The WTO and the Shrinking of Development Space

How Big is the Bite?

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The trade policy regimes that existed before and after the Uruguay Round of multilateral trade negotiations were strikingly different. Before 1994, the General Agreement on Tariffs and Trade (GATT) was the primary institution of international trade. Though the GATT pillars of non-discrimination and reciprocity established text-based parameters on its Members' industrial policies, in practice the institution was relatively disengaged with its developing country Members and tended to overlook their policy violations (Hudec, 1987). In 1994, the World Trade Organization subsumed the GATT through the Single Undertaking. This event ushered in a new policy regime that expanded both the scope and the enforcement of new regulations. This article seeks to measure the extent to which policy implementation in the developing countries has reflected these changes.

In this article, we examine the industrial policies implemented by the set of countries known as the Newly Industrialized Countries (NICs) during the GATT regime. For the purposes of this research, we created a single set of NICs including all of the first-tier and the higher performing second-tier countries.[1] The NICs in this set are all countries that:

- had high growth rates;
- had developmentally interventionalist governments;
- used discriminatory industrial policies;
- actively pursued industrial policy; and
- began their industrial push during the time when the GATT was the main institution of international trade.

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[1] The single set of NICs we examine includes Brazil, Mexico, India, South Korea, Hong Kong and Taiwan. This list is a simplified group of both first- and second-tier NICs, using an adapted definition based on the criteria used in the *East Asian Miracle Report* (World Bank, 1993). The first tier is defined as the 4 tigers, which are all are commonly classified as high-performing Asian economies. This tier includes South Korea, Hong Kong, Taiwan, and Singapore. *The East Asian Miracle Report* describes the second tier as "newly industrializing economies". While the *Report* deals only with Asia, we use their criteria to also include countries such as Brazil and Mexico, since they also fall into the top 20 growth group, the same as the second-tier Asian countries. Second-tier countries can thus be defined to include Brazil, Mexico, India, Indonesia, Malaysia and Thailand. So, together, the group of first- and second-tier developing countries become the single set of NICs considered in this article.

Though the precise policy set differed in every country, policies commonly focused on regulating foreign investment and cultivating domestic industries to the point where domestic producers could innovate on their own.[2]

Earlier papers have demonstrated that the advent of the WTO rendered policies in the NICs' strategic set inconsistent with their international commitments.[3] Though there is no question that this constricted the policy space that governments had previously enjoyed in their industrial decision-making, it assumes that countries automatically adhere to their obligations in the text.

We build on these existing rules-based analyses by examining the extent to which the textual limitation of policy availability has resulted in actual changes in policy implementation. We do this by first examining Trade Policy Reviews (TPRs)[4] and various other WTO notifications to learn whether the NICs have removed existing policies that were rendered inconsistent with their new commitments. Second, we review panel disputes to assess the extent to which countries had to be prompted to remove policies that were in violation of their commitments. Finally, we review notifications and balance of payments applications to see whether the limited policies are being continued under exceptional allowances.

I. The Nic Strategic Policy Set

Industrial policies are development strategies that are aimed specifically at shifting the productive mix of an economy away from primary products in favor of manufactured goods (Syrquin 1989). They generally focus on adjusting the industrial structure of the domestic economy to favor certain types of high-value-added industries over less profitable sectors. Countries pursue these types of policies because they expect that an economy based on manufactured goods will lead to continual productivity growth, more stable export prices, and more accessible externalities (see e.g. Pack, 1989). Industrial policies often do not conform to economic ideals because they are embedded in national priorities which are not necessarily economically efficient (Brown and Stern, 2006).

In this Section, we review a selected set of industrial strategies implemented by the NICs in the GATT era. We first show that policies were designed to respond to market failures that are common to all developing countries. NIC governments used internal technical expertise to allocate resources in ways that addressed these failures and promoted development. We then list some popular policies and discuss their distributive goals.

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[2] These policies were not exclusive to the NICs; similar policies and activities were also used by the First World countries (Chang, 2004).

[3] There are a number of rules-based analyses documenting various facets of this occurrence. See, for example, Wade (2003); Shadlen (2005); see also Amsden (2005).

[4] The Trade Policy Reviews that we read through include: Brazil (1992, 1996, 2000, 2004); India (1993, 1998, 2002); Indonesia (1990, 1994, 1998, 2003); Malaysia (1993, 1997, 2001); Mexico (1993, 1997, 2002); South Korea (1996, 2000, 2004); and Thailand (1991, 1995, 1999, 2003).

A market failure occurs when there is a distortion that keeps the market from allocating resources efficiently and adjusting to a steady state. Market failures in developing countries are typically results of underdeveloped capacity in human capital, product, and capital markets (Stiglitz, 1989). The existence of market failures means that domestic industries cannot gain the necessary technology and capacity to compete on the open market without outside intervention and protection.

The strategies of the NICs treated market failures in two ways. Most market interventions were "horizontal" (Lall and Theubal, 1998). That is, they were intended to attenuate existing market failures such as the existence of infant industries and the fact that knowledge is proprietary. Examples of horizontal strategies include skills upgrading and research and development subsidies. These types of policies aim to shift the costs of low-return activities away from firms while enabling them to reap the capacity-related benefits. In general, because they are not specific to an industry, horizontal market interventions are not restricted by the WTO.

