

Annual Review of Economics

The Political Economy of Deep Integration

Giovanni Maggi^{1,2,3} and Ralph Ossa^{4,5}

¹Department of Economics, Yale University, New Haven, Connecticut 06520, USA;
email: giovanni.maggi@yale.edu

²FGV EPGE, Brazilian School of Economics and Finance, Rio de Janeiro, RJ 22250, Brazil

³National Bureau of Economic Research, Cambridge, Massachusetts 02138, USA

⁴Department of Economics, University of Zürich, 8001 Zürich, Switzerland

⁵Centre for Economic Policy Research, London EC1V 0DX, United Kingdom

Annu. Rev. Econ. 2021. 13:19–38

The *Annual Review of Economics* is online at
economics.annualreviews.org

<https://doi.org/10.1146/annurev-economics-121020-032425>

Copyright © 2021 by Annual Reviews.
All rights reserved

JEL codes: F13, F15, F53, F55

**ANNUAL
REVIEWS CONNECT**

www.annualreviews.org

- Download figures
- Navigate cited references
- Keyword search
- Explore related articles
- Share via email or social media

Keywords

trade agreements, deep integration, political economy

Abstract

Modern trade agreements no longer emphasize basic trade liberalization but instead focus on international policy coordination in a much broader sense. In this review we introduce the emerging literature on the political economy of such deep integration agreements. We organize our discussion around three main points. First, the political conflict surrounding trade agreements is moving beyond the classic antagonism of exporter interests who gain from trade and import-competing interests who lose from trade. Second, there is a more intense popular backlash against deep integration agreements than there was against shallow integration agreements. Finally, the welfare economics of trade agreements has become more complex, in the sense that the goal of achieving freer trade is no longer sufficient as a guide to evaluating the efficiency of international agreements.

1. INTRODUCTION

The nature of trade agreements has changed fundamentally over the past decades, so much so that the term itself has become somewhat misleading nowadays. Modern trade agreements no longer emphasize basic trade liberalization but instead focus on international policy coordination in a much broader sense. For example, they routinely deal with a wide range of regulatory matters, offer special protections to foreign investors, strengthen intellectual property rights (IPR), coordinate national competition policies, and constrain government procurement activities. In trade economist lingo, trade agreements now pursue deep integration, in the sense of going far beyond the traditional shallow integration agenda of reducing import tariffs and constraining related policies.

In this review we focus on the politics and economics of deep integration. We purposely invert the traditional sequence of economics and politics because we believe some of the most interesting developments on deep integration, both in the real world and in academic research, have been in the domain of special interest and electoral politics. Thus we will first focus on the political aspects of deep integration agreements and will then discuss the design of such agreements from an efficiency standpoint.

We argue that the political economy of trade policy has changed along three key dimensions. First, trade negotiations no longer align special interests in a way that naturally pushes toward welfare-improving agreements: The old intuition that trade agreements neutralize protectionist forces by pitting exporter interests against import-competing interests no longer applies. For example, we now see international business alliances opposing international activist groups on environmental regulation, or rich-country producers opposing poor-country producers on IPR.

Second, there is a more intense popular backlash against deep integration agreements than there was against shallow integration agreements. Deep agreements seem to face stronger political opposition because they encroach on sensitive regulatory issues and connect to broader ideological controversies about the power of big business and the importance of national sovereignty. This new political activism started with the so-called Battle of Seattle in 1999—a series of intense protests against the World Trade Organization (WTO), which had just expanded its scope into the areas of regulation and IPR—and continued with a powerful backlash in the streets of Europe against the deep agreements between the European Union and the United States (the Transatlantic Trade and Investment Partnership, or TTIP) and between the European Union and Canada (the Comprehensive Economic and Trade Agreement, or CETA).

Third, the welfare economics of trade agreements has become more complex. The notion that free trade is desirable is no longer sufficient as a guide to evaluating the efficiency of international agreements. In a world of shallow agreements that focuses on tariff cooperation, a good rule of thumb is that if an agreement leads to lower tariffs, it has done a good job. But in a world where governments strive to cooperate on regulatory policies, for example, the ultimate objective of an international agreement is more complex, since regulations are typically imposed for more than just protectionist motives. As a result, economists (should) have a harder time assessing the merits of modern trade agreements.

In this review we offer our assessment of the emerging literature on the political economy of deep integration, focusing in particular on the three developments outlined above.¹ Our goal is to take stock of what we have learned so far and point to fruitful areas for future research. After

¹This emphasis also differentiates our discussion of deep integration from an earlier review of the literature on nontariff barriers to trade by Ederington & Ruta (2016).

decades of trade liberalization, shallow integration has largely run its course, and deep integration is arguably the future of trade policy. This is an area characterized by complex questions and intense controversies that deserve the careful attention of trade economists. Indeed, we believe that the reservations against deep integration are an important driving force of the broader globalization backlash seen today. Deep integration issues loom large even in the ongoing trade war between China and the United States, which was fueled by American frustrations over Chinese industrial policy and its (lack of) protection for IPR.

There have been other important developments affecting the political economy of trade policy that we do not cover in this review. One such development is related to the disruptions that Chinese import competition caused to local labor markets in the United States (Autor et al. 2013) and their distributional consequences. We refer the reader to Rodrik's article in this volume for an excellent overview of the implications of the China shock for the political economy of trade policy (Rodrik 2021). Another such development is the changing geopolitical landscape, with the hegemony of the United States being increasingly challenged by a rising China. We refer the reader to Mattoo & Staiger (2020) for an inspiring first take on the relation between this trend and the outlook for international trade agreements.

The remainder of this review is structured as follows. In Section 2 we provide some real-world background on deep integration, describing how it has progressed in practice and which controversies it has brought about. In Section 3 we turn to our discussion of the politics of deep integration, focusing first on the changing nature of special interest politics in this area and then on the popular backlash against deep integration. In Section 4 we offer a brief discussion of the new economics of deep integration agreements, focusing on the design of such agreements from a welfare point of view. Section 5 offers some concluding thoughts.

2. DEEP INTEGRATION IN PRACTICE

In this section we provide some background on deep integration, describing how it has progressed in practice and which controversies it has brought about. We organize our discussion along two dimensions. First, we distinguish between the multilateral trading system, as incorporated in the General Agreement on Tariffs and Trade (GATT) and the WTO, and the preferential trade agreements (PTAs) including plurilateral initiatives. Second, we emphasize what we believe to be the most salient deep integration issues, namely regulation, foreign investment, and IPR.

2.1. The Multilateral Trading System

During the GATT years from 1947 to 1994, the multilateral trading system was squarely focused on shallow integration. The idea of the GATT was to induce countries to exchange market access concessions by reducing import tariffs and to secure these market access concessions by preventing countries from taking alternative protectionist measures. On the one hand, this involved prohibitions of other trade policies such as quantitative restrictions (Article XI of the GATT) and export subsidies (Article XVI). On the other hand, this also implied constraints on domestic policies by requiring "national treatment" (Article III) and allowing for non-violation complaints (Article XXIII). National treatment simply means that imported products cannot be treated differently than domestic products with respect to domestic taxes and regulations. Non-violation complaints are complaints about measures that nullify or impair previously made commitments even though the measures as such do not violate the GATT. The GATT approach was therefore shallow not in the sense of not interfering with behind-the-border measures at all, but rather in

the sense of interfering with behind-the-border measures only to the extent that they were used as substitutes for border measures (we sometimes refer to this below as policed shallow integration).

