THE POLITICS OF MARKET COMPETITION: TRADE AND ANTITRUST IN A GLOBAL ECONOMY

For the *Oxford Handbook of the Politics of International Trade*,
edited by Lisa Martin

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Abstract

International political economists have long recognized increased competition in product markets as a key benefit of liberalizing trade policy. Antitrust—known as competition policy outside the United States—is supposed to achieve the same end by intervening against price-fixing, bid-rigging, and other forms of anticompetitive behavior and abuses of market power. And indeed, trade policy and competition policy have been deeply intertwined since the late 19th century. This chapter provides an overview of different ways of thinking theoretically about the relationship between the international integration of product markets and competition law and enforcement. I argue that the dominant approaches in economics and law suffer from being either devoid of politics or relying on a model of politics that deprives both firms and competition regulators of transnational/-governmental agency. I sketch a more overtly political approach, which can explain the simultaneous spread of competition law and trade openness in the last two decades.

Keywords:

antitrust policy, competition law, competition policy, cartels, mergers, market power, trade, regulation

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1. The Trade-Antitrust Linkage

Antitrust law and enforcement—known as "competition policy" outside the United States—is one of the most powerful tools that states have at their disposal to shape the structure and operation of markets (e.g., Baron 2010, 265-310; Fligstein 2001). Competition law authorizes and regulates government intervention against anti-competitive behavior, such as price-fixing or bid-rigging, and the concentration of economic power. When it succeeds in safeguarding or increasing market competition such that both buyers and sellers are generally price-takers, it brings widely recognized economic benefits, boosting economic efficiency, growth, and innovation, and thus both consumer and aggregate welfare (e.g., Gellhorn, Kovacic, and Calkins 2004; Rey 1997; Weiss 1989). In various countries and at various times, competition policy also has had a number of other legitimate objectives—many of them quite familiar to scholars of trade politics and policy—ranging from industrial policy and economic development goals to economic freedom.[1] But even when it only seeks to enhance economic welfare, effective competition policy is inherently deeply political, since it entails the use of political power to constrain or even redistribute economic power.

Ever since the adoption of the first modern antitrust statutes in Canada and the United States at the end of the 19th century, competition policy has been closely intertwined with trade policy.[2] To be sure, a diverse coalition of interests came together in passing these first national competition laws (e.g., Baggaley 1991; Letwin 1965:esp. 53-99), but a central motivation was clearly an understanding of antitrust as a substitute for trade openness. Senator John Sherman (after whom the first U.S. federal antitrust statute, the Sherman Act of 1890, is named) sought antitrust enforcement in large part to counterbalance the protectionist tariff for then-nascent

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1 See, e.g., Böhm (1961); Crane and Hovenkamp (2013); Eucken (2001); Fox (2011); Gerber (2010); Lande (1982). Even within economics, multiple distinct notions of competition are common (Stigler 1957; Martin 2012: esp. 5-11) and in fact have persisted for a long time; see De Roover (1951) and McNulty (1968).

2 Federal antitrust legislation in the United States was preceded by state-level antitrust statutes in more than twenty states, though in most cases only by a few years or even just months. Previously, English common law had been seen as providing a sufficient safeguard through its prohibitions against anticompetitive behavior since at least the 1700s, but its competition law elements had successively weakened since the 1840s, eventually prompting the adoption of statutory competition law in Canada and the United States (see, e.g., Bliss 1973, 178f; Letwin 1965:esp. 19-52).

Northern industries. As a Republican senator from Ohio, he was a proponent of the controversial protectionist measures that subsequently came to be known as the McKinley Tariff, but he also recognized that such protection would threaten the effective operation of still emerging and often oligopolistic markets for many of those industries' products. Like many of his contemporaries, Sherman thought that vigorously enforced laws against anticompetitive practices, especially the abuse of market power, would make a protectionist foreign economic policy compatible with an efficient market economy domestically (DiLorenzo 1985:esp. 82f; Hazlett 1992).

The contemporary belief that antitrust could substitute for free trade is even more important for understanding the politics of the original Canadian competition legislation, the *Act for the Prevention and Suppression of Combinations Formed in Restraint of Trade* of 1889. "Combines"— known as "trusts" in the United States, i.e., groups of companies cooperating to "manage" production, prices, and keep competitors at bay—were still rather rare and commercially unimportant in the Canadian economy. Consequently, populist hostility to the power of ever larger corporations, an important source of political support for the U.S. antitrust legislation, was much weaker in Canada (e.g., Cohen 1938, 453f; Bliss 1974, 33-54; though c.f. Benidickson 1993). Why then did the Canadian legislature passing the first modern, national competition law, 14 months prior to the United States? Archival research and a close reading of the legislative record suggests that the parliamentary majority's enthusiasm for the law was mostly about trade policy—"a calculated manoeuvre" by N. Clarke Wallace of the governing Conservative Party, the champion of the 1889 Act, "to deflect criticism from the combine-creating effects of the protective tariff" that his Conservative majority had put in place (Bliss 1973, 182f, 185, 188). And the opposition Liberals in the Canadian House of Commons accordingly portrayed the Act as a cynical distraction from the ill effects of tariff protection (Bliss 1973, 182), some going so far as to call the Act a legislative or political "fraud" (Halladay 2012, 158; Trebilcock 1991).