Certain other market failures were treated with policies that Lall and Theubal (1998) refer to as "selective" interventions. These interventions target specific sectors and are intended to regulate foreign investment and cultivate domestic firms to the point where they can innovate on their own. In many of these cases, the industrial policies followed a strategy that was described by Wade (1990a) as "simulating an ideal market". These were policies, such as tiered pricing and exchange rate management, which used existing distortions as tools to achieve their industrial goals (Amsden, 1997). These policies were used by developmental governments to selectively support different sectors and to discriminate among industries (Wade, 1990b). They were specifically intended to keep the market from adjusting to a steady state.[5]

While horizontal industrial policies are recognized as an important component of development, selective policies are generally discouraged as a result of their high dependence on the prescience of the implementing authority. As we will see in detail in Section II, the primary problem that the literature has with interventionalist policies is that governments make distributive decisions that were before made by the market.

In the case of the NICs, governments worked through planning boards and development banks that were used to handpick development projects. Institutions included South Korea's Economic Planning Board and Brazil's *Banco Nacional de Desenvolvomento Economico e Social*. They were staffed by technocrats and carefully chose the projects they funded and supported. These institutions encouraged projects that addressed the coordination problems and missing markets that are typical in developing countries. Planning boards chose projects based on economic analysis of the economy

[5] As Amsden (2001) notes in her discussion of "getting the prices wrong", the open market pricing system is not necessarily an efficient coordinating mechanism. Under perfect markets, prices reflect scarcity, which serves to incentivize production. However, in a world where profits in many sectors are tied to proprietary knowledge, prices provide inadequate indicators. This problem was recognized early on by Gershenkron (1962), who suggested that more than a market signal would be necessary in order to stimulate investment in non-traditional markets.

and then allocated subsidies in such a way that firms would be encouraged to invest in risky projects.

Despite the positive industrial results, there is disagreement in the literature about the extent to which there was direct causality between State-led industrial policies and industrial development. According to some scholars, discriminatory industrial policies served to foster new industries (Amsden, 2001), increase productive capacity (Wade, 1990b), and build up national technological capability (Singh, 1994). However, other scholars have argued that governments are not prescient and cannot be expected to choose the right products to promote (Krueger, 1990), that industrial policy is likely to be captured by protectionist interests (Grossman and Helpman, 1994), and that industrial targeting impedes market adjustment (Bhagwati,1988).

In *Figure 1*, we offer a selected set of the industrial policies that were most popular in the NICs during their industrial push periods. This list is derived from a number of different authors including Amsden (2001), Singh (1996), and Wade (1990a).

FIGURE 1
STRATEGIES OF THE NICS

GATT-Compliant	Policy Instrument		WTO-Compliant
✓	Goods:	Tariff sequencing	
✓		Import licenses	
✓		Duty drawbacks	✓
	Subsidies:	Export	
✓		Production	
✓		R&D	(actionable)
	FDI:	Local content	
✔		Tech transfer	✔
		Trade balancing	
✓	IPRs:	Selective patents	
✓		Compulsory licensing	✓
✓	Other:	Skills building	✓
✓		State-run firms	✓

Source: Authors' own, based on various sources, including Amsden 2001; Singh, 1996; Wade, 1990.
Note: We assume that these policies are applied in a specific way and do not take into account *de minimus* allowances.

The above policies had two main development goals—to build up domestic capacity and to encourage foreign investors to contribute to national export, innovation, and production goals. Domestic capacity was encouraged through production subsidies and other targeted policies. The NICs saw locally owned firms as a particularly important component of their industrial strategies.

Investment leadership was a secondary goal of industrial policy. Governments used import controls, tax manipulation and performance requirements to direct investment into target sectors. They used local content requirements and weak intellectual property protection to encourage technology and skills transfers.

II. Changes from the GATT to the WTO: A Rules-Based Analysis

In this Section, we examine the extent to which WTO rules constrict the policy space available for developing countries to deploy the strategies outlined in Section I. We go through each of the industrial policies listed in Figure 1. For each policy, we discuss the developmental benefits the literature predicts that it can have, and then we explain how these policies are treated in the WTO. The goal of this Section is to point out exactly which of the policies in Figure 1 are limited by the WTO.

For most of the NICs, the policies discussed above were most prevalent during the GATT era. The GATT functioned primarily as a forum for the industrial countries to negotiate product-based tariff concessions. This meant that not only did the GATT generally not include developing country concerns in tariff negotiations but also that it was relatively disengaged in terms of ensuring that developing countries' domestic policies conformed to GATT regulations.

The changeover from the GATT to the WTO substantially altered the availability of many of the policies used by the NICs.[6] In addition to imposing disciplines on a wider range of activities, the WTO was also better equipped than the GATT to enforce compliance. In order to understand the outcomes of these changes, in this Section we establish the policy context. This Section builds on existing studies by using their suggested list of policies (Figure 1) and then going on to explain how they were treated in the literature, how they were used by the NICs, and note how they are treated by both the GATT and the WTO. This will illustrate the extent to which the WTO has constrained Members' policies through the implementation of new agreements.

We discuss nine specific policies in two subsections modeled on the Lall and Teubal (1998) breakdown offered above. The first set of policies includes those known as "horizontal" industrial policies. These are policies that are not selective in terms of specific industries but, rather, provide economic benefits that are meant to improve specific market activities.

