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The Border Papers

Navigating New Trade Routes:

The Rise of Value Chains, and the Challenges for Canadian Trade Policy

Bill Dymond
and Michael Hart

In this issue...

With the emergence of regional and global value chains, Canadian trade policy has lost its moorings. A decisive response is required.

The Study in Brief

In the new paradigm of international trade, Canada needs a trade policy that recognizes both the increasing importance of global value chains and the critical role of Canada-US commercial and regulatory integration in gaining full benefit from their exploitation.

This *Commentary* first examines the implications of the emergence of regional and global value chains for trade policy and conventional trade agreements. It argues that as national boundaries recede as key determinants in international exchange, the instruments of trade policy and the agreements they have spawned provide at best irrelevant and at worst dysfunctional tools for states and can yield perverse results for contemporary trade and investment.

The challenges facing the Canada-US economic relationship, the largest bilateral relationship in the world, illustrate the conundrum. The two governments, both in word and deed, manifest their continuing commitment to the multilateral system. At the same time, the problems that affect the bilateral relationship arise from a range of trade issues that are either beyond the scope of the system to address or cannot be addressed by conventional trade negotiations.

The authors conclude that Canada needs to move decisively to pursue a bilateral initiative with the United States that consists of at least the following interrelated dimensions:

(i) a commitment to design and implement a border regime that eliminates much of the detritus of past customs administration for bilateral trade, relies for third-country trade on a common customs perimeter, moves what remains to preclearance facilities away from the border, and reduces border administration to what is essential to meeting common security goals;
(ii) the implementation of a joint regulatory agenda that seeks, over time, to move towards a much higher level of convergence through a combination of mutual recognition, joint rule-making, and similar programs; and
(iii) the establishment of such institutions and decision-making procedures as may be required to achieve the first two goals.

The benefits to Canadians of such a re-ordered agenda are potentially enormous.

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Canadian trade policy is at sea, preoccupied with marginal bilateral trade agreements with minor partners and multilateral efforts to defend the dwindling ranks of dairy farmers from the bracing winds of international competition. Meanwhile, it ignores pressing problems in Canada's most important trade relationship. It is tempting to put the blame on the political caution of a minority government and wait for changing political fortunes in Ottawa to be the catalyst for a more rewarding policy approach. Unfortunately, the problem is much deeper and of longer standing. Canadian trade policy has become detached from its economic moorings.

Well done, trade policy is tied to the structure of Canadian and international production and contributes to Canadian welfare and economic development. Trade agreements with Peru, Colombia, and the Dominican Republic offer, at best, marginal new opportunities for a few Canadian firms but have little impact on the economy as a whole. Trade missions to far-flung places that offer limited new prospects may similarly serve political or foreign policy imperatives but make few, if any, economic contributions. What Canada needs is a trade policy that recognizes both the increasing importance of global value chains and the critical role of Canada-US commercial and regulatory integration in gaining full benefit from their exploitation.

Over the past few decades, traditional international exchange has gradually begun to give way to a much more integrated kind, with more and more transborder transactions taking place within firms, among related parties, or within integrated networks. Tremendous reductions in transportation and communication costs have facilitated a quantum leap in the disaggregation and geographic dispersion of production. Many more goods traded internationally today are parts and components. Production is being geared to a much wider market, the range of goods and services that are exchanged internationally has widened considerably, and capital and technology move between nations to promote not only import-substituting, but also export-oriented production.

International exchange now involves a much more complex and sophisticated range of economic transactions and is as likely to entail dealings among related parties as it is unrelated parties. The vertically integrated firms of the early postwar years have given way to much more flexible, horizontally organized enterprises making creative use of regionally and globally organized value chains (Lamoreaux, Raff, and Temin 2003). In the words of the University of Manchester's Peter Dicken, the global economy has been transformed into "a highly complex, kaleidoscopic structure involving the *fragmentation* of many production processes, and their *geographical relocation* on a global scale in ways which slice through national boundaries" (Dicken 2003:9). In the 1990s, analysts characterized this process as globalization; understanding of this phenomenon has increased since then, particularly as a result of increasing focus on the evolution of value chains.

In various public statements, the federal government has suggested that it understands globalization and the role of value chains, and hinted at what it should be doing. However, it has not followed through and provided a much-needed rationale for a trade policy that recognizes the reality of modern trade and production patterns, and the centrality of the US relationship for Canada. In its November 2006 Economic

We would like to thank Sarah Geddes for research assistance on global value chains.

Statement, *Advantage Canada,* for example, the government recognized that "the fragmentation of global value chains meant that countries had to be open to foreign investment and ensure open access to products and services" (Canada 2006). Trade Minister David Emerson has similarly emphasized the importance of Canadian participation in global supply chains. "We're into a world where trade patterns and trade performance are going to be very closely related to the operation of global supply chains, and those are going to be deeply integrated chains, and they're going to be globally distributed" (Emerson 2006a; see also Emerson 2006b). During his visit to China in January 2007, Emerson pitched Canada as the anchor for North American-based value chains. "I urge you to work with Canada, work with Canadians and work with Canadian companies to create globally successful value chains" (Emerson 2007).

If the government appears to understand that Canada's future prosperity depends upon effective participation by Canadian firms in regional and global value chains, its policy preferences remain firmly rooted in the past. Emerson stresses that export market access remains Canada's highest trade policy priority. It is to be achieved through successful completion of the Doha Round of multilateral trade negotiations, the development of strategic partnerships with China, India, and Japan, and the negotiation of bilateral free-trade agreements. Buried deep in the 2007 Budget is $60 million over two years for a Global Commerce Strategy. It has three elements: supporting an expansion of Canada's bilateral trade agreements' network; strengthening Canada's competitive position in the US market; and extending Canada's reach to new markets, starting with Asia. The Strategy assumes that Canadian firms produce identifiably Canadian products to be sold for export to customers in foreign markets. The reality is that an increasing number of firms participate in global value chains, contributing one or more slices in a highly disaggregated production process. There are fewer and fewer "Canadian" products, even as Canadian integration into the global economy increases.

Global value chains create policy challenges that are not responsive to the traditional instruments of trade policy. The impact of further "market-access" liberalization on the Canadian economy is likely to be negligible, coming after 60 years of reductions in border-based trade barriers to low, almost negligible levels for most industrial products in developed countries. Rather, the principal avenues to greater participation in global value chains lie in domestic policies and practices, in a better functioning Canada-US border, and in international regulatory streamlining and convergence.

Conventional trade agreements, whether pursued bilaterally, regionally, or multilaterally, are not only yesterday's policy, but have the potential of leading to unhelpful and even perverse results in today's circumstances. They discipline trade measures on the basis of reciprocity and pairing, as if trade remains largely a matter of two-country, arms-length transactions. They perpetuate the mercantilist bias in trade agreements, focused on increasing export opportunities while disparaging the import side of exchange. Conventional trade policies' high regard for non-discrimination can mask policies that deter deeper integration and frustrate increased economic efficiency. Finally, the compromises built into the regime to ensure political support — from antidumping and countervailing measures to emergency safeguards and special and differential treatment for developing countries — undermine the full development and benefits of modern production methods.

This *Commentary* examines the implications of the emergence of regional and global value chains for trade policy and conventional trade agreements. It will argue that the theory and practice of conventional trade policy assume that international trade consists of the flow of goods and services across national borders and that states have an interest in influencing the size and direction of such flows. As national boundaries recede as key determinants in international exchange, the instruments of trade policy and the agreements they have spawned provide at best irrelevant and at worst dysfunctional tools for states and can yield perverse results for contemporary trade and investment.

The *Commentary* begins with a discussion of the traditional political economy of trade policy and trade agreements and the manner in which this political economy is embedded in the structure, rights, obligations, and institutions of trade agreements. It continues by considering the evolving object and purpose of trade agreements from ancient times to the current complex web of multilateral, regional, and bilateral trade and investment agreements. It then examines the rise of global value chains and assesses their impact on trade policy and trade agreements. The *Commentary* concludes by suggesting some new approaches to update Ottawa's trade and investment policy.