This changed with the inception of the WTO in 1995, which extended its reach into the realm of domestic policies, such as regulation and IPR.² As Mavroidis (2016) explains, the WTO goes beyond the simple principle that regulatory policies should be applied in a nondiscriminatory way to domestic and foreign firms (i.e., national treatment) and requires that regulations meet a number of additional criteria. In particular, they must be transparent and must not have unnecessary trade-restricting effects. Some also have to be based on science, be internally consistent, and follow other good regulatory practices. The Agreement on Technical Barriers to Trade (TBT) and the Agreement on Sanitary and Phytosanitary Measures (SPS) are the most relevant WTO agreements in this regard. One interesting feature is that they include a presumption that regulatory measures do not present an unnecessary barrier to trade if they are based on international standards, thus pushing countries toward harmonization.³

The WTO also includes the agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), which has no counterpart in the GATT. As Saggi (2016) reports, the TRIPS agreement was pushed through by the United States, the European Union, and Japan against strong opposition from Brazil, India, and China. The proponents were dissatisfied with the state of IPR protection in the global economy, particularly the widespread imitation and piracy occurring in major developing countries. The TRIPS agreement covers a wide range of IPR policies including patents, copyrights, industrial designs, and trademarks. As in the case of regulatory policies, the TRIPS agreement not only requires that IPR protection be offered in a nondiscriminatory way (thus imposing the most-favored-nation and national-treatment rules) but also goes further, for example by requiring countries to offer patent protection for foreign inventions for at least 20 years and thus bringing about a substantial strengthening of IPR protection in most developing countries. India, for example, did not grant product patents at all prior to TRIPS in some important sectors such as pharmaceuticals.

These deep integration elements have provoked much controversy inside and outside the WTO. Inside the WTO, the TRIPS agreement has been particularly contentious since it essentially implies that developing countries have to adopt the IPR systems of developed countries. A common concern is that stronger IPRs benefit developed countries at the expense of developing countries, and possibly at the expense of efficiency, by allowing firms from developed countries to charge higher prices and preventing firms from developing countries from catching up. Some observers even see TRIPS as a key reason for the current stalemate at the WTO.⁴

Outside the WTO negotiation rooms, the above-mentioned Battle of Seattle was the kick-off event of a new kind of antiglobalization movement. An article published in the *Atlantic* recalls that

[t]he organizers were a hodgepodge of groups—unions worried about competition from cheap foreign labor, environmentalists worried about the outsourcing of polluting activities, consumer protection

²The General Agreement on Trade in Services (GATS) and the Agreement on Subsidies and Countervailing Measures are other important WTO agreements that have deep integration elements. Staiger & Sykes (2019) and Bagwell & Staiger (2006) analyze these agreements, and we will come back to these papers below.

³An interesting fact about standards is that many of them are actually voluntary. Schmidt & Steingress (2020) provide a novel database on such voluntary standards and an estimation of their impact on international trade.

⁴The *Economist* (2008), for example, noted in a commentary on the failure of the Doha Round over a seemingly minor issue that “the shadow of the Uruguay Round arguably extended beyond this nettlesome detail. Many developing countries believe that the earlier round was lopsided, doing little to constrain the farm policies of the rich world even as it placed heavy obligations on the poor in areas such as intellectual property. In the Doha Round they wanted to get their own back, by asking more of the rich world than they offered in return.”

groups worried about unsafe imports, labor rights groups worried about bad working conditions in other countries, and leftists of various stripes simply venting their anger at capitalism. (Smith 2014)

The overarching theme of the protests was that the WTO's expanded mandate would allow the trade organization to encroach on democratic decision making in pursuit of a pro-business agenda.

2.2. Preferential Trade Agreements

While the WTO has taken some significant steps toward deep integration, the main push has happened in regard to PTAs. This can be seen clearly in a recently compiled database on the content of PTAs, which Hofmann et al. (2017) constructed for the World Bank. The database covers 279 PTAs among 189 countries and distinguishes between 52 policy areas. Some of these policy areas are border measures (tariffs, export taxes, antidumping, etc.), but the majority are behind-the-border measures (including the ones we focus on in this review, namely regulatory policies, IPR protection, and investment policies).

Hofmann et al. (2017) highlight some interesting patterns. They show that the average number of provisions contained in PTAs has increased steadily starting from 1990, going from an average of 11 provisions for the PTAs signed between 1990 and 1994 to 23 provisions for the PTAs signed between 2010 and 2015 (Hofmann et al. 2017, pp. 14–15).⁵ Even though some of the policy areas included in the PTAs are border measures, which are not in the domain of deep integration as defined in our review, there is an unmistakable increasing trend in the number of domestic policies that are covered in PTAs. Another indication of the deepening of PTAs is that, at the end of the sample period, a large share of the active PTAs covered the deep policy areas that we focus on in this review (regulations, IPRs, investment policies) through legally enforceable provisions. For example, 152 of the 279 PTAs that were in force in 2015 included legally enforceable provisions on technical barriers to trade, and the respective number for sanitary and phytosanitary standards was 147. Finally, an interesting fact is that North–North agreements are the ones with the highest average number of legally enforceable provisions (almost 20), followed by North–South agreements (fewer than 15), and South–South agreements (about 9).⁶

At the same time, it must be noted that some of the most important deep PTAs have failed. The proposed TTIP between the European Union and the United States has been put on ice over fierce opposition from both sides of the Atlantic. The United States also withdrew from the Trans-Pacific Partnership (TPP) among Pacific Rim countries, which eventually was reconstituted by the remaining countries in a somewhat watered-down form. Even the CETA between the European Union and Canada was almost sabotaged at the very last minute, when the Belgian province of Wallonia opposed the ratification of the agreement. These three agreements are often viewed as the archetypes of modern trade agreements, so it is important to note the fierce opposition they provoked.

Efforts in the areas of investment and regulation are probably the most contentious elements of modern PTAs. Building on bilateral investment treaties, the investment provisions of modern PTAs typically pursue two objectives. First, they aim to promote foreign investment, for example by removing foreign equity caps or performance requirements and by opening markets such as

⁵In part, the observed increase in the average number of provisions in PTAs also reflects a bundling of existing initiatives. A good example is investor protection, which was typically dealt with using bilateral investment treaties but is now increasingly included in PTAs.

⁶Mattoo et al. (2020) present a complementary data set that focuses more on the vertical depth (or intensive margin) of preferential trade agreements. Their findings are broadly consistent with the stylized facts from Hoffman et al. (2017) that we have outlined in the text.

financial services or telecommunications to foreign firms.⁷ Second, they aim to protect foreign investors from expropriation, including indirect expropriation through regulatory takings. What is particularly controversial is that foreign investors are usually given access to an investor-state dispute settlement (ISDS) system, which allows them to directly sue foreign governments for money damages in arbitration tribunals outside the ordinary legal system.

The provisions on regulatory cooperation also tend to pursue two goals. The first goal is to prevent a race to the bottom on issues such as worker or environmental protection. The second goal is to reduce regulatory trade barriers by promoting good regulatory practices similar to the WTO's TBT and SPS agreements and by reducing excessive regulatory heterogeneity.⁸

Political activism against deep PTAs has been particularly prevalent in Europe. For example, an estimated 250,000 people took to the streets in Berlin in 2015 to oppose the proposed TTIP and CETA deals, as part of a wave of continent-wide protests. While some of the opponents criticized every form of economic globalization, the vast majority objected specifically to the deep integration provisions on regulation and investment. As the *Guardian* reported, they feared that the agreements would “water down important EU regulations” and “give too much power to multinational companies at the expense of consumers and workers” (Johnston 2015).

But deep PTAs are also controversial on the other side of the Atlantic, especially regarding the ISDS issue. In a recent editorial, US Senator Elizabeth Warren (2015) succinctly summarizes the ISDS controversy:

Conservatives who believe in US sovereignty should be outraged that ISDS would shift power from American courts, whose authority is derived from our Constitution, to unaccountable international tribunals. Libertarians should be offended that ISDS effectively would offer a free taxpayer subsidy to countries with weak legal systems. And progressives should oppose ISDS because it would allow big multinationals to weaken labor and environmental rules.

In sum, deep integration has gained momentum since the 1990s, when the WTO was created and PTAs expanded in number and scope. But despite this momentum, the path to deep integration has proven hard to travel, as evidenced by the slow progress of multilateral and preferential initiatives. The WTO has not achieved much in this direction since its foundation, and the most ambitious regional deep integration efforts have all experienced major setbacks or failed. At the same time, deep integration is likely to remain the future of trade cooperation, given that shallow integration has been all but completed.

3. THE POLITICS OF DEEP INTEGRATION

In this section we discuss the political economy of deep integration, and in particular the change in the nature of special interest politics and the popular backlash against deep integration.