The second set of policies includes "selective" industrial policies. These policies target specific activities or industries. These policies are generally in violation of countries' WTO commitments. In this category, we analyse import controls, export subsidies, production subsidies, weak intellectual property rights (IPR) protection, and local content requirements.

[6] There are also a number of other sources that contribute to the shrinking policy space available to countries: mission creep in aid agencies; and free trade agreements. For a historical perspective, see Chang, 2005. In this paper, we focus exclusively on the WTO.

A. *Horizontal Interventions*

1. Research and development

Research and Development assistance is commonly used to address the under-investment in research that exists because firms in high-technology industries are generally unable to fully appropriate the returns to R&D.[7] The economics literature tells us that the effect of research subsidies on technological progress is unambiguously positive (Grossman and Helpman, 1991; Klette, Moen and Griliches, 2000).

This type of assistance is critical for industrialization because of the dependence on productivity growth and innovation (Shapiro and Taylor, 1990). The NICs realized this and subsidized R&D as a means of reducing the cost/benefit spread and encouraging innovation.

Research subsidies were not prohibited under the GATT and were, in fact, non-actionable under the WTO up until 1999. Since 1999, Article 8 (Identification of Non-actionable Subsidies) of the Subsidies and Countervailing Measures Agreement has expired, and research subsidies are now actionable, though not specifically prohibited.

2. Skills upgrading

Skills upgrading policies such as funds for education and training are also seen by the literature as unambiguously positive. This is because education is a public good with positive externalities. These externalities lead this type of investment to increase the efficiency of economic and political institutions (Schultz, 1988). Existing research suggests that countries with higher skills will be better able to attract foreign direct investment (FDI) and better absorb technology (Keller, 2004). And once they have attracted FDI, it will be of the type that emphasizes training and other skills-building measures (Ripoll, 2005).

Though high education levels are not a sufficient pre-requisite for development, low levels of human capital limit the ability of countries to absorb the benefits of free trade and investment. Neither the GATT nor the WTO regulate government-sponsored training and education policies and, in fact, they both participate in capacity-building activities.

3. Performance requirements

There is a strong literature on the effects of performance requirements that are imposed on foreign firms as a condition of their investment. Both developing and now advanced countries have used this type of investment regulation during their industrial periods (Chang, 2003). The literature tells us that in the presence of spillovers,

[7] For a survey of the various studies on the different rates of social and private returns, see Hall, 1996.

performance standards can: (1) act as a coordinating mechanism (Davies and Ellis, 2001); and in the presence of barriers to trade, export performance requirements can be a useful way to (2) maintain the trade balance, particularly in the developing countries (Brewer and Young, 1996), and (3) mitigate the distorting effects of foreign capital inflows, which is welfare enhancing (Rodrik, 1987). These results are especially important in developing countries, where there is evidence that foreign capital can crowd out domestic capital.

The other form of performance requirements—as a control mechanism used by governments that grant subsidies to domestic enterprises—has also been treated by the literature. Theories of control mechanisms and interventionalist governments tend to focus on whether or not government intervention solves or exacerbates the market failures that it is intended to address. As Haussman and Rodrik (2003) pointed out, there is often uncertainty about which goods a country should be producing. They point out that making the right investment decisions is key to future growth, since it determines the pattern of specialization. Gaumory and Baumol (2000) also note that the current international economy means that there are multiple best outcomes. The argument here is essentially that when it is unclear what a government could specialize in, there is value in "tinkering" with various technologies and industries (Evanson and Westfal, 1995).

The NICs used performance requirements on subsidies to ensure that recipient agents were using them in a developmentally useful way. Performance requirements on their own merit were not limited by the GATT. However, in 1984, the *Canada–FIRA* Panel dispute demonstrated that performance requirements that were attached to the receipt of subsidies were actionable. Yet, even in this particular Panel case, the developing countries agitated for the inclusion of a paragraph in the Panel ruling that pointed out that it did not apply to them.[8] As a result, in the *FIRA* case, the ruling was that local content requirements were inconsistent with GATT Article 3 but that performance requirements were not.

Though they were part of the Uruguay Round discussions, export performance requirements are not prohibited under the Agreement on Trade-Related Investment Measures (TRIMs Agreement). They are only inconsistent if they are applied differentially to domestic and foreign producers, in which case they are a violation of GATT Article 3 (National Treatment).

[8] In the case that pre-dated and foreshadowed the Agreement on Trade-Related Investment Measures, the Panel ruled Canada could not give differential treatment to Canadian firms. Because a group of developing countries threatened to block the Panel decision, the 1984 settlement includes a paragraph at the end that the interpretation would not apply to the developing countries: "The Panel recognizes that in disputes involving less-developed contracting parties, full account should be taken of the special provisions in the General Agreement relating to these countries." Panel Report, GATT FIRA Case, 7 February 1984, 5(a) 5.2.

B. *Selective Interventions*

1. Tax manipulation

Preferential internal taxes on domestic goods is one way countries can address the infant industry problem. Many of the NICs used preferential tax rates for domestic goods in order to limit imports in certain sectors. In particular, countries manipulate the WTO's requirement that "like" or "similar" products be taxed the same. This is a policy that is generally used to promote the use of domestic goods for the local market rather than to encourage exports.