The Political Economy of Trade Policy and Trade Agreements

States enter into international agreements to achieve objectives that are beyond the capacity of unilateral action; constraining or modifying the behaviour of other states is essential to their achievement. The agreements provide a vehicle for states to yield autonomy over areas of national policy in return for complementary action by other states. The object and purpose of trade agreements is relatively straightforward: to govern the conduct of states in their regulation of the flow of goods and services across their borders and their treatment of imported goods and services in domestic markets. States accept obligations on their treatment of imports and exports in exchange for reciprocal treatment by their treaty partners.

Origins of the Modern Model

Modern trade agreements emerged 150 years ago, starting with the 1860 Cobden-Chevalier Treaty between Britain and France, which by virtue of its most-favoured-nation clause, led to freer trade throughout Europe. The benefits were brief, as political rivalries culminating in the Great War, followed by the Depression of the 1930s, left trade among European countries without a governing framework. The United States had always remained aloof from trade agreements with the exception of agreements with Hawaii, Canada (1854-1866), and Cuba. Canada remained similarly aloof, except for efforts that helped forge the imperial preference system.

The road to a new treaty-based framework for the conduct of international trade began in the United States with the adoption of the Reciprocal Trade Agreements Act (RTAA) in 1934. The brainchild of Secretary of State Cordell Hull, the RTAA enabled the president to negotiate on a reciprocal basis, within limits established by Congress, the reduction of US tariffs. It was, as Gil Winham observes, "revolutionary in that it explicitly accepted that setting tariff rates should no longer be a matter of unilateral policy … but a bilateral issue to be settled through negotiation" (Winham 1992:19). The RTAA provided the inspiration for the 1947 General Agreement on Tariffs and Trade (GATT), which emerged as the primary instrument for the reduction of trade barriers following the failure to bring the more ambitious International Trade Organization into force.

The object and purpose of modern trade agreements are set out in the preamble to the GATT: the parties "recognize that their relations in the field of trade and economic endeavour should be conducted with a view to raising standards of living, ensuring full employment and a large and steadily growing volume of real income and effective demand, developing the full use of the resources of the world and expanding the production and exchange of goods." Slight variations are found in bilateral and regional free-trade agreements and in the 1994 Marrakesh Agreement Establishing the World Trade Organization (WTO). The object and purpose they establish provide the basis for elaborating the core principles of trade agreements and the provisions setting out the rights and obligations of the parties.

An Uneasy Blend of Mercantilist and Ricardian Ideas

The underlying political economy of such trade agreements finds its inspiration in an uneasy blend of mercantilist and Ricardian ideas. The politics of trade rest on the belief — backed up by experience — that there are votes in promoting exports but not in facilitating imports. The economic benefits of trade, on the other hand, as first suggested by Adam Smith and more fully explained by David Ricardo and his successors, flow from expanding the market, facilitating specialization and the international division of labour, exploiting comparative advantage among producers, increasing productivity, and allowing consumers to gain access to the best the world has to offer at competitive prices.[1] At the same time, governments have learned that political benefits accrue to those who save jobs threatened by competing imports. The US Reciprocal Trade Agreements program and the subsequent GATT provided an ingenious solution to this conundrum: organize trade negotiations to maximize market access for exports in foreign markets, paid for by conceding reciprocal import access to one's own market. As well, these commitments are held together and made more valuable as a result of the overarching commitment to non-discrimination — as expressed in the most-favoured-nation (MFN) and national treatment principles — and the binding of these commitments in a treaty. The postwar multilateral process of mercantilist bargaining succeeded in providing governments in the developed countries of the OECD with the necessary political cover to negotiate agreements that delivered on the Ricardian promise.[2]

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1 As virtually every trade economist since Smith and Ricardo has demonstrated, national welfare is boosted by imports, paid for by receipts from exports. This is not the place, however, for a more complete discussion of modern theories of international trade and their debt to Smith and Ricardo. For those interested, see Irwin (1996) and (2002).

2 Because of the voluntary nature of the liberalization process only OECD members and a few other countries have fully grasped the opportunities offered by the regime. The results have been two-fold: steady liberalization of external barriers by these countries and increasing convergence in their commercial policies as they internalized their external obligations into domestic policy and practice. Some developing countries have begun to realize the perverse impact of this mercantilist

Despite its demonstrated effectiveness, mercantilist bargaining generates continuous tension between the politics and the economics of trade agreements, which is amply on view in the structure and rationale of the GATT's core principles and their implementing articles — notably MFN treatment, national treatment, market access, reciprocity, and dispute resolution (Curzon 1965, Dam 1970, Hudec 1975, and Jackson 1997 all provide detailed overviews of GATT rights and obligations).

Ricardian Influences: The economic justification of the MFN principle is consistent with the Ricardian goal of reducing barriers to the exploitation of comparative advantage and other benefits of international trade by all participants in the system. MFN treatment builds a defense against preferential trade practices by providing for the automatic and unconditional extension of any benefit granted by one country to all others in the system. This beneficial impact arises from distributing the benefits of trade liberalization to all participants in an MFN system and thus acting as an accelerator of international trade expansion. A fully functioning MFN system also reduces transaction costs by eliminating the need for detailed origin rules and procedures and the potential for economic distortions that flow from preferential trade practices.

Similarly, the companion principle of national treatment acts as a guarantor of the benefits of trade liberalization by preventing countries from vitiating its impact in domestic markets through discriminatory internal measures.

Market access provisions also contain a healthy dose of Ricardian inspiration. The objective is a larger and more efficient market, achieved by binding ceiling tariff levels through negotiation and by prohibiting — except in circumscribed situations — resort to quantitative restrictions on imports or exports. The binding of tariffs conveys certainty to producers, investors, and traders on the terms of market access. Periodic negotiations among the members of the GATT system add the potential of further reductions in tariff barriers, thus favouring competitive suppliers and sending market adjustment signals to inefficient producers.

The elimination of quantitative restrictions from the arsenal of available trade tools avoids the economic distortions that arise from reserving shares of the home market for domestic producers. As originally conceived, the combined effect of non-discrimination and international market efficiency would, over time, create the environment for the exploitation of comparative advantage on as wide a basis as possible.

Mercantilist Influences: The mercantilist counterpoint to the MFN principle found expression in (i) the exception allowing for continuation of the British preferential system, (ii) the provision for free-trade areas and customs unions — which in recent years has been enthusiastically used by all members of the system, and (iii) the emergence of preferential tariff treatment offered by developed countries to imports from developing countries.

A plausible argument can be made that preferential schemes under certain circumstances may expand international trade generally through the stimulation of

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footnote 2 cont'd

... element on their development aspirations and have begun to make reforms in their domestic regimes, largely on a unilateral basis or as part of bilateral negotiations, but not as part of a new commitment to multilateral trade liberalization.

economic growth in the beneficiaries and thus provide advantages to non-participants greater than the costs of facing discriminatory trade barriers. Nevertheless, the practical effect of any preference scheme can constitute a formidable obstacle to the realization of comparative advantage through the distortion arising from the provision of trade advantages to participants in preference schemes and their denial of benefits to non-participants.[3] The national treatment principle similarly contains a strong mercantilist flavour in the exception provided for subsidies, which may be paid either directly to domestic producers or through the procurement of goods by governments for their own use.

