administrative fines, US antitrust law is also backed by criminal sanctions. While competition law scholars are familiar with the major differences between the EU and US regimes, and with individual examples of countries emulating the EU or the US, the relative influence of each regime has not been studied quantitatively.

By leveraging a novel and highly detailed data coding of competition statutes around the world, this article is the first systematic study the relative influence of EU and US competition regimes in shaping the global regulatory landscape. Using data on dozens of competition law
provisions from 126 countries, we trace the evolution of competition regimes for over a half a century of lawmaking, from when the EU joined the US as another major competition regulator in the world in 1957 to 2010. Our analyses reveal that the majority of jurisdictions with competition law regimes have laws that more closely resemble the European Union’s competition laws than the United States’ antitrust laws. Moreover, our detailed data allows us to trace the evolution of EU and US influence over time. This analysis reveals that the European model of competition became more emulated than United States’ model in the 1990s, and the EU’s “sphere of influence” in the domain of competition regulation has continued to increase ever since. Thus, the significant diffusion of competition rules we have witnessed over the past three decades has not only led to a globalization of competition law, but also to a notable “Europeanization” of competition regulation across the world markets.

The Europeanization, rather the Americanization, of global competition law is notable because the US has a considerably longer history of using competition law. Indeed, the United States the Sherman Act long before the EU and its competition laws were conceived. The US has also been an influential leader in competition economics and law alike, spearheading early efforts to adopt competition law regimes in many parts of the world—including in the EU. However, after the EU adopted its own competition law, it eventually eclipsed the US as the leader in providing the template for the global expansion of competition laws, marginalizing the US’s global influence in the decades that followed. In other fields, such as corporate law, thousands of articles have been devoted to debating whether there’s a race to the top or the bottom, what mechanisms drive the race, whether shareholders or managers benefit, and more (e.g., Romano 1987; Roe 2003). However, because the literature on the world’s competition regimes is in its infancy, a key contribution of this article is to document that there exists a global regulatory race in the area of competition law, and that the EU is clearly winning it.

We also advance a set of explanations for why the European model has come to predominate. First, a set of “push factors” explains the EU’s ability to effectively externalize its laws. The EU’s competition law dominance can be partially traced to the EU’s conscious efforts to expand its regulations through a myriad of trade, association, and other political agreements.

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11 We note that the mechanisms driving these races are very likely different. While in the corporate law area, many states seek to attract and curry favor to private parties, in the antitrust arena, regulatory races are driven by efforts to enhance public power even at the cost of frustrating or even breaking up private firms, as we explore in Part IV.
The EU has required many countries seeking greater market access or closer political association to adopt competition laws. In addition, as Bradford (2012) outlines in “The Brussels Effect,” the EU has the greatest ability to shape foreign jurisdictions’ laws given that the companies often apply the most stringent regulatory standard—typically the EU standard—across their global operations to capture the benefits of uniform production while maintaining compliance worldwide. Second, the EU competition law model also spreads due to strong “pull factors.” In many countries, domestic politics are more conducive to EU-style competition laws, which accommodate more diverse policy goals and defer less to markets and more to governments’ ability to correct market failures. Another major pull factor is the EU’s tendency to promulgate more precise and detailed rules, making them easier to copy in the absence of technical expertise in the adopting country.

Our findings have several implications. First, our results offer evidence of the EU’s outsized influence in regulating global markets. This narrative stands in contrast to many critics who have declared the end of the EU’s influence and ability to shape outcomes globally as its relative economic and political power wanes. Second, our results suggest that, although the law and economics movement may have had a large influence on the development of America’s antitrust law and policy, it may have had a more modest influence on the development of competition policy in the rest of the world (Bradford et al. 2020). Third, and more generally, our analysis illustrates the ability of a single jurisdiction to attract countries with starkly different characteristics into its orbit, vesting it with a sizable regulatory influence that spans economic, linguistic, and political boundaries. Out of this dynamic, a new form of globalization of norms emerges—globalization emerging as a result of EU’s unilateralism as opposed to multilateralism. Finally, beyond illuminating the regulatory influence in the competition law context, our results speak more broadly to the literature on regulatory competition, diffusion of norms, and legal transplants. Competition between the European and US regulatory schemes has been prominent in many areas, ranging from privacy (Schwartz 2013; Schwartz and Peifer 2017), to chemicals (Scott 2009), to finance (Gadinis 2010), to discrimination law (Linos 2010), to name but a few. Documenting the specific pathways through which the EU has succeeded in externalizing its models thus contributes to a broad range of fields and advances the diffusion literature, which to date has primarily focused on countries receiving foreign models and not on the entities promoting them.
This Article proceeds as follows. Part 2 reviews the key elements of the EU and US competition laws. Part 3 introduces our data and deploys it to demonstrate the outsized influence of the EU model over the US model in shaping the international competition law landscape. Part 4 discusses the reasons for the global appeal of the EU competition regime. Part 5 briefly concludes by outlining some descriptive and normative implications of our findings.

2. The EU v. US Models

An extensive literature has emerged to evaluate the transatlantic divergence in competition law and the reasons behind it (Gifford and Kurdle 2014; Devlin 2009). Most commentators agree that the EU and US competition policies have converged over time, in part because of the growing reception of the economic analysis in the EU. But while the two regimes share important similarities, there are key differences in the jurisdictions’ competition policies that are embedded deeply in their legal institutions and that are likely to persist. These include having competition regimes with different policy goals, substantive rules, and institutional architecture.

2.1. Historical Origins

Key US antitrust rules long predate EU competition rules. The US adopted the Sherman Act in 1890 to counter the power of trusts that had come to dominate American commerce, suppressing the ability of small firms to compete (Bradley 1990, p. 738). The Sherman Act regulates cartels and other anticompetitive agreements as well as unilateral conduct by monopolies. In 1914, the US Congress enacted the Clayton Act, which gave the government the power to review and, when needed, restrict mergers and acquisitions, adding to the powers vested by the Sherman Act.

EU competition law was enacted in 1957, almost 70 years after the Sherman Act. It was adopted as part of the EU’s founding treaties that laid the groundwork for the common market. Competition law was seen as an important complement to trade liberalization, intended to ensure that private anticompetitive practices did not frustrate the gains from the removal of public barriers, such as tariffs and quotas, between member states. Whereas the 1957 Rome Treaty included foundational competition principles, notably the prohibition on anticompetitive agreements as well on the abuse of a firm’s dominant position, the regulation of mergers was not introduced until 1990, through the European Merger Control Regulation (“EMCR”).
2.2. Different Goals

The goals of US antitrust law diverge somewhat from the goals of EU competition law. While initially the goals of US antitrust enforcement were varied and included an attempt to broaden economic opportunities, at least since the 1970s, US antitrust law has been almost exclusively dominated by the concern for efficiency and consumer welfare (Fox 1997, p. 340). While there is some debate as to whether efficiency should be associated with greater consumer welfare or total welfare, there have been limited sustained efforts to incorporate broader, non-economic policy goals into the law.

EU competition law, in contrast, has always had broad goals. European integration and the establishment of the single market were important goals of EU competition law from the beginning, alongside the protection of consumer welfare (Patel and Schweitzer 2013; Gerber 2006; Consten and Grundig-Verkaufs-GmbH v. Commission of the European Economic Community [Joined Cases C-56/64 and C-58/64 (1966)]). This integration goal has led the EU to pursue a more stringent approach on vertical agreements, both in statutory provisions and in enforcement, in particular when those agreements involve territorial restraints that divide the common market. While the EU has moved towards greater focus on consumer welfare as the primary goal of a competition law over time, it has historically been more open to consider a wider range of policy goals, even if at the margin (Fox 1997, pp. 339-40; Italianer 2013; Levy 2005). These additional goals include the protection of small and medium-sized enterprises, employment, regional development, and the preservation of a competitive market structure. For instance, the goal of protecting small and medium sized companies has given the EU a broad mandate to leverage its competition laws against dominant companies in an effort to protect the smaller rivals’ ability to compete.

2.3. Substantive Differences

Both jurisdictions recognize similar types of behavior as potentially anticompetitive and structure their laws around the following well-understood categories: anticompetitive agreements,

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13 Microsoft (citing the need to protect rivals incentives to innovate).
monopolization, and control of mergers. The greatest substantive differences relate to the degree to which the two jurisdictions tolerate market power and therefore intervene in the conduct of a dominant company. The EU is more likely to conclude that a company has a “dominant position” on the market and, once dominance is established, more likely to find that the company is abusing its dominant position (Gal 2004, pp. 345-46; Fox 1997, p. 344). For example, the EU bans practices such as excessive pricing, which the US antitrust statutes do not expressly restrict and which the US courts have not read into the broader provisions of the law.\textsuperscript{14} The EU is also generally viewed as stricter when it comes to vertical agreements with suppliers or distributors.\textsuperscript{15}

Merger control is an area of historical divergence—the EU adopted its merger control regulation significantly later than the US. And while the EU and US substantive rules on mergers are largely aligned, the EU is more prone to challenge in particular conglomerate and vertical mergers,\textsuperscript{16} regardless of the home jurisdiction of the merging firms (Bradford et al. 2019).

These substantive differences in competition law largely stem from divergent views on how markets operate (Hall & Soskice 2001). US antitrust laws reflect greater trust in markets’ ability to self-correct and skepticism about the government’s ability to intervene. In contrast, the EU competition law rests on the belief that markets fail and governments can often improve outcomes by intervening.\textsuperscript{17} Put differently, the US is more fearful of false positives (where the government restricts competitive behavior) whereas the EU is more fearful of false negatives (where the government fails to restrict anti-competitive behavior).\textsuperscript{18} These differences not only reflect an ideological disagreement on the how well markets work, but the differences also reflect

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\textsuperscript{14} In addition, many types of conduct recognized in both jurisdictions as potentially abusive have a higher evidentiary threshold in the US. For instance, these include prohibition of predatory pricing or anticompetitive discounts or refusal to deal.

\textsuperscript{15} This is true in particular with respect to non-price vertical restraints such as exclusive dealing or territorial and customer restrictions. However, also resale price maintenance is more strictly viewed in the EU.