⁷For example, chapter 8 of the CETA “sets out measures to open up investment between the EU and Canada”; chapter 13 “enables financial institutions and investors in the EU and Canada to benefit from fair, equal access to each other’s markets”; and chapter 15 gives “each other’s businesses fair and equal access to public telecommunications networks and services.”

⁸As examples of the first goal, chapter 23 of the CETA “prevents either side from ignoring or lowering labor standards to boost trade,” while chapter 24 “prevents either side from relaxing their [environmental] laws to boost trade.” As examples of the second goal, chapter 5 of the CETA “ensures that measures by either side to ensure food safety and animal and plant health do not create unjustified barriers to trade”; chapter 12 “ensure[s] that domestic regulations in the other territory don’t act as an unfair barrier to trade”; and chapter 21 “encourages regulators to exchange experiences and information, and identify areas where they could cooperate.”

3.1. Special Interest Politics

In this section we discuss our own work on the changing nature of special interest politics (Maggi & Ossa 2020) and relate it to the political science literature on this topic, and in particular to the work by Young (2016, 2017).

A central point of our theory (Maggi & Ossa 2020) is that the lobbying forces that shape deep integration agreements are more complex and less benign than those that shape shallow integration agreements. In particular, while the negotiation of shallow trade agreements pits import-competing interests against exporting interests, which tends to enhance efficiency, the coalitions of special interests that emerge around the negotiation of deep agreements do not necessarily push toward an efficiency-enhancing outcome.

We develop a theoretical framework to investigate the welfare impacts of shallow and deep agreements when such agreements are negotiated under pressure from producer lobbies, building on the canonical model by Grossman & Helpman (1995). We depart from the canonical model in three main ways. First, we go beyond the analysis of shallow integration and focus on international regulatory cooperation, which is a particularly salient issue area for deep integration. Second, in order to examine how politically motivated agreements affect global welfare, we distinguish between the governments' positive objectives and a normative criterion. Most existing models adopt the same government objective function to predict and evaluate trade policy choices, and therefore they cannot address the widespread concern that trade agreements benefit special interests at the expense of society.⁹ Third, we consider a world with many small countries rather than the canonical large-country setting. This allows us to put lobbying at the heart of trade negotiations, as small countries have no ability to manipulate terms of trade.¹⁰

With respect to shallow integration, our model confirms the common intuition that trade negotiations tend to enhance global welfare, because they trigger opposition between import-competing interests and export-oriented interests, thereby bringing about beneficial reductions in trade barriers. Without trade negotiations, import-competing interests remain unchallenged because there is little governments can do to increase their exporters' foreign market access. This changes with trade negotiations, since exporting interests can then find a voice by lobbying for reciprocal tariff cuts.¹¹

Rodrik (2018) was among the first scholars to suggest that this logic of countervailing lobbying between import-competing and exporting interests may no longer work in modern deep integration agreements. He argues informally that

[r]ather than reining in protectionists, trade agreements empower another set of special interests and politically well-connected firms, such as international banks, pharmaceutical companies, and multinational corporations. Such agreements may result in freer, mutually beneficial trade, through exchange

⁹Notable exceptions are offered by Grossman & Helpman (1995b) and Ornelas (2005, 2008), who discuss whether politically viable regional trade agreements are likely to cause more trade diversion or creation, and thus whether they are likely to increase or reduce welfare. These papers, however, do not examine deep integration.

¹⁰The feature that lobbying is key to the purpose of a trade agreement is present also in some domestic-commitment models of trade agreements (e.g., Maggi & Rodriguez-Clare 1998, Mitra 2002). However, these papers make very different points from the present review, and they do not address deep agreements.

¹¹It is important to note that this point holds only if export subsidies are not freely available; otherwise, governments would use export subsidies to directly cater to export-oriented interests without the need of trade negotiations. In practice, the GATT has long prohibited export subsidies, so we take this restriction as a fact of life.

of market access. But they are as likely to produce welfare-reducing, or purely redistributive outcomes under the guise of free trade. (Rodrik 2018, pp. 75–76)

In a recent paper (Maggi & Ossa 2020) we scrutinize Rodrik’s intuition through a formal model of regulatory cooperation. We argue that it is important to distinguish between two areas of regulatory cooperation: product standards, defined as restrictions on the characteristics of products sold in a given country, and process standards, defined as restrictions on the production processes that take place on a country’s soil. Examples of product standards include emissions standards for automobiles and safety standards for children’s toys. As mentioned earlier, some of the most famous controversies regarding deep integration have involved product standards. Examples of process standards include environmental regulations for factories and safety standards for workers. As we emphasized above, many modern trade agreements include provisions on process standards, often with the stated motivation of preventing a harmful race to the bottom; and as we explain below, international cooperation on product standards and on process standards can have dramatically different welfare implications.

Standards can be used for legitimate welfare purposes, and in particular to address consumption and production externalities. For example, product standards might cap the pollution emissions from automobiles sold in the local market, and process standards might cap the pollution emissions from factories operating on the national territory. A government’s choice of standards balances producer surplus, consumer surplus, and externality considerations.

Following the canonical Grossman–Helpman approach to lobbying, we emphasize the role of producer lobbies, in line with the idea that it is easier for producers to overcome collective-action problems and get politically organized. We capture the influence of producer lobbies in a reduced-form fashion, by assuming that governments attach an extra weight to producer groups in the various industries. The influence of producer lobbies tends to distort the regulatory choices of governments in the noncooperative scenario, and the question is whether regulatory cooperation dilutes the distortionary influence of lobbies or rather intensifies it. This, in turn, depends crucially on whether the interests of lobbies in different countries are aligned (a situation that we refer to as co-lobbying) or in conflict (a situation that we refer to as countervailing lobbying).

In the case of product standards, we find that colobbying prevails, so an international agreement strengthens the overall influence of special interests on regulatory policy. The reason is that producers in all countries benefit from deregulation, since looser product standards imply lower local consumer prices, thereby boosting demand and raising the worldwide producer price. This, in turn, implies that a deep agreement on product standards can reduce global welfare, and this is more likely to happen if lobbies are more powerful.

In the case of process standards, however, lobbying pressures have a much more benign effect. In this case, we find that international cooperation increases welfare if lobbies are sufficiently powerful. This is because international negotiations induce countervailing lobbying between domestic and foreign producers, and hence they dilute the overall influence of special interests on regulatory policy. Specifically, domestic producers now prefer weaker domestic standards but stricter foreign standards, so that domestic costs are lower and foreign costs are higher. In this setting, if lobbies are very powerful, then noncooperative process standards are too loose—a race-to-the-bottom situation—and regulatory cooperation leads to a tightening of process standards, thus mitigating the welfare distortion.

Our model focuses on nondiscriminatory standards, since imposing discriminatory regulations creates barriers to trade, and thus prohibiting discrimination can be viewed as part of shallow integration. Indeed, recall that the GATT’s national treatment principle requires that domestic policies be set in a nondiscriminatory way. In practice, tackling discrimination in regulatory

policies is an unfinished job, not only in the GATT/WTO but also in recent PTAs. Our analysis of shallow integration summarized above suggests that, to the extent that the issue of discriminatory standards is on the international negotiating table, the influence of lobbies on the agreement should tend to be benign, because there should be counter-lobbying between import-competing producers and exporters.

One important takeaway of the Maggi–Ossa model is that the role of special interest politics in deep integration agreements is more complex and potentially less benign than its counterpart in shallow integration agreements. It goes beyond the classic antagonism between import-competing and export-oriented interests, and it can push trade agreements in a welfare-improving or a welfare-reducing direction, depending on whether the interests of producer lobbies within a given industry but across international borders are aligned or in conflict.

This argument has an interesting point of contact with the recent political science literature on deep integration. For example, Young (2016, 2017) documents that, in the context of TTIP negotiations, the global cleavages in special interest groups are very different from those that are typical of shallow integration agreements. His main point is that the classic opposition between import-competing and export-oriented interests has played almost no role in TTIP negotiations. Instead, US and European business groups largely acted in a coordinated way both in supporting TTIP negotiations and in influencing the content of TTIP. He argues that these transatlantic business alliances represent a new phenomenon in the history of trade negotiations, and he attributes this to the fact that TTIP negotiations are significantly deeper than any previous trade negotiations, particularly with respect to regulatory cooperation.

