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**World Trade Organization**  
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REVISITING TRADE AND DEVELOPMENT NEXUS

What Global Fragmentation Means for the WTO:

*Article XXIV, Behind-the-Border Concessions, and A New Case for  
WTO Limits on Investment Incentives*

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# What Global Fragmentation Means for the WTO:

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A New Case for WTO Limits on Investment Incentives\**

Emily J. Blanchard<sup>†</sup>

December 19, 2013

## **Abstract**

The rapid rise in global fragmentation – foreign investment, global supply chains, and ‘production sharing’ – is fundamentally reshaping the multilateral trading system. This paper uses a simple economic modeling framework to understand how the global fragmentation phenomenon may reshape the WTO, and particularly its developing country members that are most affected by the rise in global production sharing and foreign direct investment. The paper argues that the surge in global production sharing, supply chain agreements, and investment has not only recast the role of existing GATT/WTO rules, but that these same forces also create a strong rationale for new multilateral disciplines pertaining to investment incentives and other ‘behind-the-border’ policies.

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# 1 Overview: A Brave New World

When the General Agreement on Tariffs and Trade (GATT) was first ratified in 1947, a ‘shallow’ trade agreement was largely capable of mitigating opportunistic manipulation of international activity by independent governments. At the time, countries’ geographic borders generally coincided with their national economic interests, and exports were produced using primarily local labor, capital, and inputs centered on a domestic value chain. Trade between exporters in one country and importers in another typically took the form of arms-length exchanges of raw materials, commodities, and final goods traded at the border.<sup>1</sup> And so, in that bygone era of national ownership and localized production, shallow integration measures to manage market access through the core principles of reciprocity and most favored nation (MFN) treatment sufficed.

The world is different today. Production is increasingly fragmented across borders through complex supply chains, foreign investment, and intricate production sharing arrangements. Even cross-border portfolio holdings have introduced new and deeper economic connections between trading partners. This global fragmentation phenomenon poses fundamental questions for the WTO and its member countries. On one hand, the ‘brave new world’ of production sharing could partially supplant the tariff-binding and trade-liberalizing roles of the WTO, as some governments unilaterally expand market access in response to their constituents’ offshoring investments. At the same time, however, foreign investment or tightly woven contractual relationships between foreign suppliers and domestic buyers of customized intermediate goods could trigger opportunistic manipulation of tariffs, investment subsidies, and behind-the-border instruments by governments on both sides of trade and investment transactions.

The longstanding shallow integration mandate of the GATT/WTO, which by construction limits attention to countries’ trade and trade-related policies, may not be equipped to counter the host of new incentives and opportunities for policy ma-

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<sup>1</sup>In more recent parlance, gross trade equalled trade in value-added, at least to a rough approximation.

nipulation. The recent surge in preferential trade agreements – many of which carry broad and powerful behind-the-border provisions – may be in part a reflection of latent demand for richer agreements. Moreover, to the extent that regional agreements allow some trading partners to leverage a reinforcing cycle of investment and trade liberalization, they may undermine further *multilateral* talks.

Based on existing research on the economics of trade agreements, this paper traces out the implications of global fragmentation and international investment for governments' unilateral policy objectives and addresses potential points of conflict, thus evaluating the practical implications for the future of the GATT/WTO in the 21st century. Particular attention is afforded to the case for adding additional disciplines to the WTO mandate, including cooperative agreements to limit foreign investment incentives and other behind-the-border policy concessions.

The discussion is organized around two key questions. Section 2 addresses the first: what do global supply chains, production sharing, and foreign investment mean for existing trade policy objectives and the WTO's current 'shallow integration' mandate? The section opens by describing a simple analytical framework that characterizes the role of the GATT/WTO as an elegant solution to a classic 'terms-of-trade driven prisoners' dilemma'. By outlining the canonical economic understanding of the role of the GATT/WTO in the traditional national-ownership framework, it then becomes a relatively simple matter to ask how that traditional mercantilist understanding needs to be updated in light of the global fragmentation/ownership phenomenon. The remainder of Section 2 then maps recent research findings into the terms of the simple modeling framework to demonstrate the influence of global fragmentation, investment, and production sharing.

The exercise yields three broad conclusions, centered on three distinct features of the global fragmentation phenomenon. First, *international ownership* can induce governments to expand market access unilaterally but also, ominously, preferentially. Second, *complex bargaining relationships* under global production sharing introduce additional opportunities for distortionary policy manipulation by opportunistic governments. Third, *longer supply chains* magnify the effects of existing trade barriers,

particularly when rules of origin or value added cumulation rules are not carefully calibrated among trading partners. The section closes by evaluating the central role of preferential trade agreements, arguing that bilateral and plurilateral free trade deals may signal revealed preference for deeper agreements.

Section 3 of the paper turns to a closely related and particularly important issue, asking whether the global fragmentation phenomenon strengthens the case for including cooperative restrictions on investment incentives under the WTO. As in the previous section, the discussion opens by developing a formal modeling structure to guide analysis. The case for a multilateral (or plurilateral) agreement over foreign direct investment (FDI) subsidies (broadly defined to include behind-the-border concessions) is then evaluated through the lens of this framework.

The modeling exercise highlights a subtle but important point: the *interaction* between potential trade preferences and vertical (export-oriented) FDI can exacerbate a ‘race-to-the-bottom’ where potential FDI-hosts aggressively compete for a place in the global supply chain through investment incentives and bilateral behind-the-border policy concessions. The intuition is simple: to the extent that large investing countries devote limited negotiating resources to forming FTAs with countries in which they have the greatest FDI interests, *simply the possibility* of preferential agreements may induce investment-host countries to over-subsidize FDI. Ergo, potential host countries would be better off under an agreement limiting policy competition for FDI, including bilaterally negotiated ‘deep concessions’ that impose behind-the-border policy restrictions.

The paper closes in Section 4 with a discussion of the policy implications for developing countries. Emerging markets and other developing countries stand to gain the most from preferential trade deals and are increasingly well-positioned to join or expand their role in the global value chain. Many already find themselves in heated competition for foreign investors’ dollars and could benefit immediately from a multilateral investment agreement. There is an argument, too, that the promise of lucrative preferential market access under Article XXIV may lead developing countries to accept asymmetric bargaining positions vis a vis large trading partners offering

bilateral trade agreements in exchange for potentially draconian behind-the-border concessions.<sup>2</sup>

## 2 Global Fragmentation and Existing Trade Rules

This section traces the implications of global supply chains and foreign investment for *existing* trade rules. To structure ideas and clarify exposition, this section opens by developing a very simple (and familiar) model for understanding the canonical economic view of the GATT/WTO in the *absence* of the global fragmentation/international ownership phenomenon. The model is used simply as a reminder of the argument by Bagwell and Staiger (1999) that together the core GATT principles of MFN and reciprocity act as a simple and effective solution to the “shallow” market access conundrum known as the ‘terms-of-trade driven prisoners’ dilemma’ in the absence of more complicated international ownership or supply network concerns.

