

# Sustaining Capitalism and Democracy: Lessons from Global Competition Policy<sup>1</sup>

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## **Abstract**

Competition policy has been a central forum for contesting the uneasy relationship between capitalism and democracy since the late 19th century. From the earliest policy debates, concerns that robust competition policies aimed at limiting economic concentration would disadvantage domestic producers featured prominently. This dynamic creates an international cooperation problem over competition policy that has intensified with the dramatic increases in globalization over the last several decades. Understanding the causes and consequences of this cooperation problem is central to understanding global governance of the world economy including the ability of democratic states to manage global capitalism in a manner that sustains democracy. This essay frames the challenge that global competition policy has posed over the last hundred years and argues that democratic major powers have played a critical role in shaping the limited cooperation that has been achieved. A research agenda that develops integrated theories of domestic and international competition policymaking as well as a multi-method empirical agenda for describing and explaining policy outcomes and their consequences for economic inequality, growth, and democracy is an essential task for international relations scholars.

# Introduction

A distinguished body of scholarship in political economy starts with the premise that democracy and capitalism are compelling frameworks for organizing politics and economics respectively while questioning their mutual compatibility. Does capitalism create stark economic inequalities that eventually undermine the political equality which is the foundation of democratic institutions? Do democracies have the capacity to govern capitalist economies effectively without intervening too much or too little in market outcomes? [Milner \(2021\)](#) argues that contemporary global capitalism constitutes an acute threat to democracy by generating inequality, insecurity, and international interdependence. This account emphasizes that globalization has significantly exacerbated many of the problems thought to be inherent in sustaining democracy in market economies.

This essay builds on Milner's theme through the examination of one of the most understudied but consequential policy areas for assessing the relationship between democracy and capitalism: global competition policy. Economic concentration, monopolies, and trusts have long been recognized as salient features of market economies and threats to democratic governance. From late 19th century concerns in the United States about Standard Oil to contemporary analyses of Amazon, the problem posed by concentration is not just economic but political. It is argued that bigness threatens the quality of democratic processes if not the institution itself.

In assessing the resilience of democracy to the consequences of economic concentration, it is essential that scholarship identify the determinants of policies designed to limit economic concentration generally and specifically those forms of concentration that are most harmful to democratic institutions. What are the political, social, and economic conditions that are conducive to the adoption of robust competition policies?

In this essay, we argue that explaining when and how countries cooperate internationally over competition policy<sup>1</sup> is central to a convincing answer to this question and that histori-

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<sup>1</sup>Also referred to as antitrust law within the United States. We use antitrust and competition law

cally the most important successes have been the result of economically powerful democratic countries compelling other countries to adopt more restrictive and mutually compatible policies. Our argument suggests that for competition policy, as in other areas, globalization has indeed made it more challenging for states to govern capitalism so it does not endanger democratic institutions. Moreover, success in meeting this challenge may depend as much on global economic governance as on domestic policies.

The argument has two steps. First, we highlight that globalization, specifically increased trade competition, creates international externalities in competition policy that lead democracies to adopt less restrictive competition policies than they otherwise would. This dynamic suggests that there is an international cooperation problem over antitrust policy at the heart of the ability of democracies to govern global capitalism. In addition to providing a theoretical framework for the international cooperation problem in competition policies caused by trade, we explore the importance of this problem through a historical analysis of trade concerns in competition policy in the United States and a quantitative analysis examining the impact of a state having a more restrictive competition policy than its trade partner on the extent of import competition.

The case study suggests that policymakers have been consistently concerned about the possibility that strict competition policies disadvantage American firms at home and abroad. The United States has tried a myriad of domestic policies to address this concern and advocated for international cooperative solutions, but it seems abundantly clear that trade concerns have been a drag on robust competition policy and enforcement in the United States.

We also estimate a gravity model to evaluate whether the problem is a general one as opposed to one limited to the United States. We use directed dyad trade data from 1960 to 2010 for a global sample of countries. We find evidence that having relatively strict competition policies significantly increases imports. This is consistent with the idea

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interchangeably in this essay.

that countries with more accommodating competition policies may have an advantage in international competition as large firms with dominant domestic market positions may be more productive and successful exporters. Essentially, relatively accommodating competition policies can create national champions.

Taken together, these theoretical considerations and empirical patterns suggest that countries face a difficult international cooperation problem in governing economic concentration. This raises the question of what factors have been critical in determining the degree of cooperation in this issue area. The second part of our argument advances the idea that cooperation over competition policy has generally been limited and the major exceptions to this pattern involve powerful democratic countries compelling other countries to adopt more restrictive and mutually compatible competition policies.

We note that over the last hundred years of competition policymaking, there are two major waves of global legislation. The first takes place after World War II and was led by the United States. The United States was both committed to adopting a more robust competition policy but worried about its consequences for the competitiveness of domestic firms. It responded by advocating that other countries adopt similar anti-trust models. Several major economies adopted important reforms at this time. The success of this second wave, however, should not be overstated as take-up of this policy initiative was far from universal. The second wave takes place after the end of the Cold War and was led by the European Union (EU), the International Monetary Fund (IMF), and to a lesser extent the United States. For each period, we discuss how the democratic values of the major economic powers were important in determining its commitment to a robust competition policy and its willingness to invest its political capital so that this commitment did not disadvantage it in the global economy. We also suggest that the democratic major powers were most effective when they had political or economic leverage over a country, for example, when a partner country was experiencing an economic crisis or seeking membership to an international institution or trade deal.

Our evidence for the limits of cooperation over competition policy historically and the role of democratic major powers in facilitating much of the cooperation that we do observe is only suggestive. The main goal of this essay is to highlight the centrality of competition policy for understanding the relationship between global capitalism and the future of democracy and to provide a compelling case that the regulation of economic concentration is characterized by a cooperation problem of first order importance for international relations scholars.

## The Problem of Economic Concentration for Capitalism and Democracy

Monopoly, oligopoly, and trusts have long been viewed as a problem for capitalism and democracy. Concern over economic concentration has accelerated in recent years because of mounting evidence that markets around the world appear to be experiencing increasing levels of concentration, particularly in the United States ([Pike 2018](#); [Grullon, Larkin and Michaely 2019](#); [Gutiérrez and Philippon 2019](#)).<sup>2</sup> The most basic concern about economic concentration is that it reduces competition, raises prices, and, in doing so, decreases consumer welfare. Recent work has found that rising market concentration has led to growth in markups ([De Loecker, Eeckhout and Unger 2020](#)). Some attribute rising prices in the United States compared to prices within European markets to the US's less stringent antitrust enforcement ([Gutiérrez and Philippon 2019](#); [Covarrubias, Gutiérrez and Philippon 2019](#)). That said, a common contention is that recent increases in concentration have not been accompanied by rising prices—perhaps because of trade or technological change—with some observers interpreting this pattern as evidence that the concentration observed to date is not causing economic harm while others see evidence of predatory pricing that will ultimately harm consumers. Additionally, concentration is thought to inhibit economic growth and productivity by reducing innovation ([Baker 2013](#); [Federico, Scott Morton and Shapiro](#)

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<sup>2</sup>For an alternative perspective see [Shapiro \(2018\)](#).