The mercantilist influence on market-access provisions is equally powerful, notwithstanding the provision for tariff bindings and a more or less regular cycle of negotiations to reduce tariffs. There is no obligation to reduce tariffs, still less to harmonize tariffs across the system to provide a rudimentary level playing field. Countries may choose to forego the benefits of trade liberalization and the exploitation of comparative advantage and deny such opportunities to their trading partners. The provisions for tariff negotiations are voluntary and provide that negotiations will take place on a “reciprocal and mutually advantageous basis” (GATT Article XXVIII bis). The judgment of what constitutes reciprocity and mutual advantage is individual to each country and not subject to review. Hence, it would be entirely consistent with the obligations of the system for one or more member countries to decline to negotiate further the reduction of their trade barriers or to participate fully in tariff-reduction negotiations, all the while benefiting from negotiations among other participants as a result of the MFN rule.[4]

The mercantilist nature of market-access negotiations is driven home by the exceptions for developing countries, collectively known as special and differential treatment (SDT). Developing countries are not only excused from participating in tariff negotiations but can justify virtually any departure from the rules on the basis of SDT. As a result, the regime’s impact has been much more limited in curbing the protectionist instincts of developing country governments. As US trade economist Gary Hufbauer sarcastically points out: “everyone ’knows’ that trade ministers representing poor countries can’t be asked to dismantle their barriers because … well, because they like to use muddled infant industry arguments to confer favours on well-connected constituents” (Hufbauer 2005: 293; see also Hart and Dymond 2003).

The capacity for countries to apply anti-dumping and countervailing duties to injurious imports owes nothing to Ricardo and everything to the mercantilists. Although codes of conduct for the application of such duties are now fairly elaborate, the effect has not been to reduce the incidence of these measures but rather to increase their frequency and spread their use to an increasing number of countries. Notwithstanding the economic argument that dumping and subsidization may prove damaging to market efficiency, the reality is that these measures owe their origin to politically inspired motivations to protect constituents from the full impact of trade

3 See Viner (1950) for the classic discussion of the economic distortions that can arise through trade diversion. The WTO Secretariat, in its last Trade Policy Review of Chile, noted that Chile’s network of free-trade agreements was not an unalloyed economic benefit and could lead to sub-optimal economic outcomes (WTO 2003). See also World Bank (2004).

4 Canada, for example, declined to participate in the tariff-cutting formula adopted during the Kennedy Round. See Hart (2002: 247-59) for a discussion of Canada's participation in the Kennedy Round.

liberalization and to do so in a manner consistent with the rules of the system (see, for example, Nivola 1993 and Destler 2005 for discussion of the political basis of trade remedies in the United States).

The Ricardian/mercantilist tension also manifests itself in the dispute settlement provisions.[5] It was designed, in the view of the Canadian delegation to the original negotiations, to be "essentially non-legal in the sense that its prime purpose was to provide for the settlement of disputes in the highly technical field of economics, finance and commerce" (Wilgress 1948:14). Contesting this view were the advocates of a rules-based approach to dispute settlement, who argued that such an approach would convey predictability to the rights and obligations of the GATT.[6] The modern system of dispute settlement represents the ascendancy of rules-based adjudication over diplomatic conciliation.

The Ricardian element of dispute settlement is found in the procedures. The first step in any dispute is consultation between the parties. Only if the parties cannot resolve the issue between them may the steps towards a formal adjudication be initiated leading to the formation of a panel and a review of the issues in the light of the parties' obligations. At any time, the parties may invoke procedures for good offices and mediation. The first duty of a panel or of the Appellate Body upon concluding that a measure is inconsistent with a member's obligations, is to recommend that the member bring the measure into conformity with the relevant WTO obligation. The mercantilist counterweight is the provision, in the event that the recommendations are not implemented, for compensation or retaliation. The member maintaining the inconsistent measure may offer compensation in the form of reduced barriers to other products. If no agreement is reached, the member which invoked the dispute settlement procedures may seek authorization to suspend the application to the offending member of concessions or other WTO obligations. While this has happened rarely, WTO members retain the option of accepting retaliation rather than conforming to the obligations.[7]

The result is a rebalancing of obligations at a lower level, effectively an increase in protection and the re-establishment of obstacles to the exploitation of comparative advantage. While the direct consequences of dispute settlement actions are generally confined to the parties to a dispute, a dispute that results in retaliation, for example, between two major trading countries can reverberate commercially to other countries either directly through damaging the economies of their trading partners, or indirectly by reducing demand for inputs or intermediate products which are the subject of a dispute.

5 The WTO contends that dispute settlement is the central pillar of the multilateral trading system and the frequency of use of the dispute settlement system makes a compelling argument for its central role. Over the first 10 years of the WTO, an average of slightly more than 19 cases had been concluded annually out of a total of more than 300 that had been initiated.

6 For a summary of the debate between the pragmatists and the legalists, see Barfield (2001: 20-28).

7 For example, the EU lost a case in 1998 brought by Canada and the United States complaining that a ban on the imports of beef from animals fed growth hormones was inconsistent with the WTO. When the EU did not eliminate the ban, Canada and the US raised tariff barriers on a range of EU imports authorized by the WTO as equivalent to the value of the exports lost by the ban.

The Evolving Dynamics of the Multilateral Trade System

From Negative Prescription to Positive Rule-making

Over its 47-year history, the GATT sought to foster the expansion of world trade through the reduction of government-imposed barriers to trade and the elimination of government-mandated discriminatory treatment in international commerce. The substantive obligations of the GATT required its members to refrain from applying their trade policies in ways that are contrary to these fundamental objectives, what we have called the principle of negative prescription. Members agreed not to raise tariffs, not to impose quantitative restrictions, not to discriminate, and more (Hart and Dymond 2000). The obligations did not require adherence to absolute standards of behaviour, nor did they impose rules and procedures for the detailed administration of trade policy. Hence, there was no obligation in the GATT to set maximum tariff rates. GATT members remained free to negotiate such rates and free to apply them at lower levels or not all. The basic national treatment obligation did not guarantee a standard of treatment for imports, for example, respecting the level of indirect taxes, but rather required that such taxes or other regulations affecting internal trade not be higher or more burdensome than those applied to products of domestic origin.

In the seven rounds of multilateral trade negotiations between the GATT's entry into force in 1948 and the completion of the Tokyo Round in 1979, there were no significant changes in the fundamental structure of the rules. The focus of each negotiation was the reduction of tariffs on industrial goods and, beginning with the Kennedy Round in the 1960s, the elaboration of codes of conduct on the application of non-tariff barriers and antidumping and countervailing duties (Winham 1986). However, the eighth round of multilateral trade negotiations, the Uruguay Round (1986-94), fundamentally altered the nature of the GATT-based trade relations system.[8]

Its result may be divided into two categories. The first, fully consonant with the principle of negative prescription, consisted of further reductions in tariffs, agreements on agriculture and textiles to bring these sectors more fully within GATT coverage, an agreement expanding the scope of government procurement open to international competition, revised agreements on emergency safeguards and antidumping and countervailing duty procedures, and a new agreement disciplining the use of trade-related investment measures.

The second category constituted a decisive shift of focus from negative prescription to positive rule-making, i.e., commitments to specific standards. The shift is particularly apparent in the agreements governing trade in services, the protection of intellectual property rights, technical barriers, and sanitary and phyto-sanitary (SPS) measures, and in parts of the agriculture agreement. Taken together, these agreements — combined with the positive obligation to ensure conformity with WTO rules, the new powerful dispute settlement system, and the trade policy review mechanism — institutionalize a degree and intensity of intervention into domestic governance that exceeds anything possible or contemplated under the GATT.

8 For useful summaries, see Schott (1994) and Croome (1995).

An Altered Balance of Economic Benefits: The new centre of gravity for international trade rules had profound consequences for international trade relations. First, it changed the balance of economic benefits. The prime objective of the first seven rounds of multilateral trade negotiations was the reduction and elimination of barriers to trade in goods imposed at the border. The resulting benefits were widely distributed to all economic actors and were even available to excepted sectors — for example, through lower input costs or higher exports — and to countries that made little or no contribution to trade liberalization.

The shift into rule-making is aimed principally at harmonizing the regulatory framework affecting both trade and production. While global economic efficiencies flow from eliminating barriers resulting from different regulatory structures, the distribution of benefits among economic actors, including countries participating in such rules, is far less clear and in certain cases economic costs will be incurred. For example, enhanced intellectual property protection rules produce economic benefits for the owners of intellectual property rights, but costs for the users, without corresponding benefits in terms, for example, of enhanced export opportunities.

