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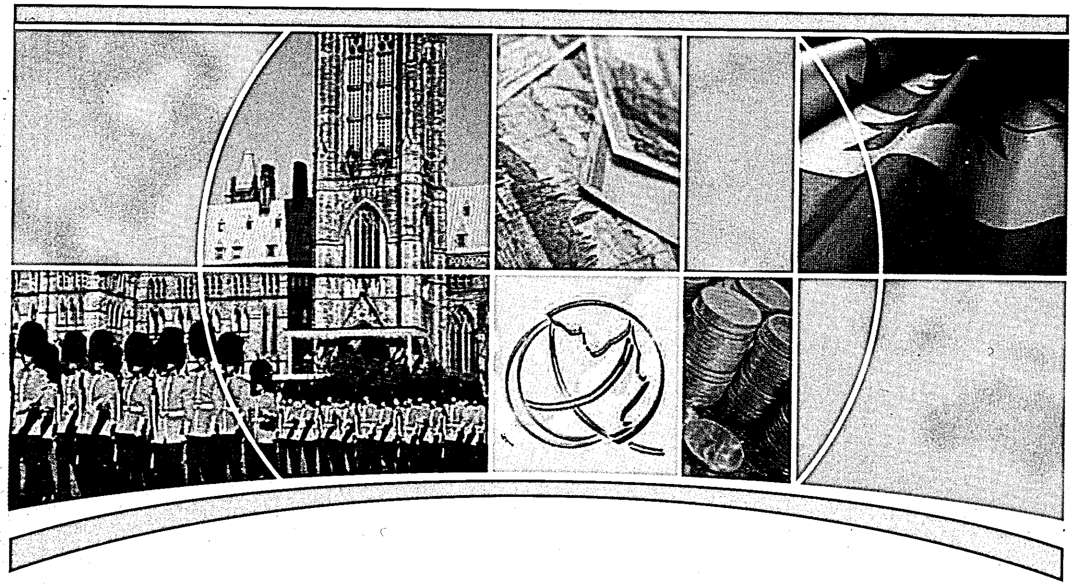

Trade Policy Research 2005

Trade Policy *Research* 2005

John M. Curtis and Dan Ciuriak
Editors

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Foreword

This volume brings together the results of analysis and policy research undertaken within, on behalf of, or in collaboration with Foreign Affairs and International Trade Canada over the past year. Launched in 2001 as part of the response to the Government of Canada's *Policy Research Initiative*, a government-wide effort to re-create and expand its research capacity, the *Trade Policy Research* series is now in its fifth edition.

Previous volumes have traced the debate in trade policy circles since the watershed developments at the 1999 WTO Ministerial in Seattle, following the launch and hesitant progress of the Doha Round, touching on topical issues and showcasing research and analysis conducted within the Government of Canada on various aspects of trade policy and economic globalization more generally.

This year's volume continues in that vein. Part I addresses issues confronting the Doha Development Agenda as it moves towards the closing phase of negotiations.

Part II compiles several staff papers and commentaries completed in 2005. The seven chapters describe: the determinants of the direction of Canada's direct investment flows abroad; the dynamic version of Foreign Affairs and International Trade Canada's computable general equilibrium model for analyzing the impact of trade policies on Canada; an adaptation of a standard partial equilibrium model for use within the Department; a method of directly including revealed comparative advantage in a gravity model of trade; a preliminary assessment of the impact of embassies and consulates on Canadian trade performance; and two commentaries on topical aspects of trade policy.

Through this volume, Foreign Affairs and International Trade Canada seeks to continue to contribute actively to the discussion concerning the role of international trade and investment in Canada and in the global economy more generally. And, in the process, we continue to work in the spirit of the broader commitment of the Government of Canada to stimulate the development of its applied research capacity. At the same time, we continue to foster links with professional and academic commentators by continuing the pattern set in previous *Trade Policy Research* editions of including contributions from that sector. Accordingly, the papers presented in the various chapters are written in the personal capacity of the authors and do not represent the views of the Department, of the Government of Canada, or of any organizations with which the respective authors might be affiliated.

This volume was produced under the guidance of John M. Curtis, Chief Economist, Foreign Affairs and International Trade Canada, together with co-editor and managing editor Dan Ciuriak, Deputy Chief Economist, Foreign Affairs and International Trade Canada.

Ottawa
March, 2006

Part I

Multilateral Trade Issues

Scoping the End-Game in the Doha Round: A Roundtable Discussion

John M. Curtis and Dan Ciuriak*

On February 17-18, 2005, the Centre for International Governance Innovation at the University of Waterloo and the International Development Research Centre, in co-ordination with the Department of Foreign Affairs and International Trade convened an informal meeting of leading observers of the international trade and investment scene for a discussion of the progress of the Doha Development Agenda as the focus shifted to the scoping out of the "end game" for the negotiations and more particularly to the preparations for the Sixth Ministerial Conference of the World Trade Organization (WTO) at Hong Kong, China, December 2005. The goal of the roundtable discussion was to share views on the progress of negotiations and the prospects for an ambitious outcome, taking into account the geopolitical and international macroeconomic context; to discuss issues that might usefully be addressed given the directions being taken in the negotiations; and to identify areas where analytic work might facilitate further progress. This note represents the Chair's thematic summary of the discussions. As these were held under Chatham House rules, no attribution is given. Responsibility for the interpretation of the discussion rests entirely with the authors.

* John M. Curtis is Chief Economist and Dan Ciuriak is Deputy Chief Economist, Foreign Affairs and International Trade Canada. The views expressed in this paper reflect the discussion at the roundtable and are not to be attributed to Foreign Affairs and International Trade Canada or the Government of Canada, to the Centre for International Governance Innovation, University of Waterloo, or to the International Development Research Centre.

Introduction

Now in its fourth year, the Doha Development Agenda, the ninth round of multilateral trade negotiations under the auspices of the GATT/WTO, is already well on its way to being as storied as its immediate predecessor, the Uruguay Round, which took eight years and the overcoming of many trials and tribulations to complete. After a surprising plot twist which saw the Doha Round revived from an ignominious collapse at Cancún in September 2003 by an agreement on negotiating modalities in Geneva in July 2004, the questions of the moment have become, first, whether negotiators can take advantage of renewed life in the Round to bring it to completion; and second, whether an outcome in the present Round can be built up to match that of its predecessor.

In good measure, the rather pedestrian answer to these questions is that much will be determined by the extent of progress in the negotiations during 2005 and, most importantly, by the results of the December 2005 Hong Kong ministerial meeting. A successful outcome in this context will depend on factors as varied as:

- The preparation of a good first approximation of the text of a potential final agreement by mid-2005.
- The avoidance of fractiousness in the selection of a new Director General of the WTO to replace the incumbent, Supachai Panitchpakdi, whose term expires on 1 September 2005.[1]
- A smooth assumption of the burdens of trade leadership by Robert Portman and Peter Mandelson, the successors of US Trade Representative Robert Zoellick and EU Trade Commissioner Pascal Lamy, two individuals who combined tireless advocacy of trade liberalization with the technician's command of the substance of negotiations.
- Substantively, finding a way to unlock meaningful offers on agriculture, services and non-agricultural manufactured

[1] The transition was indeed smooth: Pascal Lamy became the fifth Director-General of the WTO, as of 1 September 2005 for a four-year term.

goods in order to move the negotiations from discussion of modalities to discussion of commercially meaningful market opening—for developed and developing countries alike.

While good progress in 2005 would pave the way for the final run to an agreement, it would not of course be the end of the story. A number of other shoes would still have to fall in the end-game before the Doha Round would be safely in the books.

- A credible commitment of resources for trade-related technical assistance and capacity building would have to be forthcoming to keep the large bloc of poor countries (the G-90[2]) at the table.
- Solutions would have to be at hand for the systemic and institutional issues that are likely to arise, as they typically have in the past, in the late stages of the negotiations to help balance the deal.
- The various protagonists in the negotiating process would have to meet the procedural challenges of bringing along each of the negotiating groups, of aggregating the results in understandable ways for the Members to facilitate the calculation of the trade-offs that they individually face, and of maintaining transparency in the process to forestall an inadvertent breakdown of trust that could derail the process altogether.

Are there innovative ideas on ways to break through the various impasses that have slowed or stalled negotiations to date? Will the major industrialized states see multilateral trade liberalization as a solution to their current macroeconomic problems—or as an impediment or even as irrelevant? Will the large dynamic developing countries that are presently doing well in economic terms complacently decide to live with the *status quo*, or make essential contributions to the trading system from which they have drawn much of their recent dynamism? Will international business enterprises see improvements to the operation of the multilateral system as important to their bottom lines?

[2] The G-90 is a WTO-oriented coalition of the least developed countries (LDCs), the African Union (AU) and the African, Caribbean and Pacific (ACP) group.

As we will see from the discussion recounted below, the prospects are not without hope, but there are no clear answers to these questions, which means that 2005 will, for those involved in trade policy, be a year of living rather nervously.

The macroeconomic and geopolitical context

Historically, many have argued, the macroeconomic context has played an important role in the progress of trade rounds as policymakers looked to trade to help resolve imbalances.[3] This time around, it was pointed out by some observers, the linkage is not being made. Not even by markets.

Global imbalances are not driving trade activism...

In the shadow of global macroeconomic imbalances the sheer size of which is straining the imagination of the economic commentariat if not yet overtaxing the nerves of international investors, 2004 was the best year for global growth in several years. The macroeconomic imbalances have to date been benign and, going forward, are not expected by the mainstream to lead to precipitous adjustments.

As regards exchange rates, some 50 percent of the adjustment in exchange rate parities thought by some to be needed to help turn the dynamic towards reducing imbalances had already happened by the end of 2004, albeit in an unbalanced way, with the US dollar depreciating against the euro and the floating commodity currencies but with limited participation from Asia. The key to the remaining part of the dollar adjustment was thought to be China moving to a more flexible exchange rate regime, which it had long signaled it would do when the re-

[3] See, for example, C. Fred Bergsten, "The International Monetary Scene and the Next WTO Negotiations", in Jeffrey J. Schott, *Launching New Global Trade Talks: An Action Agenda*, (Washington: Institute for International Economics, September 1998): 39-46. Also see John M. Curtis. "The Role of Contextual Factors in the Launching of Trade Rounds", in John M. Curtis and Dan Ciuriak (eds.) *Trade Policy Research 2002* (Ottawa: Department of Foreign Affairs and International Trade, 2002): 33-70.

forms to its banking system were sufficiently advanced, the timing of which remained uncertain.[4]

As regards the US domestic savings-investment imbalance which has been exacerbated by the expansion of the US fiscal deficit and which has increasingly come to be seen as to blame for the external imbalance, it was noted that there is a general expectation of some improvement with robust global economic growth reducing the cyclical component in the near term and the Administration having announced a program of fiscal consolidation to reduce the structural component in the medium term.

However, it was suggested, the so-called "twin deficit" issue has not generated a sense of urgency in Washington.[5] In part, this reflects consideration of the context in which the US current account deficit originated: some two-thirds of the external deficit was built up during the late 1990s at a time when the US was going into fiscal surplus. This was a period of high growth in US productivity and of the US economy overall, while slow growth in continental Europe and Japan weakened external demand for US exports. This suggested that cyclical factors were primarily responsible. And since the expansion of the external and fiscal deficits has *not* led to rising longer-term interest rates, typically a symptom of investor unease, the more compelling case to some analysts is that the external deficit reflects the attractiveness of the United States to foreign capital—in other words, the US capital account surplus is driving the current account deficit. Moreover, insofar as there *is* a real fiscal problem in the United States, it was thought to lie in the longer term as

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[4] Editors' note: On 21 July, 2005, China announced that its currency, the renmimbi (RMB), would no longer be pegged to the US dollar, but would float against a basket of currencies. The initial revaluation of the RMB by 2.1 percent from 8.28 to 8.11 was not however followed by further significant changes in its parity; the RMB traded at 8.09 to the US dollar in mid-October.

[5] In fiscal year 2004, the US federal government deficit, inclusive of social security, amounted to US$412.1 billion or 3.5 percent of 2004 US GDP of US$11,733.5 billion; the current account deficit in calendar year 2004 amounted to US$665.9 billion or 5.7 percent of GDP. Source: Congressional Budget Office and US Bureau of Economic Analysis.

the burden of repayment of the rising debt shifts to future generations. But those longer-term problems will not come home to roost for the current Administration or even (not unimportantly for Administration political strategists) for the next Administration. There was, thus, in the view of some observers, a strong sense presently of "free lunches" in Washington.

The real test will come, it was argued, if interest rates get high enough to cause pain. But, it was pointed out by others, interest rates have not become a problem even with questions being raised about the Administration's seriousness on budget consolidation after it added US$80 billion to defence spending a week after releasing the 2005-2006 budget. And, as long as that remains the case, there will be no macroeconomic problem deriving from the budget deficit, or by extension from the external deficit.

...but might global imbalances pose risks to trade?

Even if one takes a benign view of the macroeconomic consequences of global imbalances (which many observers worldwide do not[6]), there are potential risks for the trade system from the external deficit. If there is no change in policy, current trends imply a continued widening of deficits.[7]

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[6] As one observer put it, there are no precedents for the current situation; a gut-wrenching adjustment cannot be excluded. A detailed exposition of this view is provided by Lawrence H. Summers, "The U.S. Current Account Deficit and the Global Economy", *The Per Jacobsson Lecture*, October 3, 2004; http://www.perjacobsson.org/2004/100304.pdf.

[7] Conventional private sector macroeconomic projections have tended to show the US current account deficit flattening out in absolute terms and gradually declining as a share of GDP. For example, Global Insight projected the deficit growing from US$666 billion in 2004 to the US$700 billion range in 2005 and remaining essentially flat in absolute terms thereafter, while declining as a share of GDP from the 5.7 percent range in 2004 to the 5 percent range in 2007-2008. See Global Insight, *Quarterly Review and Outlook*, Fourth Quarter 2004. The continued widening of the deficit has substantially exceeded these expectations; in the first half of 2005, the deficit was close to US$800 billion at annual rates.

From the perspective of those who view exchange rate adjustment as the key, it was stressed that China holds that key—and China is doing quite well, thank you, and likes the current situation. And the rest of Asia likes China doing well. Moreover, whereas in the Uruguay Round, the active developing countries held out until the last minute but ultimately signed on to what many now regard as on balance a bad deal for them (including TRIPs, etc.), now China and others in the G-20 are prospering and do not have to sign on to any given deal. Even the Europeans, it was suggested, are mostly happy with things as they are. This implies continuation of the *status quo* (i.e., no rush to a deal and/or a small outcome at Hong Kong, China).

To be sure, this would generate ugly rhetoric in the United States—substitute China for Japan, suggested some, and the 1980s serves as a guide to the likely flavour of discussion in the United States over the coming months and likely the decade as a whole, although the actual pressure on China, the Schumer bill notwithstanding[8], cannot as yet be compared to the pressure on Japan in the 1980s.

But several argued that things have changed since the 1980s, especially in the economic and trade domains. To be sure, US power has not disappeared and, despite a long list of potential contenders, international relations are *not* operating on the basis of a balance of power. However, the WTO Agree-

[8] "S. 295: A bill to authorize appropriate action in the negotiations with the People's Republic of China regarding China's undervalued currency are not successful." The Bill was introduced February 3, 2005 by Senator Charles Schumer [D-NY], read twice and referred to the Committee on Finance. The Bill proposes a 27.5 percent tariff on all goods of Chinese provenance, that being the average of estimates considered by the Bill's framers of the undervaluation of China's currency, the renmimbi (RMB), against the US dollar. The Bill argues that the tariff would be consistent with the US' WTO commitments, basing it on Article XXI of the GATT which provides for measures taken for national security interest: "Protecting the United States manufacturing sector is essential to the interests of the United States." The tariff would remain in place until such time as China effected a substantial revaluation to bring the RMB into line with its "fair market value" and ceased to acquire foreign exchange reserves to prevent the appreciation of the RMB against the dollar.

ments have introduced a different legal regime to govern international trade while globalization has changed the business environment, including through the massive expansion of foreign direct investment and the organization of production in global value chains. Trade is increasingly accounted for by South-South flows; and the growing share of global growth accounted for by China means that at least some commodity prices are driven more by developments in China than in the United States. The South might thus be at least partially insulated from tensions in, or with, the North.

The geopolitical and geoeconomic shift in the power dynamic brought about by the expanded role in trade of Brazil, China and India has made itself felt in the WTO context. The traditional forum for trade leadership, the Quad, was described as effectively "finished". The ability of the US-EU partnership to drive the process has also been considerably diminished. For example, prior to Cancún, the impasse on agriculture led to a request by WTO Members to the United States and the European Union to develop a draft agreement; they agreed but Brazil said no, effectively blocking the agreement. Meanwhile, in the Geneva process leading up to the July 2004 agreement on a negotiating framework, the group that drove the process on agriculture was the Five Interested Parties (FIPs), which included Brazil and India alongside the United States and the European Union, with Australia as Cairns Group representative, and with Kenya being brought into the discussions to provide an African perspective. Pointedly, Chinese officials have privately described FIPs as "not large enough".

In the view of some, these developments underline the fact that, in the economic sphere, the United States now needs the cooperation of other nations to get things done. It cannot pressure them relentlessly on economic policy and is in any case hampered by the inward focus of its politics.

Some observers questioned just how important a priority trade would be for the present US Administration. Trade, it was noted, was not mentioned in the 2005 State of the Union address. While the United States was very active on trade during Robert Zoellick's tenure as United States Trade Representative

(USTR)—indeed it was argued that there would not be a Doha Round if Zoellick had not made it happen in the first place and then kept it alive in the Geneva process in 2004—there appears to be considerable risk that US trade leaders will not get backing from the domestic side when they push forward. The bilateral agreements that the US is negotiating, which were seen by some as merely a sideshow, were facing a tough time in Congress and were at risk of being shut down.[9] The inward focus in the United States was, as one observer noted, a rather ironic state of events given the global security situation.

While the path to resolution of the imbalances was as shrouded in uncertainty to roundtable participants as it appears to be to economic observers more generally, many tended to the not illogical perspective that unsustainable imbalances will not be sustained—and the only questions are what will trigger the correction and what will be the consequences?

There are enough possible triggers for an adjustment—events in the political sphere or in currency or financial markets—and the adjustment could start outside the United States: rising interest rates could be a problem in the developing countries, impacting negatively on sovereign debt, commodity prices and growth.

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[9] Editors' note: The Dominican Republic-Central American free trade initiative (DR-CAFTA), which involved the United States, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras and Nicaragua, faced intense lobbying against liberalizing sugar trade and was also slowed down by various other sticking points, the latest of which was an intellectual property issue with Guatemala which passed legislation to resolve the issue in March 2005. The DR-CAFTA eventually was passed by the US Congress, but by the narrowest of margins. The United States is also negotiating a separate pact with Panama and an FTA with the Andean countries (Colombia, Ecuador and Peru) in addition to the stalled Free Trade Area of the Americas (FTAA). Other US regional/bilateral initiatives include negotiating a number of FTAs in the Middle East that might be rolled up into a Middle East Free Trade Agreement (MEFTA), a proposed network of bilateral FTAs with ASEAN countries, and FTA talks with the South African Customs Union (SACU). A Congressional push is also mounting for an FTA with New Zealand.

The big complication, it was suggested, is the risk of a China-US power struggle emerging as the balance of power shifts and as the role of the US dollar comes under potential pressure.[10] In this regard, a comparison was drawn with Britain looking at the rise of German industrial power in the 1900s. Such tensions could spillover onto the trade system. For the smaller players in the international system, the talk of confrontation between the US and a rising China is unsettling.

Thus, much as it might be wished for by the trade policy community, a simplistic dynamic of macroeconomic policy problems leading to positive, forward-looking trade policy activism simply does not exist. Rather, there is the uncomfortable underlying sense that the combined macroeconomic/geopolitical context embodies risks for the trading system.

Still, it was argued, while the Doha Development Agenda may in the end be a minimal, face-saving round, the trading system will carry on business as usual. Will it?

Attenuating the risks to the system

Some observers sense a certain complacency about the stability of the global trade system with negotiations focused on the "nuts and bolts" while the major pressures that bear on the system go largely ignored. This is hardly unusual: the minutiae debated in

[10] A commentary noted in the roundtable discussions on the implications for the US of the shift in global power is that by Michael Lind, "How the U.S. Became the World's Dispensable Nation", *Financial Times*, 25 January 2005. Lind argues that "It is true that the US remains the only country capable of projecting military power throughout the world. But unipolarity in the military sphere, narrowly defined, is not preventing the rapid development of multipolarity in the geopolitical and economic arenas." In the latter regards, he suggests that "Today the evidence of foreign co-operation to reduce American primacy is everywhere – from the increasing importance of regional trade blocs that exclude the US to international space projects and military exercises in which the US is conspicuous by its absence." As regards foreign central banks diversifying away from the US dollar as reserve currency, there is some evidence that some have done this; however, such diversification has necessarily been made up for by the Chinese and Japanese central banks which have intervened heavily to support the dollar.

GATT circles as the Members were trying to launch the Uruguay Round reminded one observer of the last issue debated in the League of Nations just before World War II: level railway crossings. Is the WTO similarly at risk of losing itself in its own minutiae and missing the big picture?

Some argued, yes. Success is needed in the Doha Round negotiations for the good of the system—and a small round will not do. The Doha Round, it was suggested, better be on people's geopolitical agenda for several reasons:

- The pressures within the trade system are growing, not diminishing, and require the palliative offered by new negotiations. Not least of the sources of pressure are: (a) the expiry at the end of 2003 of the "peace clause" on agricultural disputes; (b) the use of the WTO dispute settlement understanding (DSU) for strategic purposes in order to set up subsequent negotiations; and (c) the negative sentiment in the US Congress to international courts.
- Regional/bilateral agreements are proliferating discriminatory measures.
- Trade was to provide the resources to help achieve the United Nations' Millennium Development goals. If the Doha Development Agenda fails, it might be many years before a new round could be put together. In the interim, it would not be possible to move forward on agriculture and services liberalization, both of which depend on the cross-sectoral trade-offs afforded by a comprehensive round. The broader development agenda was thus at risk.

Balancing the judicial and legislative roles of the WTO

Since the DSU is mandated to clarify the WTO Agreements, dispute settlement and negotiations are intended to work symbiotically within the WTO. The linkage between the WTO's judicial and legislative processes is emphasized by the occasional use of the DSU for strategic purposes in order to set up subsequent negotiations. Thus, in the absence of movement on the negotiating front, dispute settlement is subject to added pressure.

While no new complaints concerning agriculture have been raised since the expiry of the "peace clause", the Cairns Group could at any time, it was noted, immobilize the dispute settlement system with claims against agricultural subsidies under the WTO's subsidies code.[11] What strains would that raise, it was asked, for the trading system? The panel decision on cotton attacked so many US laws that, in the perspective of one observer, it was problematic from a systemic perspective: what if the United States were to lose several more such cases on agriculture or on the Farm Bill under the DSU? What would happen if the Appellate Body were to rule on the European Union's Common Agricultural Policy?

The dispute settlement system, including the research capacity in the WTO Secretariat, is already strained, many argued, by the high case load, the volume of which has vastly exceeded the expectations of the framers of the system.

To be sure, the cases taken to the panel stage are but a small part of the picture. Most international commercial disputes are settled outside the DSU altogether (e.g., through the food safety system, etc.). Moreover, diplomatic settlement early in the WTO dispute resolution system is quite active.[12] Former WTO Director General Mike Moore also emphasized the availability of provisions to use the good offices of the DG in mediation and conciliation, but with few takers to date. The Sutherland Report[13] sug-

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[11] Editors' note: the two recent agriculture cases targeting sugar subsidies in the European Communities and US cotton subsidies were initiated before the expiry of the so called 'peace clause' under which WTO Members agreed not challenge domestic agricultural subsidies; the expiry of the peace clause was not a factor in either case, although it was referred to in the WTO hearings. No new agricultural cases have been brought to the WTO since the expiry of the 'peace clause'. See Bridges Weekly Trade News Digest, "DSB UPDATE: EC-SUGAR, US-COTTON" (Vol. 8 No. 10, 18 March 2004.)

[12] See, for example, Marc L. Busch and Eric Reinhardt, "The Evolution of GATT/WTO Dispute Settlement", in John M. Curtis and Dan Ciuriak (eds.) Trade Policy Research 2003 (Ottawa: Department of Foreign Affairs and International Trade, 2003): 143-183.

[13] Peter Sutherland, et al., "The Future of the WTO: Addressing institutional challenges in the new millennium", Report by the Consultative Board

gested the need to start seriously thinking about enlarging the role of the Secretariat and of the Director General.

Moreover, compliance is an issue. Overall, compliance has been very good with only some 8-10 cases where there has been an outright failure to comply or where compliance measures are subject to ongoing dispute. If there is a problem here, it is not with the small countries, which are complying. The potential problem lies with non-compliance by the big countries in big cases; such non-implementation, it was argued, is corrosive for the system.

Containing the risk element in regionalism

While all the major trade negotiations have slowed to a crawl or stalled, including the Doha Development Agenda, the Free Trade Area of the Americas (FTAA), and Mercosur/EU, smaller bilateral/regional agreements are proliferating, which in the view of some will inevitably weaken the multilateral system and the WTO—indeed, the "most favoured nation" (MFN) principle is in danger of being replaced by the "least favoured nation" or LFN principle as the volume of trade conducted under MFN shrinks. Every time the Doha Round appears to stall, the regional/bilateral dynamic intensifies.

IMF/World Bank analysis indicates that multilateral liberalization is the ideal route. While preferential trade agreements are generally considered to be "building blocks" towards freer trade, some argue that they do not result in a good environment for business. For example, the National Foreign Trade Council, a US business lobby, found that rules of origin (ROOs) arising from the plethora of preferential trade agreements were bad for its members. Accordingly, it was pushing for elimination of all duties on manufactured goods by 2015.[14]

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to the Director-General Supachai Panitchpakdi (Switzerland: World Trade Organization, 2004).

[14] See Matthew J. Slaughter, "Tariff Elimination for Industrial Goods: Why the Gains Will Far Outweigh Any Losses", Background Paper prepared for the National Foreign Trade Council, August 2003, http://www.wto.org/english/forums_e/ngo_e/posp44_nftc_tarif_paper_e.pdf.

Moreover, preferences have proved to be of uncertain benefit even for those receiving them. The utilization of the General System of Preferences (GSP) is weak because of the operation of ROOs. For example, many apparel export contracts stipulate the source of textiles to be used in the manufacture of articles of clothing. Thus, if competitive East Asian textiles are used in South Asian apparel manufacture, the products cease to qualify under the GSP because of the GSP's ROOs.

Supporting development

Success is needed in the current multilateral trade talks, it was suggested, for broader reasons as well: in particular to support development. The Millennium Development Goals, many thought, will not be met ("not even close"). Trade was to have provided the resources and for this a minimal negotiated outcome simply will not do: subsidies must be cut in the rich countries, barriers must come down in middle income countries, reforms are needed in the poor countries. A non-ambitious outcome would not only be deleterious to the reform momentum in the poorer developing countries, it would also mean that aid would have to be maintained at higher levels than otherwise would be necessary. Accordingly, the aim of the Doha Round has to be pitched unambiguously high.

The path to an ambitious outcome

The question of the size of the outcome is not unrelated to the question of the path to the outcome. The challenge for 2005, in the estimation of some observers, was to set the level of ambition, which is implicit in the modalities. Every capital will have to decide what to put on the table. If countries bite the bullet on tough issues, it builds up the size of the outcome. The Round has been kept alive until now by marvelous work by key individuals such as Robert Zoellick, and movement on some key issues (in particular, the EU's pledge to eliminate agricultural export subsidies), but a quantum leap is needed to set up a successful conclusion to the Round.

In an ideal world, offers are put on the table simultaneously. But if everyone waits to see what others will offer, we will have nothing. Who will take the lead? Not developing countries, it was argued; they have been burnt repeatedly by the failure of the industrialized countries to deliver on concessions and are now shy. This dates back to the Kennedy Round and was repeated in the Uruguay Round negotiations where they were given concessions yet saw that protection was put back up again through other instruments. China, Brazil and India are doing fine as things stand, which reduces the pressures on them to cut a deal. This leads some observers to conclude that the industrialized countries will again have to be the first movers.

Agriculture is the area where industrialized countries have a large margin of flexibility to provide the basis for a reasonable deal: some tariffs are sky high (e.g., one industrialized economy was cited as having some tariffs in the 700 percent range) and tariff rate quotas (TRQs) are often infinitesimal when considered as a share of the domestic market. The OECD's producer support estimate (PSE), a measure of public support for agriculture, shows that PSE levels have declined only from 36 percent in the mid-1980s to 31 percent now. Current public financial support for agriculture in the OECD countries, it was suggested on this basis, is larger than the GDP of Africa! Success in the Doha Development Agenda depends on very ambitious cuts to this level of support. In practical terms, this means that the US and the EU have to signal that they will provide something along the following lines:

(a) actual cuts in subsidies, not just in bound commitments (some estimates suggest that cuts have to amount to as much as 80 percent in order to provide meaningful liberalization); and

(b) improved market access in areas of particular export interest to developing economies.

In the opinion of some observers, we are close to the point of having strong signals as to the shape of the package on agriculture. There would be perhaps 70-80 percent cuts in bound subsidies, although there remains some uncertainty about which products, and improved market access under TRQs. The timing of cuts to agriculture subsidies remains to be firmed up. But, if the United States were to offer something on counter-cyclical subsidies and the EU on export subsidies, that would constitute, in the estimation of some, the package.

Since agriculture cannot be self-balancing, the balance must come from services and non-agricultural market access (NAMA). A good offer on agriculture would, in the view of some, unlock the services and NAMA negotiations. Even without a rules component, a good market access package would constitute an overall successful outcome for the Round.