2019; Watzinger et al. 2020; Cunningham, Ederer and Ma 2021) and investment (Gutiérrez and Philippon 2017). Some scholars have found that increasing income inequality in the United States may be exacerbated by high levels of concentration (Furman and Orszag 2018). Others have found that the fall in the labor share of income in the United States is driven in part by economic concentration and the rise of “superstar” firms (Autor et al. 2017, 2020). In short, the problem of concentration for capitalism is that the legitimacy of markets depends on their performance and perceived fairness and concentration undermines both.

The problem of economic concentration for democracy is a direct consequence of its economic effects. There are several broad sets of concerns. First, to the extent that economic power creates a political resource,<sup>3</sup> concentration undermines democratic norms of political equality. It is difficult to sustain regime support if in practice economic elites have disproportionate influence on policy. Citizens will likely object to both the inequity of the process and the actual policies selected by that political process. Populism, defined as a thin-centered ideology that contrasts a “corrupt elite” versus a “virtuous people,” can be seen as one such reaction to economic concentration that shapes political influence (Mudde and Kaltwasser 2017). While there is debate about the extent of tensions between populism and democracy, there is little doubt that in practice many populist movements have been characterized by increasing authoritarian voters and leaders. Economic concentration and the translation of economic power into political influence provides an opening for populist backlash against democratic practices and institutions as well as policies that support capitalism. Relatedly, excessive economic concentration may also diminish the vitality of democratic discourse. One study of American newspapers finds that competition between local newspapers was a strong driver of ideological diversity in news coverage (Gentzkow, Shapiro and Sinkinson 2014). This feedback loop between economic concentration and democratic dynamism are part of what is motivating calls in the United States today for increased antitrust enforcement

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<sup>3</sup>See Callander, Foarta and Sugaya (2021) for an integrated dynamic model that shows how market power may produce political power and the limits of this positive feedback loop.

from actors across the political spectrum, ranging from the Biden Administration’s recent executive order<sup>4</sup> to proposals for regulating “Big Tech” from Representative Jim Jordan.<sup>5</sup> Second, even if economic resources do not translate into disproportionate political power in democracies, concentration that increases income and wealth inequality may reduce democratic longevity or hinder prospects for democratization (Boix 2003). In conditions of high inequality, economic elites may have more to fear from democratic policymaking and thus may be less likely to support a status quo democracy or more likely to resist a democratic transition. Third, to the extent that economic concentration is bad for economic growth and development, it may reduce support for democracy precisely because regime support is generally dependent on economic performance.

One important emerging question about the effects of economic concentration is whether it is a threat not just to democratic regimes but authoritarian ones as well. Some, but certainly not all, of the arguments about the effects of economic concentration on democracy apply to any incumbent political regime. A non-democratic government might be concerned about the concentration of economic power if those resources can be used to threaten the regime. Many authoritarian governments generally rely on performance, delivering economic welfare and political security, to justify their rule. Such governments may consider robust competition policies if they think those policies are more likely to deliver strong economic performance. China’s recent adoption of stricter competition policies and enforcement practices are consistent with these types of concerns. For the first hundred years of competition policymaking, non-democracies adopted very few such reforms, but since the 1990s, they have shown considerably more interest in such policies. Obviously, some of the arguments for why economic concentration might threaten democracies are specifically because the regime is democratic. Nonetheless, studying the causes and consequences of competition policymaking in non-democracies is an important area for future research.

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<sup>4</sup>Accessible at <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/07/09/executive-order-on-promoting-competition-in-the-american-economy/>

<sup>5</sup>See <https://republicans-judiciary.house.gov/wp-content/uploads/2021/07/2021-07-06-The-House-Judiciary-Republican-Agenda-for-Taking-on-Big-Tech.pdf>

The problem of concentration for democracy is a long-standing concern. For example, it shaped debates about anti-trust policy in the United States in the late 1880s and 1890s. As we discuss below, in the last quarter of the twentieth century, policy, law, and to a large extent political debate narrowed and focused on the consumer welfare effects of economic concentration. It is worth noting that this trend has reversed itself to some extent in recent years. The emergence of the “new Brandeis school” of antitrust thought has challenged the consumer welfare standard in American antitrust practice (Wu 2018; Khan 2018). This line of thought first gained popular currency through applications against large and widely-known big tech firms such as Amazon (Khan 2017) and Facebook (Srinivasan 2019). Broadly speaking, the “neo-Brandeisians” seek to reinvigorate what they view as the forgotten political core of America’s antitrust tradition. Like Brandeis, they argue that economic and political liberties are intertwined. Whether this line of thinking about competition policy will emerge as dominant is far from a settled matter but it highlights the political relevance of the potential threat of economic concentration to democracy.

## **International Trade and the Under-provision of Competition Policy**

In this section, we present the first part of our argument: globalization creates a cooperation problem in competition policy that leads countries to adopt less restrictive competition policies than they otherwise would.

### **What Determines Competition Policy?**

Our starting point is to consider what factors prior research has emphasized in explaining the adoption of competition policies globally. Past work on competition laws tends to focus on domestic macro-indicators motivating legislation, such as the level of economic development, rule of law, and democracy, among others (Palim 1998; Kronthaler and Stephan

2007; Parakkal 2011). Weymouth (2016) argues that antitrust law can be explained in part by coalitions between labor and capital: where labor is positioned to enjoy the benefits of super-normal returns to large firms, competition law is unlikely. Other scholars have highlighted the importance of international diffusion through preferential trade agreements (Solano and Sennekamp 2006; Bradford and Büthe 2015; Büthe and Minhas 2015; Büthe and Cho 2017). Bradford and Chilton (2019) show that trade openness and competition policy are positively correlated, but hesitate to draw the causal arrow from trade to antitrust or vice versa. Finally, and as we discuss in greater detail below, the demands of regional economic integration seem to have pushed some countries around the European Union and elsewhere to adopt competition laws (Aydin 2012; Doleys 2012; Büthe and Kigwiru 2020). Recent adopters of competition laws tend to borrow more from European rather than American antitrust traditions (Bradford, Chilton, Linos and Weaver 2019; Bradford, Chilton and Landieri 2020).

Here, we suggest that one under-explored feature of antitrust underlies both the relatively slow pace of global competition legislation and the long history of cooperation failure over competition issues: competing demands between the politics of domestic and international trade. To put it simply, one of the primary goals of competition policy is to reduce the anti-competitive business practices of large firms that hinder the ability of new firms to compete and, in doing so, increase prices or lower product quality for consumers. That is, antitrust enforcement has the intended effect of opening up otherwise concentrated markets thereby lowering the costs for entry of new firms. But this provides new market opportunities for both domestic *and* foreign firms. As antitrust authorities regulate large domestic firms, they invite increasing competition from large foreign firms at the expense of domestic firms. The enforcing domestic state therefore benefits from international cooperation to the extent that it balances antitrust burdens on domestic and foreign firms by increasing enforcement by foreign jurisdictions.<sup>6</sup> The foreign state likely also benefits from cooperation if the reason

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<sup>6</sup>These dynamics are borne out in recent survey evidence. Brutger and Pond (2021) find that Americans are less supportive of strengthening antitrust laws when told antitrust enforcement hurts the international

it had less robust competition policies in the first place was in part because having stricter policies would disadvantage its firms in international trade. We argue that democratic major powers tend to seek to correct these asymmetric gains from antitrust enforcement by inducing foreign jurisdictions to enforce within their own borders. After we demonstrate the negative trade effects caused by relatively strict antitrust policies, we show in the subsequent section that antitrust cooperation has historically relied on major power inducement—punctuated by distinct periods of leverage for the major power over its target states—to even out imbalances in international antitrust.