\textsuperscript{18} See, e.g., Deborah Platt Majoras, Deputy Assistant Attorney Gen., Antitrust Div., U.S. Dep’t of Justice, Remarks on GE-Honeywell: The U.S. Decision Before the Antitrust Law Section, State Bar of Georgia 16 (Nov. 29, 2001).

\end{footnotesize}
the actual operation of markets in the EU and the US. For example, capital markets are less well developed in the EU than in the US, making entry into the market more difficult and hence less of a check on existing anticompetitive behavior.\(^\text{19}\) These reasons go a long way to explain the EU’s discomfort with dominant companies and the US’s reliance on markets to discipline them.

### 2.4. Institutional Differences

In addition to these substantive differences, the institutional features and remedies underlying each system present an even greater divergence. Whereas the US agencies need to involve courts when seeking an injunction or other remedy, the European Commission has vast administrative powers. In addition, private enforcement is prevalent in the US, but much more limited in Europe. Both these differences make courts more central to the development of US antitrust law.

The Department of Justice (DoJ) and the Federal Trade Commission enforce antitrust laws in the US. However, their administrative powers are more limited than those of their European counterparts. For example, unlike its European counterpart, the DoJ cannot enjoin a merger without challenging it in federal court; it is the court that needs to prohibit the merger or approve the conditions attached to the clearance decision. If the DoJ uncovers a cartel, the courts may impose criminal penalties, whereas administrative fines, injunctions, or other behavioral and structural remedies are common with respect to other types of anti-competitive practices that the government challenges.

EU competition law is an administrative system in which the Commission plays a central role. The courts are involved at the appeal stage and their role is limited to reviewing that the Commission acts within the powers vested to EU institutions in the treaties. This grants the Commission substantial power to impose remedies without pursuing litigation before European courts. The EU also does not levy criminal penalties but instead relies on administrative fines and other civil remedies. EU law co-exists with 28 national competition regimes in its member states. These individual EU members have the power to enforce not only their national law, but also EU

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competition rules, which further strengthens the regulatory capacity of the EU (see Council Regulation No 1/2003 [2002]).

US antitrust law has long featured a private right of action, whereas the private right of action is not recognized at the EU level. Only recently did the EU promulgate a directive to pave the way for greater private enforcement in member states courts (Directive 2014/104/EU 2014). This administrative enforcement model, as opposed to a litigation-based enforcement model relying more on private suits, also explains why EU competition rules are considerably more detailed, leaving less discretion and scope for their subsequent specification in case law. Similarly, remedies remain a significant source of divergence. While the US allows for criminal prosecutions in case of cartels, the EU relies on administrative sanctions alone. The US also provides for sizeable damages (including treble damages), which are common given the prevalence of private right of action. These institutional differences reflect broader systemic differences associated with common law and civil law systems and the role that private litigants and the courts have across many areas of US law.

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These above differences between the EU and US competition regimes are well documented. Our goal is not to study them. Our goal is to investigate whether the EU or the US regulatory model has gained greater traction globally. Anecdotally, competition scholars and practitioners have suggested that several countries look to the EU when drafting their competition laws (Kovacic 1998, pp. 1086-89; Gal 2007). According to Khokhlov (2013), EU and German competition laws significantly influenced the 2006 Russian law on the protection of competition and subsequent amendments. Feyissa (2009) argues that the Ethiopian competition law regime is modeled after the EU, with the EU law offering the “primary material” in the drafting of the 2003 Trade Practice Proclamation that regulates competition. Jatar (1998) similarly notes that many Latin American countries, including Colombia and Venezuela, drew heavily on Articles 101 and 102 of the EU treaty when drafting their competition statutes. In India, the 2001 Report on the Competition Bill notes that the Act is “closely in tune with the Competition Law of the European Commission” (Parliament of India 2001). Finally, China’s antimonopoly law mirrors EU competition law (Wu 2012). We move beyond these anecdotes to a systematic analysis of the world’s competition laws.
3. The Spread of Competition Law

We now turn to empirically testing how similar countries’ domestic competition regimes are to the EU and US models. Before doing so, we introduce our data on competition laws around the world. We then test the relative influence of the EU and the US on those laws in two ways. First, we compare the correlation between key substantive provisions in countries competition laws with the EU and US laws over time, both at the aggregate and issue-specific level. Second, we draw on our coding of linguistic similarity in competition statutes to see how frequently countries have incorporated key parts of the EU and US language into their own statutes. While both measures have their limitations, the fact that both approaches consistently point to the EU’s growing influence around the world, and the diminished influence of the US, gives us confidence in our results.

3.1. Comparative Competition Law Dataset

Our dataset comprises 126 countries that we identified as having a competition law regime by 2010 (Bradford et al. 2018).20 For each of those jurisdictions, we retrieved and coded every competition law from the jurisdiction’s first measure adopted, together with every subsequent addition and modification through 2010. Thus, for example, our data for the US spans across the years 1890-2010, but for Zimbabwe, from 1998 to 2010. Our data gathering included both general and sectoral competition laws as well as competition provisions in other laws such as criminal laws or constitutions.

For each law retrieved, we coded a range of features, including basic information (such as when the law was adopted), whether the law incorporates key phrases from the US antitrust and EU competition laws, and whether various substantive provisions are included in the law. The substantive variables comprise four principle topics: a country’s “Authority,” their rules over “Merger Control,” restrictions on “Anticompetitive Agreements,” and regulations on “Abuse of Dominance.” By Authority, we refer to provisions governing the broader structure of the regime, including the territorial scope of the law or the various limits of the law’s application, and the

20 Because we introduce our dataset and discuss the details of our data gathering in (Bradford et al. 2018), we only briefly review it here. We focus on statutory law in our main analyses, but also include a robustness check to assess whether results change when we also code for US case law. See Figure 6C and Supplementary Appendix A3.
availability of remedies or private litigation as tools of competition enforcement. By Merger Control, we refer to provisions guiding the review the mergers and acquisitions, including whether merger notification is mandatory, the substantive test used for assessing mergers, and the defenses that are permitted to approve otherwise prohibited mergers. By Anticompetitive Agreements, we refer to rules regulating cartels, including prohibitions of price fixing, bid rigging, or output limitations or rules on vertical agreements, including prohibitions on resale price maintenance or supply restrictions. By Abuse of Dominance, we refer to regulations on the abuse of monopoly power, including bans on tying, discounts, and other unfair pricing practices.

To illustrate the data, Figure 1 shows the frequency that each of 36 key variables from the four substantive categories discussed above appears in countries’ laws as of 2010.21 The x-axis illustrates the percent of countries that have each of these provisions in their competition law in 2010. As Figure 1 illustrates, there is considerable variance in the prevalence of the different provisions. For instance, 94 percent of countries with a competition law that had the authority to impose fines when implementing their competition regime, but just 44 percent of countries with a competition law had the authority to impose prison sentences.

We use this dataset to examine whether countries around the world have adopted competition regimes that resemble the EU or the US in two ways. First, we examine substantive similarity. To measure the similarity of competition regimes between countries, we use the variables depicted in Figure 1 that measure the core features of countries’ competition regimes. In Part 3.2, we use these variables to see whether countries have adopted laws that correlate more highly in each year with laws of the EU and the US. Second, we examine linguistic similarity. Our dataset includes coding of a series of variables identifying the presence of distinctive language first used in EU competition laws and US antitrust laws. In Part 3.3, we use these variables to analyze whether other countries have emulated this key language from the EU or US statutes more frequently over time. This gives us an imperfect, but useful, first indication that copying of statutes is occurring, rather than, for instance, a shared, but independent, response to common shocks.

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21 Bradford and Chilton (2018) discuss these variables and explain their relevance to measuring competition. Part A1 of the Supplemental Appendix provides descriptions of these variables and Part A2 graphs their prevalence over time.
3.2. Similarity of Substance

We begin by examining correlations in what countries’ competition laws permit and prohibit around the world. To do so, we compare the substance of each country’s competition law to both the EU and US. We do so using a method that has previously been used by comparative law scholars to measure the similarity of legal regimes across countries and time (Elkins et al. 2008; Elkins et al. 2009; Law and Versteeg 2012). We follow Law and Versteeg (2012), who used panel data on the rights included in countries’ constitutions, and then measured the similarity of constitutions by calculating the Pearson’s Phi correlation coefficient of pairs of countries. Pearson’s Phi is a correlation coefficient for binary variables that ranges from -1 to 1, where a score of -1 means that the pair of countries has the exact opposite values for the set of binary variables measured and a score of 1 means the countries have the exact same values for the set of binary variables. Using this method, we calculated the correlation between each countries’ law and the EU law for the 36 variables introduced in Figure 1 in every year between 1957 and 2010, and then calculated the correlation between each countries’ law and the US for the same 36 variables over the same time period.

Figure 2 shows the average correlations to both the EU and US law over time. There are several things worth noting about the results in Figure 2. First, the average correlation for countries to the US competition law has slowly declined over time. In 1950, the average correlation was 0.29, but by 2010, this had slowly decreased to 0.17. Second, the EU first adopted competition law, the average correlation to that law was just 0.06. Within just a decade, however, the average similarity to the EU was roughly the same as the United States. In 1990, the similarity of the EU began to dramatically outpace the US. By 2010, the average correlation to the EU law was 0.32. This is likely due to both the EU’s adoption of merger review and the dramatic increase in competition regimes around the world starting in the 1990s. In short, Figure 2 suggests that, as

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22 Because the members of the EU have competition laws that largely resemble the EU’s competition regime, the results reported in this section exclude countries that are members of the EU to avoid inflating the correlation to the EU.