Implications for Domestic Governance: Second, the shift into positive rule-making complicates domestic governance by bringing additional areas of public policy within the ambit of the regime on a basis wholly different from traditional trade liberalization agreements. While the motivation to maintain protective import regimes in certain sectors is principally economic, differences in economic regulation may have little to do with the need for protection against imports and arise, instead, from deep historical, political, or social roots. An example is the requirement to base food safety standards upon scientific examination, as required by the SPS Agreement, rather than upon decisions by governments accountable to their electorates.

From Negotiation to Litigation: Third, the shift in the focus of trade negotiations changes the management of trade relations from negotiation to litigation. Negative prescriptions point towards negotiation as a means of managing trade relations. The source of trade frictions will typically be the level of trade barriers maintained by one country that frustrate the export ambitions of others; the solution will be found in negotiations to reduce or eliminate such barriers. Positive rule-making, on the other hand, tends to lead to litigation; the source of problems lies not in trade barriers intended to protect domestic industry but in differences in the policies and practices enshrined in domestic regulations, even those that meet the highest standards of transparency, need, and proportionality.

In such litigation, the economic gains that flow from trade-barrier reduction — such as lower prices to consumers — are much more indirect and difficult to document. As we point out in earlier studies (Hart and Dymond 2000 and 2007 and Hart 1987 and 1993), the broader societal gains are much more diffuse than those flowing from the reduction in tariffs or the elimination of quotas.

The Declining Appeal of Multilateral Negotiations

The high-water mark of multilateral trade liberalization was probably reached with the conclusion of the Uruguay Round in 1994. The Doha Round, formally launched in

November 2001, has become prisoner of a fundamental difference in interests between developed and developing countries.

Developed countries are largely satisfied with the WTO as it is and seek only minor adjustments and modest expansion of the rules — if these may be obtained with minimal domestic political opposition. Developing countries, on the other hand, seek major market-access gains from developed countries that would be politically difficult to grant, while claiming the development objectives of the Round should exclude them from offering reciprocal liberalization. This fundamental difference is apparent from the drafting of the Doha Declaration (WTO 2001). Far from setting out a comprehensive negotiating agenda like the ministerial declarations that launched previous multilateral rounds, the Doha Declaration is in part a negotiating agenda, in part a work program, and in part a series of promises made by industrialized countries to developing countries.

The negotiating agenda — comprised principally of agriculture, rules (trade remedies and regional trade agreements), services, and tariff and non-tariff barriers on industrial goods — is of greatest interest to developing countries. While some industries in developed countries would benefit from improved access to the markets of developing countries, from improved rules governing agriculture, and from tinkering with the trade remedy rules, the political benefit of these gains is insufficient to offset the expected outcries of pain from other sectors. Not surprisingly, serious engagement of the negotiating agenda has yet to take place[9] — despite six ministerial meetings beginning with the first in Singapore in 1996, frequent so-called mini-ministerial meetings bringing together the trade ministers of selected countries, and pledges of political support from economic summits. On June 30, 2007 the trade negotiating authority granted by the US Congress to the president expired and the prospect is remote that a renewal will even be considered before a new Administration takes office in 2009. A Congress dominated by inwardly focused and protectionist-minded members is unlikely to grant an embattled, lame-duck president anything without a major investment by that president; there is no discernible domestic constituency that will reward such an investment at this time.

The work program — investment, competition policy, transparency in government procurement, and trade facilitation — is of greatest interest to developed countries. The reduction of the work program to trade facilitation, in the face of unrelenting developing country opposition to the first three items (WTO 2004), helped turn the Doha Round into the one-sided affair that it has become: all demand and little on offer from developing countries.

The promises by industrial countries fell into three categories. The first was action on implementation issues with a view to lightening the burdens on developing countries. These covered agriculture, including sanitary and phyto-sanitary measures, textiles and clothing, technical barriers to trade, trade-related investment measures,

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9 At the 2007 G-8 summit, leaders pledged: "We stress the need for achieving an ambitious, balanced and comprehensive agreement on the Doha Development Agenda (DDA), which will enhance worldwide trade especially among and between developed and developing countries and reinforce multilateral trade rules. We take note of the Ministerial Communiqué of the G-6 Trade Ministers of 12 April 2007 underlining their belief that by intensifying their work convergence can be reached and thus contribute to concluding the Round by the end of 2007" (accessed at www.g8.gc.ca.). An attempt by the US, EU, Brazilian, and Indian trade ministers to break the deadlock in June 2007 ended in failure and acrimony. (*Economist*, 2007: 86).

antidumping and countervailing duties, subsides, rules of origin, and customs valuation.

The second promise was a general commitment (paragraph 44) that all special and differential treatment provisions would be reviewed and made stronger, more precise, effective, and operational. In addition, no fewer than 27 of the 52 total paragraphs of the declaration contain references to SDT. The impact of special and differential treatment on developing countries is perverse, allowing poorer countries most in need of the policy-reinforcing help of an international agreement, to opt out of its economically sound but politically difficult provisions (Hart and Dymond 2003).

The third promise was for technical assistance and capacity building (paragraphs 38-41). It is not surprising that the first two promises remain unfulfilled. There is no constituency for these measures in developed countries and, in the absence of gains in other areas, no prospect of a constituency emerging. Considerable sums have been spent on the third promise by individual WTO members and through support of WTO trade policy training initiatives, but with little acknowledgement or appreciation by developing countries, at least within the context of the Round.

The Growing Appeal of Regional Negotiations

If the Doha negotiations are in the doldrums, there has been an exponential growth in regional trade agreements (RTAs). From 1947 through 1994, 124 such agreements, or about three-and-one-half a year, came into force among members of the system.[10] Since the birth of the WTO, the average has grown to 15 a year, amounting to 243 new RTAs (Fiorentino, Verdeja, and Toquebouef 2006).

While the greatest concentration of RTAs is in the Euro-Mediterranean region, where the legacy of over 100 RTAs is currently in force, the main focus of RTA activity has now shifted to Asia-Pacific, where APEC countries, in particular, are engaged in negotiating RTAs either between themselves or with cross-regional partners. Over the past five years, many WTO members traditionally favouring MFN liberalization — among them Australia, New Zealand, Japan, Singapore, Korea, Hong Kong, China, and Taiwan — have added the regional card to their trade policy repertoire. Further, hemisphere or region-wide initiatives, such as the Free Trade Area of the Americas and the European-Mediterranean Free Trade Agreements, are under negotiation.[11]

The amount of world trade covered by RTAs is difficult to calculate. The new attraction of the regional option to large countries such as the United States, however, suggests that the percentage of world trade directly governed by the WTO is steadily declining. In part, the growth in RTAs reflects the expanding membership of the WTO and tougher WTO rules requiring all such agreements to be notified. It is also clear

10 The most important of these was the customs union between France, Germany, Italy and the Benelux countries embodied in the Treaty of Rome in 1957.

11 Not everyone is happy with this turn of events. As a result, a robust literature has developed on the merits — or lack thereof — of regional and bilateral agreements, including analyses of the meager economic benefits resulting from many of these agreements, particularly those that are never fully implemented. See World Bank (2004) for a survey of this literature and an assessment of the extent and the costs and benefits of regional and bilateral agreements. Much of this literature misses the important signaling and foreign policy roles of such agreements and the declining ability of multilateral rounds to play these roles.

that RTAs have become the instrument of choice for the pursuit of trade liberalization and rule making. The agreements range in scope from classic free-trade agreements to full customs unions with numerous variants along this spectrum. Increasingly, the new generation of RTAs are built upon the traditional elimination of border barriers but also include rules on investment, competition policy, the environment, and labour.[12] As such, they are more amenable to addressing issues that arise from the growth in value chains.