The view of trade openness and antitrust enforcement as substitutes, which informed Sherman and his contemporaries can ultimately be traced back to the work of the classical political economists. Adam Smith, who warned against anticompetitive behavior in numerous passages of the *Wealth of Nations* and other works, saw such private restrictions on market competition as equally damaging as governmental measures such as royal grants of monopolies. David Ricardo, best known to trade scholars for having shown that the principles of comparative advantage can (under classical assumptions) ensure that every country is better off under free trade than autarky, formalized some of Smith's key insights in his theory of rents (a key element of Ricardo's *Principles of Political Economy and Taxation*).[3] From these sources, the substitutability of trade openness and competition policy became the traditional view in trade economics, in more recent decades underpinned by logically compelling formal models and some support from empirical analyses.

Starting in the 1990s, however, this traditional approach faced a major empirical anomaly when the rapid, institutionalized spread of trade openness (evidenced in particular by the shift from the GATT to the WTO and the explosive growth in the number of preferential trade agreements) coincided with a similarly explosive diffusion of antitrust legal norms. During the first century after Congress passed the Sherman Act, between 1890 and 1990, the number of countries with competition laws on the books increased from 2 to 37. During the next twenty

[3] For excerpts of key passages from Smith and Ricardo's works, see Crane and Hovenkamp (2013).

years, between 1990 and 2010, the number of countries with competition laws more than tripled to about 120, even though the simultaneous sustained, institutionalized increase in international market integration during the same period of time should have made the adoption of such laws ever more superfluous if trade openness were a substitute for competition policy.

This observation prompted scholars of the law and economics of competition policy to re-think the relationship between trade and competition policies. Newer theoretical models tend to emphasize the possibility that competition law—especially through selective, discriminatory enforcement—might actually be abused as a trade barrier. These models differ regarding the level of aggregation at which they operate, the attribution of causality, and their implicit or explicit causal mechanisms. Yet, they have in common that they lead us to think of competition policy as a substitute for protectionism rather than as a substitute for free trade. These new theoretical perspectives have been very influential in policy circles and have informed sometimes heated debates over the question whether antitrust law and enforcement needs to be brought under the umbrella of the WTO.[4]

The remainder of this chapter will examine these different theoretical approaches to thinking about the relationship between trade openness and competition policy, focusing in section 2 on how compelling they are deductively and in section 3 on how useful they are for understanding key aspects of antitrust in open economies. I will argue that both perspectives suffer from truncated or missing models of politics, which undermines their explanatory leverage. In section 4, I will then provide a sketch of ongoing research that seeks to address these weaknesses of the existing theoretical approaches and aims to provide a sounder empirical basis for understanding the international dimension of antitrust enforcement.

2. Theoretical Approaches: The Law, Economics, and *Politics* of Market Competition

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2.1. Competition Policy as a Substitute for Free Trade—and Vice Versa!

Trade economists have traditionally viewed trade openness as a substitute for competition policy, because they see barriers to entry as the key economic rationale for competition policy. In any standard neoclassical model with profit-maximizing self-interested economic agents, barriers to entry are a prerequisite for maintaining cartels and other forms of anticompetitive behavior through which some economic actors benefit at everyone else's expense. Competition policy seeks to constrain anticompetitive behavior *directly* by prohibiting such behavior and

[4] As Iacobucci (1997, 5f) points out, the ultimately abandoned 1947/48 Havana Charter for an International Trade Organization actually included rules concerning anticompetitive business practices already. Actual proposals for a supranational competition regime in the context of the global trade regime in fact have often sought to increase the aggregate welfare gains from competition policy rather than "just" to constrain national competition regulators in order to forestall abuse (e.g., Anderson and Holmes 2002; Fox 2003; Guzman 2004; Marsden 2003; Zäch and Correa 1999). For key critiques of a WTO-based competition regime, see Bradford (2007) and McGinnis (2004). From a trade policy perspective, arguably the greatest benefit of a formal international competition policy regime linked to the WTO and the international trade regime might be that it would provide an opportunity to reign in the abuses of antidumping, since allegations of dumping would be antitrust violations if it were not for the foreign nationality of the supposedly dumping producer.

identifying and punishing those who engage in it. This lowers barriers to market entry insofar as competition regulators target anticompetitive behavior that creates or raises such barriers, and/or industries where barriers to entry are high for other reasons, such as in industries with high start-up costs. Free trade, i.e., opening national markets to foreign producers, promises to constrain anticompetitive behavior *indirectly* by immediately lowering (trade-related) barriers to entry. Free trade thus allows foreign producers to enter and seize market share whenever domestic anticompetitive behavior keeps prices at supra-competitive levels. And sustaining the expectation that foreign producers will indeed do so requires us only to assume that competitive foreign producers for the product in question exist and are materially self-interested, which should lead them to offer their goods at lower prices, up to the point where those prices approximate the foreign producers' marginal costs.