In short, competition law creates the incentive for the home country to seek cooperation and increased enforcement abroad, while at the same time *disincentivizing* other countries from legislating as their large firms enjoy comparative advantage in the enforcing state’s market by virtue of their weaker antitrust liability. The key theoretical claim is that trade concerns lead to the under-provision of competition policy and when this cooperation problem has been successfully addressed, it has primarily been through the actions of powerful states pressuring foreign jurisdictions to increase enforcement. In the following subsection we present a brief sketch of the history of American antitrust law and practice highlighting the role played by the competing demands of domestic and international trade.

## Historical Overview of Trade and Competition Policy in the United States

Antitrust law was first developed in the late nineteenth century in the United States through the Sherman Anti-Trust Act of 1890.<sup>7</sup> The law was a response to widespread popular ag-

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competitiveness of domestic firms. Moreover, respondents who work in sectors with high levels of import penetration tend to support greater levels of international antitrust coordination.

<sup>7</sup>While it is true that Canada passed an anti-monopoly law the year prior, it is generally seen as ineffective. One historian referred to it as “no more than a political sham” (Bliss 1973, 182). For an interesting comparative perspective on early Canadian and American antitrust law and practice see Cheffins (1989). There were also various United States state laws and constitutional provisions prior to 1890 that regulated or prohibited monopolies. These proved to be ineffective given the inter-state nature of the trust problem. For a history of these see Jones (1926*a,b,c*).

itation against the growing political and economic power of so-called “trusts”—a catchall phrase for big businesses regardless of whether they were organized as a legal trust or not (Thorelli 1955, Ch. 3; Letwin 1965, 54-70). To the extent that trade influenced the development of the Sherman Act, it was primarily a reflection of partisan politics at the time around tariffs and their protective role in fostering the trusts. At least eight antitrust bills in the House provided for the curtailment or elimination of import duties on trust-made products and a similar amendment was offered by anti-tariff Democrats in the Senate (Thorelli 1955, 175-9). Despite the belief that the “tariff was the mother of trusts,” none of these attempts to link antitrust and tariff reform prevailed. Indeed, soon after adopting the Sherman Act, Congress passed a new round of protectionist tariffs under the Tariff Act of 1890.

Why the combination of anti-trust reform and more protectionist tariffs was adopted in part reflects the key tension that we emphasize in this essay. While those who cared mostly about anti-trust policy might have preferred lower tariffs to complement stricter competition policies, others expressed concern that the anti-trust reforms would disadvantage the United States in international trade. In this latter group were certainly some who were unconcerned about economic concentration but many cared about it and the competitiveness of American firms. For many, concentration was a threat to democracy, which required a policy response, though one in which any economic costs were mitigated<sup>8</sup>

The effect of antitrust on the competitiveness of American firms in international markets remained a concern in the years after adoption of the Sherman Act. Business concerns leaned on Congress to limit the scope of antitrust liability for exporters, given what they claimed

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<sup>8</sup>For an example of the fear that corporate bigness itself might be a threat to democratic principles, consider Senator Sherman’s argument in an important speech during the Senate debate

The popular mind is agitated with problems that may disturb social order, and among them all none is more threatening than the inequality of condition, of wealth, and opportunity that has grown within a single generation out of the concentration of capital into vast combinations...They had monopolies and mortmains of old, but never before such giants as in our day. You must heed their (the voters’) appeal or be ready for the socialist, the communist, and the nihilist. Society is now disturbed by forces never felt before.” (Quoted in Thorelli 1955, 180)

DiLorenzo (1985) suggests that the Sherman Act may have been nothing but a cynical ploy to provide political cover for Republicans supporting the McKinley Tariff Act. Even if true, it suggests the importance of political as well as economic forces in understanding the interaction between competition and trade policy.

were overly burdensome and anti-competitive conditions faced in the highly cartelized European markets where competition policy was weak or non-existent. These efforts culminated in the Webb–Pomerene Act of 1918, the first piece of legislation to provide an explicit exemption for export associations, so long as their combination had no harmful effects on domestic markets. This bill sparked some controversy between the proponents of the “political content” of antitrust against those for whom trade concerns dominated.<sup>9</sup>

Antitrust enforcement activity dropped off in the 1920s and early 1930s. Enforcement activity picked up again in the late 1930s after the DOJ’s Antitrust Division came under new leadership (Freyer 2006, 27). The Antitrust Division increased its size and budget and began to reorient its prosecutorial focus away from the democratic threat posed by “bigness” as such (and its emphasis on protections for small producers) towards something closer to expert-led management of competition with a focus on promoting consumer welfare, dovetailing with New Deal goals for increasing consumer purchasing power. Part of this re-orientation was a new emphasis on international cartels that were increasingly creating obstacles for the early war effort (Brinkley 1993, 566-71).

The reinvigorated Antitrust Division began increasing its international prosecutions. It pursued its first international case in five years in 1937 and in 1941 alone it initiated more prosecutions (23 cases) than the DOJ had throughout the 1920s (17 cases, Freyer 2006, 34-6). Of these cases, perhaps the most significant was the 1937 suit against the Aluminum Company of America (Alcoa) for its monopolisation of the virgin aluminum ingot market. Not concluded until 1944 due to the war, the landmark *Alcoa* decision established the extra-territorial application of American antitrust laws, so long as the conduct had an anti-competitive effect on American markets (Phillips Sawyer 2019). The *Alcoa* decision provided

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<sup>9</sup>As put by Senator Reed from Missouri prior to the final vote,

The fact is plain that back of this bill is not the demand of the small exporter, is not the demand of the small business man, but is the conspiracy of the great trusts and combinations. We are presented with the spectacle of this powerful attack upon our trust legislation (*Congressional Record* vol.56-1, p. 178)

the United States with the jurisdictional tools to begin expanding the reach of its antitrust rules into foreign markets (Gerber 2010, 64-5). This new attitude is articulated by Wendell Berge (the head of the DOJ's Antitrust Division) in his 1946 book, *Cartels: Challenge to a Free World*, "The problem of monopoly is no longer a distinctly domestic and national phenomenon. It has come to encompass the wide world." (Berge 1946, 1) He goes on to articulate the direct connections that American policymakers had begun to draw between democratic threat, foreign trade and antitrust policy:

It is generally recognized now that economic freedom cannot be attained at home if private groups are permitted to acquire monopoly power over industry...Reciprocal trade treaties and good neighbor policies can have little effect if private cartels can shut off American markets to foreign producers or prevent American producers from selling abroad. (Berge 1946, 12)

While United States antitrust authorities continued to pursue international cases at a slightly reduced rate after the War (roughly five or so international cases per year), prosecutors were successful in a series of cases that expanded their foreign jurisdiction to include behavior of multinational corporations' subsidiaries and more (Wells 2002, 125-36; Freyer 2006, 126-34). The home states of firms subject to these enforcement actions worked to limit the expanding foreign reach of American antitrust law. Beginning in the 1970s, major United States trading partners such as the United Kingdom, France, Australia and others responded to creeping American extraterritorial enforcement by legislating roadblocks for American law enforcement abroad such as higher standards for sharing information and enforcing foreign antitrust judgements (Cira Jr. 1982). The United Kingdom's Protection of Trading Interests Act of 1980 even created a mechanism for British firms to recover a portion of damages against them.