Whatever the earlier merits of multilateral, regional, and bilateral negotiations, the past decade shows a growing dissatisfaction with multilateral negotiations as the preferred instrument for liberalization and rule making.[13] This disenchantment is not unrelated to the perception of diminishing economic and political gains available from such negotiations, which, in turn, is fed by the indifference of the business sector to most traditional negotiations. Business indifference may at first glance seem ironic, given the exponential increases in the internationalization of business over the same period. The reality, however, is that changes in the structure of trade and production — exemplified by the rise in value chains — has made the traditional trade agreement a matter of marginal interest to most business leaders.

The Rise of Value Chains

At one level, it can be argued that global value chains are not new. The rise of Venice and other Italian merchant city-states in medieval times, for example, depended upon the operation of value chains linking the markets of Europe to those of the Middle East and beyond. In the 17th century, the Hudson's Bay Company and similar trading companies operated rudimentary forms of supply chains procuring inputs from North America and Asia to be manufactured in Europe and sold globally. High transportation costs and slow and uncertain communications, however, limited the impact of these early value chains. Montreal manufacturers of fine suits, for example, might have depended on Italian or English woolens, but did so at arm's length and without much input on design or price.

12 The Canada-US Free Trade Agreement and the subsequent NAFTA were early forerunners by including provisions on services and intellectual property rights well before these issues became subject to multilateral rules; NAFTA also includes labour and environment provisions in side agreements. Subsequent agreements between Canada and Chile and Canada and Costa Rica as well as US agreements with Jordan and the five countries of Central America have followed the same pattern.

13 We have pointed to the declining importance of multilateral negotiations in earlier articles (e.g. Hart and Dymond 2006 and Hart 2007), prompting some critics to suggest that if governments devoted sufficient political capital to multilateral negotiations, they would regain their preeminent place. Perhaps, but we are not making a normative judgment; rather, we are interested in explaining the decline in the importance of multilateral negotiations. There are a number of reasons, including those listed above. More fundamentally, however, we believe that part of the explanation lies in the changing structure of trade and production. Additionally, it is worth recalling that the economic objective of trade negotiations is to find ways and means to remove barriers to international exchange and promote greater scope for private entrepreneurs and consumers to benefit from comparative advantage. The means available include anything from unilateral measures to multilateral negotiations. The successful practice of trade policy is critically dependent on making persuasive judgments as to which means is most likely to yield politically acceptable results within a politically meaningful timeframe at a politically acceptable cost. In many cases, the theory of the second best helps to explain why governments do not always choose what may, in absolute terms and ideal circumstances, be the most desirable means.

In the twentieth century, the large, vertically integrated firms that dominated the US and other markets organized much of their production on the basis of geographically dispersed value chains. The dramatic reduction in cost and equally dramatic rise in the efficiency of transportation and communications, coupled with reductions in the impact of traditional border barriers,[14] allowed firms to expand this pattern beyond their own borders and the confines of their own firm. Today, global value chains, involving highly disaggregated and spatially dispersed production engaging multiple firms responsible for slices of the production process, have become the dominant pattern of international trade and production.[15]

One element of this paradigm is the displacement of arm's-length trade, between firms and individuals in one country and unrelated firms and individuals in another, by trade among related parties or within integrated networks. For example, over 70 percent of Canada-US merchandise trade consists of trade within the same industries (FAIT 2006:45). The UNCTAD reports that by 2006 some 78,000 firms qualified as multinational in their activities, each accounting for an average of 10 separate foreign affiliates. Worldwide sales by foreign affiliates had reached US$25.2 trillion in 2006, nearly double worldwide exports of goods and services at US$14.1 trillion (UNCTAD 2007).

Although national trade statistics continue to record flows of trade and investment as if they were the outcome of arm's-length transactions, the reality is that intermediate products moving across borders in value chains, as well as investment within multinational firms and networks to foster the growth of value chains, have become the principal drivers of international exchange. The inadequacy of statistics to measure the impact of the new paradigm compounds the challenge facing governments because they do not always accurately capture the origin of value-added in a complex multi-country production process.[16]

Global Examples of the New Paradigm

More critically, trade statistics do not measure the impact of modern communication and transportation technologies upon the structure of international trade. An example:

14 For many of the postwar years, differences in tariff levels applying to goods at different stages of the production process created some bizarre trade and production patterns, with some producers outsourcing elements of the production process to a foreign branch or firm to take advantage of these differentials. Free-trade zones, duty drawbacks and remissions, and outward processing tariffs all sought to capture the benefits of such tariff differentials, particularly when coupled with other factors such as low wages and tax liabilities. Many of these programs have lost their rationale with the demise of the tariff as a major instrument of industrial policy in OECD countries. Modern value chains, however, are heirs to the experience gained from these trade and production patterns.

15 For a concise description of the key factors in the rise of value chains, see Sydor (2007).

16 We would be more comfortable pursuing these issues on the basis of more robust metrics. Unfortunately, the statistical basis for measuring the impact of value chains remains under-developed because the economic assumptions that underpin the collection and analysis of international trade statistics are rapidly evolving. It is also worth recalling one of Albert Einstein's many insights: "Not everything that can be counted counts, and not everything that counts can be counted." For an examination of the challenges facing statisticians, see Ridgeway (2007). Ridgeway is Director, Balance of Payments Division, Statistics Canada. Sydor (2007) and Maule (2007) also note the statistical challenges posed by the rise of global value chains. For an analysis of global value chains in key sectors and major countries, see Nordak (2007) and OECD (2007b).

the processes involved in the production of an airplane designed and assembled in Canada, with fuselage parts from Japan, wings from Northern Ireland, engines from the United States, and avionics designed and engineered in the United States sourced from Asian suppliers. Trade statistics count an Apple computer as a Chinese import, rather than as the fruit of the design, engineering, and marketing input of the brains at Apple's Cupertino, California, campus. There is no way of accounting for the value of Chilean copper ores, refined and transformed into copper wire in Canada, in automobiles designed in Germany and ultimately manufactured in Mexico and imported into Canada through a US distribution network.[17]

A second feature is the fragmentation of production through outsourcing and subsequent re-bundling within large and technologically sophisticated supplier networks. The sophistication of the firms that constitute the fragments has made it easier to relocate specific nodes of production to take advantage of access to inputs, technology, and labour. MIT geographer Tim Sturgeon points out: "In both manufacturing and service industries, … many companies have been shifting specialized activities out-of-house to an increasingly competent set of suppliers, contract manufacturers, and intermediaries." (Sturgeon 2006).

Contract manufacturers play an increasingly critical part in the success of value chains. Li & Fung of Hong Kong is a prime example of a modern specialist in managing the economics of fragmentation and agglomeration. It has access to a network of about 7,500 contract suppliers employing as many as 1.5 million workers in China and Southeast Asia. It provides a critical mediating service bringing brandname firms together with highly efficient contract manufacturers.[18] Li & Fung takes orders from brandname companies all over the world to "make things" for them, from intermediate parts and components, to golf clubs, computers, and televisions. It in turn finds the right contract manufacturer and organizes the logistics to supply the ordered "thing" to the customer, based on the customer's specifications. Many contract suppliers maintain offices in Hong Kong to liaise with Li & Fung and provide it with product development and engineering information (Price 2001:96). Sam Palmisano, Executive Chairman of IBM, points out that this means putting "people and jobs anywhere in the world based on the right cost, the right skills and the right business environment. And it integrates those operations horizontally and globally … work flows to the places where it will be done best, that is, most efficiently and to the highest quality. The forces behind this are irresistible. The genie's out of the bottle and there's no stopping it" (*Economist* 2007:16).

The American Standard Company, which makes household and institutional toilet products, provides an example of a firm moving from the classic pattern of branch-plant operations to vertical specialization across national borders. By the 1990s it had

17 Alexander Yeats, by analyzing data for selected industries and extrapolating the results more widely, estimates that a third or more of world trade is made up of parts and components (Yeats 2001). Michael Mandel points out that the increasing proportion of services in national accounts reflects not only a more prosperous economy with an increasing desire for services rather than goods, but also the disaggregation of production into increasingly smaller slices, many of which are counted as the production of services rather than as part of the goods in which they are embedded, as well as the service links required to bring the spatially separated slices together (Mandel 2006).