This is ruled out by GATT Article III (National Treatment), which states in paragraph 2 that:

> "The products of the territory of any contracting party imported into the territory of any other contracting party shall not be subject, directly or indirectly, to internal taxes or other internal charges of any kind in excess of those applied directly or indirectly, to like domestic products…"

2. Import controls

The NICs implemented a number of import controls and licensing requirements. These policies were used to protect infant industries in the early stages of development. Though this form of policy has ostensibly fallen out of favor since the disastrous experience of the Latin American countries with import substitution policies, in fact, it remains an important subject of the WTO dispute settlement body.

This is ruled out by Article 3, paragraph 2, of the Agreement on Import Licensing Procedures, which says:

> "… non-automatic licensing shall not have trade-restrictive or -distortive effects on imports additional to those caused by the imposition of the restriction. Non-automatic licensing procedures shall correspond in scope and duration to the measure they are used to implement, and shall be no more administratively burdensome than absolutely necessary to administer the measure."

3. Export subsidies

Export subsidies are meant to protect and promote domestic production. While they are an attractive policy tool for countries seeking to nurture infant industries, they must be used strategically in order to promote innovation and productivity growth. They constitute a policy that is particularly popular in agriculture and have been used by all countries to assist the development of their domestic industries.

The majority of the literature on export subsidies views them as a negative policy intervention. Specifically, the literature focuses on the fact that producers are likely to have greater knowledge of product markets than governments do. As a result, much of the political economy literature assumes subsidies are an inefficient way to encourage firms to export.

Despite this view, there are a number of papers that point out that export subsidies, under certain conditions, can be welfare increasing. The positive domestic effects from export subsidies build mainly from Brander and Spencer's (1985) model of imperfect competition, which shows that export subsidies can improve domestic welfare in the presence of existing distortions (such as imperfect competition). In this case, it is because the domestic firms are induced to increase their output while the foreign firms will decrease output. Overall, subsidies are an attractive rent-shifting policy tool for countries that want to give less productive domestic producers the ability to produce for the international market. Export subsidies are particularly popular in agriculture and have been used by all countries to assist the development of their domestic industries (Brander and Spencer, 1985).

Though most export subsidies were prohibited for Tokyo Round signatories to the Subsidies Code,[9] other types of subsidies were still recognized as being legitimate instruments of social and economic policy.[10]

This has been ruled out by Part II of Article 3 of the Agreement on Subsidies and Countervailing Measures:

> "… except as provided in the Agreement on Agriculture, the following subsidies, within the meaning of Article 1, shall be prohibited: (a) subsidies contingent, in law or in fact, whether solely or as one of several other conditions, upon export performance…"

4. WEAK IPR PROTECTION

The literature tends to focus on the importance of intellectual property protection to encourage creative activity. However, when one takes into account the way that the NICs used intellectual property, the literature provides some different results. There are different dynamics between innovators and imitators. Innovators have to worry about how to appropriate returns on their R&D investment. Imitators, on the other hand, are concerned with profitably adapting and adopting different technologies. As Amsden (2001) points out, the NICs were imitators.

The literature suggests that for the developing countries: (i) stronger patent regimes will actually deepen their technology dependence (Ullrich, 2004); (ii) the ability to pirate technology may actually give Southern firms the greatest welfare gains (Chin and Grossman, 1988); and (iii) non-enforcement of intellectual property is welfare enhancing under existing conditions (Markussen, 1998).

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[9] Article 9(1): "Signatories shall not grant export subsidies on products other than certain primary products."

[10] Article 11(1): "Signatories recognize that subsidies other than export subsidies are widely used as important instruments for the promotion of social and economic policy objectives, and do not intend to restrict the right of signatories to use such subsidies …"

Licensing is an expensive, and in many technologically advanced sectors, prohibitive, requirement. And technology transfer from foreign firms is not guaranteed when knowledge is proprietary. Reverse engineering and copying were key means of attaining technology that foreign firms would not share. In countries like Brazil and India, weak patent protection was a way to encourage local pharmaceutical firms to produce generic drugs for both domestic use and export. This enabled these sectors both to benefit the domestic market and to become efficient producers of some advanced technology goods. The GATT did not focus on IPR enforcement, but with the advent of the Agreement on Trade-Related Aspects of Intellectual Property Rights (the TRIPS Agreement), enforcement has been vigilant.

This is ruled out by Part III, Section 1 ("General Obligations") of Article 41 TRIPS, which states:

> "Members shall ensure that enforcement procedures as specified in the Part are available under their law so as to permit effective action against any act of infringement of intellectual property rights covered by this Agreement, including expeditious remedies to further infringements …"

5. LOCAL CONTENT REQUIREMENTS

The theoretical literature expounds on the distortions that can be caused by the imposition of local content requirements. Under the assumption of perfect competition, local content requirements are unambiguously welfare deteriorating, since they distort producer incentives and raise the price of the final good (Grossman, 1981). In particular, the response of foreign firms is such that content requirements increase price competition and reduce domestic profits. As a result, both manufacturing efficiency and foreign welfare decrease (Belderbos *et al.*, 2002).

This conclusion, however, is based on the assumption of perfect competition and equality among investors. Once this assumption is removed, there are a number of effects that can benefit domestic industries. For example, local content requirements can (i) protect vertically integrated domestic industries and (ii) induce inward FDI in intermediate goods production. They can also (iii) act as a mechanism for raising employment levels and (iv) shift profits to domestic firms if foreign firms rely on imported inputs more than do domestic firms (DeSilanes, Markusen and Rutherford, 1993).