By the late 1970s, the United States began to retreat from antitrust enforcement domestically and abroad (Lamoreaux 2019, 110). The United States was attempting to restructure its domestic antitrust goals such that enforcement would promote the welfare of American consumers without adding to the burdens faced by domestic producers threatened by increas-

ing import competition and exporters that needed to develop economies of scale in order to compete in global markets. In 1982, Congress passed the Foreign Trade Antitrust Improvements Act which eliminated extraterritorial antitrust enforcement outside of imports and the Export Trading Company Act, a bill that updated and expanded the Webb-Pomerene Act. In addition to these legislative changes, various prosecutorial Guidelines maintained by the DOJ were updated to pare back antitrust enforcement (Fox 1997, 10-2). Later, the Reagan administration floated the idea of exempting industries hurt by import competition from antitrust laws altogether (Hendersen 1986).

This brief overview of United States antitrust policy suggests that although the commitment to a robust competition policy waxed and waned over the century, trade concerns remained a salient factor.

## **Trade Consequences of Relatively Strong Competition Laws**

Above, we argue that competition laws create incentives for countries to have relatively weaker competition policies than their trading partners or to seek policy change in their trading partners if they are otherwise committed to strong antitrust policies. The United States case study suggests that this is plausible and in this section, we employ a gravity model to assess the effects of relative levels of antitrust policy on trade empirically. The idea here is to provide general evidence consistent with the idea that states may be concerned about the trade impact of adopting relatively stringent competition policies. After demonstrating this empirical relationship in this section, we shift our attention to the efforts of democratic major powers to alleviate the negative trade effects of antitrust enforcement by inducing foreign countries to establish stricter competition regimes.

Because we are interested in the relationship between antitrust policy and trade—and therefore how the presence or absence of large firms influences aggregate bilateral trade flows—we follow Eaton, Kortum and Sotelo (2012) by adopting a finite-firm model of international trade. Earlier models of trade, building off of Melitz (2003), Chaney (2008) and

others, have assumed a continuum of firms per sector. Because an individual firm is assumed to be infinitesimal its productivity is therefore unable to shift aggregate trade flows. This assumption is hard to square with empirical work documenting the activities of large, “superstar” firms capable of shifting a country’s aggregate economic output (Freund and Pierola 2015). Recent theoretical and empirical work has found that relaxing the continuum of firms assumption has proven useful in modeling the effects of large firms on aggregate trade flows (Gaubert and Itskhoki 2021; Gaubert, Itskhoki and Vogler forthcoming). To implement a finite-firm model we therefore define our outcome of interest as the market share,  $\pi_{ni}$ , of firms from country  $i$  in country  $n$ :  $X_{ni}/X_n$ , where  $X_n$  is total domestic spending (absorption) and  $X_{ni}$  is the value of imports from country  $i$  to  $n$  (Head and Mayer 2014, 179).

## Data & Method

Data on competition laws are derived from the Comparative Competition Law (CCL) project (Bradford, Chilton, Megaw and Sokol 2019). The CCL provides detailed data on the competition laws from over 200 countries between 1890 to 2010. To measure the overall strength of a country’s competition law we use the project’s Competition Law Index (CLI). This index was designed to allow cross-national and -temporal comparison of the strength of competition laws. It captures a variety of legal features including substantive provisions (such as rules governing mergers, price fixing, etc.) as well as the authorities the law enables (e.g. private rights of action, fines, damages, and so on).<sup>10</sup> For our dependent variable, we obtained data on gross national expenditures from the World Bank<sup>11</sup> and bilateral import data were obtained from the Correlates of War Trade Data Set (Barbieri and Keshk 2009, 2016).

In line with recent developments in methods for estimating gravity models, we estimate a high-dimensional fixed effects model by including directed-dyadic fixed effects as well as import- and exporter-year fixed effects (Feenstra 2016; Anderson 2011). We therefore only

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<sup>10</sup>For a full description of the CLI see Bradford and Chilton (2018)

<sup>11</sup>Defined by the World Bank as: “the sum of household final consumption expenditure (formerly private consumption), general government final consumption expenditure (formerly general government consumption), and gross capital formation (formerly gross domestic investment).”

control for a set of time-varying directed dyadic factors because all country-level and time-invariant dyadic level factors will be absorbed by this set of fixed effects. We control for common membership in a preferential trade agreement and whether the two countries are party to a PTA with a competition chapter. Data for both of these indicators are taken from the Design of Trade Agreements Database (Dür, Baccini and Elsig 2014). Similarly we include a dummy variable equal to 1 if both countries are members of the GATT/WTO. And finally, we also dummy for common membership in a currency union (de Sousa 2012).

Eaton, Kortum and Sotelo (2012) show that in the case of finite firms, the multinomial pseudo maximum likelihood (MPML) estimator can be used to model the underlying data generating process. Outside of the theoretical motivations for using MPML, simulation evidence further recommends MPML as it outperforms other common estimators (such as the Poisson pseudo maximum likelihood (PPML) estimator) under a variety of assumption violations (Head and Mayer 2014, 180-3). Unfortunately, there is no readily available function for estimating MPML. However, Sotelo (2019) demonstrates that the Poisson estimator is equivalent to MPML when the dependent variable is between 0 and 1 (such as with our DV as trade shares) and destination fixed effects are used.<sup>12</sup> We therefore follow Eaton, Kortum and Sotelo (2012) and others (e.g. Feenstra 2016, Ch. 6) by estimating the equation below using the Poisson estimator:<sup>13</sup>

$$\pi_{ni,t} = \exp[\beta_0 + \beta_1 CLI_{ni,t} + \gamma \mathbf{X}_{ni,t} + \delta_{n,t} + \eta_{i,t} + \omega_{ni} + \varepsilon_{ni}] \quad (1)$$

$CLI_{ni,t}$  is an indicator variable equal to 1 if the importer,  $n$ , has stricter antitrust laws than the exporter,  $i$ .  $\gamma$  is a vector of coefficients and  $\mathbf{X}_{ni,t}$  is a matrix of directed-dyad controls. Finally, importer-year, exporter-year and directed-dyad fixed effects are expressed as  $\delta_{n,t}$ ,  $\eta_{i,t}$ , and  $\omega_{ni}$ , respectively. We cluster standard errors on the directed dyad.

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<sup>12</sup>Indeed, Sotelo writes that Eaton, Kortum and Sotelo (2012) use the Poisson estimator in their original paper.

<sup>13</sup>Specifically, we estimate this using the `ppmlhdfc` function in STATA (Correia, Guimarães and Zylkin 2019) in order to utilize the full set of fixed effects. Due to possible errors in the data, we drop observations of  $\pi_{ni}$  that exceed 1.