18 As its website boasts, "Li & Fung is today one of the premier global consumer-products export trading corporations managing the supply chain for high-volume, time-sensitive consumer goods. Our mission is to deliver the right product at the right price at the right time" (www.lifung.com.).

evolved from operating factories in several countries to supply the local market to locating the tasks of design, engineering and other stages of a global production cycle in facilities across several countries to capture the efficiency and cost advantages of each. It concentrated design in Milan, engineering in Munich, mold-making in Avignon, and manufacturing in a number of low-cost countries close to the final customer, while maintaining its headquarters in New York (Hart 1994).[19]

Firms that manufacture no product provide further examples of fragmented production. Their business is design, marketing, and brand management. Dell Computers exemplifies this model. Dell does not own its suppliers but has developed long-term relationships with a number of firms to supply the components and assemble Dell's line of computers (Friedman 2005: 515-20). Another example is Mattel and its flagship product line of Barbie and Ken dolls, designed in California, made from plastic from Taiwan, nylon hair from Japan, and cotton clothing from China, assembled in Indonesia or Malaysia, quality tested in California, and marketed globally (Feenstra 1998).

The outsourcing or off-shoring of key components of the production cycle by the lead firm is another example of fragmented production. The automotive industry has evolved away from the Henry Ford model of manufacturing in-house all the inputs needed to make an automobile to focusing on its core competencies of design, engineering, assembly, marketing, and finance. The industry now consists of the brandname companies, systems integrators such as Delphi, the key North American supplier to General Motors, first-, second- and third-tier suppliers, and the after market. All of these play essential roles in organizing the supply chain and often undertake much of the research and development associated with their share of the chain. The value added to a typical automobile by the major assemblers and their in-house suppliers has dropped from about two-thirds in the 1960s to one-third or less today as they either sold or closed many of their proprietary supply facilities and learned to rely on independent suppliers (OECD 2007b: 26).

The 1965 Canada-US Auto Pact allowed the major automobile firms to re-organize their production from two national industries to an integrated North American industry. The growth in independent parts suppliers on both sides of the border further accelerated the development of value chains. Various traditional trade and industrial policy instruments disposed some of the Japanese and European firms to locate assembly facilities in Canada and the United States where, over the past 20 years, they have developed similar North American supply chains. The Canada-US Free Trade Agreement and the North American Free Trade Agreement were critical to these developments and allowed Canadian-based participants in these value chains to become better integrated into US-organized production patterns. The industry, however, is now experiencing new problems complicating the most efficient deployment of dispersed resources, including an increasingly dysfunctional border, and the tyranny of minor but not insignificant differences in regulatory requirements, problems that are unlikely to be addressed in conventional trade negotiations.

19 American Standard announced the sale of its Bath and Kitchen operations to Bain Capital on July 23, 2007, which will take over this aspect of the firm and run it as a separate company. Press release available at ir.americanstandard.com/ReleaseDetail.cfm?ReleaseID=255826.

The aircraft industry is similarly dependent on outsourcing. For the Boeing Dreamliner, the 787, design, integration, and quality control are the responsibility of primary, or "Tier 1" suppliers, who in turn outsource to other subcontractors. In total, Boeing will produce only some 35 percent of the value of the Dreamliner. In addition to Boeing facilities in the United States, Canada, Australia, and Russia, independent suppliers in 12 other countries and a network of subcontractors for component parts and materials extending to suppliers in China and other countries in Asia and Europe are part of this global value chain (Gates 2005 and Thomas 2006).

The cut flower industry provides a different model of production and outsourcing. No longer a cottage industry, it has evolved into a sophisticated network of growers in low-cost countries, flora-genetics firms, global distribution networks, and floral design, market research, product specification, marketing, and distribution firms in the country of sale. Growers in Kenya, for example, rely on successful development and application of flora-genetics from firms in countries such as the Netherlands in order to meet product specifications specified by EU retailers. Market research and retailers influence the production process by defining the product specifications to which suppliers must adhere. Retailers also play a role in arranging, packaging, and distributing to individual stores (Hughes 2000).

Fragmentation and integration combine to increase the extent and intensity of international transactions, allowing slices of the production process to be moved to the best possible location. The speed and efficiency with which these slices can be integrated clearly have a bearing on the optimal degree of fragmentation. Fragmentation thus allows firms to specialize to a much greater degree and reap greater advantages from economies of scale and scope. Gary Gereffi points out that:

> "today, we live in a world in which *deep integration*, organized primarily by transnational corporations (TNCs), is pervasive and involves the production of goods and services in cross-border value-adding activities that redefine the kind of *production* processes contained within national boundaries." (Gereffi 2006: 163.)

OECD work points to the increasingly important role of small and medium-sized enterprises in this process as providers of specific slices or as integrators of a series of slices (OECD 2007b).

The Impact on Canadian Trade Patterns

The Canadian economy is a full participant in this global transformation of production. A recent study by Danielle Goldfarb and Kip Beckman divides goods into three categories: entry, middle, and final. It finds that, while Canadian trade in all three categories shows steady growth, entry-level trade (once price fluctuations have been taken into account) has been falling significantly and the share of both middle-point and final exports and imports has been growing, implying integration in supply chains outside Canada. This rise is evidence of increasing specialization in Canadian goods production. Canada's total imported inputs evolve in parallel with Canadian exports with middle and end-point goods, implying that Canadian firms supply inputs for the exports of firms in other countries and firms in other countries are supplying inputs for exports by Canadian firms. However measured, Goldfarb and Beckman conclude that there have been significant shifts in the structure of Canadian trade and a moderate-to-high integration into global supply chains (Goldfarb and Beckman 2007).

Canada, for example, is an important player in the global supply chain of copper and copper products used in a wide variety of industries, including architecture, automotive, marine, and telecommunications. In 2004, Canada exported C$2.9 billion of copper and copper products, while importing $1.9 billion. The United States is the major destination for exports, followed principally by Japan, South Korea, and China. Chile is a major source of imports for Canada, primarily of ores and concentrates, but the United States, Peru, and Germany also have significant shares of the import market. It is reasonable to assume that Chilean copper ores and concentrates find their way into a broad range of products manufactured and marketed as part of fragmented global supply chains.

Since the implementation of the CUFTA and the NAFTA, fragmentation has become commonplace throughout North American industry, involving both manufacturing and service industries. High levels of both two-way intra-industry trade and foreign direct investment indicate continued cross-border integration and rationalization of production between Canada and the United States, as well as a deepening interdependence of manufacturing industries. Canada is the second-leading destination for US foreign direct investment while the United States is the prime destination of Canadian FDI. Proximity of the US and Canadian industrial heartlands, well-developed infrastructures, and transparent legal systems all contribute to the highly integrated nature of the two economies. In turn, this integration contributes to a high level of trade as each country is the other’s largest foreign market and leading supplier of imported goods.

Trade figures for 2006 indicate that Canadian firms and individuals produced $524 billion in goods and services for export and imported $486 billion in goods and services from all sources. The United States remained by far the most important destination for Canadian merchandise exports at $362 billion (78.9 percent), and the principal supplier of Canadian merchandise imports at $265 billion (65.5 percent). As a result of increasing cross-border investment, Canadian firms are also increasing their presence in the United States through sales by affiliates, particularly in the services sector, just as US-owned affiliates continue to have an important place in the Canadian market place.

In 2003, the latest year for which such data are available, about 43,310 Canadian-based firms were engaged in exporting. Of these, 27,747 (64.2 percent) exported to the United States alone, 5,802 (13.4) percent) exported only to non-US destinations, and 9,671 (22.4 percent) to both. Fewer than 4 percent of these firms accounted for more than 80 percent of total exports, and 12 percent accounted for 93.5 percent of Canada’s total merchandise exports. The profile of successful exporting firms is also highly skewed toward foreign-controlled firms. Of the 44,469 firms that registered as exporters in 2002, only 3,597 (9 percent) were foreign-controlled, but they were responsible for nearly half of merchandise exports (Statistics Canada 2006 and Byrd 2005).