However, there has to be a market access *quid pro quo* for the industrialized countries. Although budget pressures might force a domestic consensus on subsidies to do what has to be done anyway, given the mercantilist ethos of trade negotiations, these countries need gains in services, areas of particular interest to multinational corporations, and something for their agricultural sectors—the "academic" approach to making the case for trade liberalization ("its good for you") does not, it was pointed out, get a negotiator to second base on Capitol Hill. It was also noted that even in the developing countries where much liberalization has been autonomous and driven by recognition that this was in the self-interest of the liberalizing country, the process has tended to stall when the pressure points are met. Reform must then be driven by outside pressures. Thus, India, Brazil and other emerging market economies need a successful round to drive further down the reform path that has led to their present success. This pushes the Round towards a bigger deal—which is essential to establish the very basis for a deal and moreover is needed by the WTO for the sake of its own sustainability, not least to stop the erosion of the MFN clause through proliferation of regional/bilateral agreements.

Accordingly, middle income developing countries have to offer meaningful market opening to the United States and to the poorer developing countries—although some would settle for developing countries simply binding the autonomous liberalization that they have already made in response to a sufficiently attractive offer from the OECD countries on agriculture: as was pointed out, there have been reversals on liberalization, so binding autonomous liberalization would be a step forward (at the same time, the demandeurs on agricultural trade have yet to see a sufficiently attractive offer). Without those carrots of additional market access, domestic vested interests will prevent a deal. At the same time, pushing forward quickly on the Doha Round negotiations could inject a positive element into shaping the next US Farm Bill (the present one expires in 2007), which will be in the important preparatory stages in 2005-2006.

Not all agreed that agriculture is the key to unlocking the way forward on non-agricultural market access and services. While undoubtedly important for particular WTO Members, from the perspective both of an overall trade deal and of budget pressures in the major industrialized economies, the agricultural subsidies represent a comparatively minor part of the picture—in other words, they are neither *the* bargaining chip nor *the* source of pressure for autonomous change that some have made them out to be. Moreover, there is concern about the political will in the industrialized economies to move on agriculture: US action in the WTO Agriculture Committee's Sub-Committee on Cotton, while not unexpected, was unfortunately also not helpful from the perspective of the developing countries[15] and the signals on agriculture from ongoing US bilateral/regional negotiations were not seen by observers as encouraging (although, as was argued, this might largely reflect the modality: it is easier to negotiate incremental liberalization on agriculture in the multilateral context than to agree to free trade in a regional or bilateral agreement and then argue about the time frame to get there).

[15] Editors' note: At the 16 February 2005 meeting of the cotton sub-committee, the US opposed African and other least-developed WTO Members' position that the sub-committee's work program include a clear mandate for negotiations. In a subsequent proposal issued 25 February the developing countries proposed, *inter alia,* establishing modalities for market access, domestic support and export subsidies for the cotton negotiations. See " Differences Over Scope Of Work Programme Linger In WTO Cotton Sub-Committee", Bridges, *Weekly Trade News Digest*, Vol. 9, No. 7, 2 March 2005; http://www.ictsd.org/weekly/05-03-02/WTOinbrief.htm.

There was also skepticism about agriculture as the key to development aspects of the Round: accelerated reform of agriculture in India or Africa, it was suggested by one observer, would create endless numbers of landless peasants.

Similarly, there was skepticism about services liberalization. The services negotiations were considered to have gone nowhere; the services offers on the table were described as "worthless". As one observer put it, if *trade in services* were a stock, the recommendation would be to "buy"; if *negotiations* on trade in services were a stock, the recommendation would be to "sell".[16] The problem is intrinsic to the nature of services trade. Services offers are hard to make because there are implied domestic regulatory reforms that are hard to think through, let alone to act on due to domestic political considerations. It is simply unrealistic to expect developing countries to enter into binding agreements which could result in payments under dispute settlement when even the rich countries cannot fathom the true extent of their commitments. For example, a recent WTO panel decision found that the United States had in fact made GATS commitments in respect of gambling services that it claimed it had not intended.[17] While, upon appeal, the Appellate

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[16] Editors' note: Corroborating this sense of the state of services negotiations, a senior WTO official reportedly described services as the "crisis item" on the agenda of the second WTO mini-ministerial meeting of 2005 in Mombasa, Kenya, at the beginning of March. See "Services, NAMA, Development Priorities At Kenya Mini-Ministerial", Bridges, *Weekly Trade News Digest*, Vol. 9, No. 7, 2 March 2005; http://www.ictsd.org/weekly/05-03-02/WTOinbrief.htm.

[17] *United States – Measures Affecting the Cross-Border Supply of Gambling and Betting Services: Report of the Panel* (WTO WT/DS285/R, 10 November 2004). Editors' note: In this case, Antigua and Barbuda argued that a US prohibition on the cross-border supply of gambling and betting services and certain measures restricting international money transfers and payments relating to gambling and betting services were inconsistent with US commitments under the GATS. The panel found that the US GATS Schedule did include commitments on gambling and betting services and that several federal laws (the *Wire Act*; the *Travel Act* and the *Illegal Gambling Business Act,* the latter two when read in conjunction with State laws) as well as a number of individual State laws were inconsistent with these commitments. This case had a number of important features. For the WTO,

Body substantially reversed the panel decision by upholding the US' ability to restrict Internet gambling on public morals grounds, it upheld the panel decision that the United States had included gambling in its schedule of commitments and that the ban on Internet provision constituted a ban on the remote supply of services. Some observers see potentially far-reaching systemic issues raised by this decision, with the potential to chill services negotiations.[18] Thus, some conclude that trade in services will have to continue to develop largely outside of trade rules.[19] Which in any event is happening: trade in services is finding a way as exemplified by the fact that India has become the top services out-sourcing country, not as a result of trade negotiations but as the result of market forces.[20]

This raises new questions: Will the developing countries buy into the Round? Will they provide leadership in moving the Round to a conclusion?

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it was the first Internet-related dispute as well as the first case in which Article XIV of the GATS (general exceptions) was invoked in defence of particular measures (including, *inter alia*, for the protection of public morals and maintenance of public order—in respect of which argument the United States cited concerns about organized crime and funding of international terrorism). Further, on a more technical level, the panel decision clarified that US services commitments, absent specific alternative clarification by the United States, could be read as based on the Services Sectoral Classification List, and that the United Nations' *Central Product Classification* (CPC) breakdowns could be used to clarify the meaning of these commitments.

[18] For a commentary, see Bridges Weekly Trade News Digest, "Antigua, US Gambling Dispute: Appellate Body Issues Mixed Report", Vol. 9 No. 12 13 April 2005.

[19] Editors' note: The major alternative to multilateral liberalization is the sectoral mode, as in the telecommunications and financial services agreements. This approach may not be feasible as a general rule. Moreover, it could raise concerns among the developing countries of being a ploy to avoid Mode 4.

[20] See for example, CIOInsight, *Global Outsourcing Report,* March 2005, http://www.cioinsight.com/article2/0,1397,1776816,00.asp

The developing country perspective

Observers close to the developing countries counter that the G-20 do have real "offensive" trade interests in addition to the standard "defensive" interests and, therefore, can be "bought off" (or, perhaps better, "bought in") with the right offer. India, it was pointed out, has an offensive agenda in services, Brazil in agriculture, and China in goods.

For example, Brazil was described as having strong interests in the Round:

- There is now a big business export lobby in Brazil. Unlike the Uruguay Round, agribusiness interests are active demandeurs in Brazil's trade policy formulation.
- The WTO is the forum in which Brazil has chosen to negotiate rules; by contrast, Brazil has resisted negotiating rules in the FTAA, which resulted in the latter negotiation being pushed into an "FTAA-lite" mode.
- Brazil's offensive agenda can only be negotiated in the WTO because agriculture cannot be dealt with either in the confines of Mercosur or even the FTAA.
- Brazil and others in the G-20 are aware that they have changed the balance of power in trade negotiations and want to seize the opportunity offered by the Doha Round to exercise their new-found power.

Some thought that the negotiations would be helped significantly if the industrialized countries made a credible response to India's interest in Mode 4 (movement of services providers). However, many observers saw this as a non-starter. Mode 4 will not happen in a trade context, they argue: in the industrialized world, Ministers do not see a distinction between temporary and permanent entry; to them Mode 4 is trade-speak for immigration. That is how Mode 4 is being debated in the US Congress; the USTR has no leverage on this debate—even in the context of the US-Australia free trade agreement, temporary movement of business persons could not be included. For its part, the European Union could not extend Mode 4 to the acceding countries, and is even more worried about Turkey as a potential accession country. If Mode 4 liberalization could not happen internally within the European Union, it was argued, it will not happen elsewhere (although it was also observed that the United Kingdom did break ranks from the rest of the European Union on Mode 4).

However, Mode 4 is important to developing countries as the importance of remittances to the balance of payments of a number of poor countries shows. Simple steps such as increased domestic regulatory transparency that might be considered as fallbacks in terms of making some progress on Mode 4 unfortunately give the real demandeurs on services such as India effectively nothing: these economies are being told, "We don't want your workers and we don't want your cross-border services".

But the Doha Round's "development" label has raised developmental expectations that have to be fulfilled somehow. A Mode 4 component may not be essential to buy-off the developing countries, it was argued; however, alternatives such as greater carve outs under the TRIPs agreement attract their own problems. Where, it was asked, is the evidence that it would be possible to expand carve-outs from TRIPs obligations for the G-90? The United States is pushing TRIPs-plus in its bilateral agreements, not TRIPS-minus. South Asia, it was noted, has signed an agreement with the United States as a precursor to an FTA but difficulties in intellectual property have slowed the process. The *quid pro quos* are hard to implement making it hard to extract market-opening concessions from the United States.

While, in terms of absolute numbers, most poor people are in the G-20, the development component of a trade deal is of particular importance to the smaller developing countries that cannot compete with G-20 big guns like China, Brazil and India. For the Doha Round to deliver tangible progress on development, it will require far more trade-related technical assistance (TRTA) than is on the table now to help G-90 Members, the countries that lack the strategic resources to develop their trade, and within that context, their broader economic development strategies. The Integrated Framework has not been impressive in this respect, it was asserted: for example, most in the G-90 still do not know how to frame their offers on services (the troubling aspect of this judgement is that, weak as the Integrated Framework admittedly appears to be, it is seen by most observers as the *only* major such instrument).

Another area where development can be advanced is trade facilitation: fully one-third of the remaining gains from trade liberalization are estimated to come from trade facilitation. Asia in particular has much to gain in this area. The key to unlocking these gains is a combination of technical assistance and complementary infrastructure services liberalization. These issues are being addressed partly by unilateral initiatives and partly through regional cooperation (e.g., APEC). This element has to date been little advanced in the Doha Round negotiations but the potential is there for more—although the extent to which this contributes to a larger outcome depends importantly on the level of ambition shown in other parts of the negotiations.

A mandatory review of implementation to assure developing economies that commitments were being met would also help.

In the end-game, it was argued, the G-90 Ministers will want something concrete to buy them off. Unlike in the Uruguay Round, the hand of developing countries cannot be forced by the Single Undertaking; now that they are inside the WTO, they have a veto. Moreover, many of the smaller poor countries are better briefed and up to speed now (at least in Geneva; in capitals it is thought by some observers to be a different story). While it is not clear by how much the decision-making process has really changed, there is no assurance that the Doha Round can be concluded if there is inaction on development commitments.

Still, the greater fear is that the WTO negotiations will not deliver—which is what is providing the impetus to all the South-South trade initiatives. Thus, it was argued that the G-90 would not be a barrier to a trade agreement. At Cancún, the G-90 "walked" but that was the result of the European Union misplaying its hand by waiting too long before making concessions on the so-called "Singapore issues"[21]; in the corridors, many G-

[21] The Singapore issues comprised trade facilitation, transparency in government procurement, the relationship between trade and investment, and the relationship between trade and competition policy. The rubric stems from the first WTO Ministerial meeting in Singapore in 1996 at which working groups on these issues were mandated.

90 representatives were horrified at the breakdown in negotiations. The G-90 goal in the Doha Round is not to block an agreement but to shift the distributional outcomes somewhat. Their preferences are being eroded with or without their engagement in the Round; the *status quo* is therefore unsustainable.

That being said, the outcome they accept may not do much for development. The Uruguay Round was concluded at a high point of acceptance of the "Washington Consensus"; now there is reform fatigue. In the G-90, special and differential measures (S&D) is all about preserving absolute policy space and freedom from reform pressures. Indeed the July package which included S&D in various guises risks the removal of any pressures to reform.

An Alternative approach to Special and Differential Treatment.

Part of the discussion at the roundtable focussed on a proposal put forward by Andrew Charlton to move away from reciprocity as the basis for negotiations. This proposal goes into a field of other proposals for special and differential measures, such as Lamy's "Round for Free" for the developing countries, and should be considered an alternative to such other formulations.

Under the proposed modality, countries would give full market access to those that are both smaller and poorer than themselves. This would elicit a lot of south-south liberalization, especially from the middle-income countries while not exposing countries to the full force of competitive pressure from those countries that are both richer and have larger markets.

While at first blush the departure from reciprocity appeared to open insuperable problems of political economy.

- Not least, it would, in the first instance, leave the US out in the cold, as was noted immediately.
- The wide differences in competitiveness across southern countries would also be problematic: Latin America could not open up, for example, to Sri Lanka in textiles, they would face import surges.
- Such a proposal does not ensure a supply response in the poorer countries, unless combined with trade-related technical assistance.
- South-south trade is developing largely outside of the WTO. Why would they want to bring this dynamic into the WTO where it is bound?
- A distinction can be drawn between commercially meaningful liberalization and wishful thinking liberalization. The EU's "Everything But Arms" initiative falls into the wishful thinking liberalization category. Commercially meaningful liberalization must come from a microeconomic perspective, although not necessarily from simple sectoral deals. ICOA, it was suggested, is a natural experiment in commercially meaningful liberalization.

- Two key distinctions enter into the question of the feasibility of approaches to liberalization:
  - Binding versus voluntary
  - Comprehensive vs. exceptions

  It is easy to grant access except where there is tough competition. The friction points in negotiation are where the gains from trade come from. True there are safeguards; but in the current system the developing countries have natural safeguards in that bound tariffs are much higher than applied. When you get to real binding, formal safeguards are the recourse and these are much more expensive to apply and also time limited.
- And, not unimportantly, its automaticity would seem to put an important constituency for a new modality—the trade negotiators themselves—out of work.

However, some found it refreshing to hear a new idea for approaches to trade liberalization. And, it was also noted, every visionary idea is considered impractical when first made. But, if it can be articulated in a first draft, it might make a long-term difference.

And this proposal has some interesting features:

- We need to articulate a "fairness" principle such as this within the context of trade negotiations.
- It provides an approach to trade liberalization that naturally skews the benefits to the poor.
- Moreover, there are answers to some of the obvious objections:
  - The proposal does not exclude the possibility of the North negotiating down the MFN rates that would apply to countries that are richer and larger.
  - It could be part of a broader package to allow for cross-sector trade-offs to deal with tough issues such as agriculture and textiles and apparel.
  - Moreover, safeguards are still available to deal with import surges.
  - While it is true that there are many south-south deals are being negotiated, the costs of negotiations are very large.
  - South-south trade deals are also deals amongst non-equals. It is possible that the constraints on supply response might be weaker in the context of liberalization between developing countries than between developed and industrial countries.

Wishful thinking liberalization, it was noted, is consistent with economic thinking. For the US, it is simply a proposal to embrace free trade.

The process will matter

It was observed that the breadth of issues raised in a wide-ranging discussion on the current state of the multilateral trade negotiations can be bewildering even to some at the table; the challenges for developing countries of pulling together the various threads into a national policy in the context of a live negotiation—the domestic aggregation process—seem daunting in this light. There is accordingly some skepticism that the sort of eleventh-hour maneuvering that has typified the closing of past rounds can work in the present context.

First, there is the issue of transparency and legitimacy which in this Round has reduced the scope to strike midnight deals behind closed doors. With WTO rules reaching into internal governance issues, Ministers are now worried about internal affairs. Questions about what is happening in Geneva are being raised in the context of the domestic political process not only in the rich countries but also in the poor—in India, for example, the view is that the WTO needs to legitimize the rules negotiated in the Uruguay Round, especially in services. Simply put, trade is being politicized in the developing world—referendums are being held and there is more visibility in the press about what is being negotiated and the potential impact of particular proposals.

The G-90 was seen as more of a problem in this regard than the G-20 since within the G-90 membership is a concern about democratic legitimacy: accordingly, even if one does not believe that the WTO is about democracy in a "global governance" context, it is important to at least make a bow in that direction. For example, it was argued that Africa is not opposed to uniform global rules; the question is participation in the process by which these rules are established. Africa too has an offensive agenda in agriculture and improvements in non-agricultural market access including addressing rules of origins. But the package has to be built up carefully and the process is important.

This complicates the negotiation process. Since Seattle, there has been a shift towards a process of small group meetings (e.g., "friends of sector" meetings) with information then fanning out to all Members. Members, if not direct participants, are at least represented in principle. Such a process of moving between small groups and large groups to develop and then promote proposals for ways to move the negotiations forward has been actively exploited in the agricultural negotiating group—for example, this approach was used to find a way to convert specific tariffs in agriculture to ad valorem tariffs, taking the proposal first to a mini-ministerial and then back to Geneva. But observers do not see this happening consistently in other negotiating groups. Moreover, while this approach facilitates rapid progress, it is not without its own transparency problems: mini-ministerials are, as was observed, *de facto* Green Rooms without the transparency constraints of WTO official meetings.

Second, there is the issue of the political aggregation process to support the formulation of a viable package. Members need to understand who wins and who loses from a given proposal; without that understanding, it is not possible to determine whether a given proposal is enough to buy off anyone. The African Union has a secretariat and research capacity and the ability to look at options and trade-offs and to build up positions. But the system does not work very flexibly as yet; Africa continues to face a process problem of coordinating the various regional subgroups.

Thus, there is a need for a neutral analysis of the costs and benefits to allow African WTO Members to confidently sign onto a deal. It was suggested that the OECD countries could help if they spent only five percent of their analytical resources to factor Africa into their analyses of the impacts of particular negotiating options. Recognizing that the costs are substantial, the question was raised: What is the African Development Bank doing? What about the African part of the UNCTAD staff?

Are reforms to the WTO process needed?

Squaring the need for transparency and legitimacy with the need for a manageable process raises the question: does the WTO need procedural and institutional reform?

The Sutherland Report, it was argued, would provide little help with the procedural issues, throwing in old ideas like the Consultative Group of 18 (CG18) and an annual ministerial meeting as well as reiterating what are now almost standard calls for more resources for the Secretariat and greater transparency in WTO processes.

But, as was noted, ministerials take a great deal of time and energy and can become expensive "circuses", which called this idea into question. Meanwhile, the Sutherland Report's proposal for a new consultative group is a reminder that, while the WTO still lacks a forum in which to discuss issues and still lacks sufficient analytical capacity, the proposal to use the Trade Policy Review Mechanism (TPRM) to bring out the connections was vetoed by WTO Members.

More broadly, the Report was criticized as having the hall marks of a "committee document", lacking a clear vision while rehashing well known concerns (especially the risks to the multilateral system from rampant regionalism). For the developing economies, the Report disappointed because it did not address the question, "What is the WTO all about?" Is the WTO just about trade law, or about global governance, or about development as well? Nor did the Report address the problems developing countries face in their aggregation process—although it was noted that the Report's recommendation that the Director General visit the regional groups would usefully stimulate regular reports on the implications of the negotiating proposals for particular regions and countries.

But from the perspective of the way Geneva operates, the Sutherland Report recommendations *were* seen as important. Why, it was asked, is it that institutional issues only get raised towards the end of a Round? They are important and should be included at the beginning. These issues cannot be put off as suggested by some—their being on the agenda is not an excuse to spend time at the beach in Cancún or go shopping in Hong Kong! In this regard, the Report's timing was unfortunate, which contributed to its falling rather flat upon release—WTO Members were, as it turned out, pre-occupied.

Towards a successful outcome at Hong Kong

To launch the Doha Round in late 2001, before completing and digesting the Uruguay Round results and China's accession to the WTO and integration into the global trading system, might well have been a great mistake. But, as one observer commented, we're stuck with it.

There are numerous sources of head winds for the Round at the present moment.

First, the multilateral trade agenda is taking place in something of a political vacuum. In particular, post-Iraq, there are questions in many observers minds about whether the United States will recommit to a multilateral agenda. And, if there is any validity to the expectation that the new US Congress will not warm up to multilateralism, what is to be done at Hong Kong?

Secondly, trade has little political traction right now in key capitals; and, to the extent it does have traction, it is often negative (e.g., resistance to Mode 4).

Thirdly, there are the various complications on the 2005 agenda, including transition in the ranks of key negotiators and the appointment of the new WTO Director General, which tend to draw energy away from the negotiations.

Most importantly, there is no clear answer to what is always the key question in a trade round: "Where are the business interests?" The political economy of trade means negotiating *through* the trade negotiators *with* the domestic interests—and the latter, except for particular narrow interest groups, are little engaged.

Do we suspend our ambitions to buy time to devise policies that work in the complex real world setting that we have? The idea of the Hong Kong WTO Ministerial locking things up is thought to be highly improbable, but a good outcome at Hong Kong does open up the road for the final run. At the same time, the expiry of US Trade Promotion Authority (in 2007) leaves little time beyond to lock things up. These considerations spark in some observers a sense of urgency: the time to involve all the Members and all the interest groups is now.

In terms of process, for Hong Kong to succeed, it was argued that it is essential that a good first approximation of the text be in hand by mid-2005; by the same token, whether or not a first approximation is in hand by that time will serve as a timely reality check for Members as to whether to start taking emergency measures. As one observer put it, officials owe it to their Ministers not to leave them with a mess to sort out. Ministers who can sit down and talk fine details with the experts are few—so it is important that the Ministerial not be burdened by too many details. The GATT Ministerial in December 1988 in Montreal was described as an abject failure for that very reason. At the same time, it is essential that Ministers participate and feel that they are participating; this can require an enormous expenditure of time and energy on the part of the Secretariat and the Chairs of the negotiating groups, but it is vital to success. At Punte del Este, it was recalled, India wanted to meet with the Chair of the Conference every evening after the conclusion of the sessions—and was accommodated. And, at the end of the Uruguay Round, Peter Sutherland supported by Friends of the Chair managed the process very skillfully. By contrast, that did not happen at Brussels and people reacted accordingly.

Given the time pressures, it was disquieting to some that there has been little progress in early 2005, although USTR Zoellick did move the markers at Davos in January, just before leaving his post, when he signaled US willingness to use different coefficients for developing vs. industrialized economies in the tariff cutting formula. The problem with losing Zoellick and EU Commissioner Lamy is that this leaves Brazil's Ambassador Celso as the only true technician among the top negotiators.

Moreover, there are all the distractions of domestic political cycles and other international agendas. For example, it was noted that the challenge to make the 2005 process work was not reduced by the delay in naming Zoellick's replacement as USTR.[22] For its part, Europe had its own internal complications: The United Kingdom, which presides over the G7/G8 in 2005 and holds the EU Presidency in the second half of the

[22] Robert Portman was nominated as USTR in mid-March 2005.

year, faced general elections in May which could tie up some of the energies of Britain's Peter Mandelson, who has replaced Pascal Lamy as the new EU Trade Commissioner. Then attention would switch to the internal EU process leading-up to the Gleneagles G7/8 summit. Furthermore, the Commission for Africa report to the G7 would lead to an Africa initiative at the Gleneagles summit in July. Then all Europeans would go on holiday! In September, everyone would wake up to the need to get a package together for Hong Kong—or the need to start to deflate expectations for Hong Kong.

The question to one observer thus was: do we start to talk down the level of ambition in the summer and prepare the world for the likelihood that Hong Kong will deliver a mouse? And, if so, how do we do that without undermining the WTO?

But as a tonic for pessimism, participants were reminded that there *was* a comprehensive, ambitious deal in the Uruguay Round—and no-one was more surprised than the negotiators!

Eyes Wide Shut?
Beyond Market Access in North–South Regional Trade Arrangements

Dan Ciuriak*

This Chapter provides a thematic summary of a seminar hosted by the Trade, Employment and Competitiveness Program Initiative of the International Development Research Centre (IDRC) in Ottawa, Canada, on 17 February 2005. The seminar addressed five themes:

- *The scope and intended benefits of North–South Regional Trade Agreements involving Asia, Africa, and Central America.*
- *Assessing the developmental benefits of regional arrangements as mechanisms for trade liberalization and regulatory convergence in non-traditional services.*
- *Do investment provisions in bilateral and regional agreements promote the development benefits of foreign direct investment (FDI)?*
- *Dealing with cross-border competition issues in the absence of multilateralism: competition provisions in international agreements.*
- *Risks and options for developing countries in negotiating new North–South agreements.*

The presentations of the seminar featured the work of members of IDRC supported trade policy research networks in developing countries, which have been investigating the challenges and opportunities posed by regional arrangements. The participants included representatives of international organizations; Canadian government ministries and agencies; IDRC staff, research partners and networks; universities; non-governmental organizations; the private sector; and experts on international trade policy and development.

A more detailed report on the seminar together with the individual presentations and papers is available on the IDRC website (see http://web.idrc.ca/en/ev-51329-201-1-DO_TOPIC.html).

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Introduction

The rush to regionalism evidenced by the bewildering growth of regional and bilateral trade agreements (RTAs) has raised concerns that the costs and benefits for the trade system – for individual countries, and particularly for developing countries and the world's poor – have not been properly assessed. Hence the title of the seminar on which this Chapter reports: *Eyes Wide Shut?*

RTAs are generally thought to have several advantages:

- They can yield tangible benefits in the form of expanded trade more quickly than the slower and more cumbersome multilateral process.
- They can facilitate deeper and broader liberalization than might be possible in the multilateral process which now has an agenda so large that it is difficult for the membership to deal with new issues.
- They can help entrench economic reforms conducive to economic growth.
- They can give impetus to multilateral negotiations.

For developing countries that are unwilling to put their economic agendas on hold while multilateral negotiations slowly grind ahead, the regional/bilateral route is thus an attractive option. The attractiveness of the latter route for developing countries that are not yet members of the World Trade Organization (WTO) is only increased by the fact that the price of WTO accession is becoming higher: recent entrants have been required to make much greater commitments than prior applicants.

There are significant differences between different types of agreement. Southern regional arrangements, i.e. RTAs amongst developing countries alone, can generate net gains from trade, are generally believed to contribute to economic growth and can serve as platforms for, rather than impediments to, multilateral policymaking processes and outcomes. They can also facilitate harmonization of social policies and provide a forum for developing economic measures on which sovereignty can be pooled.

But they entail some risks. Most generally, RTAs compromise the underlying principle of non-discrimination at the core of the multilateral trade system. Trade rules are becoming increasingly complex, with many different permutations and combinations, both within and outside the WTO. The proliferation of RTAs has created a “spaghetti bowl” of rules and commitments with well-known co-ordination and consistency problems that have frequently stalled the implementation and evolution of these arrangements in practice. Examples include the fits and starts in the history of regional arrangements in Africa, as well as in the series of agreements between the European Communities and the Caribbean, African, and Pacific countries.

RTAs spanning the North-South divide are a relatively new arrival on the scene. Economic theory suggests that they can lead to bigger economic gains than South-South arrangements because of the wider variance in the productivity and income levels between the parties. However, recent North-South agreements go far beyond providing the preferential access for exports of goods to each other’s markets that generates such gains. While most now feature provisions of much wider scope than market access, there has been little systematic examination of the character or likely impact of these provisions. Thus, in their desire to gain greater market access, developing countries risk negotiating agreements without the full knowledge of what their commitments entail. Are they, to borrow film-maker Stanley Kubrick's phrase, negotiating with their “eyes wide shut”?

To appreciate the risks entailed by RTAs, developing country policymakers must gain knowledge on many issues:

- What is occurring in the trade field and in other policy domains related to globalization?
- What are the aims of the negotiating parties and the scope of the various regional agreements? Do the provisions of these agreements achieve the desired coverage and levels of commitment? What development impact do they stand to have, singly and in combination?
- Are these provisions consistent with what has been or is likely to be agreed, in the current round of WTO negotiations?

The seminar, by bringing together people from many different regions and countries, allowed a full comparative analysis of these questions, helping to build a knowledge base to help developing countries negotiate with their “eyes wide open.”

North-South, South-South and Multilateral Liberalization: Perspectives from Asia, Africa and the Americas

In different parts of the developing world, regionalism is being driven by a differing mix of factors.

In East Asia, a kaleidoscope of new and sometimes overlapping preferential arrangements has emerged in recent years, including bilateral, trilateral, and plurilateral proposals that include regional as well as extra-regional partners (of which the most prominent has been the United States). This rush to regionalism can be explained in part as a response to the Asian economic and financial crisis of 1997-1998. The "contagion" that spread through the region put a new premium on regional cooperation. Even more fundamentally, given traditional economic and political rivalry between China and Japan, the tectonic shifts generated by China's economic resurgence intensified the need for a framework to minimize potential friction between these two economic powers over and above the disciplines provided for by common membership in the WTO. For East Asia, RTAs thus provide a way to advance regional economic cooperation and development objectives across a broad range of subject matters, notwithstanding the slow movement in the multilateral process, as well as a better means of achieving political objectives compared with multilateral arrangements.