In sum, trade liberalization checks market power, reducing the need for regulatory intervention to safeguard competition. As Blackhurst puts it: "Trade Policy is Competition Policy" (1991). In fact, from the point of view of economic efficiency under the conventional assumption of trade economics, free trade is superior to competition policy because it achieves the same ends without the need to create and maintain a sizeable bureaucracy and without the potential for abuse. Trebilcock hence refers to competition policy as a "second best" approach to safeguarding market competition.

The logic of the argument that economic openness increases competition is impeccable, given its assumptions, which are common and conventional in the trade literature. And as summarized by Irwin, "there is … overwhelming [empirical] evidence that free trade improves economic performance by increasing competition in the domestic market" (2009, 43).[5] Note, however, that it does not necessarily follow that trade liberalization goes sufficiently far—nor that economic openness is sufficiently effective in checking market power and safeguarding against anti-competitive behavior in internationally integrated industries—to constitute a real substitute for regulatory enforcement of competition law.

Three concerns motivate my skepticism about viewing free trade as a substitute for competition policy. First, as Dixit (1984) pointed out thirty years ago, much international trade occurs in industries whose structure more closely approximates oligopoly than perfect competition. Second, as noted above, competition policy may have important objectives beyond maximizing consumer welfare or generally enhancing economic efficiency. Ordo-liberals, for instance, attribute to competition policy an essential role in safeguarding economic (and therefore inherently also political) freedom, because high concentrations of economic power can be readily leveraged into political influence, as the debate about "too-big-to-fail" industrial and financial firms in the last few years has once again reminded us.[6] It is unclear how trade openness would fulfill this role. Third, and maybe most importantly, the theoretical logic underpinning the argument that free trade is a substitute for competition policy rests on the

[5] Moreover, anecdotal evidence suggest some substitutability in that (detected) antitrust violations in Canada during the early decades appeared to be disproportionately concentrated in industries "protected from foreign competition by substantial tariffs or other barriers to trade" (Trebilcock *et al.* 2002, 642).

[6] Ordo-liberalism is a philosophical school of thought that is liberal in rejecting government intervention when it seeks to direct economic activity but sees the state as having a necessary "ordering" function in the economy to safeguard individuals against any concentration of political *and economic* power that would threaten their freedom and equality of opportunity. From the 1950s through at least the 1990s, it shaped the European (EU-level) approach to competition policy.

assumption that firms are simply reactive to the constraints that public policy (including foreign economic policy) might place upon them, so that those constraints can be theoretically treated as exogenous. But a large literature on the domestic *politics* of trade policy shows that, even though it is possible to resist pressures for protectionism and genuine liberalize (Gawande, Krishna, and Olarreaga 2009; Milner 1987; Rogowski 1989), it is difficult and politically costly to use trade policy to force foreign competition upon a previously well-protected industry. Such long-protected industries are likely to have—not least thanks to the rents afforded by being protected from foreign competitors—material resources, strong incentives, and concentrated interests (including often an organizational structure for overcoming collective action problems) to simply replace one kind of protection with another (e.g., Grieco 1990; Limão and Tovar 2009; Kono 2006; Naoi 2009; WTO 2012). In sum, once the politics of trade policy are taken seriously, the theoretical case for viewing a generally liberal foreign economic policy as a substitute for a domestic competition policy becomes deductively much less compelling.

When we look at the theoretical argument the other way (competition policy as a substitute for free trade), it is similarly built on shaky foundations. As a theory of antitrust enforcement, this approach assumes that competition regulators—and the politicians who are in a position to influence them through statutory changes, resource allocation, or other means—are disinterested guardians of market efficiency.[7] Such heroic assumptions about policymakers' objectives might not be surprising given that this approach is completely devoid of politics. But competition law enforcement is inherently deeply political in that it entails the use of public authority to constrain private actors' exercise of market power. Once we take politics seriously, the theoretical case for viewing competition policy as a substitute for free trade becomes much weaker.

2.2. Competition Policy as a Substitute for Protectionism

A second perspective on the relationship between trade openness and competition policy exhibits a greater (though still truncated) awareness of the politics of both trade and competition policy. It posits competition policy as a substitute for trade restrictions rather than trade openness, based on the assumption that competition law can be selectively enforced to the benefit of domestic stakeholders and the detriment of their foreign counterparts, including the foreign competitors of domestic firms. It is theoretically useful to distinguish two variants of this antitrust-as-protectionism approach.