Philip Cross and his colleagues at Statistics Canada have done extensive work trying to understand the changing nature of cross-border trade, production, and investment patterns. They have calculated that the import content of Canadian exports has risen steadily over the past two decades. It was 25.5 percent in 1987 and peaked at 33.5 percent in 1998. The rapid rise in trade in the 1990s was in large part the result of rationalization, with imported components replacing domestic components, with the final product exported to a broader market base. More significant than the rise in exports as a share of GDP was the rise in value-added exports in GDP, which rose from 21.4 percent in 1987 to reach 28.8 percent in 1999 (Cross and Cameron 1999 and Cross 2002). The recent increase in the value of sales of energy products has had a dampening effect on a further rise in the import content of Canadian exports, but not on their Canadian value-added content.

Value Chains and Trade Policy

With the emergence of global value chains, several factors suggest that the trade model established by the GATT, and now the WTO and a plethora of regional and bilateral agreements, is becoming irrelevant and that certain of its central features even have the potential of generating perverse economic outcomes. The factors are as follows:

(i) Traditional trade agreements, whether multilateral, regional, or bilateral, in essence involve an exchange of rights and obligations between pairs of countries. At its birth, the GATT was essentially a collection of bilateral contractual commitments among its founding members, held together by a common agreement. It thus functioned as the principal trade agreement between individual pairs of countries.

This characteristic is also evident in the hierarchy of procedures for tariff negotiations: in the first instance between the country proposing to modify a tariff and the country with which a concession was initially negotiated; in the second instance with the country that is the principal supplier of a product; and in the third with countries that may have substantial supplying interests. It is only these countries that have rights to withdraw concessions in the event they are not satisfied; other countries have no voice in the matter. This "pairing" is also evident in dispute settlement procedures whose outcomes affect only the parties to the dispute and are generally not applicable to or convey precedent to subsequent disputes.

Pairing creates a virtually insoluble dilemma for governments seeking to enhance opportunities for home-based firms to participate in global value chains through trade agreements. The dilemma takes two forms. One arises in circumstances of a trade dispute between two countries over a trade measure that affects the efficiency of a several-country value chain. Typically, only the country whose exports are directly affected by the offending measure has standing to seek redress. The manner in which that redress is obtained may not relieve the damage to the effective operation of the value chain. For example, if Indonesia — the country of final assembly of Mattel's Barbie doll — imposed a tariff or antidumping duty on the import of dolls' clothing from China — inconsistently with its trade agreement obligations — thereby potentially increasing the final price and depressing demand for a fully assembled doll, all other participants in the value chain could suffer economic loss. However, only China would have credibility in bringing a complaint if the measure violated Indonesia's WTO obligations. If China chose not to bring a complaint, or accepted compensation in other sectors or increased trade barriers against Indonesian products, the other WTO members have no remedy.

The same situation would prevail if the Indonesian action violated a bilateral obligation but remained consistent with its WTO obligations. The dilemma also arises in the choice of partners for regional and bilateral free-trade negotiations. As a practical matter, there would seem no strategy that captures within regional or bilateral free-trade agreements in a timely way all the countries whose firms participate in value chains.

For the Boeing 787 Dreamliner, for example, the primary suppliers are located in 14 countries. Canada, as one of the suppliers through Boeing Canada, has a free-trade agreement with just the United States. If any of the 12 other countries maintained trade barriers that affected the viability of the supply chain, Canada as a direct supplier to Boeing would need to rely upon the United States to negotiate the elimination of the barrier.

(ii) The principle of reciprocity reinforces the mercantilist bias in the political economy of trade agreements. It does so by inducing governments to shape their political strategy for conducting trade negotiations and administering agreements around the twin objectives of maximizing export opportunities and minimizing any impact upon import-sensitive sectors. For firms whose economic characteristics reflect the traditional model of international trade, the principle of reciprocity continues to provide a practical and politically defensible guide to trade policy. For firms that are part of global value chains, the principle of reciprocity is destructive. One example would be the need for a country to provide treaty-based investment protection through a bilateral investment agreement as an essential component of a package of measures to attract foreign investment into value-chain production. If the country declined to provide such protection on the grounds that reciprocal, treaty-based protection was not available to its investors in other countries, the investment might not proceed. Similarly, a prospective value-chain investment dependent upon treaty-bound tariff-free imports of inputs may be denied due to the absence of reciprocity. While governments can escape the cul-de-sac of reciprocity through unilateral action, the built-in mercantilist bias that views such action as conveying unrequited advantages for other countries, creates formidable psychological obstacles to restructuring trade policy to conform to the imperatives of global value chains.

(iii) The relative rather than absolute character of national treatment also undermines the certainty and predictability of the trading rules in today's circumstances. It creates scope for the adoption of regulations and other internal measures affecting trade that damages the ability of firms to participate in global value chains. Consider a ban on the sale of products that have been fabricated using certain chemical inputs considered environmentally harmful. So long as the ban applies to the sale of both domestic and imported goods and meets the requirement of a scientifically credible risk assessment, it meets the WTO requirement of non-discrimination. For trade in goods that are not part of global value chains, the trade effect is confined to the immediate producers and consumers. For goods that result from global value chains, the ban affects all producers and consumers dependent upon the efficient operation of the chain.

Governments can solve this problem by entering into agreements that provide not only for non-discrimination but define the permissible standard or other internal measure of commerce. National treatment alone does not produce liberalization of barriers to trade. A country owes no national treatment obligation to allow meaningful access to its market for an imported good, even if the identical product is produced and exported from that country.[20]

(iv) The continued legitimacy and application of trade remedy measures is wholly at odds with the efficient operation of global value chains. Disruption caused by the application of such measures can occur upstream or downstream from the imports subject to the measures. An example: the application of an anti-dumping measure to steel imported to produce parts for engines manufactured in another country and installed in automobiles assembled in a third country. The duty protects domestic steel producers but raises costs not only for the engine parts manufacturer but for all firms in the value chain. For trade in non-value-chain goods, the impact of the duty is confined to the domestic economy and borne by users and consumers of the affected product. In global value chain trade, the spread of the negative impact of the duty throughout the whole chain creates a powerful inducement to eliminate participation by firms in countries where trade remedy actions are frequent. Again, governments can avoid damage by declining to apply trade remedy measures. However, the structure of the rules in trade agreements and the immense bureaucratic infrastructure created to apply such rules suggests any steps to weaken the trade remedy tools would face sustained opposition. The narrow mandate of the Doha negotiations on trade remedies, essentially measures to ensure their efficient operation, provides ample reason to doubt that the evident dysfunctionality of trade remedies in a global value-chain economy will lead to their early demise.

The Emerging Policy Agenda

The multilateral trade system, now embodied in the WTO, has endured for more than half a century. The transformation of the GATT into the WTO has given the system a permanent institutional structure while a growing membership provides ample evidence of its strength and pertinence. The 80 governments that launched the Uruguay Round in 1986, became the 124 that signed the Marrakech Declaration in 1994, the 142 that agreed to the Doha Declaration in 2001, and the 151 that are now WTO members, with a further 29 candidate countries in various stages of accession.

20 Dairy products are an example. The EU is a major exporter of dairy products, yet import levies imposed by the Common Agricultural Policy virtually prohibit imports.