South Asian countries have also been active in establishing regional and bilateral trading arrangements[1], with added impe-

[1] Editors' note: while the focus of the discussion on this point was South-North agreements, there have been several noteworthy developments in South Asia on the South-South front. These include the South Asia Free Trade Agreement (SAFTA), which was agreed to amongst the members of the South Asian Association for Regional Cooperation (SAARC – Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan, and Sri Lanka), and which was due to take effect January 1, 2006; the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (linking Nepal, India, Bangladesh, Bhutan, Sri Lanka, Myanmar and Thailand); and various RTAs linking South Asian economies to China, ASEAN and other East Asian economies. An IDRC seminar in December 2005 in Hong Kong, on the margins of the WTO Ministerial Meeting, explored issues raised by these developments.

tus apparently coming from the failure of the 2003 WTO Cancun Ministerial. Typically, the key objective for South Asian countries in RTA negotiations, at least with northern partners, has been to obtain the market access they failed to obtain via WTO negotiations. However, it was argued, because these agreements often lack clear development aims, they can introduce "conditionalities" that compromise development and undermine the public interest thus reducing the benefits of preferential/duty-free market access. For example, in the case of the US–Sri Lanka negotiations, duty-free entry for Sri Lankan exports depended on Sri Lanka adopting certain policies which *inter alia* increased Sri Lanka's ready-made garment production costs and reduced affordability of drugs.[2]

A similar problem was identified with new GSP schemes being introduced by northern countries that differentiate among GSP beneficiaries. For example, the European Union's GSP-plus incentive program provides additional benefits for countries implementing certain international standards in human and labour rights, environmental protection, the fight against drugs and good governance. Many southern countries cannot meet the conditions to access these benefits, thus leading to inevitable discrimination amongst countries receiving preferential tariffs.[3]

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[2] The measures to implement the intellectual property conditions were subsequently subject to legal challenge in Sri Lanka and were struck down by the Supreme Court; this required subsequent amendments to the implementing legislation.

[3] For example, access to the EU's GSP-plus benefits depends on ratification and implementation of some 27 conventions, 16 of which are related to human and labour rights and 11 of which deal with governance and environmental issues. While India successfully challenged an aspect of this scheme through the WTO's dispute settlement system (DS246: *EC—Conditions for the granting of tariff preferences to developing countries*), the Appellate Body opened the door to a WTO-consistent regime along these lines when it held that a GSP scheme may be considered non-discriminatory even if identical tariff treatment is not accorded to all GSP beneficiaries or if tariff preferences are addressed to a particular development, financial or trade need and are made available to all beneficiaries that share that need. See WTO News online at http://www.wto.org/english/news_e/news04_e/dsb_20apr04_e.htm, accessed December 8, 2005.

The United States has similarly tied GSP benefits to cooperation on political agendas related to drugs and terrorism. Moreover, the application of rules of origin for qualification under GSP programs can pose barriers for South Asian nations that have small domestic production bases and accordingly import production inputs; this is the case with the rules of origin applied to access the EU's GSP program. Finally, concern was expressed that RTA-stipulated obligations to adopt international standards limit the flexibilities and exceptions that WTO agreements provide to southern countries to facilitate achievement of developmental and public policy goals.

The African perspective on RTAs focussed more on economic infrastructure weaknesses that can diminish the ability of RTAs to stimulate economic growth and development. In the case of the South Africa-EU FTA, South African exports to the EU did increase, but at a disappointing annual growth rate of 4 to 5 percent, which has left the EU's share of South African exports stable at 30 to 31 percent, with little overall change in terms of either "trade deepening" or "trade widening".[4] In the case of the RTA between South Africa and the South African Development Community (SADC), categories of imports entering South Africa duty-free increased from 40 in 2000 to 70 in 2003. However, while imports from the SADC have steadily grown, growth rates in the period 1996 to 1999 were actually higher than in the period 2000 to 2003. The blame for the weak response to the FTA was laid in good measure at the door of underdeveloped transport corridors that physically limit the ability to export in great volumes as well as underdeveloped finance, telecommunications, and other services that facilitate trade relations—although problems with rules of origin and the inadequacy of domestic regulation were also mentioned.

Nowhere are differences between North–South and South–South agreements felt more keenly than in the Americas. Because of the geographical proximity of the US economy and better de-

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[4] Editors' note: trade deepening implies exporting a narrow range of products in larger quantities while trade widening implies exporting a wider and more diverse range of products.

veloped North-South shipping infrastructure links, North-South trade dominates in terms of monetary value as well as in terms of how "seriously" it is taken, especially when trade disputes arise. There are also qualitative differences: North–South trade is based more on complementarity and comparative advantage whereas South–South trade tends to feature competition in areas of common export strength. North–South negotiations involve more issues—such as intellectual property rights, labour and environmental issues, and more broadly generate pressure to move towards a free market economy (which is often controversial, sparking anti-globalism protests); by contrast, South–South agreements mainly focus on trade.

Compared to WTO negotiations, North-South RTAs are considered less demanding in terms of negotiating resources and time; at the same time there is a greater asymmetry in bargaining power—although developing countries (even larger ones like China and India) also face asymmetric power within the WTO.

RTAs and services trade liberalization

Developing countries have been liberalizing trade in services at the unilateral, bilateral/regional (including South-South and North-South agreements) and multilateral levels. Yet progress has been slow, difficult, and usually incremental, whether in the WTO or through regional negotiations – this despite the fact that economic theory suggests that services liberalization is a largely untapped source of economic growth and that there are fairly strong spillover benefits to goods-producing sectors from liberalization of producer services.

Resistance to services liberalization often is based on arguments developed to support goods protection. However, it also reflects the diversity of types of services and the complexity of the conceptual and practical issues raised in dealing with regulations and institutions touched by negotiations. In turn, this suggests the need to temper expectations of rapid progress in rule-making (i.e., in domestic regulatory reforms, emergency safeguards, and services-related subsidies) or in market-access in difficult sectors (such as air and maritime transport, audio-visual services, education and health services, and labour mobility).[5]

Developing countries' experience with services trade liberalization leads observers to extract a number of lessons.

First, one of the more important sources of increased services trade has been unilateral liberalization, which has been achieved in good measure through privatization, demonopolization and entry by new suppliers—including foreign suppliers as foreign direct investment (FDI) policy shifted in the late 1980s from restricting inflows to actively promoting them.

Second, given the multiple tracks along which services trade is being liberalized, policy coherence is an issue. Countries need to carefully consider what commitments to make on each track, taking into account past implementation experience, both their own and that of their trading partners (including the extent to which industrialized countries have delivered on offers of technical assistance and special and differential treatment). Whereas North-South agreements, such as the Cotonou Agreement,[6] tend to demand a wider coverage of services sectors and deeper liberalization commitments than either multilateral or South-South agreements, South-South agreements tend to suffer implementation and compliance problems which diminish their impact.

Third, there is the issue of sequencing of sectors to promote development. Liberalizing producer services first improves competitiveness in other services and goods sectors, just as in

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[5] The recent WTO dispute settlement case in respect of on-line gambling services brought by Antigua-Barbuda against the US brought out the difficulties that WTO Members can have in understanding their own commitments. In this case, the US was found to have included commitments to liberalize trade in gambling services, which according to the US was inadvertent. While the WTO decision, upon appeal, largely went in the US' favour, the fact that the US had misunderstood its own offer was telling.

[6] The Cotonou Agreement between the African, Caribbean, and Pacific (ACP) States and the EU, signed in June 2000, mandates the negotiation of economic partnership agreements (EPAs) between regional groups of ACP States on the one hand and the EU on the other. The trade components of the EPAs are to be negotiated by 2007. The EPAs are preferential trade agreements that involve progressive elimination of all trade barriers, including in services, first between countries constituting the regional EPA groups and then between these groups and the EU.

the case of tariff reductions on intermediate production inputs.

Fourth, with regard to sequencing by trading partner, full liberalization is often recommended first among developing countries and only after that with industrialized countries.

Fifth, mode 4 (movement of service providers) represents an important channel through which developing countries could gain from enhanced service market access in the industrialized world. Within developing countries, there is a strong interest in the movement of labour, which reflects the growing importance of remittances. Even liberalization to permit temporary movement could result in substantial benefits.

Sixth, supply response capacity of domestic services sectors and adjustment costs need to be taken into account when considering rapid liberalization under North-South agreements, since suppliers from industrialized countries tend to be much stronger than domestic suppliers. Even the built-in asymmetry in terms of implementing liberalization commitments under the WTO regime is not considered by some observers as adequate to address this concern.

Seventh, disciplines on subsidies are critical for developing countries, because it is difficult for them to compete with highly subsidized foreign trade partners.

Generally, the firmer the commitments on technical assistance and support for improved supply response and adjustment in the developing countries, the greater the chance that the latter will undertake the needed degree of services sector liberalization.

In terms of modalities, progress at the multilateral level in the Doha Round GATS negotiations has been minimal. However, with services aspects of RTAs only weakly constrained by multilateral rules, more ambitious, GATS-plus results can be obtained through regional/bilateral agreements.

One way is to adopt the NAFTA architecture in the RTA. Under this approach, services trade specific disciplines are established on cross-border trade in services (modes 1 and 2 of the GATS), while generic (i.e., non services-specific) disciplines are established on the movement of capital/investment (mode 3) and of service suppliers (mode 4). In contrast to the GATS' positive-list approach to specifying sectors for liberalization, the NAFTA architecture adopts a negative-list approach, specifying the exemptions from liberalization. The latter approach has useful features: it enhances transparency by providing a complete list of non-conforming measures, both for firms and for future negotiations; and it elicits an audit of existing restrictions on international trade which is valuable from a governance perspective.

A second way is to address areas where the GATS has lagged. For example:

- government procurement of services, which has not been dealt with at all under the GATS, is an area with considerable potential for increased market access in RTAs;
- pioneering work in formulating sector-specific emergency safeguards would facilitate the liberalization of services in sectors where foreign entry can be particularly disruptive for domestic industry (e.g., the impact on retail and wholesale trade from entry of competitors like Wal-Mart); and
- the adoption of very liberal rules of origin for services and investment would prevent third party investors from bending the rules to their own ends.

A third way is to include "good governance" in RTAs:

- make commitments based on current regulatory regimes to avoid having a "wedge" between bound commitments and applied practice as is the case with tariffs on trade in goods;
- automatically reflect unilateral liberalization in bound commitments (as is done in the NAFTA);
- protect acquired rights of established service providers;
- not require commercial presence as a precondition for serving domestic markets to promote cross-border modes of services trade, including e-commerce, while engendering convergence in underlying regulatory frameworks;
- address regulatory impediments to services trade and investment (e.g., by including a "necessity" test to determine whether the restriction is unduly burdensome); and
- include transparency commitments (e.g., such as pre-notification of new regulatory measures).

Sectoral liberalization: air transport in South Africa

In the services area, sectoral liberalization tends to confront sector-specific regulatory issues and international protocols outside the scope of the multilateral trade system, as well as domestic trade-unrelated public policy objectives that can have trade-restrictive effects. Insofar as non-trade concerns tend to be shared on a regional basis, RTAs can help move the process of liberalization along. A good example of this is provided by the air transport sector in South Africa.

As general background, air transport falls within the structure of technical freedoms (including landing rights, over-flight rights, rights to pick up and drop off passengers etc.) established by the Chicago Agreement of 1944[7]. Within the framework, individual states enter into bilateral air service agreements (BASAs) that set out which commercial services may be provided within the territory of one partner by carriers from the other, such as picking up and dropping off passengers on direct flights between the two destinations. More ambitious "open skies" agreements may extend rights to drop off or pick up passengers on routes involving third countries and/or within the territory of the partner country. The air transport sector is unique unto itself because of dominant state ownership of carriers and/or a high degree of concentration; a high degree of immunity from competition; pervasive controls on entry, capacity, and pricing; and unique regimes and institutions. These measures are in place for a variety of reasons, including the fact that air transport tends to be important for regional services within a country and for national security. That being said, there has been a steady increase in liberalization within the air transport sector, with the US open-skies policy being a major driver.[8]

[7] *International Air Transport Agreement*, signed at Chicago, 7 December 1944.

[8] The United States is party to 60 of the 89 BASAs currently in force. In Asia, a plurilateral agreement with the United States, Chile, Singapore, Brunei, and New Zealand has replaced a set of bilateral agreements between the signa-

Southern Africa provides a good example of the problems faced in tackling air transport liberalization. The great distances and limited transportation facilities in the region make air transport important to economic integration. The South African Development Community (SADC) constitutes a fairly significant air transport market, with Johannesburg as its hub; however, the development of the industry has been hampered by the small size of the individual national markets, high fee structures, and limited deregulation. The exit by European carriers from this regional market when the rand weakened in the early 2000s lends legitimacy to these countries' policies to ensure the participation and survival of domestically registered airlines. In this context, regionalization is thought to represent a possible way forward, although liberalization of the SADC regional market continues to encounter resistance and regionally owned and managed airlines have yet to be established.

RTAs and Investment Rules

The Uruguay Round pioneered the introduction of investment rules, in the form of the TRIMs agreement, into the multilateral framework. Since then, attempts to develop this minimalist agreement have met with little success as investment rules have been "too hot to handle". Investment was one of the Singapore Issues dropped from the Doha Development Agenda following the collapse of the WTO Ministerial meeting at Cancun. The OECD tried unsuccessfully to negotiate a "high quality" investment agreement. And the Free Trade of the Americas (FTAA) negotiations have moved into an "FTAA-lite" mode with no investment disciplines due to stiff opposition from Brazil. This reflects in part a lack of consensus not only between developing and developed but even within the developed world (e.g., US and EU positions diverge on portfolio investment, regulation in the public interest, and dispute settlement).

tories and the United States. The European Union has also been advancing the agenda with its "Horizontal Agreements" that modify existing BASAs to ensure non-discriminatory treatment of all EU members.

Progress in investment rules has largely come through bilateral investment treaties (BITs), of which there are now over 2,000 in existence. However, the emerging empirical consensus is that these investment treaties have had little effect on the global distribution of foreign direct investment (FDI).

From a development perspective, this is problematic since these agreements nonetheless do protect investment through limitations on public policy. Under BITs, for example, investors can go straight to international arbitration if they allege that the state has gone against the agreement. There has been a steady climb in the number of known investment treaty arbitrations since the mid-1990s, although the full extent of such litigation is unknown because the arbitration rules do not provide for full transparency and no notice may be given even in important cases affecting public policy. Some countries, including Canada and the US, are trying to fix this problem by requiring that all cases be made public under new agreements. However, there are hundreds of investment treaties that do not provide for transparency. Full transparency would shed light on how tribunals are interpreting agreements, which in turn would help governments understand the effect of rules which they are adopting.

One important issue raised by BITs is potential constraints on future public policy initiatives. When negotiating investment treaties, governments need to anticipate future policies and their possible relationship to investment treaty obligations. For example, in the case of state-provided health care, the expansion of publicly funded health services into new areas such as prescription drug and dental insurance could expose governments to law suits from foreign investors with a stake in those areas.

Another potential flashpoint is the issue of positive discrimination, which gives preference to certain groups. Some countries have sheltered the right to make such preferences when forming investment treaties, but most have not, leaving themselves exposed to challenges from foreign investors who allege that they face an uneven playing field. In South Africa, for example, policy tools are being used for Black economic empowerment, but some of these positive discrimination measures may conflict with investment treaties and may result in litigation.

Another issue is corporate responsibility. A Canadian NGO initiative has led to the drafting of a model international investment agreement that aims to strike a balance between investor protection and the rights and obligations of both home and host countries and also includes other elements such as corporate responsibility.[9] This sample agreement diverges quite a bit from a standard bilateral investment treaty but is generating widespread interest among developing country governments and within the private sector. One shortcoming of many BITs is that they fail to include exceptions and safeguards to shelter sensitive economic sectors like fisheries or culture, or to protect certain taxes, subsidies, or environmental regulations. As well, there tends to be little in the way of special and differential treatment written into international investment agreements. Some BITs retain more policy autonomy and flexibility than others. For example:

- some only require post-establishment national treatment whereas more advanced BITS require both pre-and post-establishment national treatment;
- some prohibit performance requirements, which are often used as a tool of industrial policy, whereas others do not mention performance requirements thus permitting them;.
- some BITs list many exceptions to national treatment and most-favoured-nation principles in economically important sectors whereas others do not.

One attempt to develop a quantitative measure of the degree of policy autonomy preserved under an international investment agreement is UNCTAD's "Flexibility for Development" index, which assigns numerical scores to agreements based on four criteria:

- the objectives of the treaty—is it pro-development?
- special and differential treatment for developing countries;

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[9] See "Experts Call for New Rules on Business Investing Abroad," IISD Media Announcement, 27 April 2005, http://www.iisd.org/media/2005/april_27_2005.asp; see also IISD (2005), *IISD Model International Agreement on Investment for Sustainable Development Negotiators Handbook*, http://www.iisd.org/publications/pub.aspx?id=686.

- substantive provisions (where flexibility is valued);
- application (the force of the treaty).

With this index, statistical analytical methods can be applied to assess the development benefits of different kinds of agreements. The flexibility-for-development index should be applicable to the investment component of trade agreements.

FDI responds to a wide range of incentives, not simply investment liberalization. For example, the African Growth and Opportunity Act (AGOA), signed in 2000 and extended to 2015, has been linked to considerable foreign direct investment in a number of Southern African countries, from German auto assemblers as well in the region's apparel and textiles industry as a result of backward integration by already-present Asian apparel producers into textiles. In this case, trade liberalization in effect increased the incentives for investment. Other factors that attract FDI include the provision of public goods (e.g., raising the quality of infrastructure) and improving labour productivity (e.g., by support for training and skills development).

By the same token, greater benefits from FDI can be obtained if policies facilitate technology and skills transfer as well as the creation of linkages and networks, and if competition policy maintains space for domestic firms.

Investor protection is an important international goal, but the present system of bilateral investment treaties, it was argued, "is a stacked deck"; not enough attention has been paid to the need for these treaties to respect certain legitimate boundaries for government. It is important that governments do impact assessments to assess vulnerabilities and look at loopholes—and not wait until they are being sued.

Competition provisions in RTAs

Trade liberalization through RTAs can increase competitive pressure on domestically oriented business but it can also unleash a wave of merger and acquisition activity and an increase in corporate concentration as firms exploit new found economies of scale. At the same time, anti-competitive practices such as price-fixing schemes and abuse of dominant positions in markets can nullify the potential gains from trade promised by RTAs.[10] Including competition provisions in RTAs is one way to improve the net benefits of these agreements. In fact, RTAs with competition provisions now number more than 100 – predominantly in North–South RTAs and mostly in the Americas and Asia.

Although there are various approaches and a wide diversity of objectives in terms of trade, competition, and development, RTA competition provisions typically create a number of obligations:

- to have a competition law and enforcement agencies;
- to have a mechanism for inter-agency notification, consultation, and co-operation; and
- to put in place supra-national mechanisms such as procedures and bodies to give effect to cooperation.

In North-South RTAs, provisions may also include undertakings regarding:

- technical assistance and transfer of best practices;
- a presumption of co-operation; and
- a presumption of enforcement priorities.

Northern and southern countries sign onto competition provisions, it was argued, for different reasons—some stated and some unstated. Northern countries tend to be interested in complementing market-opening measures and exporting their own antitrust model. Their unstated reasons may include setting precedents and fostering agency-to-agency co-operation. Southern countries seek access to technical assistance and transfer of best practices more quickly, as well as an external anchor for the entrenchment of national competition law and enforcement.

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[10] For example, it was indicated that South-South RTAs such as COMESA, Caricom, and SADC have more than doubled trade amongst their members, while trade liberalization worldwide has increased world welfare by about $40 billion—about half of which has accrued to developing countries. But during the 1990s alone, developing countries' imports were greatly affected by price-fixing conspiracies, the welfare costs of which exceeded US$80 billion. The Central America–US Free Trade Agreement (CAFTA) was cited as one example of an RTA where a lack of competition provisions may have been detrimental to its effectiveness.

Unstated motives may include fostering co-operation and raising the profile of their competition agencies and officials, and thereby raising the country's international stature. Thus, the north and south may have some overlapping motives.

Achieving desired competition results through RTAs is not easy. Competition provisions negotiated by trade policy officials may not be welcomed by the competition law officials. The value of technical assistance obtained through RTA commitments depends importantly on the quantity and type of assistance provided and the capacity to absorb. Agency-to-agency co-operation is still limited outside industrialized countries and building the trust needed for effective co-operation is a medium- to long-term process. In a similar vein, the external anchor of an international commitment is not a substitute for political commitment to competition law, including providing adequate budgetary resources and respecting the enforcement agency's independence. Compliance is important: if not all members of the agreement have a competition law in place, and those that do lack effective administrative institutions to enforce it (which it was argued was often the case), the effectiveness of the RTA will be of course weak or nil. Ultimately, the power of an RTA to deliver the expected development benefits in terms of fostering a more competitive environment depends on various other factors, which emphasizes the importance of policymakers being aware of the need for complementary measures.

There are of course viable alternatives to RTAs for accomplishing these motives, including agency-to-agency agreements and non-binding norms that may be less costly, more easily negotiated and possibly even more effective over time. At the same time, some issues, such as dealing with international cartels, are best addressed through multilateral institutions such as the WTO (although the high level of activity in introducing competition policy into RTAs has yet to spillover into the WTO which dropped competition policy from its negotiating agenda after the WTO's Cancun Ministerial). And domestic policy could contribute more to a competitive international market environment if recourse could be had in national courts for abuses corporate practices carried on abroad.

It was suggested that there is much room for additional research on the effectiveness of regional competition provisions as compared to national and multilateral solutions, the relative merits of alternative approaches and institutional arrangements, the effect of special and differential (S&D) treatment, and the experience with various issues raised by competition provisions in RTAs such as treatment of confidential information, implementation costs, and extra-territoriality of competition rulings.

Risks and options for developing countries in negotiating North–South agreements

There is a strong theoretical foundation for North–South agreements, and the potential benefits include strong complementarities between partners, technology transfer, and a sense of economic security that can lead to political security.

However, the sense of the conference was that these benefits are more modest in net terms and less easy to achieve than anticipated. When positive effects do obtain, they are often captured by vested anti-competitive interests, diminishing the development gains. There is also growing awareness of the price that has to be paid for improved market access—the need to accept rules and disciplines, the impact of which on domestic issues and development strategies might be poorly understood. Asymmetries in economic and political power between negotiating parties can skew the benefits from an RTA—an issue, it was emphasized, that is not restricted to North-South RTAs since South–South agreements are not always agreements among equals and can themselves foster new inequalities and create problems for the less developed members. Sound preparation is thus essential for a country contemplating entering into new negotiations.

Moreover, the assessment of RTAs must be made in light of the fact that agreements are increasingly overlapping as members of one regional agreement sign bilateral or regional agreements with third parties. Future negotiations conducted by a country's RTA partners can thus undermine the benefits expected from the original RTA. At the same time, smaller developing countries that are less attractive RTA partners may be further marginalized by the spread of RTAs as they are left out of the process altogether.

Thus, although trade agreements are hardly an obstacle to development goals, they cannot replace development strategies.

To some extent the sense of disillusionment with RTAs reflected a wider disillusionment about the ability of economic liberalization to trigger sustained development—indeed, in many cases, RTAs were seen as a tool to lock in other reforms. There is a growing consensus, it was suggested, that liberalization is not enough: regulation, institutions, and sound policies are also needed.

In the final analysis, the relationship between market access and development must be analyzed at the issue level—at the level of investment, competition, and services—and not just on the level of a generalised "beyond the border" agenda. For each trade issue, it was argued, it is necessary to map the provisions and exclusions that are "development-unfriendly." The assessment of risks and opportunities related to trade agreements cannot be made against an abstract idea of development. For example, while North–South agreements tend to be comprehensive in coverage and scope and address more than tariffs, they often leave out certain industries or sectors that are important to developing countries (the obvious example being agriculture). The reduction of policy autonomy from integration agreements could constrain the effective range of responses to development challenges. And environmental, labour, and other standards desired by northern countries, while potentially beneficial to developing countries, could be costly and difficult to implement while raising barriers to market access.

Conclusions

The surge in formation of RTAs has transformed the global economy. There are over 300 regional agreements notified under to the WTO (although only one to date has been pronounced as consistent with the WTO conditions for RTAs). One effect is a certain degree of fragmentation of the trading system into trading blocs, including the European Community, NAFTA, a number of free trade agreements signed regionally with the US, and regional mechanisms in Asia and Latin America. Some observers fear that the proliferation of regional agreements is weakening the WTO because the most-favoured-nation clause is set aside in regional agreements. The question, "Are we headed in the right direction?" remains open.

WTO Dispute Settlement: Systemic Issues

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On February 16, 2005, the University of Ottawa Faculty of Law convened a roundtable of leading observers of multilateral and regional dispute settlement mechanisms on systemic issues facing the World Trade Organization as it celebrates its 10th anniversary in the context of the Doha Development Agenda, the ninth multilateral round of trade negotiations but the first under WTO auspices. This note represents the Chair's thematic summary of the discussions. As these were held under Chatham House rules, no attribution is given. Responsibility for the interpretation of the discussion rests entirely with the author.

Introduction and Overview

The dispute settlement system has played a major role in the development of the WTO as an international rules-based system. Indeed, some go as far as to call the Dispute Settlement Understanding (DSU) the WTO's "crown jewel". However, while the mandated review of the DSU in 1998 and 1999 did indeed conclude that the system was working well, it nonetheless generated a large number of proposals for improvements. Dispute settlement negotiators, led by Yoichi Suzuki of Japan, had agreed to a package of reforms that would have been approved at the Seattle WTO Ministerial Meeting, had it been successful. Following the collapse of the Seattle Ministerial Con-

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ference, informal consultations continued in 2000 and 2001 leading up to dispute settlement being included in the Doha Declaration which launched formal negotiations in the new Round. The negotiations on dispute settlement were to be based on the work done to date (which included issues such as the "sequencing" of Article 21.5 and Article 22 procedures, the time-frames for panel proceedings, "carousel" retaliation and third party rights) plus new issues that might be introduced by the Membership. And many new issues have been added, including various proposals to amend the panel system, to improve Appellate Body procedures, and to provide greater rights for developing countries. A still wider ranging discussion of systemic issues centred on the dispute settlement system has long been underway in the literature and on the conference circuit.

Notwithstanding the long gestation period for reform proposals, the first deadline for completion of negotiations (in 2003) passed without agreement, leaving the legacy of a failed Chairman's text[1]; negotiations have since continued, with a second deadline in May 2004 also having come and gone without agreement.

The Consultative Board to former WTO Director-General Supachai Panitchpakdi, in its recent Report on "The Future of the WTO"[2], stated that "while there are some grounds for criticism and reform of the dispute settlement system, on the whole, there exists much satisfaction with its practices and performance." However, the Consultative Board was not as positive about the "spaghetti bowl" of regional trade agreements and their relationship with the multilateral trading system. It also observed that "the WTO dispute settlement system may be at a crucial, and perhaps somewhat delicate, point in its brief history."

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[1] TN/DS/9, 6 June 2003.

[2] Peter Sutherland et al. (2004). "The Future of the WTO: Addressing institutional challenges in the new millennium", *Report by the Consultative Board to the former Director-General Supachai Panitchpakdi*, World Trade Organization, http://www.wto.org/English/thewto_e/10anniv_e/future_wto_e.pdf.

The systemic issues raised in the context of proposed reforms to the WTO dispute settlement system may be grouped into four categories:

(a) Reform of the WTO Panel System. This rubric covers a range of issues that have emerged involving the panel process, including: suggestions to establish a permanent panel body or a standing body of panel chairs to address difficulties with composing panels; the question of whether a separate Secretariat staff is needed for panels; the need for improved rules of procedure and rules of evidence; and how best to ensure independence, high quality decisions, consistency and coherence in panel reports.

(b) Approaches to Interpretation of WTO Agreements. This rubric covers a complex nexus of issues related to the question of the approach taken by the Appellate Body in interpreting WTO rules. Some commentators perceive an evolution in the Appellate Body's approach to interpretation from an essentially literalist approach in the early days, paying close attention to the legal texts with frequent explicit references to the Oxford Dictionary ("textualism"), to greater reference to public international law, relying on the Vienna Convention on the Law of Treaties as a guide to interpretation. How the Appellate Body interprets WTO rules bears importantly on various debates over its role: Does "clarifying" the rules include "filling in gaps" that negotiators left ambiguous or blank, or should it be limited to simply preserving the balance of rights and obligations as negotiated by the parties? What is the appropriate standard of review for measures imposed by, and extent of deference due to, WTO Member governments by the Appellate Body and panels? Given the very strong WTO dispute settlement system and the comparatively weak rule-making system, what is the proper balance between the dispute settlement and rule making bodies?

(c) Implementation and Compliance. This rubric covers the plethora of issues related to implementation of WTO rulings, particularly by the major powers in important cases, and the tools available to promote compliance. Retaliation ("suspension of concessions") is a blunt instrument that only the major powers can use effectively, and even then it is not always an effective and efficient mechanism. What are the alternatives, especially for smaller and developing countries? Are prospective remedies the only appropriate means? Are there alternatives in the form of damages or retrospective remedies in certain cases? What are the challenges in assessing trade damage? Given the protracted time frames over which dispute resolution unfolds, is there scope for preliminary injunctions to attenuate nullification and impairment? What can be done to shore up confidence in the system?

(d) Relationship between Regional and Multilateral Trade Agreements. In recent years, there has been a proliferation of regional trade agreements and dispute settlement mechanisms. This has raised concerns such as the possibility of conflicts of rules, "forum shopping", and double jeopardy. How serious are these risks and what are the possible solutions?

These four issue areas were explored in turn by the experts participating in the roundtable. This is an account of that discussion. In the following sections, the issues are introduced with a brief context-setting outline, followed by an annotated, thematic summary of the discussion.

The sense of the experts was that the WTO dispute resolution system has acquitted itself very well in its first decade. Some of its present challenges—including the increasing volume of cases—are for the most part the product of its successes, not its failures. Reforms, while not immediately necessary, would help to improve the system. The good news is that there does not appear to be a shortage of potentially viable proposals. An ambitious outcome to the Doha Round would likely include some procedural reforms to the dispute settlement mechanism.

Reform of the WTO Panel System and Constitution of Panels

Background and Context

Since the European Communities ("EC") first proposed the idea to establish a permanent panel body in the Doha Round dispute settlement negotiations[3], there has been considerable commentary both for and against this bold idea, and various permutations of it.