Local content requirements are a risky means of encouraging domestic industry, since governments must be able to evaluate parts and components industries (Amsden, 2001, p. 153). However, in cases where governments have successfully implemented such requirements, they have had significant stimulatory effects on domestic industries. Content requirements on automotive assembly factories in Brazil were a key reason that these industries were able to grow at the rate at which they did (Shapiro and Taylor, 1990).

This is ruled out by Article 2 of the TRIMs Agreement, whose Annex notes in paragraph 1 that:

> "TRIMs that are inconsistent with the obligation of national treatment provided for in paragraph 4 of Article III of GATT 1994 include those which are mandatory or enforceable under domestic law or under administrative rulings, or compliance with which is necessary to obtain an advantage, and which require: (a) the purchase or use by an enterprise of products of domestic origin or from any domestic source, whether specified in terms of particular products, in terms of volume or value of products, or in terms of a proportion of volume or value of its local production …"

6. PRODUCTION SUBSIDIES

The literature predicts that production subsidies will increase production and may be a first best response in the case where tariff barriers exist.[11] In fact, Bagwell and Staiger (2004) go so far as to suggest that the WTO rules that limit these types of subsidies may limit the ability of tariff negotiations to efficiently expand market access. Maggi (1996) built on the Brander and Spencer (1985) export subsidy model to show that a subsidy to a firm's productive capacity can be designed in such a way that it will always at least weakly increase the home country's income regardless of the type of competition.

The NICs implemented production subsidies in various forms that were tied to performance standards. This enabled governments to both encourage production in non-traditional industries and, at the same time, monitor the progress of the recipient firms.

Production subsidies are not explicitly prohibited under the WTO. However, the form in which they were applied by the NICs—as tied to performance requirements—is prohibited as a specific subsidy.

In this Section, we saw how the NICs used industrial policies to address market failures and other capacity problems that face developing countries. We then went on to note explicitly where in the WTO Covered Agreements these policies are prohibited. Clearly, policy space has been contracted on paper. In the next Section, we go on to look at the extent to which it has been contracted in practice.

III. UNILATERAL COMPLIANCE

Many of the NICs liberalized their markets selectively during the 1960s and 1970s. This enabled them to effectively sequence reforms and allocate subsidies in such a way that certain sectors benefited from capacity-improving protection while others were exposed to productivity-increasing competition. In this Section, we illustrate how common these sequencing-oriented industrial policies were during the GATT period. We then use WTO notification to review the extent to which the NICs changed these policies in response to their WTO commitments.

[11] Since production subsidies are a more efficient instrument than tariffs to increase production (for example, see Aiello, 2002).

The international trading regime that existed during the GATT gave countries room to decide which sectors to liberalize and in which order. As a result, countries engaged in what Amsden (2001) calls "selective seclusion", where they exposed some sectors to competition while protecting others. R&D subsidies and import controls protected infant industries which were further supported by local content requirements. Other industries which the NICs felt would benefit most from competition and international exposures were subject to export incentives and export performance requirements. This form of sequenced market opening was an important aspect of the industrial success of the NICs.

While economic theory espouses trade liberalization as efficiency increasing, there is a large literature concerned with the proper sequencing of market opening and reforms. In particular, it espouses the importance of gradual rather than sudden reforms. (Edwards, 1989; Little, Scitovsky and Scott, 1970). In the absence of sequencing, the literature suggests that liberalization can lead to a deteriorating balance of trade (Santos-Paulino and Thirlwall, 2004) and currency instability (Chin and Ito, 2005).

The current focus of development policy uses an open-market paradigm. As market liberalization has moved to the center of this international development paradigm, gradual reforms have been replaced by sudden market opening that is being required by international loan conditionality and the requirements of membership in international organizations and free trade agreements. The increasing pace of liberalization[12] suggests that countries in the WTO era have lost much of their ability to sequence market opening in the way that they did during the GATT era.

In addition to a loss of ability to sequence market opening, countries are also subject to increased resource diversion as they are faced with higher compliance costs. Member countries are implementing more rigorous standards than they might have done unilaterally. This, in turn, is problematic in two ways. First, developing countries are being forced to raise their existing standards to developed country levels. Though many of the new WTO standards had been developed from the Tokyo Protocols and standards that were common among the advanced countries, few of them had been signed by the developing countries; so, while the advanced nations had already implemented new standards, the developing countries had to play catch up. And second, countries are being forced to implement standards that they did not have before. This reduces the funds both as governments work to raise standards and as firms are forced to follow them. A recent paper found that welfare losses to India totaled US$ 713 millions, while benefits to firms totaled US$ 50 million (Chaudhuri *et al.*, 2005). There are less overall funds available to devote to the few industrial policies that remain available, such as skills upgrading.

[12] The World Bank (2001) noted that the average tariff rate on manufactured goods had fallen from 40 per cent to less than 5 per cent in 2001.

Many of the discriminatory industrial policies discussed in this article enabled countries to institute sequencing of trade liberalization. *Figure 2* illustrates the scope of policies that were in place in the NICs during the GATT era. Selective industrial policies were common to all of the NICs in one form or another during the GATT era. The TPRs also reveal that popular industrial policies were in place right up until the introduction of the WTO.