The subsequent discussion begins by emphasizing the importance of how we define terms like ‘global value chains’, ‘foreign investment’, and ‘production sharing’, and asks what these phenomena mean at a practical level. For the purposes of economic analysis, it is argued that there are three key characteristics of the global integration phenomenon that prove most important: international *ownership*, relationship-specific *bargaining* between specialized buyers and sellers, and supply chain *lengthening* that implies more border crossings embodied within the production of a final good. Each aspect is considered in turn.

The final subsection considers the recent proliferation of regional agreements through the lens of this new framework, first looking at the extent to which the rush to preferential agreements may reflect the underlying mechanisms identified above. The section concludes by considering the additional challenges that greater regional fragmentation of production and investment may pose for the multilateral trading

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<sup>2</sup>The WTO Agreements on Technical Barriers to Trade (TBT) or Sanitary and Phytosanitary Measures (SPS) may assuage such concerns, however. These multilateral standards for regulatory convergence may reduce the scope for idiosyncratic or overzealous behind-the-border policy concessions to be embedded within ‘deep’ preferential trade agreements.

system.

## 2.1 A Simple Analytical Framework

The model outlined here paraphrases the seminal work of Bagwell and Staiger (1999) and Bagwell and Staiger (2002); readers familiar with that literature should feel free to skip to the next subsection.

Suppose a two-good general equilibrium world from the perspective of a given ‘home’ country, which is sufficiently large in world markets to influence world prices. With two goods, we may set one to be the numeraire without loss of generality. Let us denote the local relative price of the non-numeraire good by  $p$ , with the associated world price  $p^w$ . Assume (again without loss of generality) that home country’s comparative advantage lies in the numeraire good, so that the non-numeraire good is imported. Then we have that  $p = \tau p^w$ , where  $\tau$  is simply one plus the ad-valorem tariff. One of the key innovation in Bagwell and Staiger (1999) is their observation that *virtually any* government policy objective function may be characterized as function of local relative prices and the equilibrium terms of trade. Thus, in our two-good framework, without imposing restrictions on domestic political economy objectives, we may write government objectives as:

$$W \equiv W(p, \tilde{p}^w). \tag{2.1}$$

In the pre-fragmentation, national ownership context it is entirely reasonable and appropriate to assume that holding the local price fixed, government welfare increases with the country’s terms of trade (i.e.  $W_{\tilde{p}^w} < 0$ ). Any domestic political or redistributive objectives, meanwhile, are captured in the partial derivative  $W_p$ .<sup>3</sup>

Noting that the home governments’ unilaterally optimal tariff,  $\tau^o$ , will maximize its objective function, we then have that:

$$\tau^o = \arg \max_{\tau} W(p(\tau, \tilde{p}^w), \tilde{p}^w(\tau)), \tag{2.2}$$

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<sup>3</sup>See Bagwell and Staiger (1999) or (2002) for further discussion.



with the first order condition:

$$W_\tau = W_p + \lambda W_{\tilde{p}^w} = 0, \quad (2.3)$$

where  $\lambda \equiv \frac{\partial p^w}{\frac{dp}{d\tau}} < 0$ .<sup>4</sup> Representing the first order condition in this way admits a ready interpretation of the GATT/WTO. Given that the product of  $\lambda < 0$  and  $W_{\tilde{p}^w} < 0$  is positive, it must be true that at the unilaterally optimal tariff  $W_p < 0$ . That is, the home government's unilaterally optimal tariff is higher than it would be in the absence of terms of trade concerns. The immediate implication is then that regardless of domestic political objectives, any country sufficiently large to manipulate the world price has an incentive to do so – hence the role of the GATT/WTO.

At the most basic level, the role of any agreement is to create win-win (or Pareto-improving) outcomes: all parties should gain (or at least not lose) from signing a treaty. Put another way, there must be some inherent aggregate inefficiency embodied in the pre-treaty world, so that an agreement can deliver Pareto gains. In the context of trade policy, the economics literature has long identified a single source of pre-agreement inefficiency, the so-called ‘terms-of-trade externality’ embodied in  $W_{\tilde{p}^w}$ . The idea is simple: because large countries (by definition) affect world market clearing prices, they do not bear the full burden of their import tariffs, but rather shift part of the tariff cost onto foreign exporters.<sup>5</sup>

Left to its own devices, then, a large country will optimally set tariffs inefficiently high (from a world-welfare point of view). Whatever a government's domestic policy preferences (which very well may imply a positive ‘politically optimal tariff’ – i.e. the tariff at which  $W_p = 0$  – especially if import-competing lobby groups are politically active), it will always have an incentive to push the tariff *even further above* this politically optimal benchmark. The country will receive all of the benefits of a further

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<sup>4</sup>Embedded in the sign restriction on  $\lambda$  is the assumed absence of the so-called Metzler paradox (the pathological possibility that an increase in the tariff could cause the local price of the imported good to *fall*).

<sup>5</sup>When a country imposes an import tariff, it causes its demand (and thus total worldwide demand) for that imported good to fall. The *world* price of the imported good declines as a result of the diminished demand, and so the foreign exporters' profit margins will shrink. In effect, the foreign exporters thus bear part of the burden of the large country's import tax.

marginal increase in the tariff, but suffer only part of the cost.

From here the potential for a Pareto-improving trade agreement is immediate. Because all large countries have the unilateral incentive to impose these ‘cost-shifting’ tariffs, the treaty-less trading system is characterized by a ‘terms-of-trade driven prisoners’ dilemma.’ Collectively and individually all countries would be better-off if they could bind their tariffs from above at the politically optimal level. Bagwell and Staiger (1999) demonstrate that the twin pillars of the GATT, MNF and reciprocity, achieve precisely this end. Reciprocity allows governments a means to make cooperative agreements to reduce tariffs in lock-step, thus expanding market-access. MFN ensures that pairs of countries cannot, in effect, manipulate the terms of trade against excluded parties.

Notice that the simple analytical framework outlined above makes very few assumptions on governments’ underlying political objectives. Flexible government objective functions are left to capture a broad set of potential political machinations, and still the theory implies that (1) in the absence of trade agreements non-cooperative (Nash) tariffs would be inefficiently high; (2) a Pareto-improving agreement over tariffs would help governments bind tariffs from above and cooperatively expand market access; and (3) because the terms-of-trade externality is the *only* source of international efficiency, a “shallow” trade agreement over market access is sufficient for eliminating governments’ incentives to manipulate trade policy at the expense of their trading partners.