The EC originally proposed that a roster of between 15 and 24 permanent panelists be established comprised of persons with impeccable credentials and appointed on a full-time basis to ensure panelists of high quality and expertise. To avoid potential problems with conflicts of interest, the EC also proposed that these persons be required to be unaffiliated with any government, Member of the WTO, and bound by the *Rules of Conduct for the Understanding on Rules and Procedures Governing the Settlement of Disputes* ("Rules of Conduct")[4] and additional obligations like those applicable to the Appellate Body. The EC proposed an appointment process for permanent panel members similar to that used for Appellate Body Members, except that panel body members would be appointed for a single non-renewable term of six years.[5]

Because the proposal was viewed by many WTO Members as too far-reaching, the EC quickly modified its original proposal to allow the parties to a dispute to select two of the panelists from outside the panel body, within very short timeframes.[6] Thailand submitted an alternative proposal, namely the creation of a permanent panel body from which panel chairs would be selected.[7] Canada, meanwhile, recommended that a permanent panel roster be created, comprised of one person nominated

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[3] TN/DS/W/1.

[4] WT/DSB/RC/1.

[5] A proposal has also been made to amend the terms of Members of the Appellate Body to one, non-renewable term of six years.

[6] TN/DS/W/38, pp. 3-4.

[7] TN/DS/W/31, p. 2.

from each WTO Member, from which parties would be required to select panelists in individual cases.[8]

With WTO Members unable to agree on an approach, the subject of improvement of the selection of panelists did not figure in the Text prepared by the Chairman of the Special Session of the Dispute Settlement Body (the "Chairman's Text") issued in May 2003.[9]

The pros and cons of a permanent panel body

Much has been written on the pros and cons of a permanent panel body.[10] In the roundtable discussion, the advantages to

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[8] TN/DS/W/41, pp. 3-5.

[9] TN/DS/9, 6 June 2003. In his Report to the Trade Negotiations Committee, the Chairman, Ambassador Peter Balas, noted that a number of proposals, including those relating to improved panel selection procedures, "could not be included in the Chair's proposal in the absence of a sufficiently high level of support..."

[10] In support of its proposal, the EC cited the growing number, complexity and duration of WTO cases, compared with the previous GATT system and the increasing difficulty to select qualified panelists which has led to significant delays in the panel process. The EC also suggested that a permanent panel body would: be better able to handle new procedural developments, such as preliminary rulings and special rules governing the treatment of business confidential information; result in faster proceedings and produce better and more consistent rulings, with the result that fewer panel reports would be reversed by the Appellate Body; increase the legitimacy and credibility of the panel system in public perception; and increase the involvement of developing countries in the panel selection process and would allow more of their nationals to be appointed to panels. TN/DS/W/1, at pp. 2-4. For a discussion of the permanent panel body concept, see William J. Davey, "The Case for a Permanent Panel Body", in *Part IV: Grouping on WTO DSU Reform: Proposals Relating to First-Level Permanent Panels*, 6:1 *Journal of International Economic Law* 175-186 (March 2003). Professor Davey sees the establishment of a permanent panel body as an "inevitable and natural outgrowth of the Appellate Body" (at p. 185). For an earlier article, see William J. Davey, "A Permanent Panel Body for WTO Dispute Settlement: Desirable or Practical", in Daniel L.M. Kennedy and James D. Southwick (eds.), *The Political Economy of International Trade Law: Essays in Honor of Professor Robert E. Hudec* (Cambridge: Cambridge University Press 2002) 496-527. See also: Debra P. Steger, "WTO Dispute Settlement: The

moving to a permanent panel body (PPB) were summarized as follows:

(1) There would be significant time savings in organizing panels. At present, settling on the composition of a panel can take two months, while arranging the meeting schedule can take an additional one or two months given inherent difficulties in coordinating divergent schedules of a group of *ad hoc* panelists who are frequently geographically dispersed and busy with other work.

(2) More experienced panelists are required to cope with the increasingly heavy and complex workload under the WTO's Dispute Settlement Understanding compared to the GATT era. This reflects, *inter alia*: the introduction of whole new areas of WTO substantive legal competence, such as trade in services and intellectual property; the increase in complexity of rules and complications raised by reliance on confidential business information in areas such as anti-dumping, safeguards and subsidies; the complexity of factual issues raised in cases dealing with sanitary and phytosanitary (SPS) measures, technical barriers to trade, and other health and environmental issues; and the general increase in complexity of claims with the progressive legalization of the process. In this context, the current uneven level of experience of panelists (many of whom serve on only one or two panels) translates into an uneven quality in panel reports, which in turn increases the frequency of recourse to, and subsequent reversals by, the Appellate Body.

(3) A permanent panel body, through more frequent interaction and greater legal expertise of its members would be better placed to standardize panel working procedures and develop rules of evidence. At present, procedural rulings are developed as *ad hoc* decisions with Secretariat guidance. Moreover, a permanent panel body would be better able to respond to increasing demands for procedural innovation in areas such as preliminary rulings on difficult issues and

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Next Step", in Debra P. Steger, *Peace Through Trade: Building the WTO*, (Cameron May, 2004): 327-346.

provisional relief; and would be better able to efficiently deal with post panel proceedings (remands, Article 21.5 compliance proceedings, Article 22.6 arbitrations, etc.).

(4) A permanent panel body would increase the legitimacy of panel decisions by eliminating or at least reducing the appearance of conflict of interest raised by the practice of staffing panels with government officials many of whom are delegates of missions in Geneva.

(5) A permanent panel body would likely result in a better distribution of the work on panels among the WTO membership than has proven possible under the present system, including ensuring more frequent participation by individuals from developing countries and also greater balance in representation of the largest Members.

(6) A permanent panel body would likely result in a reduction of the influence of the WTO Secretariat. While the support of panels by the Secretariat has improved the quality of panel reports, it has also led to the perception that the Secretariat has too much influence on decisions made at the panel level. Since a permanent panel body would ultimately have its own supporting secretariat, the main difference would be in the separation of the function of advising panels from the functions of advising the WTO Director-General and Members, a separation that would eliminate any suspicion that Secretariat staff were trying to implement their own views on interpretation of the agreements through their work with panels.

However, several potential risks in, and objections to, moving to a permanent panel body were also identified.

First, there is issue of political participation in the panel selection process.[11] Governments, it was observed, jealously guard

[11] See, however, the contribution by Chile and the United States to the DSU negotiations in which they proposed a number of options for "improving flexibility and Member control in WTO dispute settlement". TN/DS/W/28. Andrew Shoyer shares these views. He argues that the current *ad hoc* selection system "serves to address one of the key objectives of a party to a WTO panel proceeding – to compose a panel that appears likely to rule in its favor – better than would a permanent panel body." Andrew

their prerogatives. Moreover, "politicization" of the selection process by the WTO is perhaps the biggest worry within the WTO Membership ("The WTO can't be trusted to appoint responsibly"). Some argue, however, that this concern is made largely moot by the fact that, since the Members cannot usually agree on a slate of panelists for particular cases, the Director-General ends up appointing most panels. In effect, party control no longer exists in most cases anyway because of the problems of composing panels.[12]

A related problem with a Panel Body, it was pointed out, is its acceptability more broadly, not just to governments but also to civil society. The WTO is seen as part of a system of global governance and decisions by the select group of panelists could have potentially far reaching consequences.

Second, it would not be easy to achieve geographic balance, including developing country representation, in a small group, not least because lawyers from the United States and the EC would be well represented. By the same token, since these two Members are frequent litigants, it would seem likely that the present rule excluding nationals from the parties to the dispute from sitting on a panel would have to be eliminated.

Third, there would be a loss of case- and agreement-specific expertise that resides in the larger pool of panelists; there is some reality to this risk since there is a question as to how quickly the Permanent Panel Body would gain experience.[13]

Shoyer, "Panel Selection in WTO Dispute Settlement Proceedings" in *Part IV: Grouping on WTO DSU Reform: Proposals Relating to First-Level Permanent Panels*, 6:1 J Int'l Econ L 203-209 (March 2003); at p. 208.

[12] As William Davey has pointed out, "The selection process has become more difficult over time – whether because of an imbalance between the demand for and supply of suitable panelists (complicated by the increased time commitment now expected of panelists compared to the past) or because of increased party selectivity as the stakes of dispute settlement have become more significant." William J. Davey, " The Case for a WTO Permanent Panel Body", *op. cit.*

[13] For example, Andrew Shoyer contends that the current system can facilitate panel composition of "a higher quality" than a permanent panel body because it draws heavily from active trade policy practitioners who are

A related question is: what would be meant by qualifying "experience"? Only GATT/WTO experience? Or should broader experience of a relevant sort also serve to qualify individuals for the permanent panel body—for example, prior participation on other international tribunals and domestic courts?

Fourth, there is the concern of potentially excessive costs in maintaining the Permanent Panel Body. The main cost would be retainers to ensure that panelists put the necessary priority on panel business (it is disruptive to panels when individual panelists fix dates to return home to attend to their other business, even if the panel business has not been wrapped up), and indeed that they allocate the necessary time (otherwise, the panels become dependent on the WTO Secretariat). However, based on a notional scoping out of the likely costs, it was suggested that this does not appear to be a serious argument.

Other proposals for improving procedures for panel composition were also debated.

One option, along the lines suggested by Canada, would be to establish a proper panel roster. The current indicative list is not generally used. The question was raised: could current practices and attitudes toward qualifications for panelists be changed?

Another option would be a version of Thailand's proposal to establish a standing body from which panel chairs would be selected.[14] This approach would provide some of the advantages

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employees of governments in capitals and in Geneva. echoes the views of some WTO Members concerned about losing "Member control" over the system. Andrew Shoyer, "Panel Selection in WTO Dispute Settlement Proceedings" *op. cit.*

[14] A similar proposal has also been made by Professor Thomas Cottier. Concerned that a Permanent Panel Body would upset the balance of power between the dispute settlement system and the political bodies of the WTO and disrupt the traditions of GATT/WTO dispute settlement, he supports a more evolutionary approach. This would involve the establishment of a College of Permanent Panelists composed of a defined number of alternating panelists and a small group of full-time or half-time chairs for panels who would reside in Geneva. The College would be supported by an independent legal and clerical staff like the staff of the Appellate Body. Thomas Cottier, "The Permanent Panel Body: A Bridge Too Far?" in *Part IV: Grouping on*

of a Permanent Panel Body, for example in terms of improved expertise and procedural standardization. However, it would not be as effective as the Permanent Panel Body system in terms of time saving and flexibility advantages. Moreover, it was noted, frictions would develop with a Panel Chair Body due to the inherent inequality that would obtain with the Chairs being much closer to the Secretariat than the other panel members.

A third option would be along the lines of the EC's modified proposal to establish a Permanent Panel Body but to include flexibility to appoint, on a case-by-case basis, one or two outside panelists. This approach would arguably retain most of the efficiencies of the Permanent Panel Body (depending on the frequency of recourse to outside panelists), while also allowing for specific expertise to be drawn on for particular cases and providing a partial safeguard against "bad" appointments to the Permanent Panel Body. A variant of this approach would be to provide for at least partial rotation in order to provide possibility for individuals from all WTO Members to participate.

While the Permanent Panel Body concept was seen as generally a good idea, and some of the risks and concerns were seen as less real than perceived, the sense of the roundtable was that a Permanent Panel Body was unlikely to be established any time soon. WTO Members simply are not ready to take that big a step.

This resistance is not necessarily a mystery, as one observer noted. Nonetheless, it is a paradox that WTO Members accept rulings from a professional Appellate Body, but resist having a permanent tribunal at the panel stage. The background suggests that Members, overwhelmed by the prospective demands of implementing the Uruguay Round agenda, sought to strengthen the Dispute Settlement Understanding as a way to safeguard their interests. The Appellate Body was accepted on this basis. Not much activity was expected; Members were therefore surprised by the level of activity and what some perceive as the "activism" of the Appellate Body.

WTO DSU Reform: Proposals Relating to First-Level Permanent Panels, 6:1 *Journal of International Economic Law* 187-202 (March 2003).

Gradualism rules in the WTO: GATT/WTO reforms have historically been slow, usually preceded by provisional rules, developed from practice with cases. Accordingly, a cautious approach is more likely to be taken to further reform the system.

Provision of Secretariat Advice to Panels

The WTO dispute settlement system is not really a panel system, it was noted, but a panel and a secretariat system. Various problems have been identified in the current structure under which the WTO Secretariat provides advice to panels.

The Secretariat is organized to support the WTO both in negotiations and dispute settlement. As a result, there can be conflicting demands, which requires a large number of players. On the one hand, this hinders standardization of advice provided to panels; on the other hand, it creates a perception in the Membership of excessive power being wielded by the Secretariat.

One option to address the problems of standardization and timeliness of support would be to create a separate staff for dispute settlement panels, along the lines of the independent Secretariat of the Appellate Body. This would be inevitable with the Permanent Panel Body (either provided for at the time of its creation or soon thereafter upon the demand of its members). The question arises whether this approach would be feasible with *ad hoc* panelists?

One option to address concerns within the Membership about possible overweening influence by the Secretariat would be to require it to circulate to the parties its advice to panels. However, this approach might simply generate additional procedural complexity without effectively sidelining the concerns (since, for example, any such rule could be easily circumvented by oral advice). Also, a requirement that the Secretariat make its advice to panels available to the parties may hinder the close, confidential working relationship between panelists and Secretariat staff, and make panel deliberations more difficult.

Rules of Procedure and Evidence

There is room for improvement with respect to rules of procedure and evidence.

While the procedural rules under which panels operate have standardized informally, variations are inevitable with *ad hoc* panelists. This has resulted in procedural rules remaining a recurring issue within the WTO.

Similarly, with respect to evidentiary rules, while most cases do not raise major evidentiary issues, there is limited experience in the ad hoc panel system for dealing with such issues effectively and appropriately when they do arise. One particular problem that needs to be addressed is how to deal with business confidential information.

Many of the perceived problems with panels in these regards could be addressed by professional training for potential panelists. Such training, which is routinely provided to judges and members of administrative tribunals and addresses issues such as rules of evidence, procedure, role of experts etc., could be led by experienced judges and jurists. Such training would also provide an opportunity for panelists to get together and "bond" which would improve their ability to work together.

And, as one observer noted, some of the discontent with the quality of decisions might usefully be aimed at the quality of the advocacy: if the quality of the advocacy is indeed inadequate, panels are provided poor material to work with in fashioning their decisions.

Is reform possible?

While not all are convinced that the system is broken and needs fixing, the Membership and the trade policy community at large see a potential benefit from some improvements to the panel process.

The key problem may lie in the fact that panel reform is not easily separated from the issues of reform of the political decision making bodies of the WTO and redefining the role of the Secretariat. In other words, panel reform inevitably will raise fundamental issues related to the separation of powers—and ultimately the balance of powers—between the so-called "legislative" and "judicial" arms of the WTO in the emerging WTO constitutional system.

Approaches to Interpretation

The interpretative choices made by the Appellate Body are of broad systemic significance. A particularly important policy decision of the Appellate Body has been its practice, followed in its earliest decisions, of "textualism"—discerning the "ordinary meaning" of the words of the treaty in light of their object, purpose and context—to inform its interpretation of the WTO texts rather than the negotiating history.

This policy decision has a firm foundation in the customary rules of treaty interpretation, as reflected in Vienna Convention Articles 31 and 32. These Articles allow resort to sources such as preparatory work and the negotiating history only under circumscribed conditions:

(a) where the meaning of a treaty provision is ambiguous when interpreted in light of its object, purpose and context, as well as with the aid of other, relevant international legal rules and instruments;

(b) to confirm an interpretation pursuant to the rules in Article 32 of the Vienna Convention; or

(c) to avoid an otherwise absurd reading of a treaty provision.

Fair enough. But, as some observers noted, ordinary meaning is not decisive, since the context in which words are used matters. Context is particularly important, it was argued, with respect to the WTO Agreement because of "constructive ambiguity" in the framing of the legal texts. What can be made by the interpreting body of "ordinary meaning" without the contextual information provided by the preparatory work and debate which lays bare the conflicting interpretations papered over by purposeful ambiguity?

By the same token, others point out, the negotiators' actual intent is reflected only in the final text of the Agreement; Members have declined to take up the opportunity afforded by the

WTO Agreement to put forward clarifying statements on issues they were unable to settle in negotiations, and there is little help from other quarters. The text accordingly must be the primary focus for the interpreting body.

This leads to the conundrum of whether the Appellate Body should give a decision on an issue on which the Members could not agree in negotiations. Some think not, seeing this as "judicial activism".

Others point out that the Appellate Body *must* rule on whatever is thrown at it. The WTO Dispute Settlement Understanding provides for compulsory jurisdiction in dispute settlement cases, and explicitly requires the Appellate Body to address the legal claims presented to it. The fact that the Appellate Body must adjudicate saves it from speculation about its motives for taking on a case or not. The parties might consider a decision not to adjudicate to be politically motivated which would undermine the system.

To some, there is less here than meets the eye; the Vienna Convention, it was noted, combines in one clause the various interpretative approaches of the ordinary meaning of the words, the context, and the object and purpose of the treaty. The relevant test by this view is legitimacy which depends on the quality of the decisions and their broad acceptability—which to some practitioners depends in turn at least in part on the consistency and predictability of the Appellate Body rulings.

In this regard, there is a big difference between interpreting statutes and interpreting treaties because in the latter case the interpreting body is dealing with sovereign States. In domestic courts, judges are skeptical about assertions and want proof. By contrast, panelists face States and must defer to their assertions of fact on evidentiary issues. There is accordingly less of the careful sifting and weighing of evidence in WTO litigation than in domestic law. And much depends on how the parties plead the facts.

What then explains the choice of the Appellate Body to take on political issues sometimes, but not other times?

It has been said in this connection that "the fate of the Appellate Body depends on the personalities". This, it was argued, is partly true: early interpretations such as *US - Shrimp* reflected the broad backgrounds of the originals Members of the Appellate Body, their legal training and experience, and their political sensibilities as they examined the treaty text and wove their way around the landmines. Similarly, in the *India-EC GSP* challenge, which was based on the "non-discrimination" requirement in the GATT GSP provisions, had the Appellate Body upheld the panel decision, it would have impacted the GSP system. And it chose not to.

But this view of the Appellate Body is also partly incorrect: it was argued that, on the record, the Appellate Body sorts out the key "A" cases, for which it mobilizes the heavy duty intellectual power, from the secondary "B" cases, in which it applies a more simplistic, textual approach.

Accordingly, one has to look at the Appellate Body's reasoning in terms of what Dworkin called "fit". Interpretation may begin with the text itself, but nevertheless requires the interpreter to introduce a significant amount of outside material such as the interpreter's intuitions about the treaty's provisions and the meanings of its words in light of the world which generates them. For example, in addressing the "like products" issue in *EC - Asbestos*, the Appellate Body imagined the way in which consumers might distinguish between products in light of their health effects, assuming a world where liability rules would internalize negative health externalities of products.

While the Appellate Body Membership has changed, it has tended to follow the interpretative pattern of early Appellate Body decisions, a pattern which, it was argued, reflects sound and perspicacious intuitions about the challenges posed by the cases in question.

Implementation and Compliance

The range of issues that surround implementation of WTO rulings is long.

Non-compliance was a problem in the GATT system which preceded the WTO. As a result, there were persistent attempts to strengthen multilateral dispute settlement, which include the

1979 amendments in the context of the Tokyo Round, the 1989 *Dispute Settlement Procedures Improvements* which closed the loophole that a Member could block the establishment of a panel, and the WTO *Understanding on Rules and Procedures Governing the Settlement of Disputes* which made adoption of panel and Appellate Body reports and authorization of retaliation more or less automatic.

Overall, the WTO dispute settlement system is working well. Unilateralism, which was a significant problem before the conclusion of the Uruguay Round, has been kept at bay, and Members have made more use of the dispute settlement system than ever before. Since 1995, there have been well over 340 disputes brought to the WTO, leading to around 90 panel reports and 65 Appellate Body reports. Approximately one-quarter of all cases settle in the diplomatic phase, without recourse to a panel or arbitration body. While the United States and the European Communities remain the major users of the dispute settlement system, developing countries (especially the larger and more powerful among them, such as Brazil, India, China and Mexico) have become more active players in the system both as complainants as well as defendants. Many less developed countries, however, have never participated as a party or a third party in a case. While the record on compliance is good—80 percent of the cases are implemented within a reasonable period of time—there are, however, problems in a handful of major, politically-sensitive cases that test the limits of the system.

Discussions on reform of the WTO dispute settlement system have been taking place, off and on, since the 1998-99 review process. Since the beginning of the Doha Round, there has been a myriad of proposals by Members, ranging from major reforms (such as the EC proposal to establish a Permanent Panel Body) to smaller procedural reforms. The Chairman of the Dispute Settlement Body issued a "Chairman's Text" in 2003 that set out proposals that he considered had some measure of support from Members. Work on this subject has since continued in informal groups in Geneva. While the dispute settlement negotiations were not originally linked to the Doha Round's single undertaking agenda on the assumption that there could be an early conclusion on these systemic issues, it now appears that, if there is to be an outcome on dispute settlement, it will likely coincide with the conclusion of the Round.

Are reforms to the dispute settlement system necessary? The answer to this question is: “no”. The system can be, and has been, improved through experience and practice in cases. Examples include: sequencing between resort to compliance panels under Article 21.5 and requests for authorization to suspend concessions under Article 22; and the more controversial experience with treatment of *amicus curiae* briefs. While most WTO Members remain steadfastly opposed to the idea of opening up panel meetings to observation by the public, in the current *EC – Hormones* case, the parties (the United States, the European Communities and Canada) agreed to open up the panel meetings.

It is in the area of compliance/implementation that most of the Members’ attention should be focused. Suspension of concessions or retaliation is a blunt instrument that realistically only the two most powerful Members, the United States and the European Communities, can use effectively; most Members recognize that other means need to be found to encourage Members to implement when encouragement is needed. Also, there are certain types of cases—for instance, antidumping, countervail, safeguards and government procurement—in which, given the timeframes for WTO dispute settlement, there is often no effective remedy at the end of a dispute because, under the WTO, there is no provision for retrospective remedies or preliminary injunctions to prevent injury from occurring while the case is being heard. Several interesting proposals have been made by WTO Members on compliance/implementation, including the idea of providing for monetary compensation for damages. These proposals are worthy of serious consideration in order to make the WTO dispute settlement system more effective and predictable.

A proposal that seems to be developing some resonance with Members is the idea to provide the Appellate Body with the power to remand an issue involving findings of fact back to the panel. This would be helpful in cases in which the Appellate Body has reversed the panel on a legal point, but finds it cannot complete the analysis. In most cases, such rulings are not fundamental to resolving the dispute between the parties, but there may be some cases in the future which are left unresolved if the Appellate Body is not given either the power to remand a case to a panel or to examine questions of fact upon appeal.

Observers agree that professionalization of the panel level through the creation of a permanent panel body or roster is the logical next step in the evolution of WTO dispute settlement. However, there is not much support for this idea among WTO Members, and it is not likely to be a major issue in the final stages of the Doha Round negotiations.

Technical assistance to developing countries involved in dispute settlement activities continues to be a major concern for most Members. The Advisory Centre on WTO Law is a significant addition to the capacity of developing countries engaged in dispute settlement, but clearly, more needs to be done. Some innovative proposals have been made by developing countries, including the least-developed among them, in this Round; these proposals deserve careful consideration. The idea of awarding costs to successful developing country complainants is a particularly interesting proposal.

Retaliation and its alternatives

Under the WTO *Dispute Settlement Understanding*, enforcement falls to the complaining party or parties, even when the case involves systemic issues. There is no provision for collective action; this framework thus takes no account of the capacity of the complainant(s) to retaliate effectively.

This places smaller economies in a more difficult position than larger economies. Small economies have little leverage and, being dependent on imports as well as exports, suffer the self-inflicted pain of retaliation more deeply than larger, diversified economies with greater capacity for import substitution. But even the major powers that can leverage compliance through their capacity to retaliate have proved to be reluctant to actually exercise this right; as a matter of fact, retaliation has only rarely been used.

Further, the present framework for retaliation only deals with prospective remedies and does not address reparation of trade damages, which in the view of some should be the real issue.[15] (As one observer noted, developing countries were shocked to find that the end result of litigation in the WTO was not cash!)

And, retaliation is a blunt instrument. Retaliatory trade measures hurt consumers or industries in the importing country that were not involved in the dispute and may target private producers in the exporting country that were innocent bystanders to the dispute.

This leads to a series of difficult questions:

- Are prospective remedies adequate and appropriate for all of the WTO agreements?
- Are retrospective remedies and calculation of *actual* trade damages possible alternatives?
- Should remedies provide reparation as well as an inducement to comply?
- Is injunctive or interim relief a possible remedy?
- Should different remedies be designed to fit the needs of specific agreements?

Another alternative is Robert Lawrence's concept of Contingent Liberalization Commitments (CLCs). Under the CLC scheme, WTO Members would stipulate a pre-authorized compensation mechanism during negotiations. A country that has suffered nullification or impairment in one area could choose from the list of CLCs on standing offer from the infringing country to obtain an appropriate degree of offsetting benefits. This approach maintains reciprocity while providing incentives for compliance, but does so in a liberalizing, not trade-restricting and self-damaging manner. Rather than a "shot in the foot", CLCs would be a "shot in the arm".

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[15] See for example, Marco Bronckers and Naboth van den Broek, "Financial Compensation in the WTO: Improving the Remedies of WTO Dispute Settlement", *Journal of International Economic Law* 8(1), 101–126

However, Lawrence's proposal is still open to the criticism that the firms and persons who are actually hurt by the infringements are not the ones who would necessarily receive the offsetting benefits in either protection through retaliatory tariffs or additional market access through CLCs.

The advantage of compensation is that it is financed by the entire tax base of a Member; this addresses, to some extent, the fairness issue in terms of spreading the pain within the country maintaining the non-complying measure; it leaves open the question of fairness in the country receiving the compensation.

The economics of retaliation

There are also the significant difficulties of assessing damage from non-conforming measures. These go well beyond the question of "Where do the numbers come from?"—although that question itself elicits troubling answers (one sample answer: "They come from out of a hat!"). While there is a need for stronger economic analytical capacity in the WTO Secretariat, the more deep-seated problem is that the results of economic modeling are considered by some to be so speculative that they have little credibility.

There is a further question of the effectiveness of the remedy. Economists are questioning whether the DSU is as strong as the legal community makes it out to be. The way markets work undermines the capacity of retaliation to inflict pain. In commodities or commoditized manufactures traded on wholesale markets, a change in tariffs on shipments going to one country is easily circumvented. Also individual companies will hop tariff walls with investment—e.g., by buying out the company protected by the tariff.

These considerations suggest that there is a need for more cross-pollination of ideas between lawyers and economists, not only in the administering the dispute settlement cases but also in helping to shape the reforms to the DSU itself.

But there legal problems as well. For one thing, there is a question as to whether the presumption of nullification or impairment can ever be rebutted. DSU Article 3.8 provides that, in cases where a panel or the Appellate Body has found an infringement of the obligations under a covered agreement, the government measure is presumed *prima facie* to constitute a case of nullification or impairment. This means that there is normally a presumption that a breach of the rules has an adverse impact on other Members party to that covered agreement; in such cases, it is up to the Member against whom the complaint has been brought to rebut the presumption. Nevertheless, WTO panels and the Appellate Body have generally followed the 1988 *US - Superfund* GATT panel ruling, which suggested that this presumption is irrefutable.

If so, has this presumption precluded a fair assessment of trade damage by arbitrators? In an arbitration under DSU Article 22.6 to determine the level of nullification or impairment in *US-1916 Act*, the arbitrators concluded: "the original panel in the dispute found, and the Appellate Body confirmed, that 'the 1916 Act nullifies and impairs benefits accruing to the European Communities.' Therefore, while the level of nullification or impairment has not been specified in quantitative terms in the EC request under Article 22.2, it clearly is not, and cannot be, 'zero'." (para. 5.48)

When and how should the "level of nullification or impairment" be assessed? Was it wise to postpone the assessment of "adverse impact" until the point at which the complainant requests authorization to suspend concessions? If a panel were to assess trade damage when it determines liability, would that provide a more powerful inducement for the defending party to comply? Under the current system, where remedies are prospective, the assessment of nullification or impairment does not cover damage incurred prior to the end of the "reasonable period of time" given to the defending party to comply. Should it cover such actual damages; for example, by starting the liability clock ticking at the date of filing the case? Or at the date of adoption of the panel and/or Appellate Body report by the Dispute Settlement Body?

Should the Appellate Body play a role in the arbitrations on the calculation of damages? There have been seven disputes in which the level of nullification or impairment was determined by the panel in an arbitration under DSU Article 22.6 (*Bananas, Hormones, Brazil Aircraft, Canada Aircraft, FSC, 1916 Act, Byrd Amendment*). Should these arbitral awards have been subject to review by the Appellate Body?

Relationship between Regional and WTO Systems

Regional trade agreements (RTAs) are proliferating, generating a complex web of multilateral, plurilateral and bilateral treaty obligations. There is a wide range of opinion on this trend, from "what's the fuss" to "this is damaging the multilateral system". The sanguine view appears largely based on the provisional consensus that RTAs on balance have been trade liberalizing, creating more trade than they have diverted, and have usefully pioneered ways to advance liberalization in new areas.

However, the proliferation of RTAs has also raised concern over the erosion of the two pillars of the WTO: the non-discrimination principles of most favoured nation (MFN) and national treatment.[16] Less than one-third of merchandise trade is now carried on under the MFN clause.

Moreover, the proliferation of RTAs and the increasing fragmentation of the global trading system seem impossible to stop or even to slow down. To be sure, the consequences of fragmentation are not too serious yet; moreover, RTAs come in batches, with considerable similarity of provisions within each batch. Nonetheless, there is concern that the more ambitious

[16] See, for example, Chapter 2, "The Erosion of non-discrimination" in Peter Sutherland et al. (2004). "The Future of the WTO: Addressing institutional challenges in the new millennium", *Report by the Consultative Board to the former Director-General Supachai Panitchpakdi*, World Trade Organization, http://www.wto.org/English/thewto_e/10anniv_e/future_wto_e.pdf

second generation agreements now being negotiated will lead to greater problems in the coming decades.