23 If we include EU members, for 2010, the mean correlation is 0.18 for the US and 0.37 for the EU.
competition laws proliferated around the world, countries were more likely to adopt regimes similar to the EU than the US.\(^{24}\)

Although Figure 2 suggest that, on average, countries’ laws have become more similar to the EU than the US, it does not reveal how many countries have laws more similar to the EU than the US. For instance, it is possible that some countries are extremely similar to the EU, but that the US model is slightly more popular in more countries.\(^{25}\) To examine this possibility, for every country with a competition law in our dataset, we created a binary measure of whether their competition law had a higher correlation to the EU or to the US in each year. Figure 3 then graphs the number of countries in each year that have higher correlations to the EU or the US. As Figure 3 shows, some of the wave of countries that adopted competition laws in the 1990s did follow the US more closely than the EU. For example, in 1985, 11 countries had competition law regimes with higher correlations to the US regime and, by 2000, that grew to 25 countries. That said, the number of countries that followed the EU regime grew even more dramatically. In 1985, 17 countries had competition law regimes with higher correlations to the EU regime and 59 did so in 2000. By 2010, 22 countries had higher correlations to the US and 71 regimes had higher correlations to the EU.\(^{26}\)

Figure 4 maps countries based on whether their correlation to the EU or the US was higher in 2010. Among the countries whose substantive antitrust regulations more closely resemble US laws are states with strong cultural and legal ties to America, including: Australia, Canada, and New Zealand. Important jurisdictions like Japan also have laws that are more similar to those of the US than the EU. That said, there are many more countries in every region of the world that have laws exhibiting higher correlations with the EU than the US. These include important

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\(^{24}\) To be clear, countries typical had elements that were similar to both the EU and US. To illustrate this, Part A5 of the Supplemental Appendix provides a graph of the correlation between countries’ scores for similarity to the EU and US in 2010.

\(^{25}\) This distinction is important because the sample of countries with competition laws has changed over time. As a result, the EU dominance could be due to new countries adopting competition law following the EU model, countries with a competition law moving closer to the EU model, or both. Or, to put this in economic terms, the results in Figure 2 provide evidence about the intensive margin (e.g. how similar countries are to the EU), but it does not speak to the extensive margin (e.g. how many countries are similar to the EU).

\(^{26}\) These totals exclude EU member states. When including EU members, in 2010, 23 countries had more similar regimes to the US and 96 had more similar regimes to the EU.
regional leaders in competition law and major emerging markets, including: Brazil, China, India, Mexico, Russia, South Africa, and South Korea.

To delve deeper, we break down the index of 36 significant provisions into four subcategories that are significant in competition laws around the world: Authority (i.e., broader regime structure), Merger Control, Anticompetitive Agreements, and Abuse of Dominance. Figure 5 measures the similarity of countries’ competition laws with EU and US competition laws in each category, and it shows that the EU competition law dominates US antitrust law today across all four categories. However, the relative strength of EU’s influence, as well as the timing of the EU’s emergence as the leading model for the world competition regimes, differs. The countries follow the EU’s model in terms of the general structure of their regime—the Authority—as well as the EU provisions on anticompetitive agreements starting in the 1960s. In contrast, the EU model surpasses the US models in the abuse of dominance provisions in the 1990s. Merger control is an outlier: the EU adopted merger control only in the 1990s, leaving the US to lead the way up until then. As of 1990s, both US and EU provide very similar merger control laws for the rest of the world to emulate. In 2010, countries have slightly higher correlations to the EU merger provisions than the US merger provisions. However, the difference is marginal, reflecting the strong US-EU consensus in this area of competition regulation.

These results all suggest that more countries have adopted competition laws that are similar to the EU’s competition laws than to those of the US. Figure 6 explores the robustness of these results in three ways to show that our results are not purely a product of the way we measure similarity, the substantive provisions we analyzed, or the way we coded antitrust regimes.

First, following Law and Versteeg (2012), we measured similarity of regimes based on the correlation between them. It is also possible, however, to measure similarity by simply counting the number of provisions that countries have the same coding. Using this approach, Panel A

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27 Merger Control, Anticompetitive Agreements, and Abuse of Dominance straightforwardly refer to the major substantive categories of competition rules, but “Authority” refers to broader structural provisions. These include the availability of remedies or private litigation as tools of competition enforcement whereas the other three subcategories capture the three most common substantive areas of competition law. These terms are briefly explained above in Section 3.1 above and elaborated in Part A1 of the Supplemental Appendix.

28 For instance, if Country A was coded as “1” for all 36 provisions, and Country B was coded as “1” for 18 of the provisions and “0” for the other 18 provisions, Country A and Country B would agree on 18 provisions. There average level of agreement would be 0.5 (that is, 0.5 = 18/36).
shows the average agreement score for each country with the EU and the US over time. Again, the pattern revealed is one of declining US influence and increasing EU influence over time.

Second, our results are not dependent on our decision to focus on 36 key provisions of the antitrust law. To illustrate, we narrowed our focus to just 10 variables that we believe are “core” to defining the scope of an antitrust regime. Although this is admittedly a somewhat arbitrary list, we selected these variables because of their nature as “core” provisions that capture some of the most fundamental aspects of a competition regimes. As Panel B shows, when using this narrowed list of 10 core provisions, the correlations with the EU regime still rose while correlations with the US regime still declined.

Finally, our primary results exclusively rely on the coding of the statutes. The results may thus reflect the greater specificity of statutes in the EU. For instance, the EU enumerates various types of abusive practices that are prohibited in the case of a dominant company. The US does not recognize these prohibitions in its law yet the courts have come to recognize those practices as anticompetitive in their case law. Examples of this includes the refusal to supply doctrine, tying, or various concerted practices such as output restraints, market sharing or the efficiency defense, all of which are products of case law in the US. We therefore repeat the correlation analysis below after adjusting our coding of the US law to count for the major decisions taken by courts that influence the substantive content of competition laws. Panel C recreates the results in Figure 2 when using this alternative coding of the US competition law regime. However, even after accounting for the US case law in this way, the correlations to the US have still continued to decline over time. In other words, the relative decline of US influence in countries’ competition laws compared to the EU’s is not driven solely by the fact that the US regime relies is based in part on judicial decisions.

29 Those 10 variables are: Authority – Private Right of Action; Authority – Imprisonment; Authority – Damages; Merge Control – Pre-Merger Notification; Merger Control-Efficiency Defense; Abuse of Dominance – General Prohibition; Abuse of Dominance – Predatory Pricing; Abuse of Dominance – Discounts; Anticompetitive Agreements – Price Fixing; Anticompetitive Agreements – Reseal Price Maintenance.

30 To determine which decisions count as major decisions, we use a reputable and commonly used antitrust case book “Antitrust Analysis: Problems, Text, and Cases” (Phillip E. Areeda et al. eds.) and adjusted the coding to account for all decisions discussed in the case book. More detail on the coding for this process is provided in Part A3 of the Supplemental Appendix.
3.3. Similarity of Language

We continue by examining the extent to which various national laws replicate the language used in the EU and US competition laws. Similarity in language has long been used in diffusion scholarship to document the spread of laws (e.g. Walker 1969; Linos 2013; Ginsburg et al. 2014; Hinkle 2015; Jansa et al. 2015; Law 2016). If there is similar language in the laws of two jurisdictions, the later adopter may have borrowed from the earlier adopter. The evidence that borrowing occurred is stronger when the language is identical, and the evidence is stronger still when there is copying of typographical errors (e.g. Walker 1969).

We supplement our coding of substantive similarity in Part 3.2 with a different coding of linguistic similarity in this section in part to triangulate on the answer to our question: as each similarity measure has its limitations, it is important to see whether they point in the same direction. In addition, linguistic ties can help shed some light on the diffusion process, by suggesting that legislators literally used one another’s laws as templates, rather than, for instance, independently developing similar solutions to similar problems.

To measure linguistic ties in competition laws, we used human coding of the language of antitrust statutes.31 Recently, scholars have used computational text analysis to measure the similarity in language across jurisdictions. To our knowledge, this approach has primarily been limited to measuring the similarity of laws across US states (e.g. Hinkle 2015) and the preambles of the world’s constitutions (Ginsburg et al. 2014; Law 2016). However, this approach has not been widely used in comparative law, as it is often the case that statutes are drafted in different formats and styles, and that these stylistic differences and similarities can yield far too many false positives and false negatives. Because of these concerns, we instead asked our coders to record whether each law contained language that was closely aligned with the precise wording (or the combinations of words or a specific order of words) used in the Sherman Act and the Clayton Act or in the EU Treaties and EMCR. When coding whether a law used wording that resembled these key clauses from the EU and the US laws, the coders were instructed to look for the use of exact or close approximation of the key phrases. For instance, coders would code “Yes” for resemblance of EU competition law if “significantly impede effective competition” appears with

31 Part A4 of the Supplemental Appendix provides more detail on our coding of language resemblance.
“impedes” in a different tense or conjugated or as “significantly impede competition” or “impede effective competition.” However, distant phrases were not coded as resembling the EU law.32

Although we recognize that relying on human coders in this way almost certainly results in measurement error, we believe that using this approach still sheds light on the influence of the EU and US laws on other countries. To ensure high coder quality, we drew on extensive LLM program at Columbia Law School to identify student coders who had both legal and language expertise. To alleviate concerns about the measurement error, we asked two coders to review each law, with a third independent coder assigned to resolve all discrepancies between initial coders under the guidance of the experienced project leader and, ultimately, us. Moreover, our coders were not informed that their resemblance coding would be used for this project, and as a result, we believe any measurement error is likely to be random. We explain our coding process in more detail in Part 4 the Supplemental Appendix.

Specifically, our coders were instructed to code the law as resembling the US if it uses any of the following phrases:

1. **SLC:** "substantially lessen competition"
2. **Combination:** "every contract, combination"
3. **Monopoly:** "every person who shall monopolize"

Phrase (1) is from the Clayton Act provision on mergers, phrase (2) is from Section 1 of the Sherman Act, and phrase (3) is from Section 2 of the Sherman Act. The phrases thus cover the three main areas of US antitrust law: mergers, anticompetitive agreements, and monopolization. We further selected these phrases because they are well known, distinct, and commonly associated with US antitrust law. Several antitrust experts we consulted on the appropriateness of these phrases confirmed our intuitions that these phrases are commonly understood as representative of the statutory language associated with the Sherman Act.