Young (2016, p. 348) reports that “leading American and European manufacturing and services associations from a diverse array of sectors—including automobiles, chemicals, pharmaceuticals, financial services, and insurance—have submitted joint proposals for easing regulatory barriers and lowering tariffs.” Analyzing submissions to the consultations of the United States Trade Representative, among other things, he concludes that “there [was] an almost complete absence of business opposition to the negotiations” (p. 350). According to Young, conflict across business groups was observed only in the agricultural sector, where no transatlantic alliances were formed.

It is important to note that the transatlantic business alliances documented by Young and the fact that they strongly supported TTIP negotiations should not necessarily be interpreted as evidence of harmful colobbying. The presence of these alliances is consistent with both mechanisms highlighted by the Maggi–Ossa model, namely that international business interests should push for both a tightening of process standards and a loosening of product standards relative to their noncooperative levels. In either case, the model suggests that if lobbies are sufficiently powerful they should support the agreement, because a key role of the agreement is to internalize the negative externalities exerted by a country’s tightening of product standards and weakening of process standards on foreign producers. In our model, harmful colobbying occurs when there is joint lobbying for looser standards, not when there is joint lobbying as such.

The Maggi–Ossa political economy approach to trade negotiations delivers some provocative messages. It portrays the welfare gains achieved during decades of GATT negotiations as a lucky byproduct of an essentially political agenda, and it suggests that deep integration may be good or bad for welfare depending on whether it intensifies or dilutes the influence of special interests on trade policy. However, this approach leaves open a number of theoretical and empirical questions. At the theoretical level, it would be important to examine the welfare impacts of international cooperation in other salient areas of deep integration, such as foreign investment and IPR policies. The cleavages between special interests across country borders are clearly issue-area specific, but our conjecture is that the basic logic outlined above will continue to apply—namely, that trade negotiations tend to enhance welfare if they dilute the overall influence of lobbies on policy making,

while they tend to reduce welfare if they intensify such influence, at least if lobbies are sufficiently powerful.

With respect to empirical work, we see two important and connected questions. The first one is just how beneficial or harmful real-world trade agreements are for welfare, that is, how the counteracting forces highlighted in the Maggi–Ossa model play out quantitatively. The second question is just how good or bad lobbying is for welfare, that is, how the welfare implications of real-world trade agreements change in response to shifts in the political influence of lobbies. These questions would be best addressed in the context of a quantitative model of regulatory cooperation, but such work has to confront the challenge of modeling regulatory policies in a reasonably realistic yet tractable way. One idea would be to follow Goldberg & Pavcnik’s (2016) advice of taking an industrial organization approach to the problem and focus on specific industries. A recent example of this approach is the work by Miravete et al. (2018), who demonstrate how EU fuel taxation and emissions policies systematically favor diesel-powered vehicles, which are made predominantly by EU car manufacturers.

3.2. Popular Backlash

In the previous section we focused on how cleavages in special interest groups are changing in response to the shift toward deep agreements. Here we focus on another important change in the political economy environment, namely the backlash against deep integration from consumer groups, environmental groups, and in some cases voters at large.¹²

The popular backlash against deep integration has been more intense in Europe, but it has occurred to some extent also in the United States. In Europe, the TTIP and CETA negotiations triggered large street protests. As Young (2016, p. 351) reports, in Europe more than 3 million people signed an online campaign against the TTIP, and 90 EU-based NGOs signed a letter to the European Commissioner for Trade expressing concern about proposals for regulatory cooperation, arguing that they “could easily facilitate a roll-back of protection provided by existing legislation.” In the United States, the main episode of street protests occurred in Seattle in 1999 against the WTO, but there was significant civic opposition also against the TTIP: For example, 73 US-based NGOs signed a letter to the United States Trade Representative which paralleled the one sent by the EU-based NGOs. On both sides of the ocean, civic interest groups also voiced opposition to the investor-state dispute settlement provisions in the TTIP.¹³

One might wonder whether the popular backlash against deep integration is simply part of a broader reaction against globalization and trade. The answer is not obvious, but it leans toward no. Opinion polls from the United States suggest that the overall share of voters who support free trade has not diminished in the last 10–15 years, and if anything it has gone up.¹⁴ Also in Europe, we are not aware of evidence that popular support for shallow integration has decreased, even in

¹²Our discussion in this section focuses only on developed countries, both because the popular backlash against globalization has been observed mostly in these countries and because there is a paucity of empirical and theoretical research on voters’ attitudes toward globalization in developing countries.

¹³It is interesting to note that in the United States there was some mobilization also against the TPP, but only by labor unions and specifically the AFL-CIO, which was worried mostly about labor standards in low-wage countries.

¹⁴Readers are referred to, for example, <http://www.pollingreport.com/trade.htm>. It is important to note that these opinion polls do not contradict the empirical findings, for example by Autor et al. (2019), that the China trade shock caused a local antiglobalization backlash in the areas that were hit by the shocks. More on these findings below.

the United Kingdom, where a majority of citizens voted to roll back on economic integration with the rest of Europe: In fact, the Leave campaign was in favor of free trade and pushed Brexit as a way to achieve freer trade with the rest of the world.

At a minimum, it is safe to say that the popular opposition to deep integration has not been matched by a comparable opposition to shallow integration. This raises a question: Why? We can think of two classes of reasons to explain why citizens may feel more strongly about deep integration than they do about shallow integration.

First are economic-utilitarian motives: It is possible that the well-being of citizens is affected more by regulations, IPRs, and investment policies than by trade barriers. Coupled with a belief that industrial lobbies have a disproportionate influence on deep agreements, this could explain a popular backlash against deep integration.

A second possibility is a cultural/ideological backlash: It might be that the popular reaction against deep integration originates in psycho-sociological motivations, such as those that relate to group identity. One can distinguish between two different versions of this mechanism. The first one is a left-wing reaction against the capitalist elite, and in particular against multinational corporations. The second one is a right-wing nationalist backlash leading to a blanket rejection of supranational authorities.

In practice, the boundary between economic and cultural motives is not sharp: For example, there may be a short distance between believing that immigration will hurt one's economic well-being and being culturally averse to immigrants. But in spite of this, the distinction seems conceptually useful: We think of the first case as falling into the domain of economic rationality (defined broadly to allow for incomplete information and arbitrary prior beliefs), while the second falls at least in part outside of this domain.

3.2.1. Is it about economics? A good example of the economic-utilitarian story is provided by Young (2016, 2017), who focuses on the political-economic forces surrounding the TTIP negotiations. Young explains the opposition to the TTIP by civic interest groups (environmental groups, consumer groups, and, in Europe, citizens more broadly) based on the notion that people are more concerned about safety and environmental standards than about tariffs. He argues that in the case of the TTIP, the perceived stakes for citizen groups were sufficiently large that they exceeded the costs of mobilization, whereas in the case of shallow integration the stakes may not have been large enough to trigger mobilization. A similar argument is made by other scholars such as Evans (2003) and Dur & Mateo (2014).

According to Young, the observed differences across the European Union and the United States when it comes to the TTIP are consistent with this stakes-based explanation. He notes that civic engagement was significantly stronger in Europe than in the United States and argues that the perceived stakes were higher for EU civic groups because the European Union had stricter regulations than the United States. From the point of view of US civic groups, there was an upside and a downside to the future of regulations under a TTIP agreement. The upside was that, to the extent that TTIP would lead to regulatory convergence with the European Union, this would create pressure toward more stringent regulations in the United States. The downside was the possibility of pressure toward deregulation on both sides of the Atlantic, for reasons like the ones we discussed in the previous section. From the point of view of EU civic groups, on the other hand, there was no upside whatsoever to the TTIP, since they were worried not only about big business lobbying for deregulation across the Atlantic, but also about regulatory harmonization in itself, since a compromise solution would mean less stringent regulations in the European Union.