Thirdly, there is concern over the unsettled legal status of RTAs. GATT Article XXIV and GATS Article V expressly allow RTAs, but only if they meet certain legal requirements. However, consensus on whether an RTA conforms to GATT Article XXIV appears only to have been achieved in one case in GATT/WTO history.[17]

There is great potential for conflicting obligations with the complex web of RTAs; how they relate to the WTO Agreement has become a major cause for concern. This is complicated by the fact that RTAs have their own dispute resolution mechanisms and disputes can be brought under both RTA and WTO mechanisms.

One much discussed issue is "forum shopping". This is a real issue: in one anti-dumping action, Brazil took Argentina to the WTO for one part of the dispute and to a tribunal under MERCOSUR for the other part. That being said, the WTO is often the forum of choice—there are indications that parties go to the WTO because the regional mechanisms are not as effective or binding.

A second, rather more subtle issue is that, while the RTA mechanisms acknowledge the WTO DSU and its provisions (e.g., WTO decisions/interpretations have been incorporated in regional agreements such as MERCOSUR, the WTO Agreement, with some exceptions, does not explicitly recognize the RTA provisions.

- For example, the dispute in *Canada - Periodicals* was difficult for the United States to take to NAFTA, because of the cultural exception in that agreement, so the United States went to the WTO where no such provisions exist. Should Canada have been able to plead the NAFTA provisions in

[17] The Czech-Slovak customs union was found to be consistent with WTO rules. See Jo-Ann Crawford and Sam Laird, "Regional Trade Agreements and the WTO", Research Paper No. 00/3, Centre for Research in Economic Development and International Trade, University of Nottingham, http://www.tradeobservatory.org/library.cfm?refID=25329.

the WTO? In the *Canada – Autos* case, Canada pleaded the Canada-US Autopact provisions, which were incorporated into the NAFTA, in its defence, but the panel did not apply them in deciding that dispute.

- WTO law is important for investor-state disputes, but there is no movement of ideas in the opposite direction.
- Meanwhile, the European Court of Justice, which is part of a regional agreement, refuses to apply WTO law.

Some observers suggest that perhaps there ought to be a dialogue rather than the present one-way interaction between the different jurisdictions.

The proliferation of bilateral investment treaties (BITs) is also an important development with potential systemic consequences.

Concluding thoughts: the glass is more than half full...

While reform of the WTO dispute settlement system is not on the front burner as critical to the success of the Doha Round, there will be an opportunity in the final stages of the negotiations to make some improvements. The scope for reform is likely to be limited, however, given the major changes made during the Uruguay Round. Also, the dispute settlement system is capable of incremental reform through practice and experience in individual cases. If negotiators were to focus on one area for reform of the dispute settlement system, they should seriously consider improving the rules and procedures relating to compliance and implementation of DSB rulings and recommendations. Several useful suggestions have been made by Members in this area that are worthy of serious consideration to make the WTO dispute settlement system even more effective and predictable.

The dispute settlement system of the WTO will continue to consider disputes and clarify the rules, whether or not the Doha Round is successful. The Doha Round provides a unique opportunity for Members to consider making improvements to the dispute settlement system. The functioning of the dispute settlement system has also drawn attention to the need for negotiators to be clear in expressing their intentions when drafting new agreements or modifications to the existing agreements.

The proposals in the Sutherland Report on the functioning of the WTO system also deserve serious consideration by Members to alleviate concerns about the legitimacy of the WTO and to make it a more accountable and more transparent international organization.

What the Appellate Body Wants

Ambassador Julio A. Lacarte*

It is an impossible presumption to suppose what the Appellate Body might want—especially from one who is no longer a Member of it. Yet the question has been put to me, and it deserves a fair answer in the interests of sharing with trade practitioners any insights from my own past experience serving as the first Chair of the Appellate Body and, hopefully, in the interests of facilitating the work of my successors in the future. So without further apology, what might the Appellate Body want to see in terms of developments in the multilateral trading system?

A Successful and Ambitious Outcome in the Doha Round

First and foremost, it is in the interests of the Appellate Body and of the international trading system generally that there be a successful outcome to the Doha Round of multilateral trade negotiations.

The World Trade Organization (WTO) will face a possible crisis, and its dispute settlement mechanism will be put under tremendous strain, if the Doha Round fails. With the expiry of the so-called "peace clause" in the WTO Agreement on Agricul-

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ture, two contentious and complex agricultural subsidy cases have been brought in the WTO—cotton against the United States and sugar against the European Union. Since it would not be difficult to conceive of a number of other possible challenges to US and EU agricultural subsidy practices, we can conclude that exporting countries have been, on the whole, prudent and cautious, so far. This can, in good measure, be attributed to the fact that negotiations are underway on agriculture in the Doha Round, as well as in regional agreements in which the agricultural aspects will depend on the outcome in the Doha Round. But this forbearance of litigation cannot be taken for granted and cannot be expected to continue indefinitely.

If the outcome of the Round is minimal and it does not resolve the contentious issues, or if the Round fails altogether, system friction in the WTO will grow as globalization deepens, as currency swings strain the competitive position of companies, and as global trade imbalances generate political pressures for protectionist measures. If this occurs, domestic lobbies will pressure governments to bring dispute settlement cases. In addition, domestic industries will turn to using domestic trade remedies, including anti-dumping, safeguards and countervailing duty actions. In the past few years, developing countries such as India, Mexico, South Africa and Brazil have become major users of domestic trade remedies which were once used primarily by the US, the EU, Australia, Canada and other developed countries. Domestic trade remedy actions will also likely be challenged in the WTO. These developments could result in an intolerable strain being placed on the WTO dispute settlement system.

The existing WTO Agreement is replete with issues on which negotiators could not agree and that were papered over with what is known as "constructive ambiguity" in drafting. Since the entry into force of the WTO, not one WTO Member has put forward a proposed decision on interpretation, although rules and procedures for adopting interpretations were included in the WTO Agreement precisely to help clarify the legal texts.

In many important areas, such as agriculture, subsidies and anti-dumping, in which the Uruguay Round negotiations were extremely contentious and difficult, modifications to the rules are only possible through negotiations among the Members. But if Members are not prepared to clarify the texts by adopting interpretations, or are unable to develop new rules or make amendments through successful negotiations, the burden will shift to the dispute settlement system. In this scenario, not only the caseload, but also the political stakes riding on Appellate Body decisions, would increase.

To follow this scenario a bit further, what would happen if the US Congress and the European Commission were confronted with a series of adverse Appellate Body decisions requiring changes in laws and policies to bring their measures into conformity with their respective WTO commitments? How loud and elevated would the political rhetoric become on the allegations already commonly heard, relating to the so-called "judicialization" of the trading system, the intrusion of WTO rules on domestic sovereignty, and so forth?

Moreover, given this scenario, what would happen if the major powers refused to comply with WTO Appellate Body rulings? Could the system be sustained in the face of possible non-compliance in the really difficult, political cases by the multilateral trading system's two most powerful Members? To be sure, it may be reasonably argued that this is not a perfect world, and there may be cases in which it is impossible politically for WTO Members to comply with dispute settlement rulings. In this sense, occasional non-compliance may provide the system with the flexibility it needs to accommodate the irregularities of the real world in the comparatively rigid frameworks of international agreements. However, the persistent efforts to strengthen the GATT/WTO dispute settlement system (including the 1989 measures to ensure automatic access to a panel and the measures adopted in the Uruguay Round for negative consensus to block adoption) speak to the underlying frustration that non-compliance creates for the WTO Membership.

To date, it can be said very confidently that the Appellate Body has been "unflinching" in making its determinations, regardless of what critics might say. An ambitious outcome in the Doha Round could help attenuate foreseen pressures on the multilateral trading system in a number of ways:

(a) by reducing the likelihood of non-compliance through negotiated resolution of the underlying issues;

(b) by introducing new disciplines on compliance (e.g., the suggestion that has been made by Professor William Davey to withdraw the right to request a panel as long as a Member is not itself in compliance); and

(c) by providing greater flexibility in ways to comply (e.g., compensation) or innovative approaches that give smaller WTO Members, which cannot retaliate effectively, means to re-negotiate their commitments commensurate with the degree of nullification or impairment that they have suffered from the inconsistent measure.

Finally, regional trade agreements (RTAs) will continue to proliferate unchecked if the Doha Round is not successful. This is only natural as national trade officials pursue opportunities where they may be found. But there are serious risks for the WTO and the multilateral trading system generally. The proliferation of RTAs has already undermined the WTO's foundational principle of "most favoured nation" and, in a *de facto* sense, weakened the WTO as an institution. This is because, with two minor exceptions, there have been no rulings concerning the consistency of the hundreds of RTAs notified to the WTO with Article XXIV of the GATT 1994 and Article V of the General Agreement on Trade in Services.

In the fractious environment that might follow a breakdown of multilateral negotiations, what landmines might there be for the WTO if the trade discrimination that has become so widespread as a result of the proliferation of RTAs becomes the subject of WTO disputes? Moreover, since many regional agreements include mechanisms for dispute resolution, the WTO faces a risk of "adverse selection" whereby the easy cases are handled by the regional mechanisms while the difficult cases might be brought under the WTO Dispute Settlement Understanding (DSU). It is an axiom in legal circles that "hard cases make bad law". The ability of the WTO dispute settlement system to quietly and effectively sort out issues that have confounded negotiators would be diminished. And since the Appellate Body *must* take decisions on cases put to it (it cannot remand cases or decline to make rulings), it would find itself in the crucible created by hard cases more often than not.

There are accordingly many reasons to surmise that the Appellate Body would very strongly want a successful outcome to the Doha Round, one in which negotiators seize the thorny nettles and resolve them, rather than leaving them for the judicial organs of the WTO to address in future disputes.

A better informed understanding of the Appellate Body's role and practices

It is only human to wish to be understood. The Members of the Appellate Body are no exception to this wish. And, considered as an institution rather than as a group of individuals, the Appellate Body itself would undoubtedly benefit from a good understanding of its behaviour.

The label of "judicial activism" is sometimes applied to the Appellate Body to characterize its collective output. When used by WTO Members, this claim in often made in the context of the perspective that the Appellate Body is usurping the prerogatives of Members. When used by non-governmental organizations, it is often in the context of a claim that the Appellate Body is intruding into domestic policy space without democratic legitimacy. In point of fact, the Appellate Body has frequently exercised "judicial restraint"—ruling where it must, but refraining from ruling where it can. Under the DSU, the Appellate Body is not permitted to remand a case back to the panel for re-examination. It must approve or overturn all panel legal rulings that are appealed. Its powers allow it to modify panel rulings. The Appellate Body must live with all the consequences that flow from its powers and its responsibility—including the real world impact and the criticisms that might be levelled at its reasoning. The Appellate Body has not, in fact, ruled on issues unless they were specifically appealed by a party to a dispute, and even then it has exercised judicial restraint in its rulings. It has only been as active as the Members have required it to be by bringing appeals; no more, no less.

In practice, the Appellate Body has spared no pains to maintain consensus in taking its decisions. Until recently, there had never been a dissenting opinion in any decision. Achieving internal consensus among the Members of the Appellate Body has required an enormous expenditure of time, effort and discussion to identify a way forward that permitted each and every Appellate Body Member to agree with a decision without sacrificing any principle. Given the varied backgrounds of the individuals who compose the Appellate Body (in the original group only one—that being myself—came from the ranks of trade officials), this search for consensus results in very difficult internal deliberations, particularly in complex cases such as *US - Shrimp*. It is sometimes suggested that the Appellate Body has bent to the political winds, but this is certainly not so. It is more accurate to say that the search for internal consensus in a group with disparate backgrounds has required the Members of the Appellate Body to bring to bear every possible source of argument to a case.

In the very difficult and contentious procedural area, the Appellate Body has found a reasonable accommodation in regard to "friend of the court" ("amicus curiae") submissions that aroused considerable concern among WTO Members. The Appellate Body has always kept the focus of its deliberations on the merits of the legal arguments presented by the parties and third parties in case at hand. That is as it should be—WTO disputes are matters between WTO Members.

Functional Improvements

The case load faced by the Appellate Body has far exceeded the expectations of the Uruguay Round negotiators. Moreover, the Appellate Body Members take the issues put to them very seriously and delve into them in depth, individually and through intensive and lengthy debates and discussions with their colleagues and with the supporting Secretariat staff. The time and energy required to develop a well-reasoned decision is not insignificant. There are a number of ways in which WTO Members could help ease the burden of the Appellate Body and contribute to smoother functioning of the dispute settlement system.

First, in framing arguments, it does not go over well if every possible argument is thrown in, those that have a chance of finding a favourable reading and those that do not. Even if an argument is frivolous, the Appellate Body is required by the DSU to address it, time consuming and tedious as this may be. By extension, it is of no value to one's own argument, and detrimental from the perspective of the overall process, to go to the wall in defending against each and every argument raised by the other party to the dispute.

Second, filing of massive documentation is singularly unwelcome, especially if it is of minimal relevance to the issue. Parties sometimes file voluminous evidence which turns out to be of no pertinence to the issues involved in the case. This leads to wasted effort and time. Given the Appellate Body's very short, strict time limits, this is not helpful and adds to the Appellate Body's burden in deciding the case.

Third, Appellate Body Members and Secretariat staff invest considerable time and energy in preparing for hearings. Questions that are raised in considering the issues in a given case can number in the hundreds. Particular issues that are raised can consume days of discussion and debate within the Appellate Body Division prior to the hearing. The questions for the parties that this process generates can be very penetrating—and it is not uncommon that counsel are ruthlessly pressed with difficult questions during the hearings. An appearance before the Appellate Body can therefore be a daunting experience for the parties' counsel—even experienced lawyers of high repute have occasionally floundered. Accordingly, it is important that counsel appearing on behalf of the parties be no less well-prepared than the Members of the Appellate Body itself. It is essential to a successful hearing that counsel know the file in all its complexity by heart, be able to respond readily and confidently on any critical point, and maintain consistency and clarity in the line of argument (a muddled mind quickly reveals itself and shifting positions or lines of argument undermines credibility).

Fourth, it is much appreciated when the disputing parties act as "friends of the Appellate Body"—for example, by pointing to approaches or material that can help the Appellate Body in its reasoning.

Fifth, recognizing that cases often raise unexpected issues of systemic consequence, it is helpful to the Appellate Body when WTO Members that take an interest in the systemic issues make third party submissions—but only when they contribute independent reasoning to the issues in dispute. Third party submissions that simply support one side or the other, that reiterate well-rehearsed positions, or address issues not relevant to the case at hand make extra work for the Appellate Body and the parties without actually benefiting the system. Thus, third party participation can be, and often is, extremely useful and important, especially relating to systemic issues. But, counsel should be well-prepared and helpful to the Appellate Body and the parties when filing third party submissions.

Concluding Thoughts

In the historical evolution of the multilateral trading system, the creation of the Appellate Body represented a quantum leap in terms of deepening and entrenching the rules-based nature of the WTO. It is a fair evaluation that the Appellate Body has become a much more significant force than the negotiators in the Uruguay Round expected, particularly in clarifying the provisions of the WTO Agreement. By the same token, the WTO Members themselves have been less forthcoming than expected in contributing to the process of clarification of ambiguous texts. Members of the WTO have, in effect, dealt with this problem by bringing issues to the Appellate Body. The stature that the Appellate Body has attained reflects this affirmation of its role by the Membership of the WTO.

It would be disingenuous to suggest that the reputation and standing attained by the Appellate Body is at all unwelcome to the individuals that comprise it. However, to operate in the milieu is to recognize the constraints and to sense the risks. What does the Appellate Body want? A fair summary would be: *first*, that the legislative arm of the WTO—the Members in their negotiating mode—pull its weight and deliver an ambitious outcome in the Doha Round, including the rules component of the negotiations; *second*, that the epistemic community convey a more nuanced appreciation and respect for the Appellate Body's responsibility and performance; and *third*, that WTO Members as parties to disputes recognize that the Appellate Body's energies are a scarce resource and approach litigation accordingly. Is that too much to ask? I think not.

A Proposal for Special Treatment in Market Access for Developing Countries in the Doha Round

Andrew Charlton*

Executive Summary

There is considerable dissatisfaction with the treatment given by the World Trade Organisation (WTO) to its poorest members. The development of an appropriate framework which maintains the 'rules based' trading system, but differentiates between rich and poor countries is one of the most important issues facing the Doha Round.[1]

This note outlines a proposal to increase market access for developing countries in the context of the Doha Development Agenda. It suggests that **all WTO members commit to providing free market access in all goods to all developing countries which are both poorer and smaller than themselves.** Thus all developing countries could expect free access to all countries with both a larger GDP and a larger GDP per capita.

This proposal compares favourably with alternative formulas for special and differential treatment (SDT) in market access. In particular: (i) it involves significant liberalisation; (ii) it promotes south-south liberalisation; (iii) rights and obligations are distributed progressively to all developing countries; (iv) it gives developing countries the flexibility to use trade policy to promote development by protecting their key industries from more efficient producers in larger and/or

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[1] For recent discussions of special and differential treatment see Hoekman (2004), Keck and Low (2004), Stevens (2002), Page and Kleen (2004), and Prowse (2002).

more developed countries; (v) it complements MFN liberalisation; (vi) it brings preferential market access within the WTO, creating clear and enforceable rights; and (vii) it is simple, does not involve complex negotiations, and has built-in flexibility in the sense that national obligations change along a country's economic growth path.

The principle underlying this proposal is that all countries should participate in an enforceable system of preferential market access in which rights and obligations are distributed progressively according to objective criteria. The proposal presented in this paper represents one straightforward means of implementing this principle. Additional provisions for specific sectors, alternative dimensions to differentiate between countries, implementation periods, and various other complexities that would undoubtedly be part of any applied version of this proposal are left out of the exposition in this paper.

This proposal would require significant liberalisation by the large developed countries, particularly towards middle income countries. While this makes economic sense, it has been argued that it lies in the realm of 'wishful thinking' because of political economy constraints in the developed countries. However despite these constraints, there are good reasons to be optimistic. First, a significant share of US and EU trade is already duty free as a result of their membership of several bilateral free trade agreements. Second, there is significant support within the developed countries for free trade.[2] Third, countries would still have access to safeguard measures to protect themselves from damaging import surges.

Further, there is a lack of satisfactory alternatives within the Doha Round. Unless a proposed agreement to conclude the Round provides both significant liberalisation and significant benefits for developing countries, it will diminish the credibility of the WTO and risk being rejected by developing country Members. An SDT and market access proposal of the type presented in this paper would, on the contrary, deliver on the development promise made at Doha and involve significant liberalisation.

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[2] See, for example, the US National Foreign Trade Council's Zero Tariff Proposal set out in Slaughter (2003).

Finally, the market access afforded by this proposal could be traded for concessions from developing countries in services, non-tariff barriers, and trade facilitation. By enriching the available trade-offs, the proposal would improve the chances for an agreement to successfully conclude the Round.

SDT in the Doha Round so Far

At the WTO's Fourth Ministerial Conference in Cancún, Mexico, in September 2003, the negotiations collapsed and the meeting ended in failure. One reason for the deadlock was that developing countries were worried about being forced into accepting obligations which would hurt their industries or impose large implementation costs on them. Many developing countries had felt disadvantaged by the last roundest of multilateral trade negotiations, the Uruguay Round, and they came to the view that no agreement was better than another bad agreement. After Cancún, developing countries stepped up their demands[3] for special and differential treatment (SDT) as a prerequisite for progress in the Round.[4]

In May of 2004, EU Trade Commissioner Pascal Lamy attempted to placate the developing countries and salvage the Round by offering a significant compromise on SDT. In a letter to trade ministers he wrote: "we propose that the least developed countries and other weak or vulnerable developing countries ... should not have to open their markets beyond their existing commitments, and should be able to benefit from increased market access offered by both devel-

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[3] See the statement Issued by Indonesia on behalf of the G-33 member countries in Geneva, 28 July 2004.

[4] For wary developing countries, SDT was an insurance policy – it would give them the flexibility to opt out of any agreement which proved to be too onerous for them. A group of developing countries, the G33, united behind the issue of SDT. As the Round began to regain momentum in 2004, they renewed their calls for SDT to be given a higher degree of clarity and specificity. In particular, they wanted the right to identify special products of interest to developing countries on which there would be no tariff reduction commitment and no new tariff rate quota commitments.

oped and advanced developing countries. So in effect these countries should have the 'Round for Free'."[5]

The danger of the blanket approach to SDT embodied in the "Round for Free" proposal is that it creates disincentives for developing countries to participate in the Round. If the least developed countries are required to do nothing, they may be pushed to the periphery of the negotiations. Then the Development Round would bear a striking resemblance to the early rounds of trade negotiations in which the GATT operated as club for the advancement of rich country interests. In those early rounds, developing countries were burdened with few obligations, but they had only a weak voice in the negotiations and little power with which to assert their interests. Developing countries benefited from industrial country liberalization, thanks to the Most Favoured Nation (MFN)[6] principle, but their peripheral role meant that they could exert little pressure on the *way* that industrialised countries liberalized. Thus liberalization of goods of interest to developed countries proceeded swiftly, but goods of interest to developing countries, especially labour-intensive goods, lagged behind and developing countries ultimately suffered. Some developed countries were happy with this system because the small and poor countries did not have sufficiently attractive markets to bother with: the benefits of market access were smaller than the costs of liberalizing their own labour-intensive import-competing sectors. The "Round for Free" approach smacks of the same two-tiered

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[5] See the letter of 9 May 2004 by Pascal Lamy and EU Agriculture Commissioner Franz Fischler. Lamy quickly stepped back from this offer. In June he noted that the "Round for Free" slogan was perhaps a misnomer since developing countries would be required to make commitments on binding their tariffs in some areas, and participating in negotiations in trade facilitation. He coined the somewhat less catchy slogan "Round at a modest price". See the speech by Pascal Lamy, European Commissioner Responsible for Trade: "Where next for EU Trade policy?", Deutsche Gesellschaft für Auswärtige Politik, Berlin, 11 June 2004.

[6] MFN is enshrined in the first article of the General Agreement on Tariffs and Trade (GATT), which governs trade in goods. MFN is also a priority in the General Agreement on Trade in Services (GATS) (Article 2) and the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) (Article 4), although in each agreement the principle is handled slightly differently.

system which exempted developing countries from commitments but excluded them from the negotiations. However, as Keck and Low (2004) argue, "where new policy areas or new rules are under negotiation, or consideration for negotiation, the best interests of developing countries would be served through engagement with respect to the substance of core proposals." Another problem with the "Round for Free Approach," which concerns many negotiators from developed countries, is that it allows the poorest countries to continue to participate in the Round (and indeed to slow its progress, as per one interpretation of the failure at Cancún) when they are contributing very little to it.

Moreover, the "Round for Free" approach may result in substantial opportunity costs for developing countries by robbing them of the benefits of liberalisation of south-south trade. Developing countries now account for around one-third of global trade. Intra-developing country, or 'south-south', merchandise trade has grown at twice the pace of world trade over the past decade. Yet barriers to south-south trade are high.[7] Indeed, 70 percent of the tariffs paid by developing countries (US$57 billion annually) are paid to other developing countries. Thus, developing countries stand to benefit a great deal from improved market access to other developing countries. The World Bank (2002) estimates that developing countries stand to realise welfare gains of more than US$30 billion per year if other developing countries eliminated tariffs on industrial goods and a further US$30 billion if they removed their barriers to agricultural trade.

A Doha Round Market Access Proposal (Doha Map)

Thus the challenge is to design special and differential treatment which gives developing countries flexibility to deal with their development problems and minimises adjustment and implementation costs, without marginalising their participation in the global trading system or foregoing the gains from south-south liberalisation. To achieve this, all WTO members could commit to providing free market access in all goods to

[7] For example, East Asian exporters face tariffs in other East Asian countries that are 60 percent higher than in rich nations.

all developing countries poorer and smaller than themselves. Thus all developing countries could expect free access to all markets with (a) a larger GDP and (b) a larger GDP per capita. This special and differential treatment provision would bind developing and developed countries alike. For example, a middle income country like Egypt with GDP per capita of US$1,390 and GDP of US$82 billion, would receive free market access to countries like the United States, but would be required to give free market access to a country like Uganda (GDP per capita of US$240 and GDP of US$6.2 billion).

This proposal has several advantages over alternative schemes:

It involves significant liberalisation

The quantity of liberalisation delivered by Doha MAP is in part a function of the correlation coefficient of the GDP and GDP per capita of WTO Members—in the limit case where the coefficient is -1, MAP requires no liberalisation from any country. Figure 1 plots the GDP and GDP per capita of WTO Members. The correlation is large and positive (0.6), implying that MAP delivers significant liberalisation. The dotted lines in Figure 1 illustrate the implications of the proposal for Egypt, a country in the middle of the distribution of both size and wealth. Doha MAP would require Egypt, after a negotiated implementation period, to provide free market access to more than 50 developing countries to its south-west in Figure 1 (with total market size of US$500 billion). In return it would receive free market access to more than 20 developed and upper-middle-income countries to its north-east in Figure 1 (with a total market size of US$28 trillion).[8]

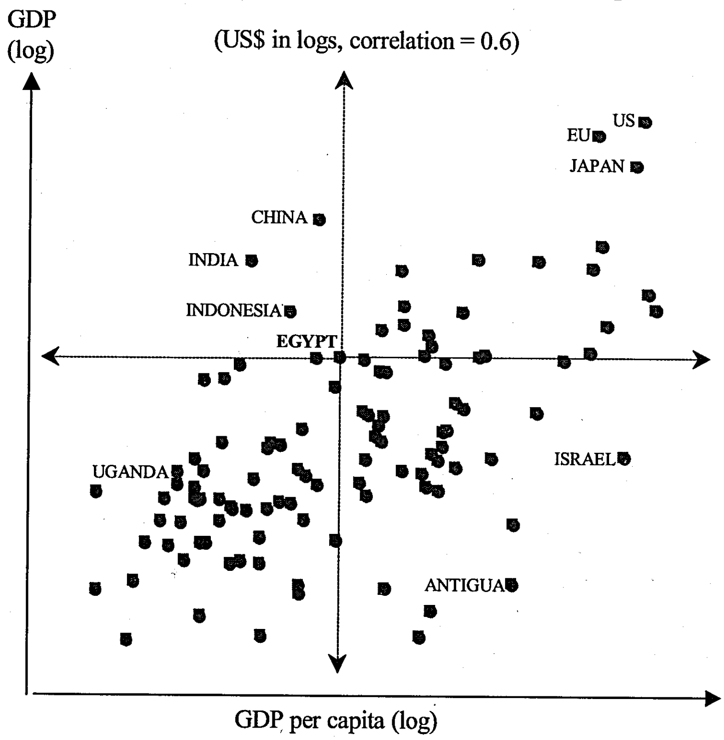
As with existing preferential schemes, the effect of Doha MAP would be, to some extent, limited by rules of origin. It is beyond the scope of this note to describe options for rules of origin that might be required to implement Doha MAP, but it is worth noting that MAP would significantly reduce the distortionary effect of rules of origin on LDCs' trade

[8] In this calculation the EC is treated as one Member; this makes little difference to the market size numbers.

compared to current SDT approaches since many of the middle income countries from which LDCs might import intermediate inputs would also receive preferential access under MAP to some of the rich countries to which the final goods are exported. Thus, while not eliminating the problem of rules of origin in SDT, MAP would reduce its effect in practice compared to the status quo.

Figure 1: WTO Members' GDP and GDP per capita

(US$ in logs, correlation = 0.6)



Particularly south-south liberalisation

Another advantage of the MAP proposal is that is takes south-south liberalisation seriously. Many existing types of SDT (including several proposed changes) do little to promote south-south trade, the liberalisation of which could bring large gains to developing countries. Indeed most Doha Round estimates indicate that the scope for welfare gains for developing countries is larger from the liberalisation by other developing countries than from liberalisation by developed countries (Francois, van Meijl, and van Tongeren 2004).

South-south liberalization has progressed slowly. Attempts at preferential market access agreements have been made outside the WTO under the auspices of the Global System of Trade Preferences among Developing Countries (GSTP).[9] Unfortunately, the GTSP is based on reciprocity—one reason for the low participation of least developed countries among its members—and it has struggled to make significant progress.[10] Bilateral and regional free trade agreements (FTAs) between developing countries are increasing in number, but it should not be assumed that south-south FTAs are unequivocally good for development since they discriminate against third party developing countries and the margin of discrimination is higher than is the case in north-north FTAs because developing country MFN tariffs tend to be higher. Thus, there may be a strong case for introducing a development dimension into south-south agreements. There are schemes being considered by some larger developing countries including India, China, and Brazil which would give special access to the least developed countries. While additional market access would be welcome, these schemes, like the existing GSP schemes operated by the advanced industrial countries, would be a patchwork of discretionary and conditional promises rather than clear legal rights enforceable within the WTO.

Within the WTO, developing countries have often been urged to reduce their MFN tariffs on the grounds that this would lead to an increase in south-south trade. Doha MAP recognises that, for this purpose, liberalisation need not occur on an MFN basis.

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[9] The GSTP, established in 1988 and promoted by UNCTAD, provides trade preferences to developing countries without extending them to developed countries.

[10] The two previous GTSP rounds, in the past two decades, were not as successful as expected, due to the economic situation of the poorest developing countries and the poor negotiating capacity of member states.

Obligations are distributed progressively

Doha MAP is progressive in the sense that it requires significant south-south liberalisation from middle income countries and very little from the poorest and most vulnerable countries. It requires the most liberalisation from the countries in the North-East of Figure 1 (in particular the Quad countries) and less of those in the South-West of the Figure 1 (mostly African LDCs). Under this scheme, all but the very poorest countries do *not* get the "Round for free" since all countries accept the obligation to provide market access to other WTO Members smaller and poorer than themselves. In return the developing countries receive considerably more market access, under well defined commitments, than under existing preferential schemes which are discretionary schemes operated by industrialised countries that are not subject to detailed WTO regulation governing their implementation.