FIGURE 2

NICS MAINTAIN DISCRIMINATORY POLICIES INTO THE 1990S, DECLINING AFTER 1994

	Local Content Requirements		Import Controls		Export Incentives		Export Performance Requirements	
	GATT	WTO	GATT	WTO	GATT	WTO	GATT	WTO
Brazil	×	○	×	○	×			○
India	×	○	×	○	×			
Indonesia	×	○	×		×			
Malaysia	×		×	○	×		×	
Mexico	×		×	○	×		×	
South Korea	×		×	○		○		
Thailand	×		×		×			

Source of GATT data: Trade Policy Review Reports, Meeting Minutes, and related documents 1990-1993.
Source of WTO data: Dispute Settlement cases, Trade Policy Review Reports 1994-2005.

In addition to showing the popularity of discriminatory industrial policies during the GATT era, Figure 2 also shows that many of these were withdrawn in the WTO period. This indicates very clearly that the NICs lost many of the tools that they had previously used to sequence reforms and liberalization.

Figure 2 also shows that many of the NICs maintained prohibited policies into the WTO period. In addition, several countries imposed new prohibited industrial policies during their phase-out periods (Purcell, 2001). However, unlike the case of the GATT-era Trade Policy Reviews, which mentioned the existence of various policies in this chart, the WTO-era Trade Policy Reviews almost uniformly denied that their countries maintained any discriminatory industrial policies. Nearly all of the information about WTO-era policies had to be extracted from dispute settlement cases and other country-based reports.

This indicates that countries understood that their policies were inconsistent with their commitments but were unwilling to withdraw them wholesale upon the expiration of their compliance timelines. What we learned from the Trade Policy Reviews is not only that countries did unilaterally withdraw their industrial policies but also that, in some cases, they did not. In the next Section, we ask if there have been consequences to this.

IV. Dispute-Induced Compliance

The new dispute settlement mechanism of the WTO was hailed as one of the institution's most important innovations from the GATT structure. While the GATT system was geared more towards encouraging resolution through negotiation, the WTO's dispute settlement mechanism is designed to promote compliance with its rulings. Here, we look at the role the dispute settlement mechanism has played in enforcing WTO regulations that require countries to withdraw their discriminatory industrial policies.

The GATT-era dispute settlement mechanism's focus on informal negotiations was generally accepted as a flawed system (Jackson, 1997). Either party could block the formation of a panel or the adoption of a panel decision. Rulings were limited to recommendations for future conduct and did not include mechanisms for compensation (Hudec, 2002).

As a result of the GATT's limited engagement with the developing countries, dispute-induced compliance with GATT regulations was limited for the countries examined in this analysis. The results of the GATT's inattention to the developing countries was illustrated by the commonality of GATT-prohibited policies in their industrial strategies (see Figure 2). The WTO dispute settlement mechanism, however, was designed to address the shortcomings of the GATT-era system by formalizing the process of negotiation and compliance.

The WTO made a number of changes to the dispute settlement mechanism that had existed in the GATT era. The automatic adoption of panel decisions addressed the potential for blocking that had existed with GATT panels. The automatic adoption of panel rulings along with the introduction of compliance timelines also introduced additional coercive elements into the dispute system. This suggests that States are less able to affect the application of international regulations. This constriction of State-level decision-making is generally seen as a positive effect in the literature (see, for example, Chorev, 2005).

In the previous Section, we saw that some NICs chose to maintain WTO-prohibited policies in the face of their new commitments. Here, we present evidence that the WTO has been active in adjudicating these non-compliant measures.

Figure 3 illustrates two important facts. First, prohibited policies remained in effect both in the developing countries and in the industrialized countries. And second, the WTO dispute settlement mechanism has spent a significant proportion of its time adjudicating industrial policies. Taken together, cases in the WTO that have dealt with prohibited industrial policies make up 25 per cent of total cases. This percentage is considerably higher if export subsidies on agricultural products are included. This means that more than 25 per cent of the 90 cases that have reached the full panel process in the

FIGURE 3
PANEL CASES INVOLVING PROHIBITED INDUSTRIAL POLICIES, 1995-2005

Defendant	Local Content Requirements	Import Controls	Export/Production Subsidies*	Tax Manipulation	Weak IPR Enforcement
Developing countries	11 (Brazil, India, Indonesia)	19 (Argentina, Brazil, India, South Korea, Malaysia, Mexico, Philippines)	3 (Brazil, South Korea, Philippines)	10 (Chile, Dominican Republic, South Korea, Mexico, Peru)	5 (Argentina, India, Pakistan)
Industrialized countries	0	4 (European Communities)	18 (Australia, Belgium, Canada, European Communities, France, Greece, Ireland, Japan, Netherlands, United States)	4 (Japan, European Communities)	10 (Canada, Denmark, European Communities, Greece, Japan, Portugal, Sweden)
Total cases	11 (3%)	23 (7%)	21 (6%)	14 (4%)	15 (4.5%)

Source: WTO chronology of cases in the dispute settlement mechanism.
Note: *Non-agriculture only.

WTO dealt with getting rid of a tool used by developmental States. Below we present a general analysis of how these cases affected the developing countries in each category.

Figure 3 lists those cases where industrial policies have been taken to the GATT/WTO dispute settlement mechanisms. In the following, we take a closer look at an illustrative case in each column to see if it reveals any continuity of policy or strategic use of the WTO mechanism. All the cases about local content requirements focused on the auto industry. For both the Indonesian and Indian cases, the defendants claimed developing country status as part of their defense of their various measures. Indonesia cited *lex specialis* in the Agreement on Subsidies and Countervailing Measures and India justified its measures for balance of payments reasons. In both cases, the justifications were rejected and the measures were withdrawn.