	(1)	(2)	(3)
$CLI_{\text{imp}} > CLI_{\text{exp}}$	0.067*** (0.026)	0.067*** (0.026)	0.066*** (0.025)
PTA		0.127*** (0.029)	0.107*** (0.030)
PTA <sub>Comp. Chap.</sub>			0.067** (0.030)
Both in WTO		-0.031 (0.054)	-0.028 (0.054)
Currency Union		0.265*** (0.059)	0.267*** (0.058)
Constant	-2.433*** (0.011)	-2.489*** (0.041)	-2.495*** (0.041)
RESET test	—	0.507	0.471
Coverage	1960-2010	1960-2010	1960-2010
Directed-dyad FE?	Yes	Yes	Yes
Importer-year FE?	Yes	Yes	Yes
Exporter-year FE?	Yes	Yes	Yes
Observations	762,969	752,049	752,049

**Note:** \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . MPML estimates are reported based on method using Poisson estimator as described by [Sotelo \(2019\)](#). Dependent variable is trade shares (imports / gross domestic expenditure). Standard errors in parentheses are clustered by directed-dyad. Coverage dictated by data availability. RESET test is estimated by re-running model including a term representing the squared linear predictions. The p-value on the coefficient for that term is reported here.

Table 1: Relative Antitrust and Import Competition

## Results

The results are reported in Table 1.<sup>14</sup> The results on the relative CLI indicators are positive and significant for all models. The estimates are stable as we progressively add control variables to the model. We successfully replicate common findings on the effect of joint membership in PTAs and currency unions. The RESET tests are not statistically significant, providing no evidence of the presence of heteroskedasticity.<sup>15</sup> These results suggest that countries with stronger antitrust laws experience higher import competition from countries that have weaker antitrust laws. The prospect of increased import penetration thus presents a clear disincentive for countries to increase their antitrust enforcement and may therefore lead to the underprovision of antitrust globally.

## Democracy and Major Powers in Global Competition Policy

In this section, we develop the second part of our argument by advancing the idea that the primary way that countries have found to cooperate over competition policy has been through the leadership of major powers. Major economic powers have provided this global public good through the encouragement (or imposition) of competition laws and the construction of international fora for governing competition policy. We then present evidence from two case studies of heightened global antitrust activity: American promotion of international antitrust after WWII and European Union and international financial institution led activity after the end of the Cold War. We complement this with a brief statistical analysis finding that antitrust legislation is more likely during financial crises. We interpret this result as

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<sup>14</sup>In Appendix A we present the results using two other common estimators for gravity models, OLS and PPML. The results are substantively similar in the OLS specifications. The PPML estimates are the correct sign but not statistically significant.

<sup>15</sup>These values are calculated by estimating the main model with an additional term representing the square of the linear predictions, we report the p-values on that coefficient. This is a common method for evaluating the presence of heteroskedasticity in gravity models, see [Feenstra 2016](#); [Santos Silva and Tenreyro 2006](#).

being consistent with our account in that crises create leverage for powerful international actors to influence policy.

A puzzling aspect of the history of global competition law is the appearance of inflection points in competition-related legislative activity at the end of World War II and the Cold War. To illustrate these abrupt increases in antitrust activity, we have plotted the yearly amount of competition-related legislation in Figure 1a. The plot indicates a sustained increase in legislative activity after World War II and an explosion of activity at the end of the Cold War. As we can see in Figure 1b, not only has legislative activity increased overall, but the average stringency of competition laws is also increasing, particularly within democracies. On top of these increases in the stringency and scope of competition laws around the world, we see a similarly dramatic inflection point marking sustained yearly increases in the percentage of countries that have established competition enforcement agencies. This is particularly important as it suggests countries are not only creating rules, but that they intend to commit resources to enforcing those rules.

Why is it that we see these inflection points? Below we suggest that this is due to a confluence of forces present around 1945 and 1990 that increased the leverage of democratic major powers to push for the expansion of international antitrust. In each case, there exists first pressure for the global community to ensure peaceful and lasting democratic transitions: for the Axis powers after WWII and the transition economies after the Cold War. Second, in both cases there was a large democratic state with a preexisting commitment to enforcing competition policy at home. This then created the incentives for foreign jurisdiction to under-enforce competition rules, as we described in the prior section. Finally, these unique international political moments provided the leverage necessary for these democratic major powers to influence competition regimes abroad. While the nature of leverage during these periods varies between episodes of overt imposition (e.g. foreign occupation) or the provision of material inducements (e.g. EU accession, trade agreements, conditional loans from ideologically aligned IFIs), we hope to show that antitrust-promoting powerful democratic

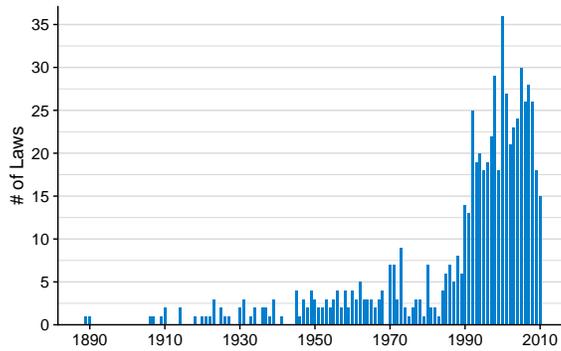
countries exploit these diverse moments of heightened leverage to promote international antitrust legislation. Below we provide brief sketches of each episode.

## **The Post-WWII Wave**

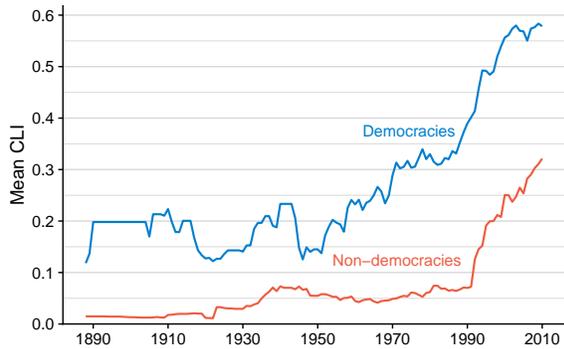
The re-orientation of American antitrust priorities around international cartels was a natural fit for post-war reconstruction and occupation policy making. In this section we offer a brief sketch of American efforts—through both diplomatic means and direct imposition—to promote antitrust laws abroad in an attempt to safeguard both democracy and its own export markets. In the interwar period, while the United States had briefly experimented with cartel-like economic organization under the New Deal, it never reached the scale seen in European economies ([Phillips Sawyer 2018](#)). Moreover, as we detailed above, by the end of the 1930s the United States had largely abandoned that approach in favor of reinvigorated antitrust enforcement. The United States thus took advantage of its postwar leverage to correct what it saw as antitrust imbalances with its its major trading partners that had highly concentrated domestic markets. Just as the United States justified its pro-competition policies at home, it did so abroad through rhetoric extolling the virtues of antitrust for not only promoting fair economic competition but also safeguarding democracy in the process. We discuss American efforts to promote antitrust laws abroad first then turn our attention to attempts at building multilateral institutions to prevent restrictive business practices.