Throughout this half-century, the twin roles of maintaining a rules-based system and sponsoring negotiations have been carefully balanced. In an important sense, they have nourished each other. As an organization, however, the WTO remains obsessed with its calling to sponsor multilateral trade negotiations, in the absence of which it believes it will lose relevance. Notwithstanding the demanding responsibilities of managing a complex system of rules and procedures, the WTO's priority since the end of the Uruguay Round has been a new round of negotiations (Lamy 2007). In insisting on the critical role of negotiations while downplaying that of rules maintenance, its members appear to be indulging the rhetoric of inertia rather than responding to the realities of the globalized economy. As a practical matter, the prestige and relevance of the WTO as the arbiter of international trade rules may never have been higher, but its negotiating role has been assumed by flourishing regional and bilateral initiatives. It is through such initiatives that its members are looking to pursue their interests in liberalizing markets.[21]

It is tempting to conclude from this analysis that the logical step is to convert the WTO into an institution devoted to rule-making related to standards, regulations, intellectual property protection, and similar issues. We disagree. The WTO has proven very successful at reducing traditional barriers to international exchange within an agreed framework of rules and procedures. As we note earlier, the critical assumptions underpinning the regime have changed, suggesting that it would be very difficult, if not counterproductive, to convert this successful regime into an instrument to resolve issues that it was never designed to address. Additionally, multilateral negotiations, which are easily captured by the most intransigent participants, may not be well suited to resolving issues of interest to countries that are part of highly integrated markets. At the same time, we are not suggesting here, or elsewhere, that the WTO has reached a point of diminishing returns. On the contrary, the WTO's rules and procedures continue to play a critical role in underpinning global exchange. We believe that misguided emphasis on the WTO's negotiating role, grounded as these negotiations are in extending and deepening the conventional trade agenda, threatens to undermine the valuable role of regime maintenance. Suggestions, for example, that failure to conclude the Doha Round would undermine the continued viability of the WTO, are both irresponsible and misleading.

In today's circumstances, expanding and deepening traditional trade agreements, whether pursued multilaterally or bilaterally, is at best an answer to a secondary question: what can governments do to break down barriers to global exchange. The more important question is what steps governments need to take to remove barriers to their firms' and citizens' ability to organize their affairs in the most efficient way possible.

The new paradigm of international trade — fragmented production strategies, the ability to disperse production much more widely around the world, and the reality of a much wider range of cross-border transactions — is generating a new set of policy challenges. The blend of mercantilist and Ricardian inspirations that fuelled the original assault on market access and related problems is ill-suited to this purpose.

The emergence of a global economy has undermined a critical assumption supporting the multilateral trade system — even if it is often over-estimated: that

21 For a more in-depth treatment of this theme, see Hart and Dymond (2007).

governments are prime players in determining the flows of international trade. The rise of global value chains, in which the key players are transnational corporations, has created a yawning gulf between voters' expectations of governments and their capacity to deliver. In the new dynamics of international trade, the critical factor is the intersection of firm-specific and location-specific value.

Governments, in the interest of attracting value-adding activity to their jurisdictions, now compete in promoting policy settings that are congenial to increasingly mobile slices of production. This entails removing barriers and providing incentives. Trade policies that focus on particular countries and the negotiation of multilateral and bilateral trade agreements may have been critical to providing the framework that promoted fragmentation and integration, but they are no longer sufficient. From a policy perspective, governments must switch their focus from specific products and markets and trade barriers to arrangements anchored in integrative or cross-border trade.

Canadian Priorities

The challenges facing the Canada-US economic relationship, the largest bilateral relationship in the world, illustrate the conundrum. The two governments, both in word and deed, manifest their continuing commitment to the multilateral system. At the same time, the problems that affect the bilateral relationship arise from a range of trade issues that are either beyond the scope of the system to address or cannot be addressed by conventional trade negotiations.

There remain barriers to realizing the full international trade potential of the Canadian economy. Some of them lie in foreign markets; more of them reside at home. In its latest report on Canada, the WTO observed that significant trade barriers still protect certain agricultural activities, and foreign investment restrictions remain in areas such as telecommunications, financial services, the cultural industries, and air and maritime transport (WTO 2007). Reform in these sectors could lower costs to Canadian taxpayers and consumers while increasing productivity and competition in the domestic market. Ultimately, addressing remaining policy-induced distortions would help ensure that Canadians continue to enjoy one of the highest living standards in the world (OECD 2007a).

The US government's annual report to Congress on foreign barriers to US exports provides a similarly helpful catalogue of policy measures that hamper Canada's economic development (USTR 2007). The failure to address these issues diverts investment and increasingly short resources of skilled labour away from sectors and services that Canada can supply competitively in world markets. It also impedes Canada's participation in global value chains, and locks Canadians into the limited opportunities of the small domestic market. There may be good social and political reasons for these policy choices, but their negative economic effects cannot be ameliorated through trade and investment negotiations with foreign partners unless Canada is prepared to accept new rules disciplining these choices. A serious contemporary trade and commerce strategy would start by hacking away at these barriers (Steger 2007 and Hart 2007).

Additionally, a growing agenda with the United States languishes on the back burner as both politicians and bureaucrats shrink from tackling "controversial" issues.

The continued presence of a heavily administered border, of similar but differentiated regulatory regimes, and inadequate institutional capacity to solve problems, now undermines the ability of firms and individuals alike to reap the full benefits of deepening cross-border integration.

Canada needs to move decisively to pursue a bilateral initiative with the United States that consists of at least the following interrelated dimensions:

(i) a commitment to design and implement a border regime that eliminates much of the detritus of past customs administration for bilateral trade, relies for third-country trade on a common customs perimeter, moves what remains to preclearance facilities away from the border, and reduces border administration to what is essential to meeting common security goals;

(ii) the implementation of a joint regulatory agenda that seeks, over time, to move towards a much higher level of convergence through a combination of mutual recognition, joint rule making, and similar programs; and

(iii) the establishment of such institutions and decision-making procedures as may be required to achieve the first two goals. As Allan Gotlieb has argued, the results of such an initiative need to be enshrined in a bilateral arrangement that has the status of international law in both countries (Gotlieb 2003).[22]

New developments in trade and industrial organization theory help us to understand the nature of new production and exchange patterns. They underline the extent to which subtle differences in regulatory regimes and undesirable border complications can frustrate corporate efforts to organize production and exchange as efficiently as possible. In a world where firms have many more choices about what to produce and where, the smaller partner in a deeply integrationist relationship is particularly vulnerable to the impact of border delays and regulatory differences. In these circumstances, the Canadian government is well advised to invest in efforts that will bring the framework of rules governing cross-border exchange into line with commercial and economic reality.

The benefits to Canadians of such a re-ordered agenda are potentially enormous. Success in reducing the direct and indirect costs of administering the border, for example, would alone be worth the effort. Reducing overlap and duplication in Canada's increasingly costly regulatory regimes would put further dollars in the pockets of Canadians and increase their capacity to pay for other priorities, from healthcare reform to education. The indirect benefits in redirecting productive private resources to more rewarding activities would be even larger, strengthening the Canadian economy and adding further to the capacity to focus on other priorities. The only cost that would arise is political, i.e., in Canadians' exaggerated pre-occupation with ephemeral concepts of sovereignty and nationhood. As the past two decades of experience with bilateral free trade have demonstrated, however, these concerns have no basis in reality. Canada is a stronger country than it was 20 years ago not despite,

22 Space limitations do not allow us to develop these issues in any detail. We have done so, however, in a number of earlier papers, including Hart (2004, 2006 and 2007) and Hart and Dymond (2001 and 2005). See also the whole of the C.D. Howe Institute's *Border Papers* for a wide range of sensible ideas to strengthen the Canada-US relationship.

but because of, the bilateral integration that flowed from free trade. The time has come to complete the project and reap its full advantages.

A secondary benefit would be its demonstration effect for a more gradual re-ordering of global negotiations. Just as bilateral Canada-US negotiations in the 1930s were a critical contributor to the development of the GATT/WTO regime, and bilateral negotiations in the 1980s ushered in the new focus on bilateral negotiations, a modernized Canada-US treaty that reflects the reality of the dynamics of value-chain-based trade and production patterns can help point the way toward a renewed and revitalized multilateral trade policy.

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