Figure 2 plots the ratio of market access rights to market access obligations under MAP for developing country WTO Members against their GDP per capita.[11] The vertical axis is the ratio of the sum of the size of all the (bigger and richer) markets to which the country will have free access to the sum of the size of all the (poorer and smaller) markets to which the country will be obliged to give free market access. The ratio of rights to obligations is progressive in the sense that the poorest countries get free access to huge new markets while being obligated to give free access to much smaller markets. In figure 2, the extent of progressivity of the proposal is reflected in the extent to which the scatter tends to slope down from left to right with a small, poor country like Sierra Leone having amongst the highest ratios and larger, richer economies like Mexico having among the lowest ratios.

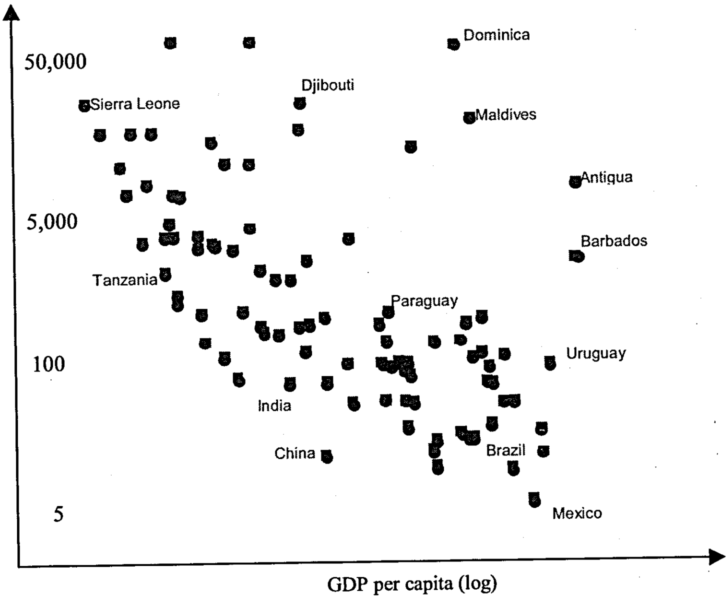
As Table 1 indicates, all developing country WTO Members benefit from the scheme. Even the largest and

[11] Figure 2 describes free market access rights and obligations after the implementation of MAP, rather than the change in rights and obligations, i.e., it includes preferential access under existing schemes, as well as new access.

richest developing countries[12] receive free access to markets whose total size is more than seven times the size of the markets to which they must give free access. The median ratio of market access rights to obligations under MAP is 303, i.e., the median developing country receives access to markets 303 times the size of the markets to which it must *give* free access. Alternatively, measured by imports, the median developing country receives free market access to countries whose total imports are 113 times the size of the imports of the countries to which it is required to give access.

Figure 2: A progressive distribution of rights and obligations

(Ratio of new market access rights to obligations for developing countries)



Countries can manage major import threats

The proposal imposes no extra obligation on developing countries to open their markets to larger or more developed economies. This gives developing countries the *option* to

[12] For the purposes here, developing countries are defined as those that had a GDP per capita below US$10,000 in 2003.

provide their key industries with some protection from imports from economies with cost advantages derived from either scale of their economies (e.g. larger countries, particularly China), or technological advantages (more developed countries). The prevalence of import barriers in some sectors indicates that developing countries wish to protect particular industries from import competition. This protection may form part of an industrial strategy based on 'infant industry' protection[13], but is more likely to originate in a desire to avoid adjustment costs which could be particularly severe in developing countries characterised by high unemployment, weak risk markets, and low levels of social insurance.

As Hoekman et al. (2003) point out, protectionism can be self defeating for developing countries in a world where multinational corporations have made production increasingly fragmented internationally. For many developing countries, "the only option to reach the minimum scale required for sustained growth in output is integration with the rest of the world" (Keck and Low 2004).

This proposal facilitates integration by providing all developing countries with significantly increased market access to larger and richer markets, while providing the option of protection from imports from countries which are at later stages of development or have scale advantages.

Is consistent with other MFN liberalisation schemes

It is important to point out that this proposal is not anti-openness. It does not involve any increases in existing MFN rates. Each country would continue to uniformly apply MFN rates to larger and more developed countries.

In addition, this proposal is squarely in the realm of SDT. There is still a role for the WTO to negotiate MFN tariffs, i.e., it complements other proposed modalities for MFN tariff reduction, rather than replacing them.

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[13] Although this would not be particularly desirable from a theoretical point of view and, indeed, seems unlikely to be a major motivating factor since infant industry policies have been shown to be ineffective (Baldwin 1969) and inferior to alternative forms of industry assistance (McCulloch, Winters and Cirera 2002).

One concern with the proposal is that it may affect the bargaining positions of developing countries in future rounds. One of the unfortunate side-effects of existing preferential schemes is that they create an inbuilt incentive for developing countries to block MFN liberalisation which would erode their preference margins. But this problem is much less severe for MAP than for existing preference schemes because MAP is far less distortionary: large rich countries do not give LDCs preferences that they do not also give to middle income countries. Thus MFN liberalisation by developed countries does not cause LDCs to lose out relative to middle income countries.

It transforms discretionary preferential schemes into well defined obligations within the WTO

One of the main advantages of this proposal over existing types of SDT is that it delivers clearly defined and legally binding rights to developing countries in a way that existing preferences do not. Many of these existing preference schemes were originally spawned by Part IV of the GATT which includes provisions on preferential treatment for developing countries. This exception was further expanded in 1979 in the decision which has come to be known as the 'Enabling Clause'. This consolidated the concept of "differential and more favourable treatment" for developing countries as well as the principle of non-reciprocity in trade negotiations.[14]

However, the problem with this (potentially) wide-ranging clause is that is has never placed any formal obligations on developed countries. Instead, piecemeal preferential deals have been established which cover a limited range of goods from a limited group of countries. These preferences, the most important of which are offered by the "Quad coun-

[14] The most significant provision of the Enabling Clause is that which enables Members to accord differential and more favourable treatment to developing countries as a departure from the MFN Clause. It stipulates that "contracting parties may accord differential and more favourable treatment to developing countries, without according such treatment to other contracting parties".

tries" (US, EU, Canada, Japan) often divert trade from other poor countries.

Another problem with preferential schemes is their uncertainty. Keck and Low (2004) argue that SDT should enshrine "legal rights and obligations", whereas existing preferences have become merely "legally unenforceable statements of intent or best-endeavour undertakings." Preferences are not binding on the countries which grant them, and can be altered to exclude certain products or withdrawn entirely at the discretion of the preference-provider. For example, in 1992 the US withdrew $60 million worth of pharmaceutical imports from their preference scheme because the US Trade Representative determined that India had weak patent protection which adversely affected US companies.

Without binding obligations, preference-providers have faced pressure from their own import-competing domestic lobbies to minimise the scope of their preferential schemes. As the Sutherland (2005) report notes, it is "grantor, rather than grantee, country interests [which] have determined the product coverage and the preference margins in GSP schemes."

Balances simplicity against the need to differentiate

The idea that SDT should be provided to countries based on objective access criteria has been previously addressed by Stevens (2002). Stevens' proposal suggests that a new SDT regime involve "greater differentiation of treatment between WTO members which, in turn, implies the establishment of objective criteria on which to determine the differentiation." For example, he suggests that access to some types of SDT in agriculture should be based on measurable criteria relating to food security, i.e., countries could qualify for special treatment if they have per capita calorie intake of less than a certain level (indicating vulnerability to food insecurity) and a high share of agriculture in GDP (indicating the importance of agriculture in livelihoods) and a high share of food imports to GDP (indicating import dependency). Stevens' approach involves setting objective criteria on an agreement-by-agreement basis. Thus, special and differential treatment would be available to countries which met objective preconditions indicating their need for exception and/or assistance. The appeal of this approach is that it closely matches the needs of specific countries to special treatment in different provisions. In addition, it provides more certainly to developing countries since, once the conditions are predetermined; eligibility would be automatic rather than at the discretion of other WTO Members.

The disadvantage of this approach is that it would add to the complexity of trade negotiations and greatly increase transactions costs. SDT measures are already overly complicated in many areas. Hudec (1987) refers to preferences as systems of "refined complexity", determined by an "orgy of fine-tuning". The process of tailoring objective criteria for SDT in each agreement requires countries to agree on measurable criteria and agree on eligibility cut-offs. As Stevens (2002) himself notes, “the whole process is likely to be fraught with political difficulty”. It is likely that neither the international consensus on these issues nor the necessary negotiating capacity currently exists to operate such an ambitious and resource-intensive SDT system.

By contrast, the MAP proposal is simple to negotiate. It would entirely do away with the whole ‘spaghetti-bowl’ of GSP preferences (although not FTA preferences) and it would save the EC the bother of negotiating the market access part of the economic partnership agreements with African, Caribbean and Pacific States.[15]

Moreover it includes an inbuilt flexibility that removes the need for renegotiation over time. As countries develop and overtake others, they will, after an implementation period, lose some preference rights and accept obligations to poorer countries. Alternatively, the scheme could be designed to include a ‘one-way’ provision so that free trade would be monotonically increase in a dynamic world where rankings change.

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[15] The Cotonou Partnership Agreement between the African, Caribbean and Pacific States (ACP) and the European Union, signed June 2000, mandates the negotiation by 2007 of a series of economic partnership agreements (EPAs) between regional groups of ACP States on the one hand and the EU on the other.

Concluding Remarks

Developing countries have been understandably reluctant to commit to large reductions in their tariff levels. They are concerned that open borders will lead to a flood of cheap imports from more efficient producers which could destroy their fledgling industries before they have a chance to develop. Because they are already characterised by high unemployment and weak private and social insurance, many developing countries believe that the adjustment costs from significant MFN tariff reduction are too large to be seriously considered. Consequently developing countries have not offered large reductions in border protection in WTO negotiations. As a result, south-south trade has suffered, and developing countries have little bargaining power in their negotiations with developed countries.

The proposal in this paper distributes new market access progressively, ensuring that the largest gains accrue to the smallest and poorest countries, and it distributes liberalisation obligations progressively, requiring that the largest and richest countries liberalise most. There are many other issues associated with tariff reduction in poor countries including adjustment costs and declining revenue to governments. These issues, and their implications for the need for technical and development assistance to poor countries, are not discussed here. The advantage of the market access proposal outlined in this note is that it provides significant liberalisation, does not demand reciprocity from poor nations to richer ones, and places simple and well-defined obligations on both rich and poor countries alike.

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Table 1: Market Access Rights and Obligations for Developing countries* under MAP

Country	Code	GDP (US$ bn)	GDP per capita (US$)	Ratio of rights and obligations	
				ratio of GDP^	ratio of imports#
Mexico	MEX	626	6,230	7	2
Poland	POL	210	5,270	13	4
Turkey	TUR	238	2,790	18	6
China	CHN	1,410	1,100	19	7
Czech Rep	CZE	85	6,740	19	6
Brazil	BRA	492	2,710	20	6
Hungary	HUN	83	6,330	22	7
South Africa	ZAF	160	2,780	25	8
Argentina	ARG	130	3,650	26	9
Malaysia	MYS	103	3,780	26	9
Venezuela	VEN	85	3,490	29	10
Thailand	THA	143	2,190	33	12
Chile	CHL	72	4,390	35	12
Egypt	EGY	82	1,390	56	21
Romania	ROM	60	2,310	56	20
Slovenia	SVN	26	11,830	58	15
Croatia	HRV	28	5,350	58	16
Slovak Rep.	SVK	32	4,920	60	18
Peru	PER	61	2,150	61	23
Colombia	COL	78	1,810	62	26
Philippines	PHL	81	1,080	80	37
Lithuania	LTU	18	4,490	84	26
Indonesia	IDN	208	810	86	38
Costa Rica	CRI	18	4,280	89	29
India	IND	599	530	97	42
Tunisia	TUN	24	2,240	101	32
Bulgaria	BGR	20	2,130	116	40
Panama	PAN	13	4,250	123	40
Guatemala	GTM	25	1,910	123	44
Trinidad	TTO	10	7,260	126	32
Ecuador	ECU	27	1,790	132	49
El Salvador	SLV	14	2,200	133	47
Dominican R.	DOM	16	2,070	134	49
Morocco	MAR	45	1,320	137	51
Uruguay	URY	11	3,790	149	47
Pakistan	PAK	69	470	152	78
Estonia	EST	8	4,960	161	51
Latvia	LVA	10	4,070	167	54
Sri Lanka	LKA	19	930	173	74

Jamaica	JAM	8	2,760	209	69
Jordan	JOR	10	1,850	211	74
Bangladesh	BGD	52	400	217	103
Botswana	BWA	7	3,430	218	72
Angola	AGO	13	740	251	108
Cote d'Ivoire	CIV	14	660	260	113
Bolivia	BOL	8	890	294	117
Cameroon	CMR	12	640	301	125
Albania	ALB	6	1,740	303	107
Honduras	HND	7	970	304	120
Gabon	GAB	6	3,580	307	101
Mauritius	MUS	5	4,090	345	105
Paraguay	PRY	6	1,100	354	127
Kenya	KEN	14	390	394	176
Namibia	NAM	5	1,870	396	132
Senegal	SEN	7	550	411	186
Nigeria	NGA	50	320	491	241
Ghana	GHA	8	320	589	292
Georgia	GEO	4	830	812	298
Nicaragua	NIC	4	730	818	300
Tanzania	TZA	10	290	947	457
Congo, Rep.	COG	4	640	1,008	351
Armenia	ARM	3	950	1,218	375
Barbados	BRB	3	9,270	1,239	252
PNG	PNG	3	510	1,540	582
Zambia	ZMB	4	380	1,615	783
Benin	BEN	4	440	1,638	659
Guinea	GIN	4	430	1,739	713
Uganda	UGA	6	240	1,799	833
Nepal	NPL	6	240	1,800	834
Swaziland	SWZ	2	1,350	1,922	534
Madagascar	MDG	5	290	1,997	938
Mali	MLI	4	290	1,998	939
Cambodia	KHM	4	310	2,015	1,091
Haiti	HTI	3	380	2,051	910
Moldova	MDA	2	590	2,495	908
Burkina Faso	BFA	4	300	2,739	1,349
Kyrgyz Rep.	KGZ	2	330	4,791	2,232
Togo	TGO	2	310	5,096	2,470
Mozambique	MOZ	4	210	5,186	2,232
Antigua	ATG	1	9,160	6,098	1,052
Chad	TCD	3	250	6,306	2,626
Niger	NER	3	200	9,328	3,110
Lesotho	LSO	1	590	9,683	3,207
Mongolia	MNG	1	480	9,873	3,267

Maldives	MDV	1	2,300	13,242	4,067
Mauritania	MRT	1	430	15,263	5,307
Central Af Rep	CAF	1	260	18,829	6,894
Rwanda	RWA	2	220	18,837	6,900
Malawi	MWI	2	170	18,841	6,903
Guyana	GUY	1	900	19,933	7,798
Grenada	GRD	0	3,790	24,227	6,320
Djibouti	DJI	1	910	35,104	11,292
Sierra Leone	SLE	1	150	35,360	15,037
Dominica	DMA	0	3,360	117,865	26,270
Solomon Is.	SLB	0	600	131,886	33,814
Gambia.	GMB	0	310	135,371	34,859
Burundi	BDI	1	100 na	na	
Guinea-Bissau	GNB	0	140 na	na	
Congo, DR	ZAR	6	100 na	na	

* Developing countries are defined as all countries with GDP per capita of less than US 10,000 in 2003.

^ Ratio of market size of countries to which free market access would be granted to market size of countries to which this country would be required to give free market access.

Ratio of imports of countries to which free market access would be granted to imports of countries to which this country would be required to give free market access.

Part II

Staff Papers and Commentaries

The Determinants of Canadian Direct Investment Abroad

Eugene Beaulieu, Shenjie Chen
and Erica Pohjola*

Abstract

It is well known that, based on any measure of economic openness, Canada is a very open economy. However, until recently, governments and analysts have all but ignored a large and important aspect of Canadian economic activity: Canadian investment in other countries. This Chapter provides a comprehensive analysis of Canadian Foreign Direct Investment Abroad (CDIA) with a focus on empirically examining the key factors that determine CDIA. The trends and patterns of CDIA from 1987 to 2003 are examined in light of a survey of the literature on the determinants of foreign direct investment. We then provide an overview and analysis of an extensive dataset that we have constructed of variables used to measure "host country" attributes. We develop an econometric framework based on the literature review and the gravity model to empirically examine the determinants of CDIA. The econometric analysis finds that the key characteristics of host countries that positively impact CDIA are geographic proximity to Canada, size of the economy, and the extent of investor protection.

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Introduction

Based on any measure of economic openness Canada qualifies as a very open economy. Canada exports approximately $400 billion[1] worth of goods, and imports over $350 billion each year, which is equivalent to between 30 and 40 percent of GDP. The flow of immigrants into Canada is over 200,000 per year, and the stock of foreign direct investment in Canada is over $350 billion. However, until recently, governments and analysts have all but ignored a large and important aspect of Canadian international activity: Canadian outward investment. In 2003, the total stock of Canadian direct investment abroad (CDIA) amounted to just over $403 billion and spanned over 100 countries around the world. During the same year, the stock of foreign direct investment (FDI) in Canada was just over $364 billion. Between 1987 and 2003, CDIA grew almost 400 percent from $74 billion in 1987. Although the share of CDIA in poor countries doubled from around 12 percent in 1987-91 to over 24 percent in 1999-03, the wealthy industrial countries such as the U.S., the EU and Japan are host to the lion's share of CDIA.

The primary focus of Canadian international commercial policy has historically been on trade (exports and imports) and on inward direct investment. But recently, more attention has been paid to Canada's direct investment abroad. The 2005 Canadian International Policy Statement argued that outward investment provides a number of benefits to Canadians: increased competitiveness, R&D, technology transfers, and positive externalities. The Statement pointed out that, to support such investments, businesses must be assured that they will receive predictable and equitable treatment in the host country. The Department of International Trade's website notes that emerging markets involve both opportunities and challenges; it poses the question: "Is enough being done to encourage outward as well as inward investment?"

A prerequisite to answering this question is to understand the patterns and determinants of CDIA. Unfortunately, the de-

[1] Unless otherwise noted, data are reported in Canadian dollars.

terminants of investment—particularly outward investment—are still not well understood.

Neoclassical economic theory predicts that capital should flow from capital-abundant to capital-scarce countries. Under the standard assumptions of neoclassical economics, such as perfectly mobile capital, the return to investment in every country should be identical. Lucas (1990) compares the US and India in 1988 and argues that according to the neoclassical model, all capital should have flowed to India, as the marginal product of capital in India was roughly 58 times that of the US. However, this pattern of direct investment was not observed between the US and India, nor do we observe it in the CDIA data.

Based on an overwhelming amount of quantitative evidence that is inconsistent with the theory, Lucas questions the neoclassical model's assumptions. But if this is the case, what is amiss with the model? Why doesn't capital flow from a rich country like Canada to poor countries? What then determines the pattern of Canadian direct investment abroad?

The main theoretical explanations for this "Lucas paradox" can be grouped into two categories. The first group of explanations focuses on market failures in recipient countries — mainly sovereign investment risk and asymmetric information. The argument is that although capital has a high return in poor countries, it does not flow there because of market failures. Gertler and Rogoff (1990) show that asymmetric information problems can cause a reversal in the direction of capital flows relative to the perfect information case. If investors lack good information about a potential market, they tend to invest less in that market relative to what the neoclassical model predicts, as the model does not take into account the information asymmetry.

Similarly, sovereign risk is not included in the neoclassical model, but investors do include it in their consideration of whether or not to invest in a country. Countries with better institutions, such as secure property rights and honest, stable governments, generally have higher levels of investment in physical and human capital. The literature on the determinants of FDI finds that FDI is positively associated with government size, political stability and openness. Wei and Wu (2002) find that, *ceteris paribus*, corrupt countries receive substantially less FDI.

The second group of explanations focuses on "missing factors" that affect the marginal product of capital via the production function. These explanations account for the lack of capital flows from rich to poor countries by looking at the existence of other factors that positively affect the returns to capital but are generally ignored by conventional neoclassical economic theory. For example, if human capital positively affects the return to capital, then less capital will flow to countries with lower endowments of human capital. In his work, Lucas considers the influence of both differences in human capital quality and the role of human capital externalities. He finds that accounting for the differences in human capital quality significantly reduces the differentials in the estimated returns to capital; including the role of externalities eliminates those differentials altogether.

We extend Lucas's "missing factors" approach to include market size, resources, and government polices. We construct a panel database covering 40 countries from 1987 to 2003. We use these data within a gravity-model framework to examine the economic, institutional, political and policy-based factors that determine the pattern of Canadian FDI across countries and over time. We find that the key host country characteristics that impact CDIA are: geographic proximity to Canada; size and growth of the economy; and taxation policy. We find that having an investment agreement with a country does not have a statistically significant effect on CDIA.

The remainder of the paper is structured as follows. The next section analyzes recent trends and patterns in CDIA from 1987 to 2003. The third section presents a literature review on the determinants of FDI in general. The literature review is structured with Lucas's (1990) question regarding where FDI locates, in mind. We develop a framework based on the literature review and the gravity-model of international transactions. This provides a framework for the empirical analysis that follows. The empirical analysis is presented in the fourth section. The fifth section discusses the results and provides some concluding remarks.

Trends and patterns in CDIA

Table 1 presents the distribution of CDIA across countries over two periods (averaged over the 1987-91 and 1999-03 periods). The top destinations for CDIA were: the United States, the United Kingdom, countries in Non-US North America (mainly Bahamas, Barbados, and Bermuda); Ireland, the Netherlands, and Hungary in Europe; Japan in Asia; and Brazil and Chile in South America. In Europe, CDIA was concentrated in the Netherlands and two low-tax countries (Ireland and Hungary), rather than in big continental European countries such as Germany and France. CDIA in Central and South America was substantial, particularly in resource-rich Brazil and Chile. CDIA in each of these countries was larger than that in Mexico. In non-Japan Asia, CDIA focused on resource-rich Indonesia and two Asian financial centers: Singapore and Hong Kong. CDIA in two major Asian emerging markets, China and India, was relatively small. Average CDIA in China during the period of 1999-2003 was only $602 million, which was smaller than Canadian investment in Colombia or New Zealand. CDIA in India over the same period was $178 million, roughly the amount of CDIA in Panama over the same period.

Canadian direct investment abroad has more than tripled since the late 1980s to reach $429.6 billion by the end of 2002. Over the same period, the geographic pattern of CDIA changed substantially. The United States remained the most favored location for CDIA, accounting for 47.1 percent of CDIA during the period of 1999-2003, though its share in total CDIA fell gradually from the high of 62 percent over 1987-91. The share of non-US North America in total CDIA more than doubled, increasing from 6.7 percent in 1987-91 to 14.2 percent in 1999-2003, and that of Europe rose from 20.7 percent to 24.7 percent over the same periods. Despite the extensive media coverage on the surge in FDI flowing to East and Southeast Asian economies, Canadian direct investment in that region was flat. Canadians made more investment in South and Central America than in East and Southeast Asia.

Table 1: Top Destinations for Canadian Direct Investment Abroad

	Ave (1987-91)	Ave (1999-03)	Percent of Total
United States	55,981	176,450	47.1
United Kingdom	11,205	36,307	9.7
Barbados	1,351	23,136	6.2
Ireland	1,173	11,763	3.1
Netherlands	1,188	10,316	2.8
Bermuda	1,769	9,823	2.6
Bahamas	1,872	7,738	2.1
Japan	890	7,023	1.9
Cayman Islands	143	6,827	1.8
Hungary	2	6,807	1.8
Brazil	1,521	6,557	1.7
Germany	800	5,917	1.6
Chile	230	5,704	1.5
France	1,456	5,634	1.5
Australia	2,091	5,131	1.4
Argentina	128	4,924	1.3
Switzerland	978	4,039	1.1
Singapore	1,795	3,730	1.0
Indonesia	997	3,668	1.0
Mexico	218	3,293	0.9
Hong Kong	522	3,134	0.8
Italy	380	2,705	0.7
Belgium	535	2,651	0.7
Peru	9	1,924	0.5
Sweden	11	1,268	0.3
Spain	472	959	0.3
Thailand	33	918	0.2
South Korea	28	821	0.2
Luxembourg	9	800	0.2
Colombia	25	794	0.2
New Zealand	152	675	0.2
Austria	26	645	0.2
China	16	602	0.2
Jamaica	300	582	0.2
Malaysia	81	560	0.1

In considering the "Lucas paradox" in the Canadian context, it is important to recognize that the direction of CDIA has shifted in the past several decades. In the early 1950s, developing countries accounted for 10 percent of CDIA. That share reached 23 percent by 1970. The 1980s was a lost decade for developing countries; their share of CDIA slipped back to the range of 13-15 percent. Since 1989, however, the developing country share of CDIA surpassed the previous peak in 1970 to reach 24.4 percent in 1999. So the Lucas paradox in the Canadian context is one of degree: why doesn't more CDIA go to developing countries?

Table 2 presents the geographical distribution of CDIA among developing countries. The distribution of CDIA was very uneven. Barbados, Bermuda, Bahamas, and the Cayman Islands top the list, followed by Hungary and several resource-rich South and Central American economies including Brazil, Chile, and Argentina. Canadian investment in developing Asia was concentrated in Indonesia and two financial centres, Singapore and Hong Kong. These countries plus Mexico represented 90 percent of CDIA in developing countries.

A surprising development is the dramatic rise of CDIA in Hungary, which increased from an average of $2 million in 1987-91 to $6.8 billion in 1999-2003 (see Table 3). CDIA in Peru, the Cayman Islands, China, Argentina, Costa Rica, and Colombia also exhibited very strong growth. Some advanced industrialized countries, including Sweden and Luxembourg, also witnessed large inflows.

By far the largest share of CDIA was concentrated in finance and insurance, followed by energy and minerals, services, and machinery. CDIA was more diversified in industrial countries than in developing countries (see Figures 2 and 3). 50 percent of CDIA into industrial economies was in services, 24 percent in "other" sectors and 19 percent in energy and minerals, with 7 percent in machinery and transportation equipment. CDIA in developing countries, on the other hand, was more concentrated, with services making up 60 percent of CDIA, energy and metallic minerals 27 percent, while machinery and transport equipment (representing most of manufacturing activities) accounted for only 2 percent.

Table 2: CDIA in Developing Countries

	Ave (1987-91)	Ave (1999-03)	Growth (%)
Barbados	1,351	23,136	1,613
Bermuda	1,769	9,823	455
Bahamas	1,872	7,738	313
Cayman Islands	143	6,827	4,674
Hungary	2	6,807	340,240
Brazil	1,521	6,557	331
Chile	230	5,704	2,378
Argentina	128	4,924	3,747
Singapore	1,795	3,730	108
Indonesia	997	3,668	268
Mexico	218	3,293	1,413
Hong Kong	522	3,134	500
Peru	9	1,924	21,282
Thailand	33	918	2,724
South Korea	28	821	2,868
Colombia	25	794	3,050
China	16	602	3,781
Jamaica	300	582	94
Malaysia	81	560	595
Turkey	NA	549	NA
Papua New Guinea	86	269	212
Russian Federation	NA	265	NA
Philippines	30	258	764
Venezuela	81	247	205
Kazakhstan	NA	230	NA
Ecuador	9	212	2,253
Taiwan	136	197	44
Panama	17	187	974
India	78	178	129
South Africa	41	156	282
Netherlands Antilles	142	122	-14
Trinidad and Tobago	56	111	101
Guyana	74	104	41
Costa Rica	3	103	3,320
Poland	NA	94	NA
Egypt	29	41	41
United Arab Emirates	30	38	27
Guatemala	11	3	-72
Vietnam	NA	3	NA

Table 3: CDIA Ranked by Growth

	Ave(87-91)	Ave(99-03)	Growth (%)
Hungary	2	6,807	340,240
Peru	9	1,924	21,282
Sweden	11	1,268	11,225
Luxembourg	9	800	8,789
Cayman Islands	143	6,827	4,674
China	16	602	3,781
Argentina	128	4,924	3,747
Costa Rica	3	103	3,320
Colombia	25	794	3,050
South Korea	28	821	2,868
Thailand	33	918	2,724
Austria	26	645	2,381
Chile	230	5,704	2,378
Ecuador	9	212	2,253
Barbados	1,351	23,136	1,613
Mexico	218	3,293	1,413
Norway	32	423	1,229
British Virgin Islands	29	313	998
Panama	17	187	974
Ireland	1,173	11,763	903
Netherlands	1,188	10,316	768
Philippines	30	258	764
Japan	890	7,023	689
Germany	800	5,917	639
Italy	380	2,705	612
Malaysia	81	560	595
Hong Kong	522	3,134	500
Bermuda	1,769	9,823	455
Belgium	535	2,651	396
New Zealand	152	675	345
Brazil	1,521	6,557	331
Bahamas	1,872	7,738	313
Switzerland	978	4,039	313
France	1,456	5,634	287
South Africa	41	156	282
Indonesia	997	3,668	268
Portugal	126	460	265
United Kingdom	11,205	36,307	224
Denmark	35	110	219

United States	55,981	176,450	215
Papua New Guinea	86	269	212
Venezuela	81	247	205

Figure 1

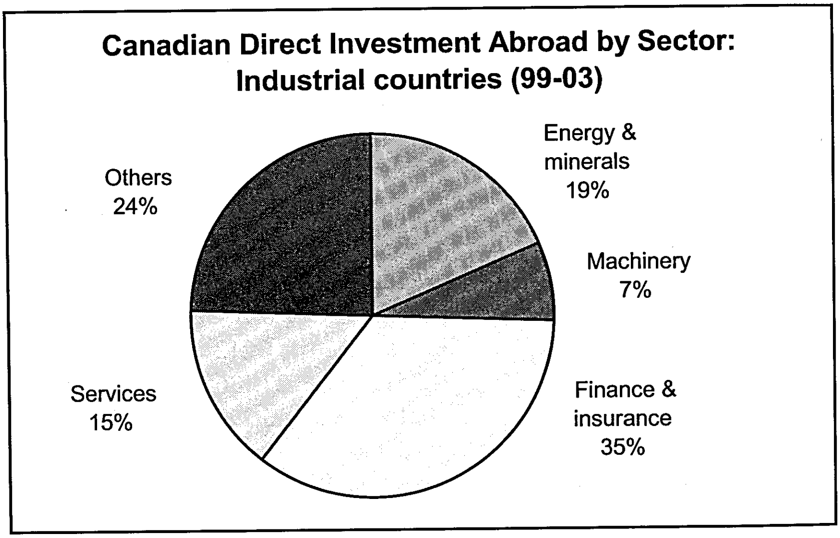
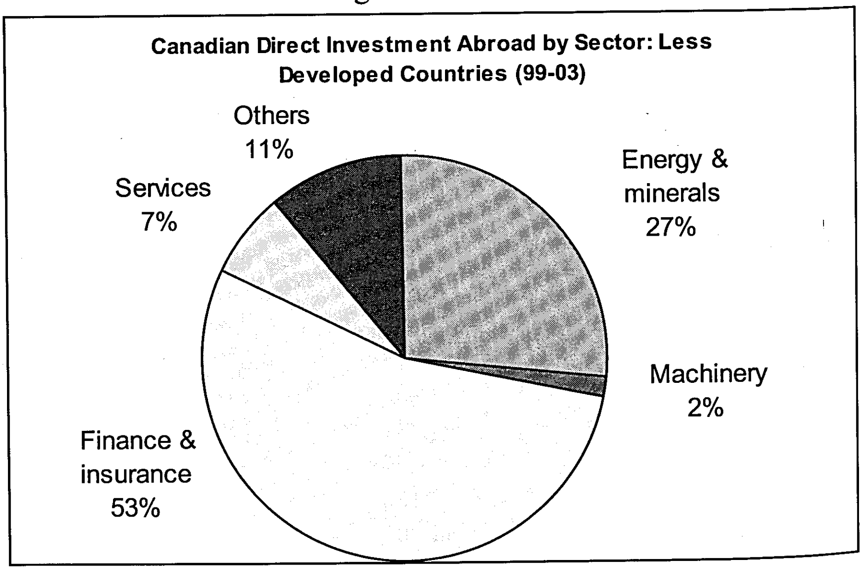


Figure 2



A Framework for Examining Determinants of FDI

The Lucas Paradox of the Neoclassical Model

Following Lucas (1990), assume a small open economy where output Y is produced using capital K and labour L.