## **Domestic Laws**

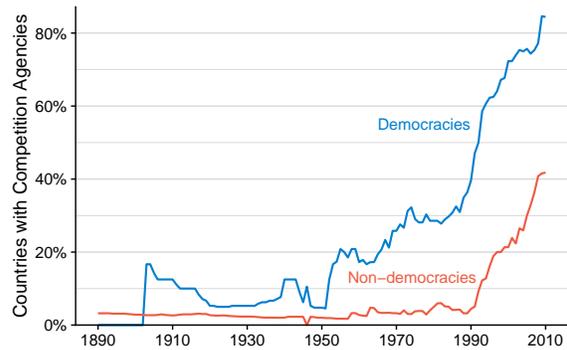
Antitrust informed the American plans for occupied Germany and Japan. German policy was summarized as the “4Ds”: denazification, demilitarization, democratization and decartelization. While the program has a mixed record of success, its goals reveal the beliefs American policymakers held on the connection between economic concentration and democratic consolidation. As a member of the group charged with evaluating the decartelization program later wrote, “...the program to decartelize Germany makes sense only in terms of a purpose to



(a) Yearly Legislation



(b) Mean CLI



(c) Percentage of countries with enforcement agency

Figure 1: Broad Trends in Global Antitrust Legislation

**Note:** Legislation, CLI and agency data taken from the CCL. Democracy is defined as any country with a Polity score greater than 6.

democratize Germany” (Stedman 1950, 448-9). Similarly, the Antimonopoly Law passed in occupied Japan was seen as an essential tool in the American efforts to democratize Japan (Freyer 2006, 162-4) and ease market access (First 2000). A report commissioned by the State Department and War Department put the problem this way, “This type of industrial organization [in Japan] tends to...destroy the basis for democratic independence in politics, and to prevent the rise of interests which could be used as counterweights to the military designs of small groups of ambitious men” (Quoted in First 2000, 21). And the head of the occupation’s Antitrust and Cartels Division wrote, “People can talk and write about democracy, but they cannot really live democracy without deconcentration of economic power” (Quoted in Wells 2002, 176). Deconcentration of the economies of occupied Japan and Germany was thus an essential element of American policy that was understood by the occupiers to serve the twin goals of making foreign markets more amenable to American penetration and inculcating democratic values.

Outside of America’s direct imposition of competition law in Germany and Japan, the United States committed significant diplomatic resources towards fighting economic concentration and cartels in its other major trading partners. As early as 1942 Lend-Lease Agreement negotiations with the British, the Americans were pushing to include competition rules (Wells 2002, 109). American pressure on the British to reform their cartel policies got so extreme that the DOJ began intervening in otherwise irrelevant commercial diplomacy between the countries. The British Embassy in Washington critiqued the United States for its preoccupation with anti-cartel policies: “There was greater US interest in cartels and monopolies than ‘more serious subjects of trade policy’” (Quoted in Freyer 1992, 259). Ultimately, the British did pass a major reform of their competition law in 1948.

### **Steps Toward Cooperation: Competition at the ITO and OECD**

In addition to the pressure the United States put on countries to adopt competition laws during and after the war, the United States set out to establish what would eventually be

know as the International Trade Organization (ITO) (Wells 2002, 116-25). While the ITO never came to fruition because of the United States' failure to ratify, the history of the ITO nevertheless provides further evidence of the American concern for international antitrust. Given the commitment of the United States to enforcing its antitrust laws, it was in the best interests of the United States to reduce the imbalance between its own laws and its trading partners. In a statement to the Senate Judiciary Committee in 1945, the Assistant Secretary of State framed the issue of international cartels with direct reference to domestic political challenges threatening the domestic antitrust laws caused by non-enforcement abroad,

We believe that the control of international trade by private cartels is a dangerous thing and that it is inconsistent with the economic philosophy which best serves the cause of peace and human well-being...If we are successful in this purpose, it will no longer be possible to argue for the weakening of the antitrust laws on the grounds of contrary economic systems abroad.<sup>16</sup>

The final text of the competition chapter of the ITO encouraged member states to implement national anti-monopoly laws and provided mechanisms for the investigation of complaints against various anti-competitive practices in other member states.

With the failure of the ITO, the United States sought increased antitrust cooperation with its major trading partners through bilateral as well as multilateral channels such as the Organisation for Economic Co-operation and Development (OECD). In the aftermath of a diplomatic conflict between Canada and the United States over the extraterritorial application of American antitrust law, the two countries established a process in 1959 by which they would exchange information relevant to international antitrust enforcement. Drawing on this conflict, the OECD in 1967 established a protocol for sharing information on antitrust investigations that might touch on the interests of another member state (Papadopoulos 2010, 52-4). In the first dozen years of its existence activity was concentrated in the United States (which initiated 32% of contacts), Germany (24%), and Japan (18%).<sup>17</sup>

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<sup>16</sup>From "Private Barriers to International Trade." *The Department of State Bulletin*. Washington, DC: Office of Public Communication, Bureau of Public Affairs, 1945.

<sup>17</sup>Data taken from the OECD "Report on the Operation of the 1967 Council Recommendation concern-

As described above, by the late 1970s and 1980s—with the rise of the Chicago school in antitrust jurisprudence—US domestic policy narrowed its focus to questions of consumer welfare. While the domestic enforcement slowed during this period, the United States retained its interest in disrupting anticompetitive business practices harming its trade interests. One target of this effort was Japan. After the American efforts at extraterritorial antitrust enforcement against Japanese firms in the 1960s and 70s met judicial roadblocks, the United States increased political pressure on Japan to improve its domestic competition laws and enforcement capabilities (Freyer 2006, 213-25). These efforts culminated in the “Structural Impediments Initiative,” a series of US-Japanese talks in the late 1980’s largely directed at curtailing anti-competitive Japanese business practices. But it was not until the early 1990s—when Japan’s economic fortunes turned—that the United States was able to exert its newfound leverage over Japanese antitrust policy (Gerber 2010, 214).<sup>18</sup>

## The Post-Cold War Wave

As Figure 1 makes clear there was a sudden and radical increase in antitrust legislative activity at the end of the Cold War. While the earlier wave was predominantly constituted by developed democracies and countries with close ties to the United States in Europe and South America, this wave is truly global in scope, with competition laws being passed in regions where they have previously been quite scarce such as the spread of competition regimes (both national and supra-national) in Africa (Bütthe and Kigwiru 2020). In this section we discuss two factors facilitating this inflection point in the diffusion of competition law: the actions of the European Union and international financial institutions (IFIs).

As we describe above, the United States retreated from antitrust enforcement in the 1980s as a result of the Reagan-era antitrust reforms that were designed to curtail domestic enforcement and promote international competitiveness. At the same time, however, the

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ing co-operation between Member countries on restrictive business practices affecting international trade C(67)53(Final) during the Period 1967-1975”.

<sup>18</sup>Data presented in First (2000) shows a massive increase in enforcement in the early 1990s.

EU was ramping up its international antitrust powers (Büthe 2007). This had the effect of reversing the burden of antitrust liability we saw in the post-WWII era, when the United States was actively promoting international antitrust. We then see the EU take up where the United States left off and begin a multifaceted effort to promote competition law globally (Aydin 2012). European competition law is a central component of the European integration project. The intellectual roots of European competition law are often associated with postwar German ordoliberal thought which identified a greater role for the state in managing markets and promoting social integration through free and open competition (Gerber 2001; Talbot 2016). Europe extended these ordoliberal impulses as it fostered deeper economic relations inside and outside its borders.

One of the EU's first major international efforts was its work in the mid-90s to add competition policy to the ambit of the World Trade Organization (WTO). Ultimately the EU failed due to the lack of support from the United States and developing countries. In a reversal from the post-WWII era, the United States was skeptical of the proposal for a variety of reasons not least of which was the potential for exposing its firms to additional foreign antitrust liability. It is important to note that even in this period, the United States was concerned about the competition policies of other countries and some of its resistance to the EU's initiatives at the WTO was due to its preference for bilateral cooperation and capacity-building on competition issues. In the words of an Assistant Attorney General at the time, the United States feared that a multilateral approach would result in a "lowest-common-denominator outcome" (Klein 1996). Consistent with our protectionist argument outlined above, developing countries feared that competition rules would expose their markets to foreign competition while at the same time hampering their abilities to develop domestic firms that can compete in global markets (Gerber 2010, 106-7).