Young also argues that, in the area of foreign investment, the perceived stakes associated with the ISDS component of TTIP negotiations were higher in the European Union than in the United

States. From the point of view of civic interest groups, the main concern about ISDS was the possibility that multinational corporations could exert excessive influence over host governments through a manipulable court system. This concern is also related in important ways to the above-mentioned concerns about safety and environmental regulations, since an ISDS system allows a corporation to sue a government for imposing excessive regulatory burdens, so the ISDS issue was relevant not only for broad consumer groups but also for environmental groups. Given the perceived power and influence of US-owned multinational firms, it is plausible that European civic groups were genuinely more concerned about the ISDS issue than were US civic groups. Moreover, in the years running up to the anti-TTIP protests, a large share of known ISDS complaints had been brought against EU member states, whereas comparably fewer cases had been brought against the United States, with the US government winning all of the cases.

3.2.2. Is it about ideology? Can the popular backlash against deep integration be explained entirely on the basis of economic rationality? Although the narrative outlined above has intuitive appeal and is probably an important part of the explanation, especially as it relates to regulatory cooperation, it is unlikely to be the whole story.

Consider, for example, the Brexit movement. As mentioned above, this was a movement against deep integration with the European Union, not against shallow integration. Recent empirical studies suggest that it is hard to explain this phenomenon based on economic-utilitarian considerations alone. For example, Colantone & Stanig (2018) find that local China-related trade shocks were a key factor driving the vote for Brexit, in spite of the fact that the Leave campaign was in favor of free trade.¹⁵ Furthermore, local immigration shocks were not correlated with the Brexit vote, while separate survey data shows that perceptions about immigration were correlated with the Brexit vote. These findings suggest that ideological/cultural factors play an important role in explaining the popular opposition to deep integration.¹⁶

In his article in this volume, Rodrik (2021) offers a thought-provoking discussion of the relation between the antiglobalization backlash and the rise in populism in recent years. He notes that the populism that has taken hold in Europe and in the United States has been predominantly of the cultural-nationalist (right-wing) brand, even though the anti-economic elite (left-wing) brand of populism was perhaps better positioned to take advantage of the economic shocks that have affected these regions. Rodrik's broad view is that the various types of globalization shocks—in particular, trade, immigration, and international finance shocks—have deepened the divide between nationals and foreigners (“us” versus “them”) by creating easy out-group targets, such as foreign exporters, immigrants, and international banks.¹⁷ Furthermore, an important role has been played by the interaction between the demand and supply sides of politics: Populist politicians have strategically played up the economic anxieties of voters and the latent cultural cleavages by depicting the “others” as threats to the voters’ economic well-being and cultural values. This is a very plausible idea, we believe, but it is not clear whether it can explain why the ideological backlash

¹⁵That trade shocks can be a powerful trigger for nationalistic/conservative sentiments is suggested also by a number of other studies: Autor et al. (2020), Ballard-Rosa et al. (2017), Cerrato et al. (2018), and Steiner & Harms (2020) find that the China trade shock caused a rise in nationalist attitudes, support for conservative/authoritarian values, anti-immigrant sentiments, and support for the Republican Party in the United States.

¹⁶The cultural explanation for the Leave vote is supported also by Margalit (2019), who finds that the Leave vote was strongly correlated with support for cultural values such as social “closedness.”

¹⁷This view is consistent with empirical survey studies such as the one by Mayda & Rodrik (2005), who find that voters’ trade preferences are strongly correlated with nationalism and attachment to local communities.

against deep integration has been much stronger than the one against shallow integration.¹⁸ We return to this question below.

In the formal literature there is a small but growing number of models that aim to explain the backlash against globalization through mechanisms related to social group identification. We discuss three of these papers in turn.

Mukand & Rodrik (2018) propose a model that emphasizes both the demand side and the supply side of politics in triggering a rise of populism. A key ingredient of the model on the supply side is that a political candidate can invest either in changing voters' beliefs about their economic interests (what they call worldview politics) or in changing their cultural identities (what they call identity politics). One of their insights is that a globalization shock that generates an increase in income inequality can induce politicians to shift toward cultural-identity strategies, which can in turn lead to a deepening of sociocultural divides. Furthermore, because of the interaction between identity politics and worldview politics, this can also lead to a change of voters' beliefs regarding the policies that are in their best economic interests.

Grossman & Helpman (2021) develop a model of identity politics in which (even small) shocks that increase income inequality can have dramatic effects on social identification patterns and cause a shift toward anti-trade policies. In their model, low-income citizens can choose to identify with their own income group or with the nation as a whole, which includes high-income citizens: The latter choice has a status benefit (belonging to a group that is richer on average) and a cognitive dissonance cost (feeling a divergence with respect to the average member of the group). If an economic shock, such as a rise of imports from China, increases the income gap between the groups, it becomes harder for a low-income individual to identify with the broad nation because of a larger cognitive-dissonance cost. And if low-income voters stop identifying with the nation as a whole, this may cause a shift toward protectionist policies. Furthermore, if there is also a noneconomic dimension to social identification, such as an ethnic/racial cleavage, then an increase in the salience of such cleavage can trigger a cultural segmentation of society and a rise in protectionism.

Endogenous group identities are also key in work by Gennaioli & Tabellini (2019), but their model emphasizes the role of belief distortions and stereotypes in generating cultural conflicts and changes in equilibrium policies. In the trade policy application of their model, they consider three underlying group cleavages: Two are economic, namely low-income versus high-income citizens and losers from trade versus winners from trade (import-oriented versus export-oriented industries/regions), and one is cultural, namely nationalists versus cosmopolitans (or social conservatives versus progressives). Motivated by survey evidence, they assume a positive correlation between trade exposure and conservative/nationalist inclinations.¹⁹ The second key assumption is that voters identify with the group of people that they perceive as closest to themselves and that is in starkest contrast with the out-group. The third main ingredient of the model is that voters'

¹⁸Rodrik (2018) makes a point that relates to this question. He suggests one possible reason for the fact that populism in Europe has not been characterized by anti-trade positions (for example, this was very clear in the Brexit campaign, as noted above), in sharp contrast with the United States: Europe has better compensation mechanisms and safety nets in place, so that the gains from trade are better redistributed. In contrast, immigration shocks can cause severe distributional problems even in Europe, because they can increase the fiscal burden on natives. Note that this is a purely economic explanation: The idea is that European voters are not as concerned about trade because they expect to be compensated in case of an adverse trade shock. However, although this is likely to be one of the forces at play, it cannot be the whole story. For one thing, this argument does not seem consistent with the above-mentioned finding by Colantone & Stanig (2018) that in the context of Brexit, the Leave vote was explained by local trade shocks and not by local immigration shocks.

¹⁹As noted by Gennaioli & Tabellini (2019), some scholars have explained this correlation based on a psychological predisposition toward "closedness," and others have attributed it to a belief in "communal values."

beliefs are distorted by group identities, through group stereotypes that exaggerate the distinctive features of a group. In this setting, Gennaioli & Tabellini (2019) show that certain shocks, such as an increase in imports from China or a rise of immigration, can exacerbate cultural divides such as the one between nationalists and cosmopolitans, as well as the cleavage between winners and losers from trade, while the traditional economic cleavage between rich and poor becomes less salient.

The above models can help explain a popular backlash against globalization as well as a concurrent rise in sociocultural tensions within a society, but two subtle questions remain. First, while these models can explain changes in the intensity of cleavages within a society, they do not quite speak to the hostility between groups within that society and external groups, or put simply, between nationals and foreigners, so they do not quite capture the above-mentioned idea articulated by Rodrik (2021). For example, in Grossman & Helpman (2021) the noneconomic cleavages are those between racial/ethnic groups, not between nationals and foreigners. And in Gennaioli & Tabellini (2019) one interpretation of the cultural cleavage is in terms of nationalists versus cosmopolitans, which is related but distinct from the cleavage between a country's citizens and the country's outsiders. One reason the role of the insider/outsider cleavage in identity politics is far from obvious is simply that outsiders do not vote, so there is no obvious electoral benefit to a politician from exacerbating the nationals/foreigners divide.