For nearly a decade, the prevailing view within economics was therefore that the shallow integration mandate of the GATT/WTO, embodied in the in core principles of MFN and reciprocity, was sufficient to fully exhaust the potential gains from multilateral trade negotiations. More recently however, first in Blanchard (2007) and (2010) and then in Antras and Staiger (2012a), that view has been challenged. In both cases, the authors have noted important features of the world trading system that are not captured in the canonical Bagwell-Staiger framework: *international ownership* and *bargaining* to determine trade prices instead of market clearing. The next two sections discuss these issues in detail.

## 2.2 Mitigating Externalities via International Ownership

*International ownership* is a fundamental feature of the broader deep economic integration phenomenon. Consider, for example, greenfield foreign direct investment, joint ventures between foreign investors and domestic partners, or virtually any type of cross-border merger or acquisition. All imply a transfer of ownership – of firm profits, factor returns, even risk – across countries. Even international portfolio diversification by individual investors (or sovereign wealth funds) constitutes a transfer of ownership across borders. Whatever the source, the ultimate effect is to muddy the distinction between national and foreign economic interests.

By driving a wedge between a country’s economic interests and its national boundaries, international ownership deals an immediate blow to the traditional ‘us-versus-them’ mercantilist understanding of trade policy as a competition between foreign and domestic interests. Intuitively, when domestic constituencies hold a direct economic stake in foreign export markets, their home government has less incentive to levy tariffs on imports.<sup>6</sup>

Formally, international ownership, particularly in the foreign export sector, will drive a wedge between a country’s traditionally understood ‘geographic terms of trade’ (the relative prices of those goods of which a country is a net exporter – regardless of ownership) and its ‘ownership terms of trade’ (the relative prices of those goods of which a country is a net seller – regardless of where those goods are produced). While trade policy is necessarily about shifting relative prices across borders (i.e. *geographic terms of trade*), governments’ welfare depends on its constituents’ real incomes, which depend in turn on the country’s national ownership position – the *ownership terms of trade*.

The upshot in the context of the model is that as the home country’s constituents take an ownership stake in their foreign trading partners, the earlier assumption that  $W_p^w < 0$  (that welfare increases with the *geographic terms of trade*) is no longer innocuous. Indeed, in a razor’s edge case in which countries hold perfectly diversified international portfolios – for instance, because of perfect international risk

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<sup>6</sup>See Kemp (1966), Jones (1967), or Blanchard (2007).

sharing –  $W_{p^w} \rightarrow 0$ ; that is, overseas investment holdings would exactly offset the beggar-thy-neighbor ‘terms-of-trade cost-shifting’ externality that would otherwise induce governments to restrict market access.<sup>7</sup> International ownership may thus partially (or even completely) substitute for the traditionally understood role of the GATT and its successor WTO to cooperatively increase market access through (shallow) reciprocal, non-discriminatory tariff concessions.

There are two major caveats to this thinking. The first complication derives from the potential for preferential agreements. Although preferential agreements can allow governments to harness the trade-liberalizing potential of international ownership, they also exacerbate potential exclusion of non-signatory countries. Furthermore, to the extent that international ownership is the result of foreign direct investment, preferential agreements induce both trade *and investment* diversion at the expense of excluded countries. Section 2.5 takes up this issue in greater depth.

The second qualification is equally important: international ownership in foreign import competing sectors alone would have no such liberalizing effect. To the contrary, theory is clear that foreign ownership in import competing sectors – for instance because of tariff-jumping, market-seeking, or horizontal foreign direct investment – would only sharpen governments’ incentives to restrict market access through tariffs. (Roughly speaking, import competing investments abroad give governments an even *greater* vested interest in improving the terms of trade, since the geographic and ownership terms of trade move in the same direction.) Thus, it is only industry-neutral or (better yet) vertical foreign investments that create a potential ‘trade-investment nexus’, whereby more investment in export-oriented operations overseas induces the *investing* country’s government to expand market access and (thus) trade.<sup>89</sup> This caveat may prove particularly important for those developing

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<sup>7</sup>Absent the potential for expropriation (an important caveat, which is discussed in the next subsection), countries would unilaterally choose globally efficient tariffs. (See Stockman and Dellas (1986), Devereux and Lee (1999), and Blanchard (2010).)

<sup>8</sup>If ownership positions are “industry neutral” (meaning that investors hold an equal share of both import- and export-oriented sectors), the liberalizing effect will dominate.

<sup>9</sup>Baldwin (2010) points out an interesting caveat in the spirit of Kojima (1975): to the extent that inward FDI in a downstream import-competing industry increases its political influence, that FDI

countries that are recipients of significant horizontal foreign direct investment flows – a consideration taken up again in Section 4.

## 2.3 Expropriation, Bargaining, and Policy Manipulation

So far, we have focussed on the potential for global production sharing, via international ownership, to reduce (or even eliminate) the negative externality in an *investment-source* country. A second and equally important feature of global production sharing and foreign investment lies in expanded *opportunities for expropriation* by opportunistic governments in *investment-host* countries. There are two key channels through which careful policy manipulation could extract returns from foreign commercial interests: increased use of behind-the-border policy instruments and, somewhat perversely, traditional trade policy. To the extent that WTO’s mandate extends to any government action that would “produce an adverse effect on the balance of commercial activity” (Hudec (1990), pg. 24), the growing scope for implicit expropriation through policy manipulation abuse merits renewed consideration by multilateral negotiators.

Global fragmentation of production and ownership sharpens the incentives for expropriative policy manipulation in two ways. First, more obviously and directly, foreign ownership of domestic firms or resources introduces the potential for implicit expropriation by investment-host country governments. When international investment is ‘sunk’ in the short run – or if foreign investors earn above market returns in the investment-host country – the potential for rent extraction from foreign investors may induce ‘rent shifting’ through domestic policy changes.<sup>10</sup>

Expropriative policy changes need not be explicitly trade-related – new taxes, technical barriers, environmental restrictions, regulations, or permit requirements could induce tariff reductions on upstream industries (though this would require the political impact of the downstream industry’s growth to outweigh the political cost of being ‘foreign’). Hillman and Ursprung (1993) also cite the potential influence of tariff jumping investors, who might seek to increase protection once they have incurred the cost of market relocation.

<sup>10</sup>This argument is developed formally in the trade policy context in Blanchard (2009).

could be structured in such a way to shift profits from foreign investors to the host government or domestic firms or workers. Likewise, tariffs could be lowered to shift rents away from foreign investors in an import-competing industry in favor of domestic consumer constituents. Alternatively, new tariffs could be imposed or raised on imported intermediate inputs used by foreign-owned firms – raising government revenue at the expense of the foreign investor. In the context of the model, foreign ownership can induce an *investment-host* country to manipulate *local* prices in such a way to benefit domestically owned firms or its consumer constituents at the expense of foreign investors, so that  $W_p$  embodies a new international externality for host-country governments – the incentive for expropriation.<sup>11</sup> Shallow agreements over market access (i.e.,  $p^w$ ) will not eliminate this expropriate externality; only a deeper agreement limiting opportunistic policy manipulation, including behind-the-border measures, could serve this role.