What may be called the Aggregate National Welfare variant, with strong affinities to statist theories of International Relations, treats governments as unitary actors and assumes that each government seeks to maximize the country's aggregate welfare. Under this assumption, (net) imports create an incentive for overly stringent enforcement, because such an "oversupply" of antitrust enforcement creates benefits for domestic consumers, whereas the costs are borne disproportionately by foreign producers. By contrast, (net) exports create an incentive for overly lax enforcement because the gains from uncorrected anti-competitive behavior are disproportionately enjoyed by domestic producers, whereas the costs are disproportionately borne by foreign consumers (e.g., Horn and Levinsohn 2001; Williams and Rodriguez 1995). Such selective enforcement is clearly attractive and hence expected for economically large countries, because it should yield a gain in aggregate economic welfare for them: For countries

[7] These assumptions are usually entirely implicit, but I submit they are necessary and in effect drive the models' conclusions.

with sufficiently large markets, antitrust enforcement-induced changes in their production or consumption affect the world price and hence the country's terms of trade (Guzman 1998, 2004).

The other variant, which may be called the Domestic Political Economy variant of the "antitrust-as-protectionism" perspective, has strong affinities to the public choice critique of regulation with its assumption that the state and any specific manifestations of public authority tend to get captured by private interests. This approach takes firms more seriously as (potential) political actors than trade economists traditionally have done. Specifically, scholars in this tradition assume that domestic firms, when faced with trade liberalization that threatens to expose them to increased foreign competition, will turn to the government or state agencies to achieve a similar level of protection through other (ab)uses of public authority. And firms' "actions aimed at effectively locking competing imports or foreign investors out of their domestic market" (Trebilcock and Howse 2005, 591) can include the "use of antitrust to subvert competition" (Baumol and Ordover 1985, 247). The argument still lacks an explicit theory of politics or policymaking, but typically assumes a pluralistic responsiveness of policymakers—including of competition regulators—to political lobbying (e.g., Shughart, Silverman, and Tollison 1995). Consequently, it yields similar observable implications to those noted for the Aggregate National Welfare variant above but for all countries (rather than just economically large countries) because there is no assumption that policymakers seek to maximize aggregate welfare and therefore will only engage in selective enforcement that is "efficient" for the national economy.

While both variants of this theoretical approach address certain weaknesses of the traditional trade economics approach, they also both suffer from theoretical weaknesses of their own. The logical structure of the argument underpinning the Aggregate National Welfare variant, for instance, is essentially the same as for optimal tariff theory (e.g., Krugman 1986), so that the well-known critiques of optimal tariff theory should equally apply here. For example, critics of optimal tariff theory have long pointed out that a country's attempts to achieve welfare gains at the expense of its trading partners (here through selective enforcement) invite retaliation by some of those trading partners since no country is economically large in all industries. Such retaliation turns the hypothetically possible tactical welfare gain for the one side into a welfare loss for both. And since the loss is predictable, we have no reason to expect to observe empirically the selective enforcement that was the original cause of concern.

Moreover, both variants, while more attentive to the politics of antitrust than the traditional trade economics perspective, still rely on an overly truncated model of politics. Even in the domestic political economy variant of the antitrust-as-protectionism perspective, firms are recognized as political actors only domestically, where they lobby regulators and the politicians who oversee them. They are denied *transnational* political agency, even though substantial research shows firms to be increasingly important transnational political actors (e.g., Baron 2001; Büthe 2010; Büthe and Mattli 2011; Cutler, Haufler, and Porter 1999). And only governments—as unitary actors—are recognized as pertinent political actors across borders, even though a substantial literature about the politics of international economic relations and global governance has shown the increasing importance of transnational politics and trans-governmental networks (e.g., Keohane and Nye 1989 (1977); Newman and Posner 2011; Slaughter 2004). If we take these insights seriously, then there is no reason to expect firms to have a preference for public over private protection (which motivates the exclusive focus on the (ab)use of public power in the Domestic Political Economy model) nor that regulatory practices and actions are shaped only by the domestic political environment in which the regulators operate.[8] Once we relax those assumptions, however, there is no compelling reason to expect that the increasing international integration of product markets would result in the (ab)use of competition policy for protectionist purposes.

3. Empirical Analyses

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Putting aside, for the moment, the above critiques of the deductive logic of the existing theoretical approaches, I now turn to a brief assessment of their explanatory leverage for understanding key aspects of competition policy in open economies. I undertake this assessment with the caveat that few of the existing empirical studies were set up as tests of the theoretical approaches presented in section 2 vis-à-vis each other, and that many gaps remain, even in the basic descriptive information available about antitrust law and enforcement across countries and over time. Yet, the theoretical approaches discussed above yield a number of clearly distinct observable implications concerning various aspects of competition policy (King, Keohane, and Verba 1994). Specifically, we should want these approaches to provide insights into whether and, if so, how international economic integration and in particular trade openness affects:

- countries' decisions about whether and when to adopt competition legislation, allowing for the possibility of network effects;
- variation in the substantive focus or stringency of antitrust laws across countries and over time;
- variation in antitrust enforcement across countries and over time;
- the broader pattern of international diffusion of antitrust law and enforcement;
- patterns of competition and anti-competitive behavior; and
- international conflict and cooperation over antitrust law and enforcement.