Undeterred by its failure at the WTO, the EU continued to pursue its global competition agenda through other means. Most significantly, the EU influenced other countries' competition policies through the EU accession process which encourages prospective member states

to align their domestic laws with EU law. In 1995, the Commission published a white paper outlining its view that alignment with EU competition rules was a requirement for accession (Doleys 2012). The harmonization of competition policy was also an essential aspect of the EU’s “European Neighborhood Policy” for deepening economic and social ties with the EU’s new neighbors after its expansion in 2004. The effectiveness of the EU’s efforts here highlight the importance of leverage in allowing democratic major powers to induce policy change elsewhere. Outside of the EU and prospective-EU member states, the EU has pursued international alignment on competition issues through bilateral treaties (Papadopoulos 2010). These efforts appear to be paying dividends as recent scholarship has found rapid growth in the diffusion of laws inspired by the EU’s regime. Bradford, Chilton, Linos and Weaver (2019) find that the number of countries with competition laws more similar to the European Union’s than to the United States’ increased rapidly in 1990, after a long period of parity from 1960-1990.<sup>19</sup>

Another important aspect of the post-Cold War inflection point is the embrace of competition policy by prominent IFIs like the World Bank and IMF that are well positioned to promote competition policies consistent with the aims of the United States and EU within countries seeking assistance to manage financial crises. While the IMF typically did not include competition rules in its conditions prior to the ’90s (Sell 1995), competition rules later became important aspects of the conditional loans these institutions provided during financial crises from the 1990s onwards, such as Turkey in 2001 (Aydin 2021) and the countries that received support during the Asian Financial Crisis (Lane et al. 1999, 72-3).<sup>20</sup> Additionally, other economically-oriented international organizations such as the United Nations Conference on Trade and Development began in the 1990s to promote competition law as an integral aspect of economic development, even beginning the process of writing a Model

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<sup>19</sup>See also Bradford, Chilton and Landieri (2020) on the Chicago school’s limited influence abroad.

<sup>20</sup>Interestingly, Malaysia, the only country severely impacted by the crisis that did not receive IMF support, did not establish its first competition law until 2010. Other countries that did receive support legislated during or soon after the crisis (Korea, Indonesia, Thailand and the Philippines).

Law for Competition and supporting technical assistance programs.<sup>21</sup>

## Crisis, Leverage and Competition Policy

We now analyze one factor in the major power-led construction of competition policy: the role of financial crisis in providing major powers and ideologically-aligned institutions leverage over domestic competition regimes. Financial crisis presents a unique opportunity for the establishment or adjustment of competition policy. First, the crisis provides leverage to the major power as the country in crisis is in need of resources quickly. For example, Korea was subject to American pressure in the 1990s for unfair business practices that American trade officials believed harmed American trade interests. The United States Trade Representative (USTR) regularly cited lax Korean competition policy in its yearly reports on foreign barriers to trade. Given the USTR's authority to impose trade sanctions in response to a foreign government's "toleration...of systematic anticompetitive activities" these reports were a source of concern for Korean officials.<sup>22</sup> But it was not until the Asian Financial Crisis in 1997 that Korea instituted comprehensive competition reforms along the lines of what the United States had been advocating (Cho and Büthe 2021, 10).<sup>23</sup> The crisis exposed Korea,

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<sup>21</sup>E.g. "Review of capacity-building in and technical assistance on competition and consumer protection law and policy." Accessible at [https://unctad.org/system/files/official-document/tdrbpconf9d6\\_en.pdf](https://unctad.org/system/files/official-document/tdrbpconf9d6_en.pdf)

<sup>22</sup>Korean officials were aware of and concerned about these reports. As the USTR reported in 1996:

Some United States companies reported that one Ministry in particular advised them against raising concerns with the United States government. A state-owned enterprise also reportedly requested a United States company to include a provision in its contract which would effectively preclude such contact with United States officials. Frequently even experienced United States exporters report that they do not want their company name or products mentioned in United States Government representations to Korea officials for fear of retribution... (United States Trade Representative, *1996 National Trade Estimate Report on Foreign Trade Barriers*, p. 231-2)

<sup>23</sup>As reported by the USTR in 1998:

Due to recent reform measures, the KFTC [Korea Fair Trade Commission] has been elevated to a ministerial-level agency and the agency's staffing has been increased. From the U.S. Government's point of view, these were necessary and welcome changes...reforms to which Korea has committed under the IMF package should spur the KFTC's efforts to deter and eliminate chronic anticompetitive practices in the Korean market. (United States Trade Representative, *1998 National Trade Estimate Report on Foreign Trade Barriers*, p. 268)

increasing leverage of the United States and ideologically aligned IFIs such as the IMF while also spurring domestic popular support for regulating Korea’s highly concentrated conglomerates (Jung and Chang 2006). This last point raises a second pathway by which crises might matter for the adoption of stronger competition laws—they increase the political salience (and failure) of economic policymaking in the country and perhaps build political support for competition-policy reform.

We now present an event history analysis of the relationship between financial crisis and competition policy. We emphasize that our empirical evaluation seeks to show a correlation between crisis and stricter competition policies that is consistent with major powers and the institutions that they influence using the leverage that a crisis creates to push for reform. The correlation is, of course, also consistent with other, purely domestic mechanisms and, as in the Korea case, we expect both are at work. We depart from earlier event history analyses of competition laws by modeling all antitrust legislation, not just a country’s initial antitrust law (Palim 1998; Kronthaler and Stephan 2007; Parakkal 2011; Bütthe and Minhas 2015).<sup>24</sup> We do this because we are interested theoretically and substantively in what encourages countries to construct active competition regimes. Including all legislation allows us to model this process without operating under the assumption that the conditions under which countries initially legislate are representative of subsequent legislation. A country’s first law can be a poor predictor of the future of competition enforcement within the country. It can take years of legislative, judicial and bureaucratic capacity building to establish a viable competition regime (Kovacic and Lopez-Galdos 2016).

We obtain yearly legislative data from the CCL data set (Bradford, Chilton, Megaw and Sokol 2019). Data on financial crises is taken from the Global Crises Dataset, developed by Carmen Reinhart.<sup>25</sup> To measure financial crisis in a given year we create an indicator variable equal to 1 if a country is coded as experiencing either a banking, currency or inflation

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<sup>24</sup>Or the first year in which a country established an enforcement agency, Weymouth (2016)

<sup>25</sup>The data set is now maintained by the Behavioral Finance & Financial Instability Center at Harvard University. It is available here: <https://www.hbs.edu/behavioral-finance-and-financial-stability/data/Pages/global.aspx>

crisis that year. We then construct a five-year rolling average (including the current year) of the number of years in which a country experiences any financial crisis. We control for various factors that may confound the relationship between crisis and competition policy. We progressively introduce controls for level of development (i.e. per capita GDP) and market size (population) from the Maddison Historical Statistics (Bolt and van Zanden 2020); trade openness defined as total imports + exports / GDP, obtained from the World Bank’s World Development Indicators; and, finally, yearly percentage change in inequality. Inequality data is obtained from the World Inequality Database and is defined as the share of income going to the top 1% of the income distribution.<sup>26</sup>

We estimate these regressions using a “conditional frailty” model (Box-Steffensmeier and De Boef 2006; Box-Steffensmeier, De Boef and Joyce 2007). That is, we estimate a Cox proportional hazards model but we include a country-level frailty terms to model unobserved country-level heterogeneity as well as stratify on the number of prior laws a country has enacted. This allows the baseline hazard rate to vary across different levels of historical legislative activity. We adopt a “gap-time” approach, so we are estimating the time between legislative events.