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32 For instance, we did not consider "Agreements... [are forbidden] that have or may have as a result the restriction of competition" close enough to "agreements ... that have as their object or effect the prevention, restriction or distortion of competition" because the law in question here contains only a reference to "restriction of competition" without the phrase "prevention, restriction or distortion". Similarly, we would not consider "concentration ...[that] gives rise to the establishment or increase of the dominating (monopolistic) status of the market agent ..." close enough to "creation or strengthening of dominant position" to be coded as resemblance under our protocol.
Similarly, our coders were instructed to code the law as resembling the EU if it uses any of the following phrases:

4. **Agreement - Object / Effect:** "[agreements that have as their] object or effect the prevention, restriction or distortion of competition"
5. **Agreement – Definition:** "agreements, ...decisions ... by associations, ...concerted practices"
6. **Abuse:** "abuse by one or more undertakings of a dominant position"
7. **Concentration - Incompatible:** "concentration is incompatible"
8. **Concentration – Impede Competition:** "significantly impede effective competition"
9. **Concentration – Dominance:** "creation or strengthening of a dominant position"

The phrases (4) and (5) resemble Article 101 of the Treaty on the Functioning of the European Union (the “TFEU”), phrase (6) resembles Article 102 of the TFEU, and phrases (7), and (8) and (9) resemble the text of the EMCR. These phrases cover the three main areas of EU competition law—anticompetitive agreements, abuse of dominance, and merger control. Following consultation of various experts in the field, they were selected because of their distinctiveness and common association with EU competition law. Given the more extensive wording of EU competition law compared to US antitrust law, we felt it was necessary to include few alternative key phrases associated with EU laws, resulting in the total of six key phrases compared to three key phrases for the US.

Figure 7 shows the trends in language resemblance. For Figure 7, countries’ competition laws are coded as resembling the US if it contained any of the three US phrases listed above but none of the EU phrases; as resembling the EU if it contained any of the six EU phrases but none of the US phrases; as resembling both if they contained at least one US and one EU phrase; and as neither if they contained none of the US or EU phrases. We exclude all individual EU member states from the analysis given their inherent proclivity to align their laws with those of the EU, including copying the language embedded in EU treaties and regulations.

Figure 7 reveals several interesting trends. The first notable trend is the substantial decrease in laws that resemble neither the EU nor the US. In other words, countries increasingly rely on a template provided by either the EU or the US. In 1960, 74% of countries’ competition laws resembled neither the US or EU, but by 2010 that number had fallen to 24%. Second, there has been a large increase in the proportion of laws that resemble the EU. In 1960, 0% of countries had language resembling the new EU competition law. But by 2010, 51% of countries had laws...
that resemble the EU. In contrast, 22% of countries had laws that resembled the US in 1960, but that number had dwindled to 10% in 2010. Figure 7 also reveals that it is relatively rare for countries to borrow language from both the US and the EU.

To further explore these patterns, Figure 8 maps which countries’ laws resembled the EU or the US based on 2010 data. We again exclude EU member states from the analysis. Figure 8 shows that the EU influence can be seen far beyond the continent. For instance, EU language is used in Mexico, India, and China. In contrast, relatively few countries resemble just the United States. Notable exceptions are countries that share similar common law traditions with the United States: Australia, Canada, and New Zealand. Additionally, Russia, Brazil, and Saudi Arabia—countries powerful and distinctive enough to set their own path—are among the states that have copied neither the EU’s nor the US’s language. Because the mapping linguistic similarity in Figure 8 is similar to the mapping substantive similarity shown in Figure 4, we are more confident that the EU truly has had a disproportionate influence on competition rules around the world.

Figure 9 looks further into the specific provisions that drive the textual similarity by showing the frequency with which jurisdictions copied each of the nine phrases above from 1960 to 2010. Figure 9 illustrates which specific phrases have gained traction, and also serves as a robustness check. The EU’s dominance documented in Figures 7 and 8 could be in part due simply to the fact that we coded three phrases for the US and six phrases for the EU. As Figure 9 shows, however, none of the three key US phrases have gained much traction. Of the three, in 2010, the most common is “SLC” at 25 countries, followed by “Combination” at 5 countries, and “Monopolize” at 2 countries. In contrast, five of the six EU phrases have gained more traction than the US phrases. In 2010, this ranged from “Agreement—Object / Effect”, found in 48 countries to “Concentration—Incompatible”, in 3 countries. This suggests that, even if we were to compare the three phrases that were least common from the EU, they would still have been incorporated into the language of more countries’ statutes than the three US key phrases.

3.4. Additional Results

Our examination of the similarity of substance and the similarity of language both suggest that more countries are similar to the EU competition laws than the US competition laws. To

33 If we include EU members, for 2010, the percent of countries that resemble the EU would increase to 55 and the percent of countries that resemble the US would decrease to 8.
further explore these patterns, we also examined the relationship between similarity of substance and similarity of language. To do so, we created a Net Similarity of Substance measure (“Net Similarity”) by subtracting countries’ correlation to US in a given year from their correlation to the EU in the same year. Positive numbers indicate that the country has a regime that is more similar to the EU and negative numbers indicate that the country has a regime that is more similar to the US. As Figure 10 shows, countries coded as having language resembling the US (based on the definition from Figure 7) are more likely to have negative Net Similarity scores and countries that coded as having language resembling the EU are more likely to have positive Net Similarity scores.\(^{34}\) Regressions reported in Part A5 of the Supplemental Appendix show this more formally: language resembling the EU has a positive, statistically significantly association with Net Similarity scores and language resembling the US has a negative, statistically significantly association with Net Similarity scores.

Finally, our results have indicated that countries are more likely to have adopted competition laws that resemble the EU than the US, but it is possible that this is not due to any form of copying. Instead, an alternative hypothesis would be that countries simply have independently reached the same conclusions about the best ways to regulate markets. Although we cannot rule out this possibility, we are able to show that basic facts about countries markets are poor predictors of whether countries have high Net Similarity to the EU. In Part A5 of the Supplemental Appendix reports figures showing that population, GDP per capita, and polity scores are all poor predictors of whether countries have high net similarity to the EU. This is at least suggestive evidence that the high similarities are not due to countries with similar market conditions all independently regulating their markets the same way, but instead because the EU competition regime has been emulated by a diverse set of countries.

4. WHY THE EU HAS DOMINATED

Our evidence suggests that the EU model of competition laws has gained significantly more traction globally than the US model. But the question remains why the EU model has been so influential. We argue that a set of push and pull factors explain the EU’s greater success in

\(^{34}\) Because countries competition law regimes have high correlations across years, to avoid any results being driven by serial correlation for countries that appear more years in the dataset, Figure 10 only shows data for 2010.
exporting its competition law. The push factors are extensive EU efforts to promote its regulatory model, by conditioning access to the EU market on the adoption of competition laws abroad; and the pull factors are a greater demand for detailed, easy to implement, EU-like regulations that reflect broader goals that appeal to wider constituencies abroad.

4.1. Push Factors

4.1.1. Diffusion through International Agreements

The EU frequently leverages preferential trade agreements (PTAs) to spread its regulatory norms. By offering preferential access to its vast consumer market, the EU has significant bargaining power over its trade partners and is therefore in a position to set conditions for signing a PTA. One of those conditions is the adoption of competition law. In addition to the data we have collected on countries’ antitrust statutes, we have also compiled data on the competition law requirements of 596 PTAs signed between 1947 and 2010.\footnote{We thank DESTA for providing copies of PTAs and acknowledge previous coding by Bradford and Buthe (2015).} Excluding PTAs signed only between EU members, the EU has signed 88 different PTAs, and 64 of those treaties include a requirement for the trading parties to have or adopt a competition law. The EC-Turkey Customs Union from 1995 provides an illustrative example. In its Chapter 39, the agreement provides that “Turkey shall ensure that its legislation in the field of competition rules is made compatible with that of the European Community.” Prior to the negotiation of this agreement, Turkey did not have a competition statute. To comply with this agreement, however, Turkey adopted a competition regime that resembles the EU both linguistically and substantively. Using the methodology introduced in Part 3.2, our data suggests that Turkey adopted a competition law with substantive provisions that have a correlation of 0.46 with the EU’s competition laws; and using the methodology introduced in Part 3.3, our data reveals that Turkey adopted a competition statute with language resembling key elements of the EU’s competition laws.

An interesting question is why the US rarely employs this strategy. In our data, the US has signed 18 PTAs. Of those, 15 have competition provisions in any form. This is likely to be because, traditionally, the US has always endorsed the separation of trade and competition law, mostly to ensure the purity (and hence the focus on economic efficiency) of competition laws. The US fears

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that competition law would lose its exclusive focus on consumer welfare if it became enmeshed with trade policy considerations (*see, e.g.*, Melamed 1998; Waller 1996). This is one of the reasons that the US systematically opposed including competition regulation within the scope of the WTO (*see, e.g.*, Melamed 1998; Monti 2002; World Trade Organization 1999), whereas the EU was a strong advocate of incorporating competition rules in the multilateral trade regime. After all, the EU’s own competition laws were initially enacted to complement the goal of establishing a single market and to ensure that the efforts to remove trade barriers would not be frustrated by erecting private barriers to trade. The EU’s fear was that, without such laws, private companies could re-create trade barriers between member states and undermine the goals of a common European market. The EU’s practice of including competition provisions in its PTAs thus follows the same logic and can be seen as a conscious attempt to replicate the policy that was so central in establishing the single market in the EU.

In addition to PTAs, the EU uses other economic and political agreements as instruments to externalize its rules.³⁶ The EU has signed over 20 association agreements with countries from neighboring regions. These agreements are designed to create closer economic and political links between these countries and the EU. While in some instances the association agreements are meant to pave the way for the accession to the EU (such as the association agreement with Turkey), today the EU also concludes them with countries that are not necessarily future candidates for accession (such as an association agreement with Ukraine). The EU has also signed various other types of cooperation agreements, including stabilization Agreements, and economic partnership agreements with third countries (European Commission 2018). What is common to these agreements is the EU’s tendency to seek alignment with its regulatory framework, which is believed to advance trade and ease of commerce between the signatories and to foster beneficial market reforms in partner countries (European Commission 2018). Competition law is among the policies that the EU typically includes in these agreements.