Overall, with regard to these six sets of *explananda*, many and maybe most of the implications of the different theoretical approaches remain untested. A few clear findings nonetheless emerge, and identifying the gaps in our knowledge also helps specify avenues for future research.

<u>Adoption of National Antitrust Law and Its Content or Stringency</u>: Here the trade economics approach suggests that there should be an *negative* relationship between the country's trade openness and the likelihood that the country adopts a competition law or increases its stringency. By contrast, the antitrust-as-protectionism approach implies that there should be a *positive* relationship between the likelihood that a country adopts or strengthen its competition law and the country's level of net *imports*.

Strikingly, there is, as noted by Gutmann and Voigt, "no established dataset based on one consistent definition of what constitutes a competition law" (2014:6) and no comprehensive database of countries' competition laws, which would allow easy access to even such basic

[8] "Private protection" refers to economic actors protecting themselves against the consequences of increased exposure to competitors through collusion or other anti-competitive measures. It is discussed in greater detail below.

information as the year when a country adopted a competition law for the first time.[9] There is consequently very little large-N, comparative empirical work on the adoption of national competition legislation. Bradford and Büthe are currently building a comprehensive panel dataset of national antitrust laws, based on a detailed coding of their substantive provisions and secondary legislation/implementing regulations. That database, however, is still a work in progress. To provide a preliminary sense of the explosive spread of competition laws over the 125 years since 1889, I use for Figure 1 information from the gap- and error-prone antitrustworldwiki (see also Hylton and Deng 2007), complemented by data from Kronthaler (2010), Petersen (2013), Voigt (2009), and Waked (2010), each of whom has collected more specific information for different subsets of countries. Figure 1 shows the striking pattern of the number of countries with a competition law on the books, which at least prohibits cartels—from 1945, when still only Canada and the United States had such a law on the books, to 2010.

[FIGURE 1 ABOUT HERE]

[CAPTION:]

Figure 1
Increase in the Number of Jurisdictions with Competition Laws, 1945-2010

Given that trade openness has generally increased over the course of the 65 years captured in the graph and especially during the two decades after the WTO replaced GATT, the overall pattern in Figure 1 seems clearly inconsistent with a view of trade openness and competition policy as substitutes. The graph does not, however, provide us with insights into the situation in the individual countries, especially regarding an increase in net imports, suggested by the antitrust-as-protectionism perspective as a key motivation for the adoption of antitrust laws. In the absence of a well-established empirical model, Table 1 takes a first cut at this question by reporting the trade patterns in the years prior to a country's first adoption of an antitrust law for the 97 countries that have enacted their first competition law between 1980 and 2010 (inclusive).

[9] The challenge is illustrated by the history of Austria's competition laws: The country adopted its first "cartel legislation" in 1951. That legislation, however, primarily required cartel agreements to be notified to a state agency in order to be enforceable as contracts. It subjected cartel agreements to certain disciplines and created a quasi-judicial procedure allowing the Austrian federal government to prohibit a cartel agreement if the agreement had detrimental consequences for the Austrian economy, but it made clear that agreements on production quotas, prices, etc. would not per se considered as having detrimental consequences. Amendments in 1956, '57, '58, '62, '68 and a new version of the law in 1972 provided for more elaborate administrative and judicial review processes and increasingly restricted the permissiveness of cartels that sought to raise prices or keep them from falling, but a general prohibition of cartels was not included in the law until 1988. Which year should count as the first year for Austria's competition legislation?

Table 1
Trade Patterns Before the Enactment of a Country's First Antitrust law

	t-1	**avg. (t-1, t-2, t-3)**	**avg. all obs**
trade openness (as % of GDP)	87.1% (51.2)	85.9% (50.4)	82.4%
net imports (as % of GDP)	2.59% (11.5)	3.53% (12.7)	6.66%
N	95	93	4866

Note: Standard deviations in parentheses.

While such a simple bivariate table with no consideration of possible confounding factors cannot yield conclusive results, the empirical findings in Table 1 offer no support for the trade economics approach, which suggests that the probability of adopting antitrust legislation increases during periods of unusual low trade openness. The findings moreover directly run counter to expectation of the antitrust-as-protectionism approach.

Enforcement: Analyses of legal provisions must be supplemented by analyses that consider their enforceability in order to avoid falling into the trap of the old institutionalist literature of mistaking formal rules for practice.[10] Information about enforcement also requires careful interpretation: A highly effective antitrust enforcement agency, in equilibrium, needs to undertake little or no enforcement actions, because it successfully deters all violations.