1. $$Y_t = A_t F(K_t, L_t) = A_t K_t^{\alpha} L_t^{1-\alpha}$$

where A is the productivity parameter and the t subscript denotes time period t. If all countries share a common technology, perfect capital mobility implies the convergence of interest rates. The property of diminishing returns to capital implies that resources will flow from low-returns to high-returns countries. Hence, for countries i and j,

2. $$A_t f'(k_{it}) = r_t = A_t f'(k_{jt})$$

This is certainly not what we observe in the data. There is insufficient capital flowing from rich to poor countries to yield the convergence of interest rates across these countries. Lucas suggests that the lack of capital flows from rich to poor countries can be accounted for by looking at the existence of other factors such as the differences in human capital quality and the role of human capital externalities that might positively affect the productivity of capital. For instance, if the availability and quality of human capital positively affects the return to capital, FDI will flow to countries with large endowments of high quality human capital. In other words, Lucas essentially assumes that the productivity parameter is higher in rich countries ($A_{rich} > A_{poor}$) because of a human-capital externality. If human capital positively affects the rate of return to capital, investment will not flow to poor countries, as the rate of return there will be much lower than the neoclassical theory suggests. In equilibrium, workers can earn higher wages in rich countries than in poor countries, and there is no pressure on capital to flow to poor countries.

Generalizing this argument, the paucity of capital flows from rich to poor countries is explained by the existence of other factors that affect the rate of return to capital, which in turn, influences the location decision of investment. Thus, the production function (1) can be rewritten as

3. $$Y_t = A_t F(K_t, Z_t, L_t) = A_t K_t^{\alpha} Z_t^{\beta} L_t^{1-\alpha-\beta}$$

where Z_t denotes the "missing factors" that account for the lack of capital. Thus, the true rate of return that accounts for the return differentials between countries *i* and *j* should be

4. $$A_t f'(k_{it}, z_{it}) = r_t = A_t f'(k_{jt}, z_{jt})$$

The following discusses the main components of z_{it} in turn. We modify the approach of Lucas (1990) to incorporate other determinants of FDI flows that are found in the literature. In particular we attempt to empirically substantiate three different theoretical motivations for FDI: market-seeking FDI, resource-seeking FDI, and efficiency-seeking FDI. In addition to these main motivations for FDI, we incorporate economic policy variables and measures of political risk into our analysis. We adopt the gravity model that has become the most widely employed empirical model for understanding the geographic distribution of economic relationships. The gravity model allows us to empirically examine the determinants of CDIA based on the above framework.

The economic determinants of FDI

The literature establishes three key motivations for FDI: market-seeking, resource/asset-seeking; and efficiency-seeking. The literature tends to find that macroeconomic stability, country risk and the policy environment are also important determinants of FDI. Table 4 lists these six determinants of FDI and provides some measures for each determinant. This sub-section discusses each determinant in turn.

The key to understanding the determinants of FDI is to understand the interaction of FDI with its chief agent, the multinational enterprise (MNE). A MNE is a firm that controls and manages production establishments located in at least two countries. These establishments may be horizontally or vertically integrated. Horizontally integrated establishments produce the same line of goods or services in each facility in different locations; vertically integrated establishments produce output in facilities that serve as an input for other facilities located across national boundaries. Consequently, FDI primarily emerges as a tool through which a MNE extends its territorial boundaries abroad. In other words, FDI is a mechanism for MNEs to maintain control over production activities outside their own national boundaries (Dunning and Rugman, 1985).

Table 4: Host country determinants of FDI

Determinants of CDIA	Variables measuring host country characteristics
1. Market-seeking	Market size: real GDP or population
	Wealth: per capita income
	Market growth: growth of real GDP
2. Resource/asset-seeking	Country resource endowment: the proportion of resource exports in total exports by country
3. Efficiency-seeking	Human capital: an education index is used to measure the quality of the workforce.*
4. Macroeconomic stability	Inflation
5. Country risk	Expropriation risk
	Rules of law regarding entry and operations
	Repudiation of contracts by government
6. Institution and policy environment	Infrastructure
	Taxation policy
	Investment agreements
	Trade commissioners

* NB: We do not have data on wages or efficiency wages so this proxy is used instead.

Market-seeking FDI

The importance of market-seeking as a determinant of FDI is self-evident. Various empirical studies have shown that the size[2] and growth[3] of host country markets are among the most important determinants of FDI. The idea here is simple: large size and high economic growth increase the attractiveness of a country for a MNE, since a larger market size enables it to exploit economies of scale and earn higher profits.

Recently the market-seeking motive for FDI gained in importance with the opening of services industries to FDI. The bulk of FDI in services, which accounts for a rising share in overall FDI, is market-seeking almost by definition, as many services require face-to-face delivery.[4]

In the analysis that follows, we use real GDP to measure country size and real GDP per capita to measure wealth. We also construct a variable called "emerging", which combines country size with growth. Note that, as discussed below, the market size of the host country is also a determinant of FDI, as derived from the gravity model.

Resource/asset-seeking

Resource-seeking FDI is motivated by the availability of natural resources in host countries. This type of FDI was historically important and resource-seeking remains an important factor in attracting FDI for some developing and emerging market countries. The share of resource-seeking FDI in total world FDI flows, however, has decreased significantly. The primary sector's share in the outward FDI stocks of major investing countries was below 5 percent in the first half of the 1990s (UNCTAD, 1998).

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[2] See Agarwal (1980), Brewer (1993), Lucas (1993), Bajo-Rubio and Rivero (1994), Wang and Swain (1995), Gastanga, Nugent and Pashamova et al (1998).

[3] See Agarwal (1980) and Lucas et al. (1993).

[4] Note there are four modes of services supply: cross-border trade, consumption abroad, commercial presence, and movement of natural persons. Commercial presence in services by definition is market-seeking FDI. Although complete data on the four modes of services are not available, available data on exports shows that Canadian services exports through commercial presence are twice as large as that through cross-border trade.

The declining share of resource-seeking FDI is partly due to the decline in relative prices of resources. Note, however, that resource-seeking remains an important motivation for Canadian firms investing abroad. The share of resource-seeking FDI flowing from Canada was 24 percent of total outward FDI in 2002—the same share as in 1989.[5] Given the continued importance of resource-seeking FDI to Canadian firms, we include a measure of resource potential in our analysis.

Efficiency-seeking

Efficiency-seeking (i.e., a desire to take advantage of differences in labour costs, technologies, and specialization) has emerged in recent years as an important motivation for FDI and has played an important role in the rise of geographically dispersed production chains. Although cost differences are important factors in other types of FDI, the competition for efficiency-seeking FDI flows is based entirely on cost differences between locations, the quality of infrastructure and business-related services, the ease of doing business and the availability of skills and technologies.

The naïve articulation of this motive is that firms invest in markets to exploit low wage workers. However, the empirical evidence is clear: labour productivity plays a key role in the efficiency-seeking motivation for FDI. Thus, it is low efficiency-wages that are important, not low wages *per se*. The "efficiency wage" concept combines the wage rate paid and the productivity of the workers. The evidence on this is compelling. Miller (1993), Wang and Swain (1995), Bajo and Rivero (1994), and Lucas (1993) provide evidence that labour costs themselves are not important determinants of FDI inflows. Therefore, we do not include wage levels as a determinant of CDIA, but we do include a measure of human capital, as a rough proxy for efficiency wages.

[5] The source for the Canadian FDI data is Statistics Canada "Canada's International Investment Position, 2003" Catalogue 67-202-XPB.

Macroeconomic stability

The institutional and policy environment is a key determinant of success in attracting FDI. This criterion includes economic and political variables that we discuss in turn. According to Brewer (1993), if market size is an important factor in explaining FDI, macroeconomic policies such as monetary and fiscal policies that stimulate or retard growth are also significant determinants of FDI.

Macroeconomic variables are known to indirectly impact FDI as they provide information about the expected state and stability of the economy. For example, in his survey article, De Mello Jr. (1997) refers to FDI inflows as being sensitive to balance of payments constraints and to general macroeconomic performance. Similarly Bajo and Rivero (1994) and Wang and Swain (1995) use macroeconomic variables such as inflation or real interest rates as proxies for the degree of macroeconomic stability and the expectations associated with an economy. Wang and Swain (1995) find evidence of significant negative effects of domestic interest rates on FDI inflow to China and Hungary over the periods 1978-1992 and 1968-1992 respectively. Empirical evidence provided by Bajo and Rivero (1994) shows a highly significant effect of inflation on FDI inflows.

The level and variability of the exchange rate also likely plays an important role in determining FDI inflows. However, the empirical evidence on exchange rates and FDI is decidedly mixed. Bajo and Rivero (1994) find an insignificant impact of the real effective exchange rate on FDI inflows. Empirical studies conducted by Wang and Swain (1995) and Blonigen (1997) have also generated mixed support for a link between exchange rates and FDI inflows. Blonigen (1997) acknowledges that empirical studies have had limited success establishing a link between exchange rate levels and FDI inflows. Lucas (1993) suggests the same, ascribing a residual role for exchange rate risk in determining the value of repatriated profits.

Although exchange rate movements impact firm dynamics and decisions, the relationship is complex and differs across firms. It is very difficult to find an empirical relationship between exchange rate movements and aggregate FDI. The inflation rate is the preferred variable that reflects macroeconomic stability and is found to be a significant determinant of FDI flows. In the empirical analysis reported below, we therefore include inflation as a criterion of macroeconomic stability.

Country risk

The absence of secure property and contractual rights discourages investment (Olson, 1982; Weingast, 1993). Knack and Keefer (1995) develop institutional indicators to measure the country risks facing investors. These institutional indicators include *expropriation risk* (measuring the risk of expropriation) *rules of law* (measuring whether there are established peaceful mechanisms for adjudication of disputes), *repudiation of contracts by government* (measuring contract enforcement), and *corruption in government and quality of bureaucracy* (measuring the general efficiency with which government services are provided). Knack and Keefer (1995) find that institutions that protect property rights are crucial to economic growth and investment. Countries that score low on these dimensions are likely to have less physical and perhaps human capital investment. The low capital stock of countries with poor institutions does not attract investment despite the possibility of high returns. On the other hand, high capital stock countries, benefiting from good institutions, continue to attract investment despite diminishing returns to investment.

A number of available measures provide information on the "Lack of Investor Protection" across countries.[6] There are two basic approaches to measuring "investor protection" or "country risk": *objective indicators* and *subjective indicators*. Objective indicators are based on observed institutions – for example, an objective measure of investor protection is the extent of formal protections of property rights a country has codified into the

[6] Export Development Canada, Transparency International and the World Economic Forum were also considered as possible data sources; however, the ICRG and KKM data were deemed to be most appropriate for this analysis.

legal system. Subjective indicators are based on survey data from firms and/or individuals either through polls or expert opinion.

Both types of indicators quantify risk characteristics and typically cover various aspects of investor protection and country risk. The indicators differ in their measurement approach, their focus and their coverage of years and countries. Both types of indicators are useful and have been widely used in the literature. However, the architects of the subjective indicator point out:

> *"...we rely exclusively on subjective or perceptions-based measures of governance when constructing our aggregate governance indicators. The primary reason for this choice is that for many of the key dimensions of governance, such as corruption or the confidence that property rights are protected, relevant objective data are almost by definition impossible to obtain, and so there are few alternatives to the subjective data on which we rely."* (Kaufmann, Kraay and Zoido-Lobatón (2004, p. 19)

The interested reader may refer to the Appendix for more information on the differences between subjective and objective indicators. Both types of indicators are used in this analysis.

Daniel Kaufmann, Aart Kraay, and Massimo Mastruzzi have constructed indicators covering 199 countries but only for 1996, 1998, 2000, and 2002. The data are further described in the World Bank Policy Research Working Paper 3106 titled "Governance Matters III: Governance Indicators for 1996-2002". We use and report results for the indicator for Rule of Law; the measures for Regulatory Quality and Control of Corruption are used in the analysis described below although the results using these variables are not reported.

The second group of country risk indicators is produced by the PRS Group; these indicators cover 145 countries over the period 1984-2003. The indicators for Investment Profile, Law and Order, and Corruption are used.

Both groups of indicators come in point estimates.

Infrastructure: The existing infrastructure in a country affects the cost of doing business and therefore potentially plays a role in firms' decisions to locate in a given jurisdiction. Data on infrastructure is difficult to obtain for a broad cross section of countries but we attempt to include some measures such as telephone infrastructure.

Taxation/regulation policy: Taxation and regulatory policy potentially have important implications for firm investment decisions. For example, UNCTAD (2004) lists privatization as a leading determinant of recent FDI flows into Latin America. This is an extreme example of how regulation affects investment location decisions. There is also a very well-developed literature looking at the impact of taxation rates on firm investment decisions. Beaulieu, McKenzie and Wen (2005) provide a brief survey of this literature. They point out that effective tax rates are the appropriate measure of tax structure of a given jurisdiction. However, comprehensive cross-country data on effective tax rates do not exist. In the analysis below, we include data on the marginal corporate tax rate by country over time.

Trade policy: Trade policies can affect the incentives for FDI in many ways. A sufficiently high tariff may induce tariff-jumping FDI to serve the local market. Other types of import barriers can have the same effect. It is no coincidence that Japanese automobile manufacturers began producing in the United States following the imposition of so-called "voluntary export restraint" agreements limiting the number of automobiles that could be shipped from Japan. Such quid pro quo investments are motivated by the belief that the added cost of producing in the foreign market is more than compensated by the reduced probability of being subjected to new import barriers on existing exports to that market. However, the gains to the recipient country from this type of FDI may be limited. FDI attracted to protected markets tends to take the form of stand-alone production units, geared to the domestic market and not competitive for export production. High tariffs on imported raw materials and intermediate inputs can further reduce international competitiveness, especially if local inputs are costly or of poor quality. Furthermore, if trade is subsequently liberalized, tariff-jumping investment would likely be among the first candidates to be rationalized, as it is not competitive for export production. In this case, trade policy and investment policy offset each other thereby reducing the potential benefits of trade and investment liberalization.

On the other hand, trade and investment policy can complement and reinforce each other, leading to greater trade and investment flows. For instance, the increases in efficiency-seeking investment due to investment liberalization and low tariffs could stimulate trade in intermediate inputs, which has proven to be one of the driving forces behind the spectacular growth of merchandise trade we have witnessed in the past several decades. In addition, if FDI stimulates economic growth in the host country, as appears to be the case, the result will be an increase in demand for imports, including from the source country.

In the analysis that follows we include a measure of the trading relationship between countries and consider the impact of trade on CDIA.

Investment Agreements: Canada has signed 43 investment agreements, in part to provide some level of investment protection in higher risk jurisdictions. We examine whether investment agreements affect CDIA.

The recent literature examining the impact of bilateral investment treaties (BITs) on international investment flows provides somewhat mixed results. Neumayer and Spess (2004) examine the impact of BITs on FDI flows into developing countries; they find that the number of BITs increases FDI flows to developing countries. They argue that BITs function as substitutes for good domestic institutional quality. That is, countries with poor domestic institutional quality gain the most from signing bilateral investment treaties. On the other hand, Mary Hallward-Driemeier (2003) examines twenty years of FDI flows from the OECD to developing countries and she finds little evidence that BITs have stimulated additional investment.

Tobin and Rose-Ackerman (2004) empirically examine whether BITs affect investment flows from 176 countries and include various indicators of government performance, investment rates, social indicators and investment treaties. The authors adopt a panel approach using data from 1959 (the year of the first BIT) through 2000. The authors examine the evidence in two ways: they look at FDI flows in general; and they look at bilateral US data.

For the general case, they look at the relationship between a country's share of total world FDI and the number of BITs the country has ratified. The BIT variable is measured as the cumulative number of BITs that a country has signed using five year averaging to avoid year-to-year variation in the number of BITs from 1975 to 2000. The authors find that the number of BITs a country has signed has no statistically significant effect on FDI flows.

When they look at US bilateral data, they find a negative relationship between US FDI and BITs. This result may reflect the fact that countries with low levels of FDI from the US are clamouring to sign agreements in an attempt to attract more US FDI. In a related vein, Blonigen and Davies (2004) find that bilateral tax treaties between the US and its partners do not increase US FDI to those countries.

Empirical Analysis

The gravity model

The most widely employed and successful model for understanding the geographic distribution of economic relationships is the gravity model. We develop a version of this model to empirically examine the economic and commercial determinants of Canadian FDI, using the variables identified in the literature review. We discuss two estimating approaches: 1) a cross section estimation; and 2) a pooled cross-section and time series estimation.

Cross section analysis

In principle, it is possible to estimate a cross-section model to examine Canada's FDI abroad. The advantage of this approach is that the data requirements are reduced. The downside of using a cross-section approach is that we exclude variables that change over time.

Since we are only considering Canada as the source country, we drop the "i" subscripts and estimate Canada's investment to country j. Thus, our estimating equation becomes:

5. $CDIA_j = \beta HostVariables_j + \varepsilon_j$

where $CDIA_j$ is Canadian (the source country) FDI to host country j. Our estimates of CDIA are obtained from Statistics Canada.

As mentioned, typically the gravity equation would include home, or source, country as well as host country characteristics, but in this case the home country characteristics are for one country, and hence there is no variation in the cross-country regression. Therefore, in a cross-section regression, the Canadian (source country) characteristics are not included; *HostVariables* includes only the characteristics of the host countries.

Cross-section and time-series panel approach

A more powerful estimating approach is to take advantage of the panel nature of the data. The panel data include variables that vary over time as well across countries. Again, since we are only considering Canada as the source country, we continue to suppress the "i" subscripts and estimate Canada's investment to country j at time t. Thus, our estimating equation becomes:

6. $CDIA_{jt} = \beta HostVariables_{jt} + \alpha_j + \lambda_t + \varepsilon_{jt}$

where $CDIA_{jt}$ is Canadian (the source country) FDI to host country j at time t. We include the same dependent and explanatory variables as discussed above. In addition we include a country fixed effect (α_j) – which controls for country characteristics that are not observed in the data; and we include a trend variable (λ_t).

We have constructed two datasets on cross-country CDIA and investment risk. We have a dataset that has data for four years: 1996, 1998, 2000 and 2002. We also have a dataset that covers 1987 to 2003.

For market-seeking FDI, we use real GDP (constant 1995 USD) as a proxy for market size. These data are from the World Development Indicators constructed by the World Bank Group. The data cover 208 countries over the period 1960-2002, although not all years have data for all countries.

Inflation is used as a measure of a country's macroeconomic stability. These data come from the International Monetary Fund's September 2004 World Economic Outlook Database, and cover 179 countries for 1980-2005.

For infrastructure we use the average cost of a phone call to the US from the World Development Indicators.

We include average corporate taxation data, which are from the World Tax Database compiled by the University of Michigan.

Before looking at the regression results, it is worth looking at some scatter plots of CDIA and some of the key variables. Figure 4 presents a scatter plot of CDIA in 2002 against the distance to recipient countries. We can see that there are a large number of countries grouped together with less than \$10 billion dollars in CDIA. However, we still see that the regression line has a negative slope: the destination of CDIA is negatively associated with distance. Recall that the United States accounts for over 47 percent of CDIA and that the United Kingdom accounts for 9.7 percent. Figure 5 re-draws the relationship between CDIA and distance after excluding these two countries and again we see a negative relationship between CDIA and distance. This is consistent with what we expect from the literature.

Figure 6 looks at the simple linear bivariate relationship between CDIA and corporate tax rates. Again, excluding the United States and the United Kingdom, CDIA is negatively related to corporate tax rates. This is what we expect to see based on our discussion of the trends and patterns of CDIA. CDIA flows are generally larger to low tax jurisdictions. Notice that Barbados (BRB) receives the most CDIA among these countries but shows a very high corporate tax rate. It is important to note that this is an aggregate tax rate and that the tax rate on the financial sector (where Canadian CDIA is concentrated in that country) is 5 percent. If we exclude Barbados from the diagram, or code the corporate tax rate at 5 percent in that country the slope of the trend line would be even steeper in absolute terms.

Finally Figure 7 presents the relationship between CDIA and "rule of law". As we can see from this diagram the trend relationship is positive. That is, the distribution of CDIA across countries is positively correlated with the "rule of law" in those countries. As expected, CDIA is higher in countries with stronger legal institutions.

Figure 4

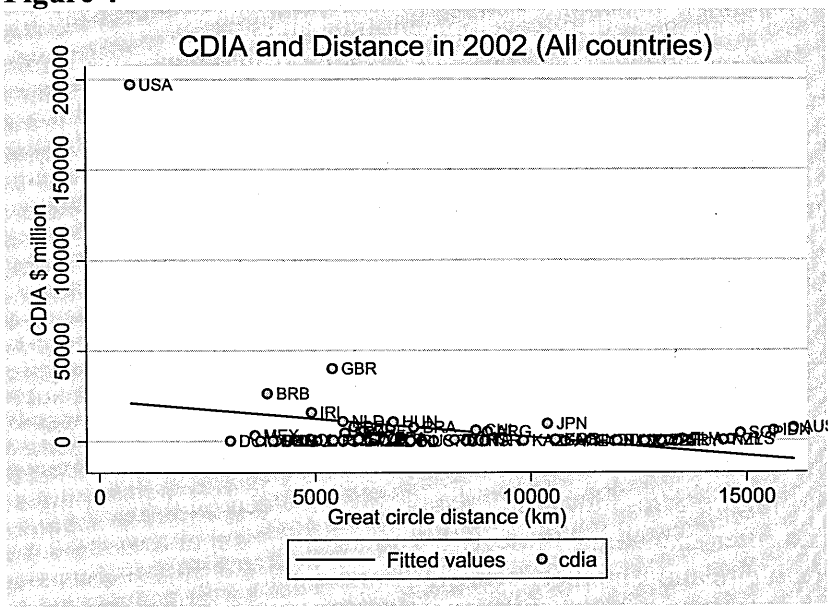


Figure 5

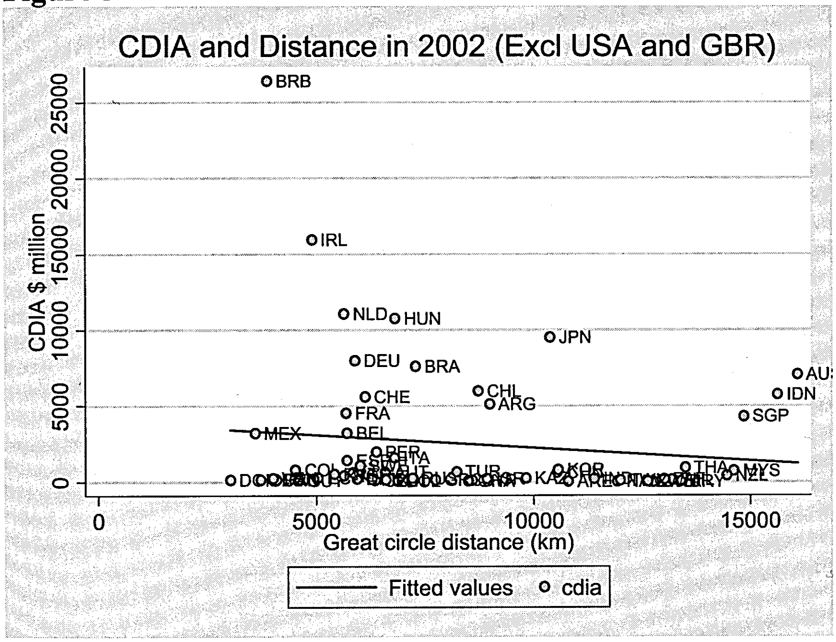


Figure 6

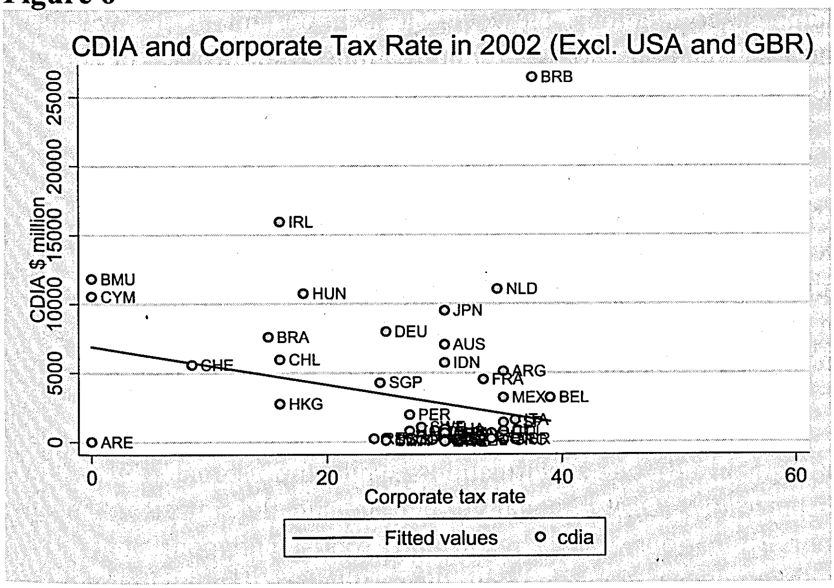
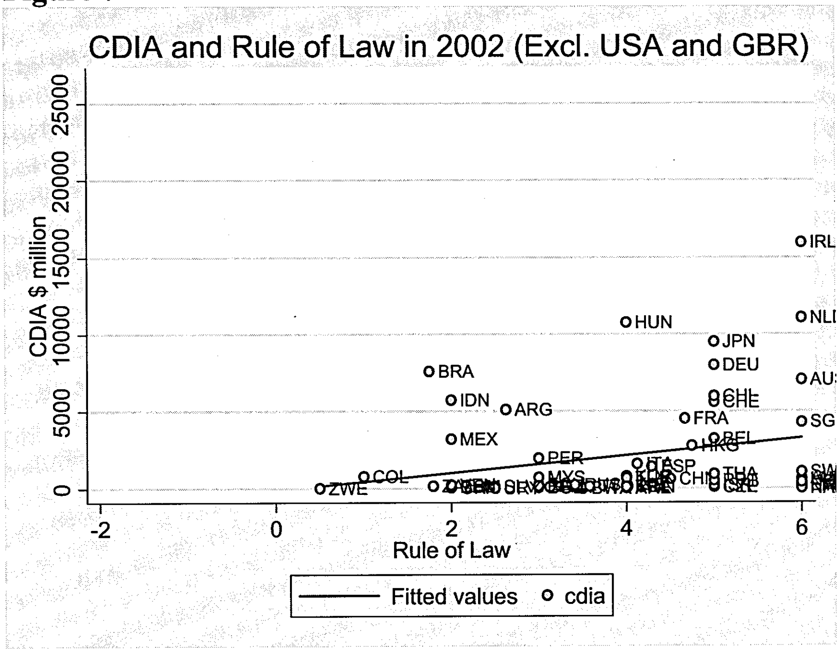


Figure 7



The patterns of CDIA in these scatter plots reveal some anticipated correlations. However, it is important to see whether these correlations hold in a multivariate framework. As shown below, the results from multivariate regressions are similar.

Cross Section Results

Table 5 reports four columns of results from estimating Equation 7 based on 2000 data only, using different versions or specifications of the gravity model. In addition to a common set of variables, column 1 includes per capita income, column two includes rule of law, column 3 includes the education index and total trade, and column 4 includes rule of law and total trade.

The effect of GDP on CDIA is positive and statistically significant in all four specifications, while the estimated effect of distance on CDIA is negative and statistically significant in all four estimations. These results are robust and consistent both with our expectations and with the results found in the literature.