Examples of competition law being exported through association agreements include countries like Algeria, Egypt, and Georgia. For example, Georgia undertook the obligation to approximate its future competition laws with those of the EU when it signed the Partnership and Cooperation Agreement in 1996 (Menabdishvili 2015, p. 213). This commitment was further

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³⁶ *See* more generally the literature on “external governance” of the EU in Lavenex (2004).
enhanced in its 2014 Association Agreement with the EU, which established a Deep and Comprehensive Free Trade Area.\footnote{It is revealing that the Association Agreement is over 700 pages long (see https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:22014A0830(02)&from=EN) and, according to Menabdishvili, obliges Georgia to harmonize its legislation with 300 EU laws (Menabdishvili 2015, p 218).}

4.1.2. The Brussels Effect

The EU’s adoption of high standards also creates pressure for other countries to emulate Europe’s policies. Bradford (2012) terms this phenomenon “the Brussels Effect.” Briefly put, if EU citizens prefer strict competition, food safety, environmental, data protection, or other rules, EU regulators can require all firms—both foreign and domestic—to comply with these heightened standards as a condition of access to the EU market. Few firms can afford to forgo selling goods and services to over 500 million comparatively wealthy consumers in Europe. As a result, firms typically adhere to EU rules. Furthermore, due to scale economies and other benefits of uniform production, these firms often end up adopting the EU standard across their global conduct or production, leading to \textit{de facto} Brussels Effect. And once these firms have adjusted their global conduct to EU rules, they have the incentive to lobby for their own governments to adopt these same rules in their home markets (Bradford 2012; Vogel 1995). Replication of EU laws domestically levels the playing field for export-oriented companies \textit{vis-à-vis} their domestically oriented producers who do not export to the EU and hence do not need incur the costs of complying with EU rules otherwise. This foreign corporate advocacy for EU-style competition laws often converts the \textit{de facto} Brussels Effect to \textit{de jure} Brussels Effect, and explains why EU laws get adopted by foreign jurisdictions.

In these instances, other jurisdictions also have little to gain by adopting less stringent competition rules compared to the EU. Their lenient rules would only be superseded by the EU rules, making them obsolete regulators in the enforcement process. For example, if the EU prohibits an international merger, the merger it banned worldwide; it is irrelevant if the other jurisdictions clear the same merger. In this sense, “the most stringent regulator wins” in the competition law domain, further illustrating why deviating from the EU (as the most stringent jurisdiction) brings few gains for other jurisdictions.

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There is an additional, distinct advantage in aligning one’s domestic competition rules with those of the world’s dominant regulator. If a non-EU country’s competition rules mirror those of the EU, it can simply follow the EU’s lead in evaluating anticompetitive conduct and capture regulatory gains by leveraging fines domestically based on its enforcement of the same set of laws. South Korea, for example, followed closely the EU’s ruling condemning Microsoft for an abuse of a dominant position in tying the Media Player with its operating system. Alternatively, foreign jurisdictions can outsource their enforcement to the EU and free ride on its resources and investigations while benefiting from outcomes that are consistent with their own regulatory framework. Different rules would make free riding harder because an independent investigation based on different legal framework might lead to a different regulatory outcome. These reasons make converging to the laws of the “winner” of the regulatory race appealing (Fox 1997).

4.2. Pull Factors

The global dominance of the EU competition model has much to do with concerted EU efforts to condition access to the EU market on foreign countries’ adoption of competition rules. This however is an incomplete picture, because the EU competition law model has also spread to countries with more limited commercial ties to the EU. There are also reasons the EU competition model is attractive to a diverse set of countries. The EU competition template—which articulates a broad, ideologically attractive range of goals in an easy-to-copy format—became appealing to numerous developed and developing countries, especially those with limited ability to develop and interpret their own customized regimes. These pull factors are also likely to make EU models appealing in many areas besides competition law.

4.2.1. Emphasis on Multiple, Ideologically Appealing Goals

The optimal balance between public and private power in market regulation is widely debated around the world. The EU competition regime is perceived as a compromise between the operation of free markets and government intervention in those markets. US antitrust law, in contrast, is believed to further business interests through its more robust reliance on markets’ ability to self-correct and sustain competition absent regulatory intervention (e.g. Fox 1997). The US’s steadfast commitment to free markets is not uniformly shared around the world; thus, for many countries, EU regulatory models are considered a better ideological fit.
EU competition law has traditionally viewed the goals of competition law broadly, embracing not only concerns about economic efficiency, but also issues of fairness and the relationship between the competitive process and the society in which the law is embedded (Gerber 2004). While the primary focus of EU competition law today is consumer welfare, the EU also employs competition law as a vehicle for market integration. The EU has advanced some additional considerations—such as employment or the protection of small and medium sized enterprises—to operate at the margin of its competition law regime. The EU itself reflects a compromise among the diversity of preferences and legal systems across the member states, and its laws—including its competition laws—accommodate the concerns of its heterogeneous membership. The current US antitrust law, by contrast, has reduced the legitimate objectives of competition law to economic efficiency (Gerber 2004).

For countries in which the adoption of competition laws is met with domestic resistance, the EU can prove a more acceptable model to follow (Kovacic 1998). Developing countries and emerging markets in particular find the EU model more accommodating of the myriad of concerns that they have about the operation of the markets and the distributional effects of competition policy. In these new competition regimes, the politics behind competition law adoption has required the governments to obtain a buy-in from various interest groups, some of which are skeptical about the value of the competition regime. It has been easier to gain support for competition law when the objective of the law are construed more broadly to accommodate concerns ranging from development, protecting small businesses, and promoting social policies. Indeed, our data shows that 61 jurisdictions listed goals other than efficiency, consumer welfare, total welfare, or other strictly economic considerations in the first law they adopted. For example, South Africa’s competition law includes the goal of creating equitable opportunities for small and medium-sized enterprises to participate in the economy and the goal of increasing the ownership stakes of historically disadvantaged groups. In addition, broader social policy concerns are identified in the laws of countries including China and Japan, industrial policy in the laws of countries including Costa Rica and Namibia, and development in the laws of countries including Ethiopia and South Korea.
4.2.2. Precise Rules in Many Languages are Easy to Copy

It is not only the content of EU competition law that make the EU model appealing for many jurisdictions, but also its form. EU competition law offers a template that is more precise, giving more detailed guidance for new competition regimes that are looking for clear ex ante rules that can guide their less experienced agencies and courts in their decision making. In contrast, the Sherman Act is sparse, delegating much of detailed analysis to the courts, which in the US are accustomed to exercising judgment. Precision in international templates greatly helps in their diffusion, as research in the legalization tradition emphasizes (Linos and Pegram 2016).

EU law across many fields manifests in clear, codified, ex ante rules. Unambiguous and detailed rules are critical for EU integration among the 28 member states, and were once distinctive features of the civil law tradition shared by most EU member states (Merryman and Pérez-Perdomo 2018). Such rules are thought to contribute to legal certainty and predictability. Europeans are generally less comfortable with a regime characterized by the less predictable and more pragmatic, case by case approach to competition law analysis that is deeply embedded in the legal culture in the US.38 This detailed template makes the EU competition rules easier to copy and hence more prone to diffusion among other jurisdictions that share EU’s preference for legal certainly and detailed rulemaking.39

This finding contributes significantly to current debates in comparative law and law and economics. Whereas prominent economists assert that common law traditions confer significant and continued advantages to contemporary societies, many legal scholars assert that traditional differences between common law and civil law countries have declined and become less relevant over time (Klerman et al. 2011). Our work suggests that a characteristic advantage of the civil law tradition—the systematization of a legal regime—contributes to the EU’s ability to externalize its

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38 See, e.g., Van den Bergh (2002, pp. 46-50) (attributing the EU-US divergence in antitrust partly to the EU’s obsession with predictability.) For an example of the EU’s preference for clear ex ante rules and the US’s inclination to write more open-ended laws which leave case-by-case assessment to the courts, compare U.S. Department of Justice (1995) and Commission Regulation 772/2004 O.J. (L 123), p. 11. These types of doctrinal differences, however, might be less significant when agencies’ decisions are examined in practice. See also Elhague & Geradin (2007, pp. 208-32).

39 There is an extensive literature discussing the significance of the legal origins as an explanatory variable accounting for diffusion of norms. See La Porta et al. (2008) for a review of this literature. Spamann (2009) has argued that continued ties between core-periphery countries in the same legal family, rather than differences intrinsic to the common law or the civil law model, explain diffusion patterns and processes in the corporate and securities fields.
competition regulations the same way it helps the EU in its efforts to harmonize diverse regulatory traditions internally among 28 member states.

EU competition law is an attractive template in particular in low-income countries that have less skilled administrative agencies and judiciary. For example, Schafer (2006) argues that precise legal norms act as substitutes for human capital in low-income countries, leading these countries to prefer rules over standards. Precise rules create blueprints for less developed enforcers, diminishing the need for discretion and allowing for more mechanical rule making by agencies that lack the technical experience and the training to engage in more flexible, case-by-case decision making.

EU competition laws are not only more precise templates, they also have the advantage of being promulgated in several languages, including in French, Portuguese, and Spanish. This facilitates the copying of EU laws in particular in Latin America and Francophone Africa. In addition, third countries can look to individual EU member state laws for guidance, in particular when those member states offer closer linguistic, cultural, and historical—or, as it often is, colonial—ties. For instance, Ecuador copies the Spanish competition laws almost word by word.40 However, when doing so Ecuador indirectly emulates EU competition law given that Spanish competition law derives its content almost entirely from EU law. Similarly, Hong Kong and Singapore have copied extensively UK competition law, which indirectly exported many of the EU competition provisions into their regimes. This indirect leverage that the EU possesses through its layered governance structure further broadens its sphere of influence. Another indirect form of influence takes place via the regional organizations in Africa and Latin America, including the Andean Community, WAEMU and COMESA.41 These organizations model their competition laws and institutions directly after those of the EU, which they then transplant into the legal systems of their member states.42

40 For example, compare Article 27 of the Market Power Control and Regulation Act and the Article 3 of the Spanish Competition Defense Act or the Art 11 of the Market Power Control and Regulation Act with Article 101 of the TFEU or the Art 1 of the Spanish Competition Defense Act.

41 See, e.g., Feyissa (2009, p. 275) (“Ethiopia itself has apparently enacted its rules on [restrictive business practices] in accordance with Art 55 of the [COMESA] Treaty, which itself is comparable, if not identical, with its European counterpart.”).