The second question is, even if one can argue that the political game in Europe and the United States has deepened the divide between nationals and foreigners, can this explain the differential backlash against deep integration versus shallow integration that we highlighted above? This is not entirely clear. Consider, for example, a country that imports homogenous goods or raw commodities: If the citizens of this country become culturally hostile to foreigners, they may be more reluctant to let other countries dictate their own domestic policy choices, but they may still want to buy goods from them. When viewed from this perspective, one can argue that a nationalistic backlash can lead to stronger opposition to deep integration relative to shallow integration. But now suppose the same country imports goods for which quality and safety are important and in which they are not easily observable to the average citizen. Then a deepening of the cultural divide between nationals and foreigners—especially if it involves diminished trust in foreigners—may affect beliefs about the quality/safety of imported products, and thus it may reduce popular support for shallow and deep integration alike. This seems like an open question worthy of further theoretical and empirical research.

4. THE ECONOMICS OF DEEP INTEGRATION

In this section we offer our perspective on the literature that focuses on the efficiency properties of deep trade agreements. A key difference with respect to the Maggi–Ossa approach discussed in the previous section is that this literature evaluates efficiency through the lens of the governments' objectives, making no distinction between governments' political motivations and normative criteria. We loosely organize our discussion by issue area, considering the regulatory, investment, and IPR dimensions of deep trade agreements in turn.

We begin our discussion with the work of Bagwell & Staiger (2001), which provides a useful benchmark in this literature. They ask whether the WTO should include deep provisions on environmental and labor standards in response to concerns that trade integration could induce a harmful race to the bottom. They address this question in the context of a standard neoclassical trade model in which countries can impose import tariffs and standards. Standards are modeled in a reduced-form fashion as shift parameters of the import demand and export supply functions in a deterministic environment. While countries have direct preferences over domestic standards,

they only care about the trade effects of foreign standards, in keeping with the race-to-the-bottom focus of their analysis.

Their main result is that tariff negotiations lead to an efficient outcome if countries are prevented from subsequently undoing their market access concessions by adjusting their standards. The key intuition is that countries do not care about the foreign policy mix per se but only about the market access it gives them. Also, countries only use standards to manipulate the market access of foreign producers if they are constrained in their tariff choices, since tariffs are a preferred instrument for this purpose. This result is a forceful endorsement of an approach of policed shallow integration, in the sense of tariff commitments coupled with market access–preservation rules (such as national treatment and nonviolation rules), which Bagwell & Staiger (2001) argue was the core of the GATT’s approach.

A number of follow-up papers have pushed this message further, by arguing that some real-world attempts toward deep integration are not only unnecessary but even harmful for reaching efficiency. One example is provided by Bagwell & Staiger (2006), who analyze the WTO’s stricter disciplines on domestic subsidies. They argue that the WTO has constrained domestic subsidies so much that some efficient policy mixes can no longer be attained through trade negotiations. Another example is offered by Staiger & Sykes (2019), who consider the WTO’s approach to service trade liberalization under the GATS. They argue that the GATS’ problems are rooted in its focus on behind-the-border measures and suggest that countries should instead engage in shallow negotiations over discriminatory taxes imposed against foreign service providers.

However, it has become clear that Bagwell & Staiger’s (2001) argument does not extend to a number of alternative trade environments. First, as pointed out by Maggi (2014), even in a standard competitive setting where trade agreements are motivated by terms-of-trade externalities, a shallow integration approach may not work well if international agreements are subject to contracting frictions. Suppose that trade volumes are affected by demand and/or supply shocks, and a country observes the realization of these shocks before choosing its domestic policies. Then a market access–preservation rule would need to be state contingent in order to achieve efficiency. But if state contingencies are not perfectly verifiable, so that the international contract is incomplete, then a shallow integration approach will not be enough, and imposing direct constraints on domestic policies is necessary to achieve efficiency. A similar point is made by Lee (2007) in a setting where governments can use domestic subsidies to address a domestic externality, and the level of such externality is private information. In related work, Horn et al. (2010) show that a simple tariff agreement may be optimal when trade volumes are small relative to contracting costs, while a deep agreement that imposes direct constraints on domestic instruments becomes optimal as trade volumes increase, since countries then have stronger incentives to use domestic instruments for protectionist purposes, and hence the benefits of reining in these incentives exceed the associated contracting costs.

Second, an approach of policed shallow integration is not enough if the motives for the trade agreements go beyond the mere correction of terms-of-trade externalities. For example, a deep integration approach is needed if there are domestic commitment motives for international cooperation. This point is made by Brou & Ruta (2013) in a setting where governments can choose trade policies and domestic subsidies.

As another example, Antras & Staiger (2012) show that deep integration is necessary in an environment in which there is offshoring of intermediate inputs. Their key departure from Bagwell & Staiger’s (2001) approach is that intermediate inputs are relationship specific, so that their prices are set by ex-post bargaining and not in competitive markets. This implies that there is an international hold-up problem in addition to the standard terms-of-trade externality, so that the inefficiency of the noncooperative equilibrium is based on more than just market access manipulation.

As a result, the GATT's shallow integration approach of exchanging and securing market access concessions is no longer sufficient to bring about an efficient outcome. Instead, direct constraints on domestic policy instruments are needed.

Grossman et al. (2021) similarly make the case for deep integration in the context of a new trade model of regulatory cooperation. The key difference from Bagwell & Staiger's (2001) approach is that they build on Venables's (1987) monopolistic competition model, so that the harmful international externality is a firm-delocation externality instead of a terms-of-trade externality. They show that governments then have an incentive to use regulatory policy for mercantilist objectives if their trade taxes are constrained by a trade agreement. They also show that national treatment and mutual recognition are not enough to achieve global efficiency in their full model and argue that it is hard to conceive of a workable version of nonviolation complaints. The bottom line is that a deep agreement involving explicit disciplines on regulation is needed to implement an efficient outcome.²⁰

Recent work has also begun to scrutinize the provisions on investor protection included in most modern trade agreements. For example, Ossa et al. (2020) consider an environment in which a host government wants to make a commitment toward foreign investors not to expropriate them once they have sunk their investments. They ask whether it makes sense on efficiency grounds to allow foreign investors to directly sue host governments for comprehensive money damages in arbitration tribunals outside the ordinary legal system, as is the case under ISDS. They identify conditions under which ISDS is indeed optimal but also make clear that the case for ISDS is far from absolute. For example, if the investment provisions primarily address market access instead of commitment issues, ISDS would not be optimal, as might plausibly be the case in North-North agreements such as the TTIP or CETA.²¹

The theoretical case for the particular formulation of the TRIPS agreement in the WTO and the related IPR provisions in PTAs is even weaker. The standard reference in this context is the work by Grossman & Lai (2004), who analyze noncooperative and cooperative patent policies in a simple model of expanding varieties. First, they show that countries choose overly weak patent protection in the noncooperative equilibrium, since they fail to internalize the effects of their patent policies on foreign profits. Second, they show that international harmonization of patent policies is neither necessary nor sufficient for global efficiency, thus casting doubt on the institutional design of the TRIPS agreement. In addition to questionable efficiency implications, harmonization may also have strong redistributive effects in favor of developed countries and at the expense of developing countries.²²

Overall, the literature leaves us with two main messages. First, explicit disciplines on domestic policies are needed in many realistic economic settings: The GATT's approach of policed shallow integration may not work in a world where international agreements are subject to contracting frictions, where intermediate input trade is important, or where markets are imperfectly competitive. Second, many real-world attempts at deep integration are probably suboptimal: The WTO's subsidy agreement may be excessive, the WTO's GATS agreement may have the wrong focus, ISDS may not be optimal in some contexts, and the TRIPS agreement may be misguided.

²⁰The literature has also studied regulatory policy in oligopoly models emphasizing international profit-shifting externalities (see Gandal & Shy 2001, Costinot 2008, Klimenko 2009, and Parenti & Vannoorenbergh 2020). Battigalli & Maggi (2003) provide an early analysis of international regulatory agreements from an incomplete-contracting perspective.

²¹Readers are referred to Aisbett et al. (2010a,b), Konrad (2017), Stahler (2018), Janeba (2019), Kohler & Stahler (2019), and Horn & Tangeras (2020) for other work in this area.