Unfortunately, internationally comparable enforcement data are even scarcer than data about national laws, and as Petersen notes, "there is no [agreed] perfect way to measure the existence of an effective antitrust regime" (2013, 606, emphasis added). Consequently, very few comparative analyses have been conducted—with mixed results.[11] In an unpublished paper based on field research in Africa and Asia, Waked (2010) finds a negative empirical relationship between trade openness and input measures of antitrust enforcement (budget and staff), which might be interpreted as support for the view that trade is a substitute for antitrust law and enforcement. The estimated coefficients for her measures of enforcement, however, are statistically significant in only seven of her twelve models, and her analysis is limited to 28-30 developing countries, with 5 observations over time on average. Moreover, some other empirical analyses reach opposite findings. Consistent with earlier anecdotal evidence that "the one action taken" under the 1910 Canadian Combines Investigation Act "was against a foreign corporation" (McFall 1922, 182), Shughart *et al* (1995) find significant support for the antitrust-as-protectionism approach in their analysis of the antitrust enforcement budgets for the U.S. Department of Justice's Antitrust Division and for the Federal Trade Commission. However, their work is limited to a single country, ends in 1981, and does not address concerns about

[10] Some of the most comprehensive, stringent antitrust laws are found in countries with generally very limited state/administrative capacity and a weak rule-of-law tradition.

[11] An alternative approach is to conduct time series analysis within a single country with a long history of antitrust enforcement, such as the United States. Existing longitudinal datasets of U.S. enforcement, however, lack information on the nationality of the parties against which enforcement actions have been directed, as well as detailed information about the industries involved (for disaggregated analyses of the relationship between trade patterns and enforcement). Büthe and Bradford are developing a new dataset for U.S. DoJ enforcement actions, 1960-2010 including such information.

multicollinearity and spurious correlation, which inevitably arise when regressing a trending time series on several other time series. A more robust analysis of the effect of economic openness on antitrust enforcement would include a more diverse set of countries, more comprehensive measures of the stringency of antitrust enforcement, and longer time series.

Patterns of Competition and Anti-Competitive Behavior: Patterns of competition are merely an indirect, but substantively important implication of the theoretical approaches discussed above. Analyses of patterns of competition and anti-competitive behavior moreover provide information about the suitability of key assumptions of the different models (see Coase 1994 (1981)). A number of studies have found increases in trade openness to increase the level of competition within a country, confirming one of the key assumptions of the trade economics approach. Other studies find that the stringency and/or independence of antitrust enforcement increases market competition in a country (e.g., Voigt 2009). Without assessing the effect of trade openness and competition policy simultaneously, however, these studies do not speak to the question of whether free trade and antitrust work as substitutes or in some other relationship with each other. Including both factors in multi-country industry-level analyses is one of the key contributions of Kee and Hoekman (2007). And while they confirm that free trade increases competition, they also find—contrary to what we should expect based on the trade economics model—that competition policy significantly further increases the level of competition, at least indirectly.

4. An Alternative Approach: Free Trade and Competition Policy as Genuine Complements

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To address the theoretical weaknesses of the analytical approaches discussed in section 2 and provide a better understanding of the law and politics of antitrust in a global economy, Büthe and Bradford have developed a new, alternative approach, which views trade openness and competition policy as genuine complements. I briefly sketch this approach here. It departs from the previous approaches in two main ways.

First, this approach takes firms seriously as (potential) political as well as economic actors—and not just vis-à-vis their domestic governments but also transnationally. Conceptualized in this way, firms can not only turn to their government when they seek protection but also can pursue "private protection,"[12] for instance by colluding with other firms. And trade liberalization, by putting firms into competition with each other which previously did not meaningfully compete, creates new opportunities to gain from transnational collusion, at the same time as it lowers the risk of detection because monitoring global markets is more difficult and costly than monitoring purely domestic markets, and because evidence of transnational collusion can more easily be kept out of reach of enforcement agencies that operate at the national level.[13]

Second, this approach takes governments and regulatory agencies seriously as political actors at both the national and inter/transnational level. Specifically, it assumes that

[12] See Ludema(2001); Trebilcock (1996); and Williams and Rodriguez (1995).

[13] Furthermore, insofar as *institutionalized* trade liberalization succeeds in constraining governments' urge to protect domestic firms, it creates further incentives for firms to turn to private protection.

governments (and competition regulators) understand that free trade creates opportunities and incentives for private protection. While recognizing that regulatory agencies and elected officials *can* be captured by special interests, this approach does not elevate the possibility to a general assumption.[14] To the contrary, it assumes that competition regulators see safeguarding market competition as their primary objective unless institutional features (such as the lack of agency independence) provide specific reasons to expect otherwise.