More surprising, perhaps, is that this sort of hold-up problem can arise even in the absence of international ownership. When buyers and sellers trade in highly specialized intermediate inputs – the type of transactions that are increasingly common as production becomes more fragmented – transaction prices are often determined by *bilateral bargaining*, rather than traditionally understood market clearing conditions. As Antras and Staiger (2012a) demonstrate, the bargaining process can be opportunistically manipulated by governments of both countries through both trade policy and behind-the-border policy changes. (The behind-the-border channel is articulated explicitly in Antras and Staiger (2012b).) When prices are determined by bargaining, cooperative agreements over traditional market access cannot guarantee globally efficient outcomes *even in the absence of international ownership*.

Unfortunately, it is far easier to recognize the potential for expropriative policy manipulation than it is to mitigate it in practice. While the existing Trade Related Investment Measures (TRIMs) protections may be too narrow, as they apply only to *trade-related* investment protections, stronger investment protections – like

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<sup>11</sup>From a technical perspective, a strict theoretical interpretation is then that mitigating the terms of trade externality – i.e. setting  $W_{\bar{p}^w} = 0$  is not sufficient to reach international efficiency – one must also tackle the expropriative opportunities embodied in  $W_p$ .

those in Chapter 11 of the NAFTA – present their own problems. Bilateral Investment Treaties (BITs) occupy a middle-ground between the multilateral TRIMs and new-generation PTA investment protections, and may thus serve as a constructive starting point in drafting a new multilateral investment agreement. Again, the key question going forward is which design features are necessary for mitigating opportunistic policy manipulation at the multilateral level, and which, if any, of those ideal policy guidelines, can be operationalized to the satisfaction of all signatories. Early progress on the topic has been made by Staiger (2011), Staiger and Sykes (2011), and Antras and Staiger (2012b), but these questions remain an important topic for future research.

## 2.4 Long Supply Chains and ‘Taming the Tangle’

A third feature of global production sharing is the *length of global supply chains*. Longer supply chains magnify the inefficiencies of existing trade barriers. As global supply chains increasingly stretch around the world to incorporate more border crossings, trade barriers may be applied to the same final product multiple times absent carefully synchronized rules of origin (ROOs) or value added tariff rules. Even in the best case scenario with careful cumulation rules and free trade, the bureaucratic and time cost of repeated border crossings may substantially increase the final price of a good. The fragmentation process essentially increases the so-called ‘effective rate of protection’ even if tariffs and other trade costs remain unchanged. Moreover, to the extent that border costs induce trade or investment diversion, one can expect these problems to be magnified by global fragmentation.

On a more optimistic note, Baldwin (2006) and more recently Baldwin, Evenett, and Low (2009) articulate a potential counterweight via the political process. Multi-national firms with long supply chains suffer most from the ‘tangle’ of complex regional and bilateral agreements and asynchronous rules of origin. To the extent that these firms have a voice in the political process, their advocacy to ‘tame the tangle’ may induce their governments to simplify and reduce trade barriers unilaterally. Mapping this argument to the context of our simple model formalizes the point. If

multiple border crossings magnify the distortionary effect of a tariff, the effect is a reduction in (the absolute value of)  $\lambda$ . From the first order condition, the relative weight of the terms-of-trade cost shifting motive ( $\lambda W_{\tilde{p}^w}$ ) falls, leading countries to set lower tariffs unilaterally.

Baldwin (2010) makes a different argument with a similar conclusion: to the extent that fragmentation splinters old political alliances between upstream and downstream industries or dramatically shifts the pattern of comparative advantage along the global value chain, developing countries' governments may gradually abandon long-standing infant-industry industrialization strategies, unilaterally lowering their tariffs on upstream industries in particular.

There is, however, a qualification: it is reasonable to expect governments to focus on simplifying and removing barriers against those trade partners with whom their multinational firm constituents are already involved. If so, countries that are outside the global supply chain network may be left out of process, further worsening the discrepancy between the highly integrated 'have' countries, and the peripheral 'have nots'. This point brings us to the next question, whether global fragmentation impacts the previous understanding of regionalism as stepping stone or stumbling block to freer multilateral trade.

## **2.5 Regionalism and Fragmentation: Growing Concern over Article XXIV**

Preferential trade agreements can be viewed as both cause and consequence of the global fragmentation phenomenon. Free trade agreements foster greater production sharing and FDI within the trading bloc, just as these forms of deeper economic integration sharpen the impetus for greater policy coordination through preferential agreements. To the extent that global supply chains and foreign investment spur trade liberalization through preferential agreements, and those agreements in turn further deepen economic ties as supply chains spread across signatories' borders, the cycle of improved market access, investment, and production sharing may continue.



Powerful political constituencies can fuel the fire. To the extent that preferential agreements incorporate additional policy provisions favored by multinational firms,<sup>12</sup> these corporate interests may lobby increasingly for government leadership in bilateral or regional agreements. And if multinational corporations are important actors in shaping trade policy, the rapid rise in potential global production sharing, supply chains, and foreign investment can be expected to accelerate the momentum for drafting more and deeper preferential agreements.

At the same time, it stands to fear that the same mechanism that leads some trading blocs to deeper economic and political ties could lead to substantial trade and investment diversion; just as some trading partners experience ever-greater economic integration through a sort of ‘trade-investment-supply-chain’ nexus, other countries may be left out entirely. While preferential agreements may serve as an important means for harnessing the liberalizing influence of global fragmentation, the implied provincial shift toward bilateral or regional agreements may undermine multilateral integration efforts.

The question then becomes what could coax politically powerful firms and their governments back to Geneva? Which additional provisions, if any, belong on the multilateral negotiating table? The simple answer is deep concessions on behind-the-border policies of the sort found in recent preferential agreements. WTO-led plurilateral agreements over investor protections, harmonized standards, or rules of origin could preempt competing clauses in preferential trade deals. There is the added benefit that many such concessions – for example, augmented bilateral investment treaties (BITs), or international shipping security standards – could prove to be valuable bargaining chips for developing countries, which – working together – could use the offer of these behind-the-border concessions to negotiate further MFN tariff cuts on key exports like agricultural products.<sup>13</sup>

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<sup>12</sup>For instance, NAFTA’s Chapter 11 carries powerful Investor State Dispute Settlement (ISDS) provisions that protect foreign investors against local policy manipulation by host-country governments.

<sup>13</sup>This point is essentially the “Grand Bargain” argument made by Hoekman and Saggi (2000) – that adding more issues to the same multilateral negotiating table is efficiency-enhancing, may prove most beneficial for developing countries.

By the same token, there is also a case to be made for a WTO agreement limiting unilateral investment incentives and *bilateral* concessions over behind-the-border policies. Global fragmentation and the proliferation of preferential deals sharply exacerbate longstanding concerns that individual investment-host countries may be played against each other in a ‘race to the bottom’ to attract not only foreign investment, but also coveted preferential trade deals and a central place in the global supply network. The next section takes up this issue in detail.