The *Indonesia–Autos* case (WT/DS54 and WT/DS55) presents an interesting example of how a country was imitating policies that had previously been successful but which were no longer feasible under the WTO. The local content requirements that it had placed on auto manufacturers were very similar to those used by Brazil in its auto policies. In the case of Brazil's policies, they were implemented during the GATT era and were an integral element in the establishment of their local auto manufacturing industry (Shapiro, 1993). However, for Indonesia, in 1996, the European Communities, followed by Japan and the United States, requested consultations with

Indonesia about local content provisions of Indonesia's National Car Program.[13] The Panel ruled against Indonesia in 1998; by 1999 Indonesia had implemented a new, compliant, policy.[14]

The cases that dealt with import controls were largely concerned with agricultural goods or sensitive sectors like textiles. Policies included import restrictions on sensitive goods, non-automatic import licences to limit foreign goods, and discriminatory tariffs on certain imported items. Very few of the cases extended beyond the consultations stage. The lack of movement from consultations to panel decisions is well documented as a feature of the WTO in general. Robert Hudec offered two hypotheses for this: either countries change their offending laws voluntarily; or the threat of a panel is used as a negotiating tool for its threat effect (Hudec, 1999; Butler and Hauser, 2000).

Adjudicated export subsidies were mainly in competitive, large-scale manufacturing industries that require economies of scale, with large start-up costs that require intervention to jump start production. These are industries such as aircraft, commercial shipping vessels, and motor vehicle production.

In *Korea–Commercial Vessels* (WT/DS273), the European Communities complained that South Korea had been subsidizing its shipbuilding industry through special tax breaks, subsidies, and advance payments. South Korea has a long history of government support for the shipbuilding industry, and many of these policies had been in place for long periods of time (Amsden, 1989). Certain of these were found by the Panel to consist of prohibited export subsidies, and South Korea simply let existing loans expire once they were repaid.

Cases in the tax manipulation category deal with policies that discriminated against foreign products through the manipulation of definitions of the products. Governments differentiated domestic products by taxing them differently from similar imported goods.

In *Chile–Alcohol* (WT/DS110), Chile was charged with imposing higher domestic taxes on imported spirits than it did on domestic "*pisco*". The Panel found Chile's taxes to be inconsistent with its obligations, and the Decision was upheld in appeal. Chile progressively reduced the tax rates applied to imported spirits until they met the 27 per cent rate on "*pisco*" in 2001.

The intellectual property cases all dealt with countries that inadequately translated the TRIPS obligations into their domestic policies. The majority of these cases were concerned with pharmaceutical patents. In general, new laws were implemented either immediately or as a result of panel proceedings.

In *India–Quantitative Restrictions* (WT/DS92), India was charged with failing to protect foreign patents on agricultural chemicals and pharmaceuticals. India has had a

[13] Interestingly, there were several requests for consultations against Brazil during 1996 and 1997, but none ever went beyond the consultation stage.

[14] WT/DS59/R.

long history of encouraging domestic producers to manufacture pharmaceuticals both to supply the population and as a part of the learning process (Feinberg and Manjumdar, 2001). The Panel found India to be in violation of certain TRIPS provisions, and India enacted new legislation that conformed to the Panel's recommendations.

The cases cited above illustrate two interesting facts. The first is that many of the policies had been in place for relatively long periods of time. In general, countries had not implemented new, non-compliant policies; they had simply failed to withdraw them. This suggests that WTO regulations have a deterrent effect on new non-compliant policies but a weaker effect on existing non-compliance. A second fact illustrated by the cases above is that the NICs often tried to justify non-compliance with special and differential treatment claims *ex post*. In all of the cases above, only Indonesia successfully used this argument in its initial presentation to gain a longer transition period for its policy change.

In the previous Section, we saw that the frequency of various industrial policies fell with the implementation of new text-based obligations under the WTO. However, as the Trade Policy Reviews, in that case, and as the existence of disputes here indicate, these new rules presented a reduction of policy space mainly by deterring the implementation of new, inconsistent policies rather than by encouraging the removal of existing policies.

In this Section, we saw that the WTO dispute settlement mechanism has served an important role in the actual reduction of policy space by reinforcing and improving the moderate compliance record that resulted from the change in the rules in 1994. In the next Section, we ask if the non-compliance suggested above has been attenuated by the practice of policy shifting.

V. POLICY SHIFTING

Shifting is simply the practice of moving a policy from one type of authorization to another. In the case of the WTO, the incentive to engage in policy shifting comes from both the significant expected costs of structural reforms countries had to implement to comply with their WTO commitments[15] and the expected developmental benefits of the policies themselves.

As we saw earlier, some of the industrial policies that are inconsistent with WTO regulations were either not addressed or not prohibited by the GATT. Policies that had previously been unregulated were common in the developing countries up until 1994 (see Figure 2). After 1994, countries had to withdraw, revoke or reclassify various industrial policies that, in some cases, had been longstanding components of their development strategies. We saw in both Figures 2 and 3, that often developing countries

[15] The developing countries generally had to implement reforms that were already in place in the advanced countries; see, for example, Finger and Schuler (2000).

did not voluntarily withdraw or revoke policies within negotiated timelines. In this Section, we examine evidence that suggests that countries attempted in some cases to maintain policies through reclassification.