42 For example, WAEMU has not only emulated the EU antitrust laws but its Court of Justice has held that the Treaty of Dakar (establishing WAEMU) should be interpreted with reference to the Treaty of Rome, which is the founding treaty...
The above discussion has laid out several reasons that explain the relative attractiveness of the EU competition law over the US antitrust law as a model for the world’s competition regimes. Some of the reasons reflect competition law-specific considerations while others reflect broader institutional features of EU law that pertains to several areas of law. While some reasons likely dominate others depending on the jurisdiction in question, often it is likely the combination of them that leads the countries to gravitate towards the EU’s competition law orbit.

Of course, in addition to the reasons discussed above, several other reasons may facilitate the spread of the EU model—some being more generic while others more idiosyncratic. For example, our various conversations with competition law experts abroad suggest that the EU provides a pertinent model for rule emulation because of its credibility as a supranational organization that is not associated with as controversial foreign policies as the US. The US model raises a specter of imperialism in some jurisdictions, while the EU is considered, rightly or wrongly, an ideologically more neutral model to follow. The US agencies may also not have as consistent message to promote given that there are two separate agencies in charge of competition enforcement. The top echelon of the US agency staff also changes with each administration whereas the European Commission consists of career civil servants with a well-coordinated and consistent message over time.

Yet another reason for the relative success of the EU model might be the identity of the “missionaries” that promote certain types of competition laws abroad. The EU is an expert in building consensus amidst different types of economies, preferences, and political actors. In consulting new competition jurisdictions on the laws they should adopt, the EU often sends diplomats or Commission officials with extensive experience in operating in multicultural environments and breaching common ground among member states. The US, in contrast, often relies on the universality of competition economics, sending its experts to preach on the benefits of sound economic analysis without the benefit of expertise in diplomacy, consensus building, or the politics of persuasion.

* * *

5. CONCLUSION

This Article documents the rise of the EU as the dominant model of competition law and the corresponding relative decline of the US’s global influence as the norm setter for competition regulation worldwide. Drawing on novel data, we have shown how a large number of countries with diverse economic histories, legal institutions, linguistic, and cultural ties copy the language of EU competition statutes and promulgate laws that closely resemble the substance of EU competition law. We have also offered provisional explanations that, in our view, help account for these trends. We have emphasized both the active promotion of EU law, especially through preferential trade agreements, but have also stressed how both the multi-faceted EU legal goals, and the form of EU rules, make them attractive to diverse jurisdictions.

Some limitations and qualifications of our analysis are worth noting. For one, our research has focused on the similarity of competition law statutes and not other features of countries’ competition regimes. While this represents an improvement over prior work, it is critical to do further research on the enforcement of antitrust laws, as similar laws can be enforced in varied ways. That said, some anecdotal evidence suggests that statutory similarities may make competition agencies and courts more comfortable in following EU precedents in their enforcement practices as well. For example, India has not only copied EU rules, but a variety of Indian courts and its competition agency cites EU decisions to support particular interpretations of Indian competition law. Other jurisdictions, most notably the Andean Community, have copied a wide range of EU institutions and frequently cite EU case law (Alter and Helfer 2017). These examples suggest that the EU’s influence might be even greater than the examples of statutory imitation alone can capture.

Another limitation of our research design is our focus on binding rules at the expense of important soft law instruments. While competition statutes form the foundation for every competition jurisdiction, various other legal and policy instruments, such as agency guidelines,

43 For example, the Indian Supreme Court has referred to the EU competition law in deciding whether certain entities fall within the scope of their competition law’s provisions on anticompetitive agreements (Competition Commission of India v. Cooperation Committee of Artists & Technicians of W.B. Film and Televisions 2017), while the Madras High Court cited the EU’s cartel settlement procedure in its decision regarding the permissibility of settlements (Tamil Nadu Film Exhibitors Association v. Competition Commission of India [2 I.W 686 (2015)]). The Indian competition agency CCI has further referred to EU treaties, courts and European Commission white papers in its decisions (see In re Surinder Singh Barmi and Board of Control for Cricket in India [Case No. 61/2010]), citing the “maturity” of the EU’s competition regime as a reason for serving as a good model for India.
play an important role in guiding actual enforcement. The US has pioneered many such non-binding instruments, including merger guidelines (that give direction to agencies in their assessment of mergers) and leniency programs (that have become a key policy tool for agencies in their detection of cartels). These instruments have also diffused around the world, raising the question whether their diffusion can be viewed as a sign of US influence that counters, at least to some extent, the EU’s dominant influence in spreading its statutory regime. Interestingly, our initial research suggests that while the US spearheaded these instruments, they were globalized only after they were emulated by the EU. Thus, this suggests that even the US inventions become widely adopted only when the EU acts as an intermediary and throws its weight behind those US innovations.

Additionally, we highlight that the main contribution of this article is descriptive—we show that the EU has been far more successful than the US in spreading its competition rules. We have not endorsed nor criticized the EU’s outsized role in influencing global competition regimes. For example, many may welcome greater convergence in competition laws globally as a positive development because it is likely to lower transaction costs and reduce uncertainty and the risk of conflicting decisions. However, convergence can come with a cost, importantly by reducing experimentation (de Burca, Keohane, and Sabel 2014). Moreover, even granting that convergence is valuable, that does not mean the world’s competition regimes are converging to the right standard. We certainly expect that the US government and many US corporations would rather see US competition rules replicated around the world. At the same time, we generally expect the EU to be content with the trends discussed here, happily witnessing how its preferences get translated into local norms, in markets both close and far. For the EU, this is not only an opportunity to extend its regulatory orbit, but also to institutionalize its norms worldwide in a way that is likely to outlive its own economic powers as Europe’s relative economic clout declines.

That said, even this generalization is subject to caveats, as some countries may activate some of the more questionable aspects of EU law that have long been dormant in the EU’s enforcement practice. Most notably, while excessive pricing cases are extremely rare in Europe, they are strikingly common in Russia (Girgenson and Numerova 2012). Similarly, the perception that the EU accommodates multiple goals beyond efficiency has emboldened many countries to leverage competition law for various non-economic goals. And while the EU has backed away from most of those goals and increasingly moved towards focusing on consumer welfare, it is
unclear that other countries will follow suit. Consequently, the EU may be getting more than it bargained for as it witnesses how newly established competition regimes apply EU-inspired rules for purposes far outside the EU’s understanding of the proper purpose of competition law. Thus, the global dominance of the EU competition model is likely to have significant, but nuanced normative implications for the field of competition law.

Finally, while our analysis has focused on competition law, the implications of our research extend well beyond the field of competition. This is because regulatory races between US and EU authorities are common in fields as diverse as privacy (Schwartz 2013), securities (Gadinis 2010), and chemicals (Scott 2009), to name a few. To take one example, the European General Data Protection Regulation entered into force in May 2018. Immediately, small and large firms around the world altered their privacy practices. In addition, numerous diverse countries, as well as US states, have copied or are in the process of copying this EU template (Economist 2018; Greenleaf 2017). Many of the dynamics we identified as driving the imitation of EU competition law also apply to the field of privacy. These include the push factors we emphasize, such as the Brussels Effect (Bradford 2012). Moreover, as with the European competition law model, the European privacy law model places less trust in the market than does its American equivalent, and in so doing appeals to governments around the world (Schwartz and Peifer 2017). And compared to the myriad of sectoral laws on privacy in the US, EU’s privacy regulation is detailed, comprehensive and easy to copy, thus serving as an effective off-the-shelf template for others to replicate (Schwartz and Peifer 2017). In sum, the EU is winning the race for the globalization of various economic rules, Europeanizing the global regulatory environment in ways and to the extent that few have understood. Even as the EU faces near-existential challenges and its relative geopolitical power is waning, it remains a uniquely influential actor in regulating the global marketplace—in competition law and beyond.
REFERENCES


The Economist. 2018. “America should borrow from Europe’s data-privacy law.” April 5.


**Notes:** Figure 1 reports the percent of countries for which we have coded their competition law that were coded as having a given provision as part of their law in 2010. * indicate one of the 10 “Core” variables used in Figure 6.C.
Notes: For countries with a competition law in a given year, Figure 2 graphs the average correlations for the 36 variables depicted in Figure 1 to the United States’ and to the European Union’s coding of those same 36 variables. The figure excludes data from EU members.
Notes: For countries with a competition law in a given year, we coded whether each country had a higher correlation for the 36 variables depicted in Figure 1 to the United States or the European Union. Figure 3 graphs the total number of countries with a higher correlation to the US and EU in each year. The figure excludes data from EU members.
Notes: For countries with a competition law in a given year, we coded whether each country had a higher correlation for the 36 variables depicted in Figure 1 to the United States or the European Union. This figure maps each county based on whether it had a higher correlation to the US or the EU in 2010. Countries are not shaded if they did not have a competition law in 2010, if we do not have coding of their competition law, or if they are EU members or the United States.
Figure 5: Correlation to the EU and US Competition Law – By Substantive Area

Notes: For countries with a competition law in a given year, Figure 5 graphs the average correlations for each of the four categories of variables depicted in Figure 1 to the United States’ and to the European Union’s coding of those same 36 variables. The figure excludes data from EU members.
Figure 6: Robustness Checks

A. Using Agreement as Measure of Similarity

```
Agreement 0.5 0.55 0.65 0.7 0.75
```

B. Correlations using 10 “Core” Competition Law Provisions

```
Correlation 0.1 0.2 0.3 0.4 0.5
```

C. Correlation when Using US Case Law

```
Correlation 0.1 0.2 0.3 0.4 0.5
```

Notes: This figure replicates Figure 2 while calculating similarity three different ways: Panel A uses “agreement” instead of correlation; Panel B calculates correlations using 10 core variables instead of 36 variables; and Panel C first adjusts the US’s coding to account for case law before calculating the correlations with other countries. The figure excludes data from EU members.
Figure 7: Proportion of Laws that Resemble the EU and US Competition Law

Notes: This figure graphs the percent of countries coded as having language in their laws that resemble key phrases from the competition laws of either the United States or European Union. The figure excludes data from EU members.
Figure 8: Resemblance to the EU and US in 2010