### **3 Revisiting the Case for Limiting FDI Incentives**

This section explores how the global fragmentation phenomenon recasts the debate over imposing multilateral disciplines on investment incentives, including subsidies and behind-the-border policy concessions. The discussion is divided into three parts. Sections 3.1-3.2 set the stage: the first developing a simple model of optimal FDI policy, and the second reviewing the existing arguments for multilateral limits on investment incentives in a low-fragmentation environment. The key results are found in Section 3.3, which identifies and discusses the key implications of global fragmentation for the debate over multilateral investment disciplines. The analytical framework highlights an efficiency argument for cooperative restrictions on investment incentives, which turns on the interaction between global supply chains, vertical FDI, and the potential for Article XXIV trade preferences.

#### **3.1 A Simple Model of Optimal Investment Subsidies**

A simple model provides a useful framework to guide the subsequent discussion. To avoid getting distracted by details, we will consider a reduced form modeling structure. The aim here is simply to develop a clear, structured environment for thinking about the interaction between trade policy and FDI subsidies. A more technical treatment of a similar framework can be found in Blanchard (2007).

A note of clarification before beginning: for parsimony, this section models

investment incentives as simply a (non-negative) per-unit subsidy paid to foreign investors in addition to the regular (market-determined) rate of return to capital. In practice, of course, investment subsidies can be explicit, embedded in the tax code, or implicit in infrastructure development, regulatory reform, labor market liberalization, port-authority changes, etc. In the subsequent discussion, the reader is urged to keep in mind this broader context; the key assumption is simply that incentives are (i) costly to the host government and (ii) attractive to foreign investors. To the extent that these two features bear true, the simple modeling structure below will yield qualitatively meaningful results for a wide definition of investment ‘incentives’.

Consider a variant of the analytical framework presented in 2.1, updated in three dimensions: first, let us now adopt the perspective of a set of  $N$  potential investment-*host* countries, indexed by  $i \in \{1, \dots, N\}$ ; second, allow FDI to flow endogenously across countries, and; third, enable the FDI-host countries to offer direct FDI subsidies to attract foreign investors. For simplicity, we will restrict attention to the case in which the potential investment-host countries adopt free trade, using only investment subsidies in equilibrium.<sup>14</sup> Later, we will consider the potential tariff policy of a large investment-source country.

As in virtually any model, the return to foreign investment will depend on local prices (and so under free trade, the country’s terms of trade) and the existing capital stock (and hence the existing local FDI level). Thus, the per-unit rate of return to capital in a given country  $i$  may be written:  $r_i \equiv r(p_i, \hat{K}_i) \forall i$ , where  $p_i$  denotes country  $i$ ’s terms of trade and  $\hat{K}_i$  represents its FDI level;<sup>15</sup> other arguments are taken as fixed and thus suppressed. Foreign investment is assumed to follow a simple no arbitrage condition that ensures the same rate of return to capital,  $r^w$ , in every location net of any subsidies. Thus, for any pair of countries  $i$  and  $j$  with associated per-unit investment subsidies  $s_i$  and  $s_j$ ,  $r_i(p_i, \hat{K}_i) + s_i = r_j(p_j, \hat{K}_j) + s_j \equiv r^w(\cdot)$  in equilibrium. If countries are vanishingly small in capital markets, notice that  $r^w$  will

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<sup>14</sup>If the countries are vanishingly small in goods markets, the assumption is without loss of generality, since they would set internationally efficient tariffs even in the absence of negotiation.

<sup>15</sup>The subscript  $i$  on the terms of trade ( $p_i$ ) allows for the possibility that different countries may face different external terms of trade as a result of preferential agreements or trading blocks.

be fixed from the perspective of any one country, so that  $\hat{K}_i$  will be independent of  $\hat{K}_j$  or  $s_j$  – or in other words, there will be no international spillovers embodied in each country’s subsidy policy. The converse is also true: if countries are large enough in capital markets to influence the world rate of return to capital, negative ‘beggar-thy-neighbor’ externalities will remain. (That is, an increase in the subsidy in country  $i$  would cause  $\hat{K}_i$  to rise *at the expense of*  $\hat{K}_j$  if (and only if) country  $i$  is large enough capital markets to influence  $r^w$ .)

Government preferences are defined using a simple and broad characterization as in the previous section, with one change: the government objective function now depends not only on prices, but also directly on the local level of foreign direct investment and the (costly) subsidy; for a given investment-host country  $i$ , let:

$$W_i \equiv W(p_i, \hat{K}_i, s_i).$$

Under the assumption that the country’s comparative advantage is in the numeraire good,  $W_{p_i} > 0$ . If FDI spillovers are positive (for instance, because of technology transfer or capital accumulation),  $W_{\hat{K}_i} > 0$ . (Recall the well-known result that in the absence of spillovers, if capital is paid its marginal value product, then  $W_{\hat{K}} = 0$ .<sup>16</sup>) Finally, we have that  $W_{s_i} \leq 0$ , reflecting that subsidies – holding prices and FDI fixed – are nothing but a costly transfer of resources from the government to foreign investors.

**Optimal Host-Country Investment Subsidies.** Country  $i$ ’s optimal investment policy maximizes the government’s objective function:<sup>17</sup>

$$s_i^o = \arg \max_{s_i} W(p_i, \hat{K}_i(p_i, s_i; r^w)), \quad (3.1)$$

with the associated first order condition,

$$\frac{dW}{ds_i} = W_{p_i} \frac{dp_i}{ds_i} + W_{\hat{K}_i} \frac{d\hat{K}_i}{ds_i} + W_{s_i} = 0. \quad (3.2)$$

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<sup>16</sup>From national expenditure function accounting, the competitive rate of return to capital is given by  $r = g_K$  where  $g(\cdot)$  represents a country’s GDP function.

<sup>17</sup>The no-arbitrage condition for the free movement of capital implicitly defines the endogenous FDI level in any country  $i$  as a function of the local terms of trade, subsidy, and the world rate of return; i.e.  $\hat{K}_i \equiv \hat{K}(p_i, s_i; r^w)$ .

If country  $i$  is small in goods markets so that prices are invariant to its local investment subsidy,  $\frac{dp_i}{ds_i} = 0$ ; and if there are no domestic spillovers from FDI,  $W_{\hat{K}_i} = 0$ . Then, because the marginal subsidy cost  $W_{s_i}$  is minimized at a zero subsidy, we have the familiar result that the unilaterally optimal investment policy is no policy at all; i.e.  $s_i^o = 0$ . If instead the country is small in goods markets but there are positive local spillovers to FDI, so that  $W_{\hat{K}_i} > 0$ , then we know that the optimal investment subsidy will be strictly positive; i.e.  $s_i^o > 0$ .<sup>18</sup>

Even in the presence of positive optimal investment subsidies, if the subsidizing country is *small in goods and capital markets*, there will be no international spillover effects. That is, the domestically efficient subsidy,  $s_i^o$  – even if it is positive – will also be internationally efficient. Absent international spillovers, there is no ‘race-to-the-bottom’ externality among FDI-seeking countries, and hence no economic rationale for a multilateral investment agreement (absent the potential for preferential trade deals, which is discussed later).