The reclassification of industrial policies falls mainly under the umbrella of special and differential (S&D) treatment within the WTO. S&D treatment is not a single policy but, rather, a number of different policies that are intended to ease the transition for the developing countries. Though S&D treatment appears to expand policy space somewhat, this type of treatment is not legally enforceable and depends primarily on the willingness of governments to pay attention to it (Keck and Low, 2004).

Shifting of prohibited policies to other classifications can occur at various stages of implementation.[16] In Section II, we examined the cases where countries were brought into compliance by either the threat or the act of adjudication. In many of those cases, the developing countries' defense strategies consisted of appeals to their developing country status. These were belated attempts at policy shifting of prohibited policies.

Article 21.2 of the Dispute Settlement Understanding gives special attention to the implementation of rulings by developing countries. For those policies that are adjudicated through the dispute settlement mechanism, panels are expected to explicitly note how they took into account special and differential provisions in their rulings. Despite the existence of this Article, up to the current time there appears to have been only a single case where it was applied. This occurrence was in the *Indonesia–Autos* case, where the S&D provision was invoked to extend the implementation period by six months.

There are also a number of ways that countries can shift inconsistent policies before they are forced into compliance by the dispute settlement mechanism. One way is through notification. When an inconsistent policy is adjudicated and prohibited in the dispute settlement mechanism, countries are generally given 15 months to adjust their domestic regulations to compliance. However, if a policy is notified, countries appear to gain some leeway in terms of the compliance period. Though notification does not guard against other countries bringing the policy to the dispute settlement mechanism, in general notified policies do not appear to have yet been adjudicated.

To illustrate some instances of pre-adjudicative policy shifting, we went to the country notifications. According to their notifications, only Brazil and India had used balance of payments exceptions in the course of their industrialization.[17] All countries except for Thailand had notified import licensing requirements, and all countries except for South Korea and Brazil had notified TRIMs (see *Figure 4*).

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[16] One issue we do not discuss here is compensation-based shifting. The WTO sets down policy regulations but also enables countries to violate those regulations if they provide compensation to countries that are negatively affected by the violation. This type of shift is known as compensatory shifting. The State is not claiming that the policy has been withdrawn or has not explicitly moved it to a WTO-sanctioned exception, but, rather, the State is accepting that it needs to have this policy and is willing to provide compensation in order to maintain it (Weiss, 2005).

[17] Brazil, July 1995: WT/BOP/N/4; India, July 1996, WT/BOP/N/11.

FIGURE 4
NOTIFIED EXCEPTIONS TO WTO COMMITMENTS

	Import Licensing	Balance of Payments	Trade-related Investment Measures
Brazil	1998, 2002, 2003, 2006	1995	
India	2005, 2002	1996	1995
Indonesia	1998, 2003		1995
Malaysia	1997		1995, 1996
Mexico	1998, 2004		1995
South Korea	1996, 1998, 2002, 2005		
Thailand			1995

Source: Compiled by the authors based on official notifications to the Agreement on Import Licensing Procedures, the Agreement on Trade-Related Investment Measures, and the GATT.

These notifications show that in some cases, policies that were clearly going to be at odds with countries' upcoming WTO obligations were implemented just before the Single Undertaking. For example, Indonesia's 1995 TRIMs notification includes a number of policies promulgated in 1993.[18]

Policy shifting is by no means reserved to the developing countries. In fact, there is ample evidence that the advanced industrialized countries have engaged in it, as well. A 2003 report pointed out both that R&D subsidies are heavily used by the industrial countries and that these countries continue to use performance requirements either by changing their form or exploiting loopholes in the WTO (RIS, 2004).

Another form of policy shifting is simply not notifying or renaming policies to avoid detection. This is a problem that is typical within the WTO. In nearly every report from the Import Licensing Committee, the Chair admonishes Members for not submitting notifications, missing deadlines, and not responding to questionnaires from other Members.[19]

VI. CONCLUSIONS

In the above analysis, we constructed a composite of the major policies used by the NICs during their industrial push periods. We used this as a base line to show that the establishment of the WTO led those countries to change those policies that were not consistent with their commitments.

We confirmed prior rules-based analyses that the WTO Covered Agreements have constricted some important policy space for Member developing countries. Many policies that were common in the NICs are inconsistent with their current international

[18] Indonesia TRIMs Notification (23 May 1995), G/TRIMS/N/1/IDN/1.
[19] See, for example, Import Licensing Committee, Meeting of 5 May 2004 and Meeting of 15 June 2005.

commitments. In contrast to these analyses, however, we found that countries did not immediately and fully withdraw inconsistent policies. In fact, many of them maintained their policies and either notified them or waited until they were adjudicated. This was not simply a case of countries wanting to keep existing policies; there is also evidence of countries implementing inconsistent policies even after 1994. Nevertheless, our central finding is that the WTO contracted the available policy set in practice.

Though we focus mainly on the limitations that countries have as a result of WTO policies, there is also evidence that there are windows still not closed that countries can use to expand their policy space. There are a number of popular industrial policies that were not prohibited by the WTO, such as skills upgrading. And there are a number of others that are prohibited but which have not *yet* been enforced in practice, such as subsidies for R&D.[20]

[20] Bora and Lloyd (1999) take the opinion that loopholes that are available to the developing countries are also available to the industrial countries and so they do not provide an advantage.

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