²²Saggi (2016) provides an excellent survey of the literature on the TRIPS agreement, and more generally on trade and IPR, that has developed after Grossman & Lai's (2004) work.

This takes us to our last point: the importance of quantitative evaluations of trade policy institutions. The literature on the economics of deep integration has thus far remained largely theoretical, with very few exceptions. One of these exceptions is represented by Mei (2019), who builds on the approach of Ossa (2014, 2016) to perform a quantitative analysis of regulatory protection and cooperation using a model that shares many features with that of Grossman et al. (2021). He interprets real-world standards as noncooperative standards subject to national treatment and uses this interpretation to calibrate his model parameters. He then asks what would happen in the worst-case and best-case scenarios, i.e., the noncooperative equilibrium without national treatment and the fully cooperative equilibrium that would result from efficient negotiations. His results suggest that the WTO's national treatment clause is not particularly effective at curbing regulatory protectionism. Without national treatment, real incomes would decline by 1.4% on average; with fully efficient negotiations, real incomes would increase by 12.6% on average. One of the limitations of Mei's (2019) work is the use of coverage ratios to measure product standards. Echoing our point above, to overcome this kind of limitations it would be valuable to explore a partial equilibrium approach that pays close attention to the specifics of a particular industry.

The approach of Ossa (2014, 2016) and Mei (2019) suggests a way forward for the quantitative evaluation of trade policy institutions. Real-world trade agreements are necessarily incomplete contracts, since it is virtually impossible to negotiate over all policy instruments, so the key question is not whether or not a particular trade policy institution is inefficient, but how close it gets us to the efficiency frontier and whether there are other simple institutions that could outperform it quantitatively. In particular, one question that has not been sufficiently explored is, how much could we potentially gain by moving from shallower integration approaches—such as the ones that rely on national treatment or market access–preservation rules—to deeper approaches that impose direct constraints on the governments' domestic policy choices?

5. CONCLUSION

Deep integration is the future of trade policy, and this future is fascinatingly complex. In this review, we have highlighted three dimensions of this complexity and introduced the literature on each. First, the political conflict surrounding trade agreements is moving beyond the classic antagonism between exporter interests who gain from trade and import-competing interests who lose from trade. Second, producer lobbies and labor unions are no longer the only interest groups mobilized by trade agreements, but other civic interest groups such as consumer rights or environmental protection advocates, and sometimes citizens at large, are now an active part of the equation. And third, intuitions based on standard gains from trade are no longer a good guide for assessing the merits of trade agreements, since modern agreements go far beyond classic trade liberalization.

To us, this seems like a great opportunity as well as an important responsibility for trade economists. It is a great opportunity because it requires us to rethink much of our conventional wisdom on trade policy and will thus be a source of interesting research questions for years to come; but it is also an important responsibility, because the relevance of our field will also depend on how much we have contributed to this crucial policy debate.

DISCLOSURE STATEMENT

The authors are not aware of any affiliations, memberships, funding, or financial holdings that might be perceived as affecting the objectivity of this review.

ACKNOWLEDGMENTS

We thank Emily Blanchard, Michael Blanga-Gubbay, and an anonymous referee for helpful comments. G.M. gratefully acknowledges funding from the National Science Foundation grant 1949374. R.O. gratefully acknowledges funding from the European Research Council under the European Union's Horizon 2020 research and innovation program (grant agreement 819394). All errors are our own.

LITERATURE CITED

- Aisbett E, Karp L, McAusland C. 2010a. Compensation for indirect expropriation in international investment agreements: implications of national treatment and rights to invest. *J. Glob. Dev.* 1(2):1–35
- Aisbett E, Karp L, McAusland C. 2010b. Police powers, regulatory takings and the efficient compensation of domestic and foreign investors. *Econ. Rec.* 86:367–83
- Antras P, Staiger R. 2012. Offshoring and the role of trade agreements. *Am. Econ. Rev.* 102(7):3140–83
- Autor D, Dorn D, Hanson G. 2013. The China syndrome: local labor market effects of import competition in the United States. *Am. Econ. Rev.* 103(6):2121–68
- Autor D, Dorn D, Hanson G, Majlesi K. 2020. Importing political polarization? The electoral consequences of rising trade exposure. *Am. Econ. Rev.* 110(10):3139–89
- Bagwell K, Staiger R. 2001. Domestic policies, national sovereignty, and international economic institutions. *Q. J. Econ.* 116(2):519–62
- Bagwell K, Staiger R. 2006. Will international rules on subsidies disrupt the world trading system? *Am. Econ. Rev.* 96(3):877–95
- Bagwell K, Staiger R, eds. 2016. *Handbook of Commercial Policy*. Amsterdam: Elsevier
- Ballard-Rosa C, Malik M, Rickard S, Scheve K. 2017. *The economic origins of authoritarian values: evidence from local trade shocks in Great Britain*. Conf. Memo, Stanford Univ., Stanford, CA
- Battigalli P, Maggi G. 2003. *International agreements on product standards: an incomplete contracting theory*. NBER Work. Pap. 9533
- Brou D, Ruta M. 2013. A commitment theory of subsidy agreements. *B.E. J. Econ. Anal. Policy* 14(1):239–70
- Cerrato A, Ferrara F, Ruggieri F. 2018. *Why does import competition favor Republicans?* Work. Pap., Univ. Calif., Berkeley
- Colantone I, Stanig P. 2018. Global competition and Brexit. *Am. Political Sci. Rev.* 112(2):201–18
- Costinot A. 2008. A comparative institutional analysis of agreements on product standards. *J. Int. Econ.* 75(1):197–213
- Dur A, Mateo G. 2014. Public opinion and interest group influence: how citizen groups derailed the Anti-Counterfeiting Trade Agreement. *J. Eur. Public Policy* 21(8):1199–217
- Economist*. 2008. The Doha round. . .and round. . .and round. *Economist*, July 31. <http://www.economist.com/finance-and-economics/2008/07/31/the-doha-roundand-roundand-round>
- Ederington J, Ruta M. 2016. Non-tariff measures and the world trading system. See Bagwell & Steiger 2016, pp. 211–77
- Evans P. 2003. Is trade policy democratic? And should it be? In *The New Economic Diplomacy: Decision-Making and Negotiations in International Economic Relations*, ed. N Bayne, S Woolcock, pp. 147–59. Farnham, UK: Ashgate
- Gandal N, Shy O. 2001. Standardization policy and international trade. *J. Int. Econ.* 53:363–83
- Gennaioli N, Tabellini G. 2019. *Identity, beliefs, and political conflict*. Work. Pap., Bocconi Univ., Milan, Italy
- Goldberg P, Pavcnik N. 2016. The effects of trade policy. See Bagwell & Steiger 2016, pp. 161–206
- Grossman G, Helpman E. 1995. Trade wars and trade talks. *J. Political Econ.* 103(4):675–708
- Grossman G, Helpman E. 2021. Identity politics and trade policy. *Rev. Econ. Stud.* 88(3):1101–26
- Grossman G, Lai E. 2004. International protection of intellectual property. *Am. Econ. Rev.* 94(5):1635–53
- Grossman G, McCalman P, Staiger R. 2021. The “new” economics of trade agreements: from trade liberalization to regulatory convergence? *Econometrica* 89(1):215–49
- Hofmann CA, Osnago, Ruta M. 2017. *Horizontal depth: a new database on the content of preferential trade agreements*. Policy Res. Work. Pap. 7981, World Bank, Washington, DC