Conversely, if there are positive domestic spillovers from investment (so that  $s_i^o > 0$ ), and if countries are large enough to influence the world rate of return to capital, then a ‘race-to-the-bottom’ condition is met: an increase in the investment subsidy in country  $i$  can make country  $j$  worse off and vice-versa; i.e.  $\frac{dW_j}{ds_i} < 0$ . (By increasing its subsidy,  $s_i$ , country  $i$  will increase the world rate of return to capital,  $r^w$ , which increases the ‘hurdle rate’ for attracting (and maintaining) FDI in any other country  $j$ . Unless country  $j$  also increases its subsidy, FDI will leave country  $j$ , so that  $W_{s_i}^j = W_{\hat{K}_j} \frac{d\hat{K}_j}{dr^w} \frac{dr^w}{ds_i} < 0$ .) This international spillover opens the door for a Pareto-improving agreement to limit investment subsidies.

Note that international spillovers from FDI subsidies can also arise through goods markets, though the sign of the spillover effect through goods prices is in general ambiguous, as it depends on how investment subsidies change the composition of world goods production.<sup>19</sup> For example, suppose that a developing country  $i$ ’s invest-

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<sup>18</sup>The negative welfare impact of a subsidy is vanishingly small starting from a policy of non-intervention; thus, evaluated at  $s_i = 0$ , the first order condition of the government’s optimization problem is strictly positive, implying at least a small positive optimal investment subsidy.

<sup>19</sup>If FDI is sector specific, the price effect ultimately depends on whether subsidies shift investment

ment subsidy attracts enough export-oriented FDI to cause the world relative price of its export good – e.g. footwear – to fall. This terms of trade effect constitutes an additional international spillover, which would be negative (welfare reducing) for other developing countries exporting the same good (i.e. footwear), and positive (welfare improving) for net importers of the good. The upshot is the same, however – when countries are large enough to influence international prices (of capital and/or goods), there is a natural efficiency argument for multilateral cooperation over investment policies.

The next section maps this basic argument into a richer understanding of a low- or no-fragmentation world, following the compelling discussion in Hoekman and Saggi (2000). Section 3.3 recasts the debate in the new light of global fragmentation and proliferating preferential agreements, which change the nature of international externalities as well as what it means to be ‘large’.

### 3.2 The Pre-Fragmentation Case for FDI-Related Disciplines

Just over a decade ago, Hoekman and Saggi (2000) drafted a compelling argument for postponing multilateral attention to investment-related policies in favor of more aggressive pursuit of the General Agreement of Trade in Services (GATS).<sup>20</sup> While trade in services remains a crucial issue, the impetus for WTO leadership in investment provisions has grown dramatically over the past thirteen years. Before turning to an analysis of what has changed, let us begin by reviewing the earlier ‘low-fragmentation’, 20th century case for investment disciplines.

Hoekman and Saggi (2000) developed a thoughtful and comprehensive overview of the case for multilateral action on investment-related policy. Their arguments still stand, even if the balance of forces has shifted. Their starting point is precisely the conclusion at the end of the previous section: absent international or domestic

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to higher or lower productivity locations. More generally, net price effects depend on how FDI subsidies reallocate capital *across sectors* and productivity levels.

<sup>20</sup>The GATS defines commercial presence to include FDI as a ‘model of supply’ covered by the agreement, but the provisions do not cover investment incentives/subsidies as discussed here.

spillovers (which would include market failures), there is no reason to subsidize investment at all. And absent international spillovers, there is no reason for international cooperation over investment policy, even in the presence of domestic externalities. Their argument for waiting to pursue WTO-negotiated limits on investment subsidies centers on three key assertions: <sup>21</sup>

1. To the extent that FDI subsidies are used to counter oligopolistic behavior, trade liberalization can allow foreign firms to compete (often more advantageously) via exports; the caveat is non-traded goods (including most services), which justify an emphasis on GATS.
2. Investment incentives typically are not effective in attracting FDI; most FDI is horizontal (market-seeking) and so is driven predominantly by other country characteristics. Consequently, the international spillover ‘race to the bottom’ problem does not bind in practice.
3. There is little evidence that firms are actively seeking harmonized investment provisions as a means to ‘tame the tangle’ of different BITs, local regulations, etc. (In other words, a multilateral agreement over investment would not attract more investment.)

Mapping these arguments to the context of the model above, the first point essentially implies that as long as trade in goods is relatively open, world markets will discipline the use of market power by domestic oligopolies (or monopolies). Thus, there is no domestic spillover from FDI, i.e.  $W_{\hat{K}_i} = 0 \Rightarrow s_i^o = 0$ , and no international inefficiency because countries would not use incentives (if goods are traded and tariffs are low). Notice too the implicit assumption here that FDI is market-seeking, or horizontal. The same argument would not apply to vertical investment and domestic monopsony power in local labor markets.

The second argument effectively says that  $\frac{d\hat{K}_i}{ds_i} = 0$ ; the authors point out, however, that this may not imply that subsidies are zero if governments lack full

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<sup>21</sup>Only their arguments relevant for disciplines on limiting investment *incentives* are relevant here; several other points on expanding behind-the-border concessions are omitted.

information (investors have every incentive to play hard to get even if they ultimately plan to invest). The point is simply that even if subsidies are used, there will be no spillovers and no international distortion unless FDI really is ‘footloose’; otherwise, subsidies are simply (non-distortionary) transfers from host-country governments to savvy foreign investors. The third point is quite similar, as it again implies  $\frac{d\hat{K}_i}{ds_i} = 0$ . The distinction is the mechanism (whether governments offer direct incentives or simply regulatory standardization), and thus the empirical evidence that would refute or justify the claim.

### 3.3 How Global Fragmentation Changes the Argument

This section argues that the global fragmentation phenomenon, exacerbated by the proliferation of preferential trade deals, has recast the case for multilateral disciplines to limit investment incentives. The new case for multilateral investment disciplines centers on three observations.