What are the empirical implications of this new approach to thinking about the relationship between economic openness and competition policy? The first point above implies that we should see an increase in transnational anticompetitive behavior as a function of the institutionalization of product market integration, i.e., as governments' options for providing public protection decline and firms' opportunities and incentives for transnational collusion increase—even while we might see a decrease in purely domestic anticompetitive behavior in industries that have been opened to foreign competition (consistent with the predictions derived from trade economics). Naturally, it is difficult to establish comprehensive patterns of anti-competitive business behavior, because what is in most jurisdictions now illegal behavior will not be detected. But one of the most striking developments of recent years is the increasing number of multinational cartels that have been discovered (e.g., Bond 2005; Connor 2007; Kovacic *et al.* 2007; Levenstein and Suslow 2008). And the often near-global reach, complexity and persistence of many of these cartels shows that anti-competitive behavior does not stop at border, as the traditional approaches assume, and that they are nowhere near as inherently unstable as most economics textbooks would have us believe.

Interviews with competition regulators suggest that the increase in the detection of such cartels has been at least in part a function of increased enforcement efforts, including increased monitoring of international rather than just domestic markets and increased trans-governmental enforcement cooperation (discussed below). Importantly, the transnational collusion appears to have began, for most of the major transnational cartels that have been detected, only after the relevant markets experienced a substantial increase in international openness.

The second point above implies that competition regulators will recognize the increased probability of transnational anti-competitive behavior and that they will seek to counteract it.[15] Empirically, this implies a *positive* relationship between the probability of adopting a competition law and trade openness, as in fact seen in Table 1, which yielded anomalous findings for the other theoretical approaches. It implies further that we should expect to see greater trade openness (across countries and over time) result in more resources devoted to monitoring international rather than just domestic markets. There is strong anecdotal evidence that this has occurred, at least in the United States, several European countries, and in the EU, though research completed to date does not allow a full assessment of this observable implication.

Relatedly, we should expect to see trade openness result in increased efforts to establish and institutionalize transgovernmental antitrust enforcement collaboration. Preliminary empirical findings provide substantial support for this hypothesis. The long-existing but loose

[14] This assumption is consistent with the finding that capture is much less common than often assumed (Carpenter and Moss 2014).
[15] Put another way, governments (or at least those within the "state" who see it as their objective to guard competition) should see trade openness and the *need for* vigorous competition policy as complements.

and entirely informal trans-governmental network of competition regulators, now known as the International Competition Network, has over the last twenty years become increasingly institutionalized; it also has grown tremendously (Aydin 2010; Djelic and Kleiner 2006; Svetiev 2010). It has been complemented by efforts to foster international and transgovernmental collaboration on antitrust enforcement through the OECD and the UN Conference on Trade and Development.

There also is growing evidence of increased bilateral (and occasionally minilateral) enforcement cooperation among competition regulators. In a recent analysis of antitrust provisions in preferential trade agreements (PTAs), Bradford and Büthe (2014, forthcoming) find that competition provisions generally were rare and usually minimalist through the early 1990s, but since the mid-1990s have become a common and prominent feature of PTAs, coinciding with the qualitative shift toward a much more institutionalized multilateral trade regime under the WTO (and with the increase in specificity and scope of PTAs, i.e., the increase in the institutionalization of minilateral trade agreements). Importantly, Bradford and Büthe find that provisions for information exchange and mutual assistance in antitrust enforcement strikingly common, suggesting a real interest in facilitating transgovernmental cooperation. By contrast, provisions that seek to exempt a country's firms from the other country's domestic competition regime or in other ways signal concern about the other side's abuse of competition policy for protectionist purposes are relatively rare (Bradford and Büthe 2014, forthcoming).

This institutionalization of enforcement cooperation in trade agreements is supplemented by a nearly simultaneous growth in separate antitrust enforcement cooperation agreements over the same time period, shown in Figure 2. It provides further support for the hypothesis that governments indeed see effective competition policy as a complement to trade openness (Büthe and Bradford 2012).

[FIGURE 2 ABOUT HERE]

[CAPTION:]

Figure 2

Increase in International Competition Law Enforcement Cooperation Agreements

5. Conclusion

……………………………………………………………………………………………………

Political economists since Adam Smith and David Ricardo have recognized increased market competition as an important benefit of a free trade policy. Antitrust law and its enforcement is supposed to achieve the same end by intervening directly against price-fixing, bid-rigging, and other forms of anticompetitive behavior and increases or abuses of market power. And indeed, trade policy and competition policy have been deeply intertwined since the very beginning of modern competition law in late 19th century North America.

Yet, the major schools of thought that have shaped antitrust law and its enforcement—structuralism, ordo-liberalism, the Chicago school, and the new industrial organization approach—have largely failed to recognize and address this trade-competition policy nexus: They generally assume, at least implicitly, that the boundaries of the market coincide with the boundaries of the antitrust jurisdiction. The question of how economic openness affects competition policy has therefore become the focus in a distinct set of theoretical approaches.

In this chapter, I have provided an overview of different ways of thinking theoretically about the relationship between the international integration of product markets on the one hand and competition law and enforcement on the other. Based on both a theoretical and empirical assessment in sections 2 and 3, I argued that the dominant approaches in economics and law (the disciplines that have dominated the literature on the trade-competition policy nexus) suffer from being either devoid of politics or relying on a model of politics that deprives both firms and competition regulators of transnational and transgovernmental agency, respectively.