Notes: This figure maps each county based on whether their competition laws were coded as having language that resembled key phrases from US or the EU in 2010. Countries are not shaded if they did not have a competition law in 2010, if we do not have coding of their competition law, or if they are EU members or the United States.
Figure 9: Resemblance to the EU and US by Specific Provision

Notes: This figure graphs the number of countries for which their competition laws were coded as having language that resembled each of nine key phrases from US or the EU. The figure excludes data from EU members.
Figure 10: Relationship Between Language Resemblance and Substantive Correlations

Notes: The x-axis of this figure is calculated by subtracting countries correlation from the US from their Correlation to the EU (e.g. higher numbers correspond to greater net correlation to the EU). The Figure separately graphs countries that were coded as having language that only resembled the US or the EU. The figure excludes countries that had language that resembled neither or both the US or EU. The figure also excludes data from EU members.
The Global Dominance of European Competition Law
Over American Antitrust Law

Supplemental Appendix

Description. This Supplemental Appendix provides five pieces of additional information about the data and results reported in our paper. Part A1 provides descriptions of the 36 Key Competition Provisions we use to measure substantive similarity of competition regimes in Part 3.2 of the paper. Part A2 provides graphs showing the overall trends of the prevalence of each of those 36 Key Competition Provisions over time. Part A3 provides additional information on our coding of US Antitrust Case Law. Part A4 provides additional information on our coding of language resemblance. Part A5 provides additional results discussed in the body of the paper.
### Authority Provisions

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private right of action</td>
<td>This variable indicates whether private parties are entitled to file lawsuits to seek remedies.</td>
</tr>
<tr>
<td>Fines</td>
<td>This variable indicates whether the law provides for fines as a remedy for violating the law.</td>
</tr>
<tr>
<td>Imprisonment</td>
<td>This variable indicates whether the law provides for imprisonment as a punishment for violating provisions of the law.</td>
</tr>
<tr>
<td>Divestitures</td>
<td>This variable indicates whether the law allows for divestitures as a remedy. These may entail 1) selling of assets or division of the company as a remedy for non-merger-related antitrust violations or 2) for the merger control authority to make the approval of a merger conditional on divestiture (or allow it to force divestiture if the firms proceed with the merger without it).</td>
</tr>
<tr>
<td>Damages</td>
<td>This variable indicates whether the law allows injured parties to obtain damages. Remedies available for third parties may include either monetary damages or injunctions.</td>
</tr>
<tr>
<td>Extraterritoriality</td>
<td>This variable indicates whether the law applies extraterritorially (i.e., it applies to foreign companies and citizens as long as the activity has some effect in the country applying its law).</td>
</tr>
<tr>
<td>Industry exemptions</td>
<td>This variable indicates whether any industries or economic sectors or types of economic activities are excluded from the application of this antitrust law.</td>
</tr>
<tr>
<td>Enterprise Exemptions – categorical</td>
<td>This variable indicates whether this law categorically or completely exempts any of the following categories of enterprises from the application of this law categorically (i.e., completely as opposed to partially or conditionally):</td>
</tr>
<tr>
<td></td>
<td>- export cartels</td>
</tr>
<tr>
<td></td>
<td>- state-owned enterprises</td>
</tr>
<tr>
<td></td>
<td>- state-operated or state-designated trading companies</td>
</tr>
<tr>
<td></td>
<td>- designated monopolies</td>
</tr>
<tr>
<td></td>
<td>- other categories of enterprises</td>
</tr>
</tbody>
</table>
## Substantive Prohibitions

### Merger Control

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-merger notification</td>
<td>This variable identifies whether the law provides for a pre-notification of mergers (i.e., where the notification must take place before the closing).</td>
</tr>
<tr>
<td>Mandatory notification</td>
<td>This variable indicates if the law provides for a mandatory merger notification.</td>
</tr>
<tr>
<td>Substantive assessment: economic</td>
<td>This variable identifies whether the law directs the agency to consider the effect of the merger on market competition, such as anti-competitive consequences for the structure of the market or possible barriers to entry or, alternatively, the resulting dominant position or market share of the merged entity.</td>
</tr>
<tr>
<td>Substantive assessment: public interest</td>
<td>This variable identifies whether the law grants the agency the power to prohibit a merger if the merger runs contrary to public interest.</td>
</tr>
<tr>
<td>Efficiency defense</td>
<td>This variable identifies whether an otherwise impermissible merger may be allowed if it will contribute sufficiently to economic efficiency.</td>
</tr>
<tr>
<td>Failing firm defense</td>
<td>This variable identifies whether an otherwise impermissible merger may be allowed if it prevents a business failure.</td>
</tr>
<tr>
<td>Public interest defense</td>
<td>This variable identifies whether an otherwise impermissible merger may be allowed because it is in the public interest.</td>
</tr>
</tbody>
</table>

### Abuse of Dominance

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>General prohibition</td>
<td>This variable identifies if the law prohibits the abuse of a dominant position, either generically or by specifying actions that would constitute an impermissible abuse of a dominant position.</td>
</tr>
<tr>
<td>Market Access</td>
<td>This variable identifies if the law prohibits a dominant firm from limiting the supply of goods to the market or from restricting sales to certain purchasers or consumers (refusal to supply).</td>
</tr>
<tr>
<td>Tying</td>
<td>This variable identifies if the law prohibits a dominant firm from conditioning the sale of products or services on the sale or acquisition of another product or service that is not directly connected (tying).</td>
</tr>
<tr>
<td>Discounts</td>
<td>This variable identifies if the law prohibits a dominant firm from offering discounts that incentivizes the buyer to deal exclusively or predominantly with the dominant firm (loyalty discounts).</td>
</tr>
<tr>
<td>Term</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Unfair pricing</td>
<td>This variable identifies if the law prohibits a dominant firm from taking advantage of its dominant position when setting its prices (unfair pricing).</td>
</tr>
<tr>
<td>Discriminatory pricing</td>
<td>This variable identifies if the law prohibits a dominant firm from imposing different prices for the same goods or services for different customers (discriminatory pricing).</td>
</tr>
<tr>
<td>Predatory pricing</td>
<td>This variable identifies if the law prohibits a dominant firm from engaging in predatory pricing.</td>
</tr>
<tr>
<td>Resale Price Maintenance</td>
<td>This variable identifies if the law prohibits a dominant firm from setting the price at which retailers will ultimately sell their product to consumers (resale price maintenance).</td>
</tr>
<tr>
<td>Other abusive acts</td>
<td>This variable identifies if the law prohibits a dominant firm from engaging in acts—other than those specified in the preceding questions—as constituting an impermissible abuse of a dominant position, or indicates that the acts that are specified in the law do not constitute a comprehensive list of impermissible acts.</td>
</tr>
<tr>
<td>Efficiency defense</td>
<td>This variable indicates if an otherwise impermissible act by a dominant company is excused if it substantially contributes to economic efficiency.</td>
</tr>
<tr>
<td>Public interest defense</td>
<td>This variable indicates if an otherwise impermissible act by a dominant company is allowed if it contributes significantly to the public good.</td>
</tr>
</tbody>
</table>

### Anticompetitive Agreements

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price fixing</td>
<td>This variable identifies whether the law prohibits attempts to set the market price for a product (price fixing).</td>
</tr>
<tr>
<td>Market sharing</td>
<td>This variable identifies whether the law prohibits agreements to divide or allocate the market by a particular geographic, demographic, price- or otherwise-defined characteristic (market sharing).</td>
</tr>
<tr>
<td>Output limitations</td>
<td>This variable identifies whether the law prohibits agreements to limit the overall rate of production or amount of products made available to the market (output restraint).</td>
</tr>
<tr>
<td>Bid rigging</td>
<td>This variable identifies whether the law prohibits agreements not to bid on a tender for a certain product or to bid at or above a certain price (bid rigging).</td>
</tr>
<tr>
<td>Tying</td>
<td>This variable identifies whether the law prohibits companies from conditioning contracts on buying additional products that are not directly connected to the product that is the subject of the contract.</td>
</tr>
<tr>
<td>Exclusive dealing</td>
<td>This variable identifies whether the law prohibits agreements not to sell/buy their products to/from certain other companies or groups of companies.</td>
</tr>
<tr>
<td>Variable</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Resale price maintenance</td>
<td>This variable identifies whether the law prohibits producers setting the price at which retailers will ultimately sell the product to consumers.</td>
</tr>
<tr>
<td>Efficiency defense</td>
<td>This variable identifies whether the law allows for an impermissible practice if it contributes significantly to economic efficiency.</td>
</tr>
<tr>
<td>Public interest defense</td>
<td>This variable identifies whether the law allows for an impermissible practice if it contributes significantly to the public good.</td>
</tr>
</tbody>
</table>
A2. Trends for Variables Used to Calculate Similarity of Substance

Authority – Countries with Provision in Law, 1890 to 2010

Private Right of Action

Fines

Imprisonment

Divestitures

Damages

Extraterritoriality

Industry Exemptions

Enterprise Exemptions

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Merger Control – Countries with Provision in Law, 1890 to 2010

Pre-Merger Notification

Mandatory Notification

Substantive Assessment: Economic

Substantive Assessment: Public Interest

Efficiency Defense

Failing Firm Defense

Public Interest Defense
Abuse of Dominance – Countries with Provision in Law, 1890 to 2010

<table>
<thead>
<tr>
<th>Year</th>
<th>General Prohibition</th>
<th>Discriminatory Pricing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1900</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1930</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>1960</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>1990</td>
<td>90</td>
<td>90</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Resale Price Maintenance</th>
<th>Unfair (or excessive) Pricing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1900</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1930</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>1960</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>1990</td>
<td>90</td>
<td>90</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Predatory Pricing</th>
<th>Discounts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1900</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1930</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>1960</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>1990</td>
<td>90</td>
<td>90</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Tying</th>
<th>Refusal to Deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1900</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1930</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>1960</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>1990</td>
<td>90</td>
<td>90</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Other Abuse</th>
<th>Efficiency Defense</th>
<th>Public Interest Defense</th>
</tr>
</thead>
<tbody>
<tr>
<td>1900</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1930</td>
<td>30</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>1960</td>
<td>60</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>1990</td>
<td>90</td>
<td>90</td>
<td>90</td>
</tr>
</tbody>
</table>

Electronic copy available at: https://ssrn.com/abstract=3339626
A3. CODING INSTRUCTIONS FOR US CASE LAW

A3.1. General Instructions

The goal of the case law and common law coding project is to capture data for each jurisdiction regarding the role that courts play in shaping antitrust law and how antitrust law has developed over time in that jurisdiction.