**Global production sharing is changing the composition of FDI.** While horizontal investment remains the dominant mode of FDI worldwide, the composition appears to be shifting rapidly toward vertical investment as more firms fragment production across countries.<sup>22</sup>

This movement towards vertical FDI carries an important implication in our context. There is strong evidence that vertical FDI is more footloose than horizontal investment, and thus sensitive to subsidies. Horizontal investment depends at least

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<sup>22</sup>Measuring horizontal apart from vertical FDI is notoriously difficult in practice. Perhaps the cleanest measure is the destination of sales by foreign affiliates of multinational corporations. Affiliate sales to the local market serve as a reasonable proxy for market-seeking horizontal investment, while sales back to the investment-source country or other ‘third’ countries proxy for vertical FDI. Publicly available data from the US Bureau of Economic Analysis demonstrate a marked aggregate shift in the composition of foreign affiliate sales of US multinationals, even over the relatively short horizon between 1999 and 2008; on average more than 63% of affiliate sales targeted the local market in 1999, compared with just 55% by 2008. Some of the largest shifts from local to export-bound sales took place in Africa, East Asia, Eastern Europe (particularly the Czech Republic), Brazil, and India – locations that anecdotally have seen a rise in offshoring operations.



as much on the characteristics of local demand as it does on supply side conditions, whereas vertical FDI depends on the supply side. Olney (2013) finds compelling evidence of exactly this differential sensitivity using detailed data on foreign affiliates of US multinational firms as a function of local labor market reforms. He finds that while stronger employment protections have a negative effect on all types of FDI, the impact is small for affiliate sales to the local market (i.e. horizontal FDI) and much larger for affiliate sales back to the US (vertical FDI). Anecdotally, the so-called ‘China plus-one’ international business strategy paints a similar picture: for multinational firms seeking to diversify the nationality of suppliers abroad, what matters is simply having a ‘plus one’ country; the identity of the ‘plus-one’ seems less important.<sup>23</sup>

In the context of the model, then, a secular shift from horizontal to vertical FDI as a result of increased ‘fragmentability’ of production – coupled with vertical FDI’s more elastic nature – implies greater competition for foreign investment and increased risk of a race to the bottom in the global competition for FDI.

**Greater fragmentation exacerbates the regulatory ‘tangle’.** Longer supply chains mean that more border crossings are embedded in the production of a final good, adding more regulatory hurdles, paperwork, and opportunities for problems to arise. Less than ten years after Hoekman and Saggi (2000) concluded that “the transactions cost argument for harmonization of FDI policies is a weak one,” Baldwin, Evenett, and Low (2009) provided a series of forceful arguments suggesting the contrary. Unfortunately, there is no systematic evidence on either side of the debate, leaving the empirical reality a question for future work. Nonetheless, it is safe to assume that increasing fragmentation will exacerbate the costs of local policy asymmetries. To the extent that a multilateral investment agreement could also extend regularity convergence to investment policy (following in the steps of the TBT and SPS agreements) there could be substantial welfare gains to the global trading system.

**Preferential trade agreements introduce new externalities.** The important changes noted above notwithstanding, the proliferation of preferential trade agree-

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<sup>23</sup>Again, the results in Olney (2013) suggest that competition for multinational investment among potential ‘plus-ones’ is fierce.

ments may provide the strongest reason for negotiating limits on investment incentives under the WTO. Including the possibility of preferential trade agreements to the model above has two important effects. The first centers on a (positive) domestic *market access* externality, while the second exacerbates (negative) international spillovers through a *preferential terms of trade* externality. Note that the mechanisms emphasized in this section apply for export-oriented (or industry neutral) FDI. As discussed earlier in the paper, import-competing (horizontal) FDI would not have the same capacity to induce preferential market access.

The domestic ‘market access externality’ implies that even the possibility of signing a bilateral trade deal with a large investment-source country will increase an investment-host country’s optimal subsidy level. Recall the result from Section 2.2, that an investment-source country has an incentive to offer lower tariffs (and in a multi-country world, preferential market access) to given investment-host country  $i$  the greater is country  $i$ ’s FDI level. Holding everything else fixed, if an increase in FDI has the potential to expand market access to the large (presumably developed) investment-source country’s market, then FDI is more valuable to the investment-host country. Ergo, the optimal subsidy will be higher, too.<sup>24</sup> The upshot is that the possibility of preferential trade agreements may entice investment-host countries to go further in offering investment incentives than they otherwise would.

Formally, suppose the rate of preferential market access to the large investment-source country is increasing with the local FDI level in a host-country  $i$ . The improvement in market access (a reduction in the tariff faced by country  $i$ ,  $\tau_i$ ) will be reflected as an improvement in country  $i$ ’s terms of trade,  $p_i$ . We then have that country  $i$ ’s terms of trade will be increasing with the investment subsidy – providing a welfare gain above and beyond any previous domestic spillovers; that is,  $\frac{dp_i}{ds_i} = \frac{dp_i}{d\tau_i} \frac{d\tau_i}{d\hat{K}_i} \frac{d\hat{K}_i}{ds_i} > 0$ , which makes the first argument of the first order condition in (3.2) strictly positive and implies an increase in  $s_i^o$ . Thus, all else equal, the potential for additional investment to induce a terms of trade improvement will increase country  $i$ ’s optimal subsidy beyond the MFN (no preferential agreement) benchmark. One interpretation of the result is that there exists some set of  $s_i > 0$  subsidies (or regulatory concessions, BIT

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<sup>24</sup>This argument follows Blanchard (2007).

provisions, etc.) that the investment-host country was not willing to offer foreign investors absent the possibility of a preferential agreement, but *would* offer were a PTA on the table.

The second implication is increased (negative) spillovers across countries. If countries are sufficiently large to induce investment and/or trade diversion, or if preferential agreements are rationed in some way, then PTAs can exacerbate the negative international spillovers of individual countries' investment subsidies. First, following immediately from above, notice that if countries are large enough to influence the world rate of return to capital (and thus large enough to distort global trade flows), the impact of an increase in their individually optimal subsidies will be an increase in investment distortion and a reduction in global efficiency as governments compete for scarce FDI.

Perhaps surprisingly, the case also extends to vanishing small countries if the number of possible preferential agreements is limited (for instance, because negotiating resources are finite). To illustrate the point, consider a limiting case in which each investment host country is sufficiently small that it cannot influence world prices or the equilibrium rate of return to capital. Absent the potential for preferential market access, there would be no international spillovers; every country's unilaterally optimal subsidy would be globally efficient.

Now add the potential for preferential market access, but suppose that the investment-source country is limited in how many preferential agreements it can sign.<sup>25</sup> When trade preferences are possible, we have two effects – as noted earlier, the domestic market access externality would induce every investment-host country to increase its investment subsidy beyond the previously optimal subsidy level. Additionally, under limited preferential agreements, an increase in one country's subsidy level could attract attention from the investment-source country *at the expense of other investment-host countries*, inducing a second international 'preferential terms of trade externality'. In essence, competition for preferential agreements can make

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<sup>25</sup>Indeed, the investment-source country may have an incentive to limit the number of agreements intentionally; but this question is beyond the scope of this paper.

an otherwise small investment-host country loom large in the eyes of its neighbors. If only a handful of countries will be chosen for bilateral trade agreements, the incentive to subsidize investment will be that much greater. The over-subsidization of FDI induced by this competition for PTAs constitutes a negative international spillover, and hence a clear economic rationale for a cooperative agreement limiting the potential for a ‘race to the bottom’ in investment subsidies.