The estimated coefficients are reported in Table 2. The coefficient on the *Financial Crisis* variable is positive, significant and relatively stable across all specifications despite the sizable changes in the size and composition of the sample as we add control variables. If a country has experienced a financial crisis in one of the last five years, we estimate the probability of legislative activity to increase by roughly 13%.<sup>27</sup> We find support (though the results are less stable across specifications) for other factors including market size, level of economic development and trade openness. Interestingly, after accounting for macroeconomic factors we find little evidence in support of the link between a country’s level of democracy and competition reform.<sup>28</sup>

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<sup>26</sup>Available here: <https://wid.world/>.

<sup>27</sup>Based on the estimate from Model 3,  $0.126 = e^{0.593 \times 0.2} - 1$

<sup>28</sup>Earlier work has found this association, though these studies have all focused only on initial legislation (Parakkal 2011; Weymouth 2016; Bütthe and Minhas 2015)

	(1)	(2)	(3)	(4)	(5)
Financial Crisis	0.500*** (0.160)	0.507*** (0.166)	0.593*** (0.180)	0.643*** (0.209)	0.822*** (0.266)
Democracy		0.404*** (0.147)	0.205 (0.167)	0.180 (0.195)	-0.486* (0.285)
ln GDP per cap.			0.501*** (0.106)	0.267** (0.108)	0.289* (0.150)
ln Population			0.123** (0.054)	0.201*** (0.061)	0.088 (0.075)
ln Trade Openness				0.633*** (0.157)	0.248 (0.203)
$\Delta$ Inequality					2.287** (1.038)
Legislative events	369	354	349	273	200
Countries	68	65	65	64	48
Observations	6,617	6,126	5,598	2,832	1,340

**Note:** \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Table reports the estimated coefficients for “gap-time” Cox proportional hazards models. All models are stratified by the number of prior legislative events. Country-level frailty terms are also included in all models. Financial Crisis is defined as the five year rolling mean (including current year) of the number of years in which a financial crisis occurred.  $\Delta$ Inequality is the yearly percentage change in the income share of the top 1%.

Table 2: Financial Crisis and Antitrust Legislation

This analysis should be interpreted as predictive and non-causal, though we believe it does suggest the need for further research into the mechanisms driving the association between crisis and competition policy. While we suggest that crisis provides leverage for democratic major powers and their agents (through IFIs) to push for competition reform, we do not rule out the possibility that alternative mechanisms are also likely at work. For example, crisis may increase the salience of fairness concerns which could in turn boost popular demands for reforms limiting the political or economic influence of big business. Also, we know little about the kinds of competition rules that tend to be implemented in these crisis periods and if they differ qualitatively from other periods of reform. Most importantly, for our purposes, is the need for further work to establish the importance of economic crises as moments in which major powers have greater leverage to influence global competition policy making.

## Discussion

Economic concentration constitutes a central challenge in governing capitalism and sustaining democracy. Globalization creates incentives for states to underprovide competition policy and this is an important and underappreciated mechanism by which global capitalism may undermine democracy. International cooperation over competition policy is the obvious remedy for addressing this dynamic. While there have been numerous attempts to institutionalize competition cooperation, we argue that historically economically powerful democratic states committed to strong domestic antitrust policies but worried about the consequences for the international competitiveness of domestic firms have been the primary drivers of cooperation.

Given evidence of growing economic concentration in global markets, a pressing question for policymakers and international relations scholars is what are the prospects for future cooperation in competition policy in the current era of globalization. There are substantial reasons to think that the scope and form of cooperation might increase. First, the EU

and to a lesser extent the United States seem increasingly committed to robust competition policies for domestic political economy reasons. Admittedly, it remains unclear in the United States whether the coalition for antitrust policy that goes beyond considerations of consumer welfare will be able to advance legislation and/or new judicial action. Second, in the both the EU and United States the tension between the desire for strong competition law and the consequences for domestic firms competing in the global economy is extremely salient. There is an impetus to find ways to adopt strong and mutually compatible competition policies that echo prior eras of major power provision.

Perhaps, the most important caveat in this assessment is how China influences international cooperation over competition policy. On the one hand, state-led and state-subsidized capitalism produces precisely the kind of large, internationally competitive firms that might lead EU and United States policymakers to think twice about reducing concentration in their domestic markets. On the other hand, China and other non-democratic regimes have their own reasons for wanting to regulate economic concentration. Market power constitutes a potential threat to political power in non-democratic states for some of the same reasons that it is a problem for democracy. This shared interest in a more robust competition policy may provide a starting point for global cooperation among both democratic and non-democratic states. This conjecture, as with many of the arguments discussed in this essay, merits a great deal more research attention by international relations scholars.

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Online Appendix for “Sustaining Capitalism and Democracy:  
Lessons from Global Competition Policy”

## **Alternative Gravity Specifications**

	OLS ln(Imports + 1)				PPML Imports			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
CLI <sub>imp</sub> > CLI <sub>exp</sub>	0.256*** (0.041)	0.252*** (0.042)	0.244*** (0.042)	0.244*** (0.042)	0.021 (0.020)	0.022 (0.020)	0.021 (0.019)	0.022 (0.019)
PTA			0.300*** (0.045)	0.343*** (0.048)			0.186*** (0.030)	0.158*** (0.029)
PTA <sub>Comp. Chap.</sub>				-0.201*** (0.060)				0.053* (0.027)
Both in WTO			-0.006 (0.064)	-0.008 (0.064)			-0.098 (0.066)	-0.094 (0.066)
Currency Union			0.598*** (0.124)	0.603*** (0.123)			0.071* (0.040)	0.074* (0.040)
Constant	9.227*** (0.014)	9.163*** (0.014)	9.113*** (0.034)	9.117*** (0.034)	22.776*** (0.009)	22.791*** (0.009)	22.799*** (0.059)	22.790*** (0.059)
RESET test	—	—	0.684	0.206	—	—	0.374	0.442
Coverage	1900-2010	1948-2010	1948-2010	1948-2010	1900-2010	1948-2010	1948-2010	1948-2010
Directed-dyad FE?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Importer-year FE?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Exporter-year FE?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,169,576	1,117,251	1,075,301	1,075,301	1,126,050	1,074,586	1,035,764	1,035,764

**Note:** \*  $p < .1$ , \*\*  $p < .05$ , \*\*\*  $p < .01$ . OLS = Ordinary Least Squares. PPML = Poisson pseudo maximum likelihood. Dependent variable on the regressions (1) through (4) is the natural log of imports + 1, to avoid dropping zero values. Dependent variable on models (5) through (8) is imports in current \$USD. Standard errors in parentheses are clustered at the directed-dyad. RESET test is estimated by re-running model including a term representing the squared linear predictions. The p-value on the coefficient for that term is reported here.

Table A.1: Alternative Gravity Specifications, OLS and PPML