In section 4, I have then sketched a more overtly political approach, based on recent and forthcoming joint work (e.g., Büthe and Bradford 2012; Bradford and Büthe (2014, forthcoming)). It takes firms seriously as sophisticated transnational actors, not just able to lobby their domestic governments for public protection but alternatively capable of setting up systems of private protection in an increasingly global economy. At the same time, it takes government regulators seriously as political actors with often considerable independence and hence a capacity to pursue their own, distinct interests, including in transgovernmental network of competition regulators, in which they are embedded.

The empirical analysis of the international and comparative dimension of competition policy is still in its infancy. Yet, preliminary results suggest that a theoretical model that allows for transnational as well as transgovernmental politics can explain the simultaneous spread of competition law and trade openness in the last two decades and more generally yields at least an equally plausible understanding of trade and antitrust in the global economy as the traditional model of trade economics and models that posit antitrust as a substitute for protectionism. This finding should not come as a surprise: Antitrust enforcement inherently entails the use of public authority to constrain private actors' concentration and exercise of market power. Hence, if we want understanding competition policy in a global economy, we need not just legal and economic but also—and much more—political analysis.

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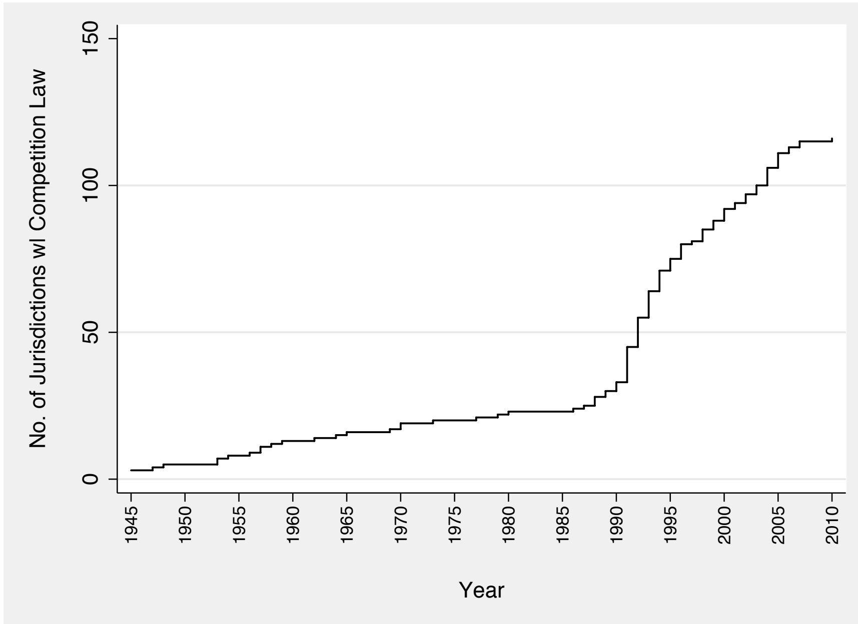

Figure 1

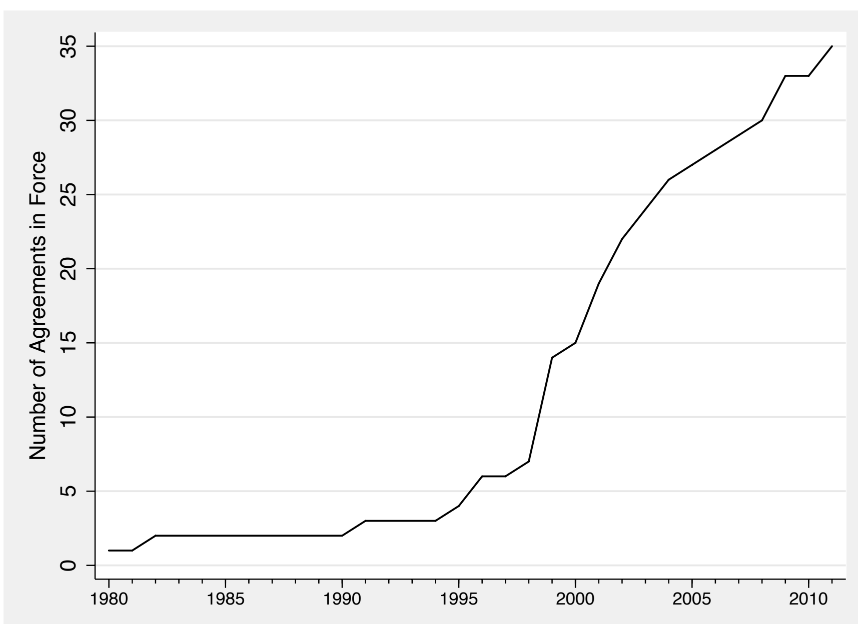

Figure 2