**The Case for a Multilateral Investment Agreement.** Taken together, these three facets of the global fragmentation phenomenon – the shift toward footloose vertical FDI, increased burdens of more frequent border crossings, and the additional complications arising from preferential trade deals – suggest renewed consideration of a multilateral investment agreement that includes disciplines on the use of investment subsidies. Nonetheless, two important considerations bear noting.

First, while the argument in favor of curbing investment incentives has grown stronger, the practical difficulties are no less acute than a decade ago when the issue was last set aside. Many of the most powerful policy enticements for foreign investors lie deep within countries’ borders and national sovereignty. Indeed, the findings of Olney (2013) are a sobering reminder that foreign investment is blind to political sensitivities, not least the difficult issues surrounding labor markets. While it may be difficult to move beyond a simplistic definition of investment subsidies as clearly identifiable financial transfers, the value of such a circumscribed agreement would be limited. The WTO Agreement on Subsidies and Countervailing Measures (SCM) should serve as an important starting point for the endeavor to expand the definition of investment incentives, although it stops short of including many indirect (but important) incentives like infrastructure development or labor market liberalization.<sup>26</sup>

Second, it is worth highlighting the relationship between the policy implications in this section and those from Section 2. Recall that the key insights in Section 2 advocate a move to include deeper behind-the-border policy concessions under the WTO umbrella. Section 3, meanwhile, develops a case in support of developing

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<sup>26</sup>The SCM defines a subsidy as consisting of a financial contribution (broadly defined) by a public body or government, which confers a benefit.

multilateral disciplines on investment incentives to limit both explicit FDI subsidies and, at least in principle, the implicit subsidies embodied in *bilaterally negotiated* behind-the-border concessions.<sup>27</sup> These two policy recommendations are distinct but complementary; together, they make a forceful argument for broadening the WTO mandate to include behind-the-border policies. Such a move would both protect investment-host countries from a potential race to the bottom to attract FDI and a central position in the global supply chain, and also pre-empt the potential formation of trading bloc ‘fortresses’ with deeply internally integrated trade, investment, and production sharing arrangements, but potentially little interest in multilateral liberalization.

Moreover, to the extent that a multilateral investment agreement also contained regulatory convergence measures and additional (BIT-like) protections for foreign investors, investment-source countries would have a clear interest in seeing such an agreement passed. While limits on investment incentives are more likely to appeal to (mostly developing) potential investment-host countries, multilateral investment protections and additional synchronization of regulatory standards would offer benefits to (mostly developed) investment-source countries. It is conceivable that a multilateral investment agreement thus could satisfy enough constituencies to stand on its own. More broadly, bringing multilateral investment and behind-the-border policy issues to the negotiating table can only increase the odds of reaching a ‘grand bargain’ over old and new trade policy issues.

## 4 Implications for Developing Countries

Before concluding, it is worth highlighting several aspects of the paper’s findings as they relate specifically to developing country members of the WTO. But first it is important to reiterate the enormous heterogeneity among developing countries. While many countries are net recipients of vertical, offshoring-type FDI, many others attract

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<sup>27</sup>Recall that the latter constitute implicit investment subsidies to the extent that they benefit multinational firms and foreign investors at the expense of the host-country government.

predominantly horizontal investment designed to serve massive and growing domestic consumer markets. Still other developing countries are net investment-source countries (though few engage in as much outward *FDI* (as opposed to portfolio investment) as they receive). Perhaps even more important are the differences in comparative advantage, regulatory environments, national security, and proximity to large trading partners – all of which are powerful determinants of countries’ attractiveness to foreign investors, production sharing opportunities, and potential contributions to the global value chain. The results of this paper should be interpreted accordingly, with explicit recognition of these important differences across developing country members. That said, there are three points that apply to most, if not all, of the WTO’s developing country members.

The first point can be interpreted as both an opportunity for developing countries and a challenge for the WTO: to the extent that Generalized System of Preferences (GSP) programs permit a degree of unilateral discretion over preferential trade policy by investment-source countries, multinational investment in a host-country’s export sector may improve market access to the investment-source country under GSP. A recent study by Blanchard and Matschke (2012) finds evidence of a causal link between offshoring activity by US multinational firms and the structure of US trade preferences, particularly under GSP. The effect is substantial – using a sample of potentially GSP eligible developing countries between 1997 and 2006, they find that a ten percent increase in sales by multinational affiliates back to the US leads to roughly a 15 percentage point increase in the rate of GSP access – nearly doubling the sample average rate of duty free access under GSP.

The second point is more cautionary. Investment-host countries should approach behind-the-border investment protections carefully, regardless of whether negotiations are bilateral or under WTO auspices. Policy concessions that protect foreign investors through ‘grandfathering’ rules or compensation clauses may prove particularly costly to countries that have not yet developed rich regulatory structures.<sup>28</sup> Even a simple change in environmental policy may prove financially untenable under the most restrictive investor protection rules. Hoekman and Newfarmer (2005) put

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<sup>28</sup>Chapter 11 of the NAFTA and Chapter 10 of the U.S.-Chile FTA come to mind.

it succinctly: “[C]are needs to be taken not to create incentive to make the legal departments of multinationals a profit center.” (p.969)

The third and final point echoes the Hoekman and Saggi (2000) ‘Grand Bargain’ approach to advancing the multilateral agenda. Overzealous investor protections notwithstanding, it seems likely that a set of well-considered behind-the-border policy concessions could prove a valuable bargaining chip for developing countries in future rounds of multilateral trade negotiations.

## 5 Conclusion

Taken together, the key features of the global fragmentation phenomenon justify a renewed push for a multilateral approach to international policy coordination. The complementarity between global production sharing and preferential trade agreements exacerbates the risk of political fragmentation into regional ‘fortresses’. While these mega-trading blocs might enjoy highly integrated goods and capital markets and deep behind-the-border agreements internally, it stands to fear that the competition to enter these blocs could put some (presumably developing) countries in a disadvantageous negotiating position, while others may be left out entirely. Moreover, the emergence of increasingly powerful mega-blocs may render multilateral progress on even shallow liberalization efforts infeasible.

For the WTO to keep pace with regional agreements (and again, there are important reasons to be concerned about the proliferation of preferential deals), it must at least consider the options for deepening the multilateral trading system. Robert Lawrence (2011) recently proposed a two tiered system within the WTO, one that would supplement the core GATT obligations with optional, add-on plurilateral deep-integration agreements into which countries could opt-in or out. The key, notes Lawrence, is to offer a WTO-based framework that is more attractive than regional agreements. The move away from preferential agreements cannot be forced, but perhaps it can be coerced by creating a better alternative.

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