- Horn H, Maggi G, Staiger R. 2010. Trade agreements as endogenously incomplete contracts. *Am. Econ. Rev.* 100(1):394–419
- Horn H, Tangeras T. 2020. *Economics and politics of international investment agreements*. IFN Work. Pap. 1140, Res. Inst. Ind. Econ., Stockholm, Swed.
- Janeba E. 2019. Regulatory chill and the effects of investor state dispute settlements. *Rev. Int. Econ.* 27:1172–98
- Johnston C. 2015. Berlin anti-TTIP trade deal protest attracts hundreds of thousands. *Guardian*, Oct. 10. <https://www.theguardian.com/world/2015/oct/10/berlin-anti-ttip-trade-deal-rally-hundreds-thousands-protesters>
- Klimenko M. 2009. Policies and international trade agreements on technical compatibility for industries with network externalities. *J. Int. Econ.* 77:151–66
- Kohler W, Stahler F. 2019. The economics of investor protection: ISDS versus national treatment. *J. Int. Econ.* 121
- Konrad K. 2017. Large investors, regulatory taking and investor-state dispute settlement. *Eur. Econ. Rev.* 98:341–53
- Lee GM. 2007. Trade agreements with domestic policies as disguised protection. *J. Int. Econ.* 71(1):241–59
- Maggi G. 2014. International trade agreements. In *Handbook of International Economics*, Vol. 4, ed. G Gopinath, E Helpman, K Rogoff, pp. 317–90. Amsterdam: Elsevier
- Maggi G, Ossa R. 2020. *Are trade agreements good for you?* NBER Work. Pap. 27252
- Maggi G, Rodriguez-Clare A. 1998. The value of trade agreements in the presence of political pressures. *J. Political Econ.* 106(3):574–601
- Maggi G, Rodriguez-Clare A. 2007. A political economy theory of trade agreements. *Am. Econ. Rev.* 97(4):1374–406
- Margalit Y. 2019. Economic insecurity and the causes of populism, reconsidered. *J. Econ. Perspect.* 33(4):152–70
- Mattoo A, Rocha N, Ruta M. 2020. *The evolution of deep trade agreements*. Policy Res. Work. Pap. 9283, World Bank, Washington, DC
- Mattoo A, Staiger R. 2020. Trade wars: What do they mean? Why are they happening now? What are the costs? *Econ. Policy* 35(103):561–84
- Mavroidis P. 2016. *Regulatory cooperation: lessons from the WTO and the World Trade Regime*. Policy Options Pap., E15 Initiat., Int. Cent. Trade Sustain. Dev., Geneva, Switz.
- Mayda A, Rodrik D. 2005. Why are some people (and countries) more protectionist than others? *Eur. Econ. Rev.* 49:1393–430
- Mei Y. 2019. *Regulatory protection and the role of international cooperation*. Work. Pap., Univ. Chicago, Chicago
- Miravete E, Moral M, Thurlk J. 2018. Fuel taxation, emissions policy, and competitive advantage in the diffusion of European diesel automobiles. *RAND J. Econ.* 49(3):504–40
- Mukand S, Rodrik D. The political economy of liberal democracy. *Econ. J.* 130:765–92
- Ossa R. 2014. Trade wars and trade talks with data. *Am. Econ. Rev.* 104(12):4101–46
- Ossa R. 2016. Quantitative models of commercial policy. See Bagwell & Steiger 2016, pp. 207–59
- Ossa R, Staiger R, Sykes A. 2020. *Disputes in international investment and trade*. NBER Work. Pap. 27012
- Parenti M, Vannoorenberghe G. 2020. *A simple theory of deep integration*. Work. Pap., Univ. Libre Brux., Brussels, Belg.
- Rodrik D. 2018. What do trade agreements really do? *J. Econ. Perspect.* 32(2):73–90
- Rodrik D. 2021. Why does globalization fuel populism? Economics, culture, and the rise of right-wing populism. *Annu. Rev. Econ.* 13:133–70
- Saggi K. 2016. Trade, intellectual property rights, and the World Trade Organization. See Bagwell & Steiger 2016, pp. 433–512
- Schmidt J, Steingress W. 2020. *No double standards: quantifying the impact of standard harmonization on trade*. Work. Pap., Bank Can., Ottawa
- Smith N. 2014. The dark side of globalization: why Seattle’s 1999 protesters were right. *Atlantic*, Jan. 6. <https://www.theatlantic.com/business/archive/2014/01/the-dark-side-of-globalization-why-seattles-1999-protesters-were-right/282831/>
- Stahler F. 2018. *An optimal investor state dispute settlement mechanism*. Work. Pap., Univ. Tübingen, Tübingen, Ger.

- Staiger R, Sykes A. 2019. *The economic structure of international trade-in-services agreements*. NBER Work. Pap. 22960
- Steiner N, Harms P. 2020. *Local trade shocks and the nationalist backlash in political attitudes: panel data evidence from Great Britain*. Work. Pap. 2014, Johannes Gutenberg Univ. Mainz, Mainz, Ger.
- Venables A. 1987. Trade and trade policy with differentiated products: a Chamberlinian-Ricardian model. *Econ. J.* 97:700–17
- Warren E. 2015. The Trans-Pacific Partnership clause everyone should oppose. *Washington Post*, Febr. 25. https://www.washingtonpost.com/opinions/kill-the-dispute-settlement-language-in-the-trans-pacific-partnership/2015/02/25/ec7705a2-bd1e-11e4-b274-e5209a3bc9a9_story.html
- Young A. 2016. Not your parents' trade politics: the Transatlantic Trade and Investment Partnership negotiations. *Rev. Int. Political Econ.* 23(3):345–78
- Young A. 2017. Intergovernmental policy makes transnational politics? The unusually transnational politics of TTIP. *Camb. Rev. Int. Aff.* 30(5–6):527–48

Contents

Emmanuel Farhi, Economist Par Excellence <i>Jean Tirole</i>	1
The Political Economy of Deep Integration <i>Giovanni Maggi and Ralph Ossa</i>	19
Large Games: Robustness and Stability <i>Ronen Gradwohl and Ehud Kalai</i>	39
Does Vote Trading Improve Welfare? <i>Alessandra Casella and Antonin Macé</i>	57
What Shapes the Quality and Behavior of Government Officials? Institutional Variation in Selection and Retention Methods <i>Claire S.H. Lim and James M. Snyder Jr.</i>	87
The Elusive Peace Dividend of Development Policy: From War Traps to Macro Complementarities <i>Dominic Robner and Mathias Thoenig</i>	111
Why Does Globalization Fuel Populism? Economics, Culture, and the Rise of Right-Wing Populism <i>Dani Rodrik</i>	133
Systemic Risk in Financial Networks: A Survey <i>Matthew O. Jackson and Agathe Pernoud</i>	171
The International Aspects of Macroprudential Policies <i>Kristin J. Forbes</i>	203
Estimating DSGE Models: Recent Advances and Future Challenges <i>Jesús Fernández-Villaverde and Pablo A. Guerrón-Quintana</i>	229
Firm Dynamics and Trade <i>George Alessandria, Costas Arkolakis, and Kim J. Ruhl</i>	253
The Economics of Currency Risk <i>Tarek A. Hassan and Tony Zhang</i>	281
Empirical Models of Industry Dynamics with Endogenous Market Structure <i>Steven T. Berry and Giovanni Compiani</i>	309

The Macroeconomics of Financial Speculation <i>Alp Simsek</i>	335
Uncertainty Spillovers for Markets and Policy <i>Lars Peter Hansen</i>	371
A Helicopter Tour of Some Underlying Issues in Empirical Industrial Organization <i>Ariel Pakes</i>	397
The Story of the Real Exchange Rate <i>Oleg Itskhoki</i>	423
Choice in Insurance Markets: A Pigouvian Approach to Social Insurance Design <i>Nathaniel Hendren, Camille Landais, and Johannes Spinnewijn</i>	457
The Econometrics of Early Childhood Human Capital and Investments <i>Flavio Cunha, Eric Nielsen, and Benjamin Williams</i>	487
Sufficient Statistics Revisited <i>Henrik J. Kleven</i>	515
The Blossoming of Economic Epidemiology <i>David McAdams</i>	539
Directed Technical Change in Labor and Environmental Economics <i>David Hémons and Morten Olsen</i>	571
Inflation Inequality: Measurement, Causes, and Policy Implications <i>Xavier Jaravel</i>	599
Theoretical Foundations of Relational Incentive Contracts <i>Joel Watson</i>	631

Indexes

Cumulative Index of Contributing Authors, Volumes 9–13	661
--	-----

Errata

An online log of corrections to *Annual Review of Economics* articles may be found at <http://www.annualreviews.org/errata/economics>