This project is not meant to capture any statutory developments unless those statutes are elaborated/interpreted by the courts (and even then, we only record how courts have interpreted such statutes in their case law). Statutory provisions themselves are recorded by another survey. Thus, if you face a question in this survey on whether the country’s antitrust laws apply extraterritorially and you know for the fact that they do because of an explicit provision in the statute affirming extraterritorial application, do *not* code YES here if the courts have been silent on the matter. You should only focus on what the courts have held on any given matter in their case law.

For each jurisdiction, the coder will be asked to research the key cases in a variety of antitrust subject matters using a key source or sources, such as case books, horn books and treatises. Any sources chosen must be authoritative and representative (for example, choose a more commonly used case book over a rarely used one) and as comprehensive as possible. We do not need you to use comprehensive databases such as electronic court archives that give you an access to each and every decision ever reached by any court in that jurisdiction. Rather, you can rely on sources that summarize the most important cases, which we can assume to be comprehensive as far as key cases (i.e., cases that shape antitrust law) are concerned.

Each subject matter will contain several questions regarding a specific point of law, and for each question the coder should provide all of the critical cases which the source being used mentions for that point of law. (For instance, if a horn book mentions 6 cases which discuss the availability of voluntary merger notification, the coder should code all six. However, if there is no case precedent on that particular point of law discussed in any of the sources consulted, the coder may select “no significant holdings in this area.”).

For each case, the coder will be asked to provide the name of the court, the case number and name, year, the basic holding of the case, whether the case was interpreting a specific statute, whether the case cited law or a case from another jurisdiction, and how the case affected prior precedent. After reviewing the coder’s input, the reader should be able to have a good understanding of the holding and impact of the case coded. After completing each subject matter section, the survey will record the coder’s responses. The coder may then re-load the survey to begin working on another section or stop and return to coding at another time. When all subject matter sections are complete, the coder will have finished her coding for the jurisdiction.

A3.2. Sample coding instructions for “Abuse of Dominance – Tying”

Note: We provide the instructions for “Abuse of Dominance – Tying” as an example. A similar set of instructions exists for each provision that forms part of our statutory coding.
Q231 Abuse of Dominance: Tying

Does the jurisdiction’s case law/common law prohibit a dominant firm from conditioning the sale of products or services on the sale or acquisition of another product or service that is not directly connected?

Comment: Tying typically requires the buyer, as a condition of the sale of some product or service, to acquire another, unrelated product or service from the seller. The case law/common law may use terms such as "tying" or "bundling". Note that this question is about the prohibition of such practices by a dominant company. Please record a general tying provision (unconnected to dominance) later under "Restrictive Trade Practices."

Example:
- Yes
- No
- Other (please explain) ____________________
- No significant holdings in this area

Q232 Does the jurisdiction’s case law/common law prohibit a dominant firm from conditioning the sale of products or services on the sale or acquisition of another product or service that is not directly connected? Please note all critical cases (up to 2014) to address whether a dominant firm may condition the sale of its goods or services on the sale of other goods and services that are not directly connected. For each case, provide the number and name of the case, the court and the year of the decision and its basic holding. In the event that a decision overturns or modifies a prior holding, please note that as well.

Q233 Case Name:

Q234 Court:

Q235 Year of Decision:

Q236 Holding:
- Yes
- No
- Other (please explain) ____________________

Q237 Holding Detail: Provide key language or explanation of holding from source material.

Electronic copy available at: https://ssrn.com/abstract=3339626
Q238 Statutory Interpretation: Was this case interpreting a statutory provision?

- Yes (If yes, which statutory provision is the case interpreting?) ____________________
- No
- Other (explain). Please use this option if the case is interpreting a statute-like document, such as a regulatory agency’s official guidance. Select this selection also if you’re not sure and note that. ____________________

Q239 Precedent: How does this case modify prior case law/common law?

- It does not – matter of first impression
- It does not – reaffirms prior case law/common law [Please note the specific prior decision being modified.] ____________________
- Overturns [Please note the specific prior decision being overturned.] ____________________
- Expands [Please elaborate (i.e. please say how this case expanded prior case law/common law). If possible, please note the specific prior decision or decisions that were being modified.] ____________________
- Narrows [Please elaborate (i.e. please say how this case narrowed prior case law/common law). If possible, please note the specific prior decision or decisions that were being modified.] ____________________
- Other (please explain) [use this selection if you’re not sure] ____________________

Q240 Citations: Does this case cite another jurisdiction’s case law/common law, statutes, or other legal source such as a case book or treatise? You may select multiple answers. For each source selected, please name the source cited and describe the context in which it was cited.

- Case book ____________________
- Statute ____________________
- Legal source ____________________
- No such citation
A4. CODING INSTRUCTIONS FOR LANGUAGE RESEMBLANCE VARIABLES

Extensive, general coding instructions are not included in this annex. The full codebook is available on the website (www.comparativecompetitionlaw.org) and only a short excerpt is included here to illustrate the way coders captured the resemblance:

A4.1. Legal Traditions

The following variables capture whether the law resembles one of the two major antitrust regimes in the world: the EU or the US. The law is considered to resemble these jurisdictions if it directly or closely copies the wording of the main antitrust statutes in either jurisdiction.

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>EU resemblance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable Label:</td>
<td>Resemb_eu</td>
</tr>
<tr>
<td>Description:</td>
<td>This variable indicates if the law resembles EU antitrust law.</td>
</tr>
<tr>
<td>Coding Rules:</td>
<td>0= NO 1= YES</td>
</tr>
<tr>
<td>Notes:</td>
<td>The law is considered to resemble EU law if it uses any of the following phrases: 1. &quot;[agreements that have as their] object or effect the prevention, restriction or distortion of competition&quot; 2. &quot;abuse by one or more undertakings of a dominant position&quot; 3. &quot;concentration is incompatible&quot; 4. &quot;significantly impede effective competition&quot; 5. &quot;creation or strengthening of a dominant position&quot; 6. &quot;agreements, ...decisions .. by associations, ...concerted practices&quot;</td>
</tr>
</tbody>
</table>

Coders were instructed to look for exact or close approximation of the phrases. For instance, coders would code "Yes" if "significantly impede effective competition" appears with "impedes" in a different tense or conjugated or as "significantly impede competition" or "impede effective competition."

However, distant phrases were *not* coded as resembling the EU law. E.g., "Agreements...[are forbidden] that have or may have as a result the restriction of competition" is not close enough to "agreements ... that have as their object or effect the prevention, restriction or distortion of competition" because the law in question here contains only a reference to "restriction of competition" without the phrase "prevention, restriction or distortion"). Similarly, "concentration ...[that] gives rise to the establishment or increase of the dominating (monopolistic) status of the market agent ..." is *not* close enough to "creation or strengthening of dominant position."
The coders were also instructed to note on a write-in field if they coded YES based on a synonym as opposed to the exact same word (or otherwise remain uncertain of how close the resemblance is).

To further illustrate the above instructions, the coders were provided examples from selected jurisdictions that would merit coding YES for resemblance with the EU [and the US].

**Examples:**

“All agreements which have as their object or effect the **prevention, restriction or distortion of competition**, and in particular those which…”

“**Any abuse by one or more undertakings of a dominant position**; in the market shall be prohibited” ...

“The Commission prohibits a concentration which is expected to **create or strengthen a dominant position** by one or more undertakings.”

*(Albanian competition law of 2003, Arts. 4, 9, 13)*

“Concluding **agreements** in any form by economic entities, taking **decisions in any form by associations** and other **concerted competitive behaviour** (actions, inactivity) of economic entities shall be considered as concerted actions.”

*(Ukrainian competition law of 2001, Art 5, which bears resemblance to: "agreements, ...decisions .. by associations, ...concerted practices" as you can find all three types of practices: 1) agreements by undertakings/economic entities, 2) decisions by associations and 3) concerted practices noted together in the same sentence/paragraph).*
A5. ADDITIONAL RESULTS

A5.1. Scatterplot of Correlations to US and Correlation to EU in 2010

Electronic copy available at: https://ssrn.com/abstract=3339626
A5.2. Absolute Value of Difference Between Correlation to EU and Correlation to US
## A5.3: Regression of Net Similarity on Language Resemblance

<table>
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<th>(3)</th>
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<tr>
<td>Resembles EU</td>
<td>0.150***</td>
<td>0.115**</td>
<td>0.130**</td>
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</tr>
<tr>
<td></td>
<td>(0.048)</td>
<td>(0.049)</td>
<td>(0.058)</td>
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<tr>
<td>Resembles US</td>
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<td>-0.181**</td>
<td>-0.166*</td>
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<td></td>
<td>(0.081)</td>
<td>(0.083)</td>
<td>(0.089)</td>
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<td>Resembles Both</td>
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<td>(0.076)</td>
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<td>Observations</td>
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<td>R-squared</td>
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<td>0.144</td>
<td>0.146</td>
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</tbody>
</table>

-- Dependent variable is the “Net Similarity”, which is the correlation to EU for the 36 key provisions minus correlation to the US for the 36 key provisions
-- Data is for 2010 only
-- Standard errors in parentheses
-- *** p<0.01, ** p<0.05, * p<0.1
A5.4: Net Similarity by Population

净相似性（欧盟与美国的相关性）

净相似性与对数人口的相关性

电子版可在：https://ssrn.com/abstract=3339626
A5.5: Net Similarity by GDP Per Capita

Electronic copy available at: https://ssrn.com/abstract=3339626
A5.6: Net Similarity by Polity Score

Net Similarity (Correlation to EU - Correlation to US)

Polity2 Score

Electronic copy available at: https://ssrn.com/abstract=3339626