The coefficient on the corporate tax rate is negative as expected and is statistically significant in all four specifications; thus, a low corporate tax rate in the host countries provides a powerful and effective incentive to Canadian investment.

The abundance of resources in the host countries is positively related to CDIA in all four specifications. This reflects Canada's major presence in the global resource market. Resource sector investments account for roughly one quarter of total CDIA.

The table also reports the estimation results of the impact that signing a Foreign Investment Protection Agreement (FIPA) has on CDIA. The variable "FIPA" is equal to 1 if a country has a FIPA with Canada and zero otherwise. In all four specifications, a FIPA does not have a statistically significant effect on CDIA.

Table 5: Cross section regression results

Dependent Variable: LOG(CDIA)

Variable	(1)	(2)	(3)	(4)
C	-5.4957	-2.1189	-2.87686	-0.22796
Log(GDP)	0.7243*	0.8282*	0.5702*	0.5079*
Log(Distance)	-0.8666**	-1.1495*	-0.9323**	-0.9978*
Log(GDP Per Capita)	0.4205*			
Education Index			2.2418	
Law		0.5012*		0.4762**
Corporate Tax	-0.1025*	-0.1055*	-0.1138*	-0.1032*
Resources	0.0547*	0.0551*	0.0498*	0.0594*
FIPA	0.1401	0.168558	-0.1254	0.225543
Trade Commissioners	0.0091	-0.00069	-0.0008	-0.00637
Log(Total Trade)			0.3026**	0.3572*
R-squared	0.5879	0.5812	0.5816	0.5974

Note: * significant at the 5 percent level; ** significant at the 10 percent level.

The same is true for another policy instrument, "trade commissioner services", measured as the number of Canadian trade commissioners assigned to a country plus the number of locally engaged staff. While trade commissioners have no mandate to promote outward investment, this variable is included in order to test the *indirect* effect of trade promotion activities on outward investment. No such effect is, however, observed: in all four specifications, the estimated coefficients for "trade commissioner services" show no statistical significance.

As mentioned, the first specification also includes per capita income. As shown, our results find the estimated coefficient for per capita income to be greater than zero, implying that CDIA is positively correlated with GDP per capita.

The second specification includes the rule of law variable while the fourth specification incorporates total trade along with rule of law. Rule of law is included in order to test the importance of institutions in the host country in attracting CDIA. The results show a strong positive effect of rule of law on CDIA. Canadian investors are more likely to invest in countries with good domestic institutions, particularly sound legal systems.

The third column of Table 5 includes an education index to test the role of human capital in determining the pattern of CDIA. The estimated coefficient is positive but statistically insignificant suggesting that, *ceteris paribus*, the level of human capital in the host country is not a critical factor in attracting CDIA.

Lastly, the third and fourth columns explore the correlation between CDIA and bilateral trade with host countries. The estimated coefficients are positive and statistically significant. This suggests that Canadian trade and investment are complements, not substitutes as some economists suggest.

Pooled time series and cross section results

Table 6 presents results from estimating a pooled regression based on the gravity model presented in Equation 8. The first two columns present the results from estimating the model over all years (1987 to 2002). Columns 3 to 5 report the results from estimating the model over a sub-sample of years: 1987-91 in column 3; 1992-96 in column 4; and 1997-02 in column 5. All five regressions include distance, rule of law, the variable "emerging" (which measures the effect of economic growth and size of GDP), real GDP per capita, inflation, the corporate tax rate and a time trend. The simulation reported in column 1 also includes a measure of infrastructure based on the availability of telephones. The telephone variable restricts the number of observations in the model. All variables in the regressions are log values.

Table 6: Pooled regression results

	(1)	(2)	(3)	(4)	(5)
	1987-02	1987-02	1987-91	1992-96	1997-02
Distance	-0.892	-0.88	-0.856	-0.816	-0.95
	(6.15)**	(7.04)**	(3.60)**	(3.57)**	(4.98)**
Rule of Law	0.387	0.366	0.547	0.484	0.134
	(1.70)	(2.01)*	(1.41)	(1.19)	(0.54)
Emerging (growth * size)	0.594	0.539	0.507	0.472	0.654
	(12.59)**	(13.60)**	(5.73)**	(6.78)**	(11.12)**
Real GDP per capita	-0.067	0.134	0.164	0.068	0.168
	(0.73)	(1.99)*	(0.98)	(0.59)	(1.76)
Inflation	-0.245	-0.119	0.002	-0.187	-0.097
	(3.73)**	(2.52)*	(0.03)	(2.15)*	(1.08)
Telephone	1.98				
	(1.06)				
Corporate tax	-0.052	-0.059	-0.061	-0.055	-0.064
	(3.92)**	(5.96)**	(4.01)**	(3.37)**	(3.59)**
Time trend	0.121	0.101	-0.044	0.159	-0.003
	(5.90)**	(6.53)**	(0.40)	(2.27)*	(0.05)
Constant	10.757	9.667	9.506	9.337	11.243
	(6.23)**	(7.06)**	(3.55)**	(3.72)**	(5.07)**
Observations	444	567	151	221	195
R-squared	0.45	0.43	0.37	0.34	0.54

The t statistics are given in the parentheses.
* significant at 5 percent level; ** significant at 1 percent level.

The estimated effect of distance on CDIA is negative and statistically significant in all five regressions. This extremely robust result is consistent with our prior expectations and with the previous literature. The "rule of law" variable is positive in all columns but not statistically significant except in column 2 where all years are included and telephone is excluded. The constructed variable "Emerging" is positive and statistically significant in all five versions of the model. Again, this is a robust result with the expected sign. Real GDP per capita is not statistically significant. Inflation is negative as expected and is statistically significant in some cases. Corporate tax rate is negative as expected and is statistically significant. This is a robust result.

Table 7 presents results using pooled cross section and time series data to examine the impact of signing a FIPA on CDIA.

Table 7: Pooled regression results including FIPA

	(1)	(2)	(3)
Distance	-0.892	-0.904	-0.883
	(6.15)**	(6.22)**	(7.07)**
Rule of Law	0.387	0.453	0.417
	(1.70)	(1.93)	(2.25)*
Emerging (growth * size)	0.594	0.574	0.518
	(12.59)**	(11.49)**	(12.45)**
Real GDP per capita	-0.067	-0.093	0.112
	(0.73)	(0.97)	(1.61)
Inflation	-0.245	-0.234	-0.113
	(3.73)**	(3.56)**	(2.36)*
Telephone	1.98	1.972	
	(1.06)	(1.07)	
Corporate tax	-0.052	-0.051	-0.057
	(3.92)**	(3.87)**	(5.74)**
Time trend	0.121	0.128	0.109
	(5.90)**	(6.06)**	(6.89)**
FIPA		-0.41	-0.484
		(-1.76)	(2.25)*
Constant	10.757	11.039	9.855
	(6.23)**	(6.28)**	(7.13)**
Observations	444	444	567
R-squared	0.45	0.45	0.44

The t statistics are given in parentheses.
* significant at 5 percent level; ** significant at 1 percent level.

The first column in Table 7 recreates column 1 of Table 6 for comparative purposes. Column 2 adds the FIPA variable, and column 3 omits the telephone infrastructure variable, as this increases the number of observations. As can be seen in columns 2 and 3, the FIPA variable has a negative sign, contrary to expectations.

Discussion and conclusions

This paper provides an empirical analysis of trends and patterns in Canadian Foreign Direct Investment Abroad (CDIA). The paper provides an overview of CDIA from 1987 to 2003, presents a survey of the literature on determinants of FDI, and integrates variables identified in this literature as being significant determinants of FDI (such as economic growth and size and measures of investor protection) into a gravity model framework. An extensive dataset of host country attributes was compiled by the authors and is used in the empirical work.

The results show that CDIA is mainly driven by economic fundamentals such as the size of the host country's market, natural resources, and distance from Canada. The results also suggest that domestic policy features in host countries, such as a good legal infrastructure and low corporate taxes are important determinants of the pattern of CDIA.

The effects of FIPAs in facilitating CDIA are inconclusive or indeterminate at best. There is no significant, positive relationship between the presence of a FIPA and the distribution of CDIA; in a number of regressions, the sign is actually negative. This result is consistent with the recent literature examining the impact of bilateral investment agreements on FDI. However, this result may be due to countries beginning to improve their domestic institutions before the FIPA itself is signed, so that the improvement and signing do not occur in the same period. A second possible explanation is that Canada has not signed FIPAs with the "right" countries. Most FIPAs that Canada has signed are with small far-off countries with poor investment opportunities, which may explain why FIPAs have not been successful at promoting CDIA to partner countries. A third possible explanation is that the economic model used to determine the pattern of CDIA does not fully describe investors' behaviour.

It is hoped that the research presented here will contribute to a discussion on policy direction. The results offer a perspective on the following two policy statements:

> The Canadian economy also benefits from outward investment, which contributes to competitiveness and to increased R&D, and leads to technology transfers and spillovers to our economy. We must support such international business appropriately with the right rules-based framework, both within the receiving country and between Canada and that country: the confidence to invest and expand must be based on assurances of predictable and equitable treatment.
> (Canada's International Policy Statement, 2005, p.10).

> Emerging markets frequently offer production efficiencies, but are sometimes coupled with challenges such as limited intellectual property (IP) protection and restricted market access. We must decide if Canada's current array of policy instruments and business development tools is sufficient to meet the existing opportunities, challenges and competition we face in the marketplace. Is enough being done to encourage outward as well as inward investment?
> ("Developing ITCan's Emerging Markets Strategy") http://www.itcan-cican.gc.ca/em_back-en.asp (last updated 2004-11-18).

The first statement points out that the federal government must support international business with a rules-based framework. There is fairly strong evidence, both here and in the literature, that a host country's legal framework is an important determinant of FDI flowing into that country. However, it is not clear from the evidence presented here, nor from the literature, that bilateral investment treaties such as FIPAs will provide a substitute for sound domestic legal institutions.

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Appendix A: Measuring Investor Protection

Objective indicators

One widely used objective indicator is "International Country Risk Guide" (or ICRG) from the PRS Group.[7] The ICGR provides up-to-date country risk ratings for 140 countries in three broad categories: financial, political and economic risk. For our purposes, we are interested in the composite measure of political risk and/or some of the components of the political risk variable. These data are up-to-date and are available from http://www.countrydata.com/reports/. The **Political Risk Points by Component** is Table 3B: *This table provides the Political Risk Rating and all of its component points for all countries monitored by ICRG, allowing you to select the date of your choice. This rating assesses political stability by assigning risk points to a pre-set group of the political risk components: Government Stability, Socioeconomic Conditions, Investment Profile, Internal Conflict, External Conflict, Corruption, Military in Politics, Religion in Politics, Law and Order, Ethnic Tensions, Democratic Accountability, and Bureaucracy Quality. The lower the risk point total, the higher the risk, and the higher the risk point total the lower the risk.*

An historical and alternative version of the ICRG data also exists and is available from the same source. This database is known as IRIS and is available from 1982-97. The advantage of this database is twofold: it includes very specific measures of investment protection (repudiation of contracts by government, and risk of expropriation) and it goes back to 1982. The disadvantage is that the most recent data point available is 1997 – so it is not useful for doing current analysis. The IRIS Dataset was originally constructed in 1993 by Steve Knack and Philip Keefer for the IRIS Center at the University of Maryland, based on data obtained from the **International Country Risk Guide (ICRG)**. The dataset includes computed scores for six vari-

[7] Go to PRSGroup web page http://www.prsgroup.com/icrg/icrg.html. Or go to the link http://www.countrydata.com/datasets/

ables: corruption in government, rule of law, bureaucratic quality, ethnic tensions, repudiation of contracts by government, and risk of expropriation. Knack produced subsequent issues of the data for an ongoing series of working papers from the IRIS Center. In its current form, IRIS-3 contains data for the period 1982-1997. In the present analysis, we use the ICRG data that covers 1987 to 2003. The two investor protection variables (repudiation of contracts by government, and risk of expropriation) are included as components of the "investor profile" variable in the ICRG data – but are not reported separately.

There are scores of alternative country risk measures. The ICRG is widely used in academic and policy analysis and is relatively inexpensive. An alternative source is BERI: Business Environment Risk Intelligence (http://www.beri.com/). This has country risk data as well as Mineral Extraction Risk Assessment and Quality of Workforce Index.

Subjective indicators

The **Worldwide Governance Research Indicators Dataset** provides six subjective indicators on "governance" constructed by researchers at the World Bank Institute (WBI).[8] The database covers 199 countries and has six dimensions of governance in four different years: 1996, 1998, 2000, and 2002. The authors use econometric techniques to construct the six indicators from several hundred individual variables measuring perceptions of governance, drawn from 25 separate data sources constructed by 18 different organizations. The authors assign individual measures of governance to categories capturing key dimensions of governance, and use an unobserved components model to construct six aggregate governance indicators in each of the four years. The six indicators are called: Voice and Accountability; Political Stability and Absence of Violence; Government Effectiveness; Regulatory Quality; Rule of Law; and Control of Corruption.

[8] See Kaufmann, Kraay and Zoido-Lobatón (1999a,b and 2003).

Kaufmann, Kraay and Zoido-Lobatón (1999a,b and 2004) discuss various methodological issues, including the interpretation and use of the data given the estimated margins of error. They define the indicators as follows:

*1. **Voice and Accountability:** a number of indicators measuring various aspects of the political process, civil liberties and political rights. These indicators measure the extent to which citizens of a country are able to participate in the selection of governments. We also include in this category indicators measuring the independence of the media, which serves an important role in holding monitoring those in authority and holding them accountable for their actions.*

*2. **Political Stability and Absence of Violence:** several indicators which measure perceptions of the likelihood that the government in power will be destabilized or overthrown by possibly unconstitutional and/or violent means, including domestic violence and terrorism. This index captures the idea that the quality of governance in a country is compromised by the likelihood of wrenching changes in government, which not only has a direct effect on the continuity of policies, but also at a deeper level undermines the ability of all citizens to peacefully select and replace those in power.*

*3. **Government Effectiveness:** the quality of public service provision, the quality of the bureaucracy, the competence of civil servants, the independence of the civil service from political pressures, and the credibility of the government's commitment to policies. The main focus of this index is on "inputs" required for the government to be able to produce and implement good policies and deliver public goods.*

*4. **Regulatory Quality:** is more focused on the policies themselves. It includes measures of the incidence of market-unfriendly policies such as price controls or inadequate bank supervision, as well as perceptions of the burdens imposed by excessive regulation in areas such as foreign trade and business development.*

5. ***Rule of Law:*** *several indicators which measure the extent to which agents have confidence in and abide by the rules of society. These include perceptions of the incidence of crime, the effectiveness and predictability of the judiciary, and the enforceability of contracts. Together, these indicators measure the success of a society in developing an environment in which fair and predictable rules form the basis for economic and social interactions, and importantly, the extent to which property rights are protected.*

6. ***Control of Corruption:*** *measures perceptions of corruption, conventionally defined as the exercise of public power for private gain. Despite this straightforward focus, the particular aspect of corruption measured by the various sources differs somewhat, ranging from the frequency of "additional payments to get things done," to the effects of corruption on the business environment, to measuring" grand corruption" in the political arena or in the tendency of elite forms to engage in "state capture". The presence of corruption is often a manifestation of a lack of respect of both the corrupter (typically a private citizen or firm) and the corrupted (typically a public official or politician) for the rules which govern their interactions, and hence represents a failure of governance.*

There are several advantages of this dataset. First is the methodology used to construct an index from **subjective evaluations** of country governance. As mentioned above these subjective indices are drawn from 25 separate data sources. Not all of the data sources cover all of the indicators, or all of the years. However, the authors construct the indices for 199 countries using sophisticated econometric techniques. An additional advantage of these data is that they are easy to access and free.

Appendix B: Background on the gravity model

The gravity model gets its name from its intellectual genesis: the "Law of Universal Gravitation" proposed by Newton in the 17^{th} century. Newton law modeled the attractive forces between two objects i and j as positively related to the mass of the two objects and negatively related to the distance between them. The gravity model was first applied to economic relations between countries by Jan Tinbergen in 1962.

The basic gravity model of economic interactions between countries is based on the Newton-Tinbergen framework:

$$5.\quad F_{ij} = G\frac{M_i^{\alpha} M_j^{\beta}}{D_{ij}^{\theta}}$$

where F_{ij} is the "flow" of trade or investment between country i and country j. Flows depend positively on a constant G; and on the mass—or economic size—of each country M_i and M_j; and depend negatively on the distance between the countries, D_{ij}. There are three parameters in this specification of the gravity model that measure the responsiveness of flows between i and j to country i's mass (or GDP) (α), country j's mass (or GDP) (β), and distance (θ). A nice feature of this model is that taking logs of the equation provides a linear expression that can be estimated using standard econometric techniques:

$$6.\quad \ln F_{ij} = C + \alpha \ln M_i + \beta \ln M_j - \theta \ln D_{ij} + \varepsilon_{ij}$$

In the present analysis, we build on this basic framework to estimate the salient determinants of Canadian outward FDI.

This basic gravity model has been applied to both international trade and investment and has been extended to include additional factors that affect flows of trade and investment between countries. For example, researchers have included common language, contiguity, remoteness, income per capita, and regional trade agreements. The gravity model does a very good job of explaining trade and investment patterns.

Foreign Affairs and International Trade Canada's Trade Model, Version 2.0

Evangelia Papadaki, Marcel Mérette, Yu Lan and Jorge Hernandez *

Introduction

In a rapidly changing international environment, shaped by the emergence of new economic powers and increasingly complex arrangements amongst companies doing business across borders, the stakes for a trading nation such as Canada with trade equivalent to over 70 percent of GDP are high. Policy makers, academics, and the business community are thus equally concerned to understand better the impact of new trade and integration agreements that may help shape the future prosperity of Canada.

The ability to make quantitative assessments of the potential implications of proposed international trade agreements in a bilateral, multilateral or unilateral context provides valuable insight and complements qualitative arguments. Since general equilibrium effects must be taken into account to fully understand the impact of major trade policy changes such as broad liberalization on a multilateral basis or through a deeper bilateral or regional free trade agreement, computable general equilibrium (CGE) models have been used extensively to analyze such policy initiatives. Such has been the case during the political and economic debates surrounding the various phases of the

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European Integration, and closer to home in the cases of the Canada-USA and North-American Free Trade Agreements.

The Office of the Chief Economist in Foreign Affairs and International Trade Canada has thus developed computable general equilibrium modelling capacity in order to provide quantitative assessments of a variety of possible trade policies that Canada is considering or might wish to consider. This note describes the modifications introduced into the first version of the Department's trade model,[1] to allow it to capture dynamic effects of trade policies, in addition to the static effects captured by the initial version.

Specification of ITCan CGE Model, Version 2.0

The ITCan CGE model Version 1.0 introduced the innovative feature of disaggregating Canada into six regions, therefore allowing for a regional as well as economy-wide assessment of hypothetical trade policies. Indeed Canada's recent experience has demonstrated that free trade agreements can have different effects on national and provincial trade. As the United States is Canada's most important international commercial partner, the first priority has been to develop a model that can assess possible policies that directly affect the Canada-US trading relationship. Version 1.0 thus fully models the United States. The Rest of the World is also fully modeled as one aggregate region.

Version 1.0 has been used to analyse various scenarios of closer integration between Canada and the United States, ranging from the adoption of a common external tariff, to the more ambitious full economic union, and demonstrated the differential impact of these trade policies on the regions of Canada.

Version 1.0 is, however, subject to certain limitations. In particular, it is a static model with fixed capital. As such, it compares two equilibria: the baseline equilibrium prior to pol-

[1] ITCan CGE model, Version 1.0, is described in Evangelia Papadaki, Marcel Mérette, Yu Lan and Jorge Hernández, "The International Trade Canada Trade Model, Version 1.0", *Trade Policy Research 2004*, (Department of Foreign Affairs and International Trade: Ottawa, 2004): 247-264.

icy reform and the equilibrium achieved after the implementation of the hypothetical policy change. The adjustment from one market-clearing equilibrium to another is instantaneous, as static models do not explicitly model time; the results are interpreted as long-term effects. No account is taken of possible incentives for changes in capital accumulation and investment in the post-reform environment, nor is account taken of the adjustment and transitional process towards the new long run equilibrium. However, since the number of years between the baseline and the long-run equilibrium is thought to be large, understanding the adjustment and transitional dynamics is important for policy purposes.

ITCan CGE model Version 2.0 has been developed to shed light on the latter questions. Version 2.0 is a dynamic model. Such models explicitly introduce time and consequently allow us to model the adjustment process. They also allow for capital accumulation and investment responses to trade policy reform. Generally speaking, allowing for capital accumulation tends to strengthen the response to trade liberalization as compared with static models.

There are two general ways to introduce dynamics into CGE models: a) the recursive approach, and b) the inter-temporal maximization approach.

Recursive CGE models solve for a sequence of static equilibria, connected with each other through capital accumulation. Investment in these models is either exogenous and equal to savings in any given time period or endogenous but dependent on actual rather than future rates of return to capital. Recursive dynamic models are popular because they present a rather simple way of introducing dynamics into otherwise static CGE models. Examples of recursive dynamic models include the GREEN model, (Burniaux et al., 1992), the DART model (reference), and the GTAP-Dynam (reference) model.

Dynamic models that use the inter-temporal maximization approach assume that economic agents exhibit rational, optimizing behaviour, and take into consideration the state of variables both at present and in the future in their decision-making. Savings and investment are not only endogenous but they are derived by a decision-making process that is inter-temporal in nature. Inter-temporal dynamic models are significantly more complex because, instead of a sequential solving method, they involve a dynamic system that is interdependent over time and has to be repeatedly solved forward or solved simultaneously. Due to the complexity, these "fully" dynamic models have to compromise in terms of regional or sectoral detail to remain tractable. Thus, a number of inter-temporal dynamic models are one-country models (Pereira and Shoven, 1988; Bhattacharaya, 1996). The RICE model (Nordhaus and Young, 1996), though a multi-country fully dynamic model, does not incorporate sectoral disaggregation.

The ITCan CGE model Version 2.0 uses the latter inter-temporal maximization approach. The methodology developed is inspired by the seminal paper of Mercenier and Michel (1994) and later expanded by Lavoie et al. (2001). Version 2.0 maintains the unique feature of Canadian regional desegregation, but due to the computational complexity of the dynamic model reduces the number of industrial sectors to nine from the twenty four sectors of Version 1.0.

The Theoretical Framework of Version 2.0

In the model, we first define different commodity sets. Sectors of activity are identified by *s* and *d*, with *S* representing the set of all industries so that *s*, *d* =1,..,S. Regions are identified by indices *i* and *j*, with W representing the set of all regions so that *i*, *j*=1,..,W. In an inter-temporal, multi-region, multi-sector framework, it is necessary to keep track of trade flows over time by their geographical and sectoral origin and destination. Thus, a subscript *isjdt* indicates a flow originated in period *t* and sector *s* of region *i* with industry *d* of region *j* as recipient. Since it will be necessary more than once to aggregate variables with respect to a particular subscript, to avoid unnecessary proliferation of symbols, occasionally we substitute a dot for the subscript on which aggregation has been performed; for instance, $c_{.siv}$ is an aggregate of c_{jsit} with respect to the first subscript.

Households

In each region, there is a representative household living infinitely and maximizing its utility. The household in each region chooses consumption and investment levels that maximize its utility. The household can borrow or lend from international financial markets. Through an inter-temporal decision-making process, the representative household in each region choose its aggregate levels of consumption and investment path over time and for each period *t*. Once optimal consumption at each time is determined, it is allocated among different sectors and subsequently over different geographic origins.

These distinct allocation steps are described for the steady state in greater detail below.

(a) The Inter-temporal Optimization Problem

The inter-temporal decision problem of the representative household of region *i* is to maximize:

$$\int_0^\infty e^{-\psi t} \frac{C_{it}^{1-\gamma}}{1-\gamma} dt , \qquad (1)$$

subject to:

$$\dot{F}_{it} = \psi F_{it} + \left[w_{it} L_{it} + r_{it} K_{it} - PC_{it} C_{it} - PI_{it} I_{it} \right] \quad \dot{F}_{i\infty} = 0 \qquad (2)$$

$$\dot{K}_{it} = I_{it} - \delta_i K_{it}; \qquad \dot{K}_{i\infty} = 0 \qquad (3)$$

where:

ψ : Rate of time preference,

C_{it} : Total consumption of the household living in country *i* at time *t*,

γ : Inverse of the inter-temporal elasticity substitution,

F_{it} : Stock of foreign assets held by country *i* at time *t*,

$\dot{F}_{it}$: Change in the stock of foreign assets held by country *i* at time *t*,

w_{it} : Nominal wage rate in country *i* at time *t*,

L_{it} : Labour supply in country *i* at time *t*,

r_{it} : Nominal rental rate on capital in country *i* at time *t*,

K_{it} : Capital stock in country *i* at the beginning of time *t*,

PC_{it}: Consumption price index in country *i* at time *t*,

PI_{it} : Investment price index in country *i* at time *t*,

I_{it} : Total investment by the household of country *i* at time *t*,

δ_i : Rate of capital depreciation in country *i* ;

We borrow from a methodology developed by Mercenier and Michel (1994), and later expanded by Lavoie et al., (2001), that permits the transformation of continuous, infinite-horizon time into discrete, finite-horizon time, which can then be resolved numerically. In the discrete, finite-horizon formulation time horizon can be aggregated into *v* time intervals or periods[2].

[2] For instance, a time period *t* of 100 discrete intervals can be converted into, say, 5 aggregate time-periods *v* with an average time length of 20 intervals. Uppercase V accounts for terminal period.

The first order conditions of the discrete finite horizon problem[3] are:

$$\log\left(C_{iv-1}/C_{iv}\right) = \frac{1}{\gamma}\log(PC_{iv}/PC_{iv-1}) \tag{4}$$

$$I_{iV} = \delta_i K_{iV} \tag{5}$$

$$F_{iV} = \frac{1}{\psi}\left[PC_{iV}C_{iV} + PI_{iV}I_{iV} - w_{iv}L_{iV} - r_{iv}K_{iV}\right] \tag{6}$$

$$PI_{iv-1} = \frac{1}{1+\psi\Delta_v}\left[\Delta_v r_{iv} + (1-\delta_i\Delta_{iv})PI_{iv}\right]\text{ ; for } v<V \tag{7}$$

$$PI_{iV-1} = \frac{1}{\psi}(r_V - \delta PI_{iV})\text{; for } v=V \tag{8}$$

where Δ_v is a scalar factor that converts the continuous flow into stock increments and represents here the length of the time interval.

Equation (4) suggests that the marginal rate of substitution between consuming now and consuming later equals the relative price of consuming later instead of now times the intertemporal elasticity of substitution. Equations (7) and (8) indicate that the current price of investment depends on the rates of return to capital and depreciation adjusted to capital gain or loss (captured by the future price of investment). Equations (5), (6) and (7) are terminal conditions that insure that stocks of capital and foreign assets are constant in steady state.

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[3] A reformulation of the continuous, infinite-horizon time optimization problem into a discrete, finite-horizon time problem requires dynamic aggregation methodology. See Lavoie *et al.* (2001)

(b) The Household Static Consumption/Investment Decision Problem

Domestic final demand decisions in each region i are made by a representative household. The decision problem of the household can be broken down to a "consumer" and "investor" problem.

The domestic consumer considers products of industries from different regions as imperfect substitutes [Armington (1969)]. This is represented by a two level utility function. The first level combines consumption goods $c_{.siv}$, assuming constant expenditure shares ρ_{si}. The second level determines the optimal composition of the consumption aggregate in terms of geographic origin.

Formally, the household's consumption preferences are given by a log-linear transformation of a Cobb-Douglas utility function at the first level, and a constant elasticity of substitution (CES) function at the second level:

$$U_{iv} = \sum_{s \in S} \rho_{si} \log c_{.siv} \qquad \text{where} \quad \sum_{s \in S} \rho_{si} = 1 \tag{9}$$

$$c_{.siv} = \left(\sum_{j \in W} \delta_{jsi} c_{jsiv}^{(\sigma_{si}-1)/\sigma_{si}} \right)^{\frac{\sigma_{si}}{(\sigma_{si}-1)}}$$

where:

c_{jsiv} is the consumption in region i of goods s produced in region j in period v,

$c_{.siv}$ is the composite of domestic and imported goods in period v,

δ_{jsi} are consumption share parameters in region i of goods s produced in region j, and

σ_{si} are the Armington elasticities of substitution for consumption in region i for good s.

The consumer maximizes (9) subject to

$$PC_{iv}C_{iv} = \sum_{j\in W}\sum_{s\in S}(1+\tau_{jsiv})p_{jsiv}c_{jsiv} \tag{10}$$

where p_{jsiv} denotes prices on which consumers have no influence, and the term on the left-hand side results from the intertemporal decision of the household.

The investor's problem, in turn, is to determine the optimal composition of the local investment good. The decision problem involves minimizing

$$Minimize\ PI_{iv}I_{iv} = \sum_{j\in W}\sum_{s\in S}(1+\tau_{jsiv})p_{jsiv}I_{jsiv} \tag{11}$$

Subject to

$$\log(I_{iv}) = \sum_{s\in S}\omega_{si}\log(I_{.siv}), \qquad \sum_{s\in S}\omega_{si} = 1, \tag{12}$$

$$I_{.siv} = \left\{\sum_{j\in W}\delta_{jsi}I_{jsiv}^{\frac{\sigma_s-1}{\sigma_s}}\right\}^{\frac{\sigma_s}{\sigma_s-1}}$$

<u>Firms</u>

Each region is characterized by perfectly competitive industrial sectors. Demand for capital, labour and intermediate inputs by producers result from minimization of variable unit costs v_{isv}

$$v_{isv}Q_{isv} = \sum_{j\in W}\sum_{d\in S}(1+\tau_{jdiv})p_{jd.v}x_{jdisv} + w_{iv}L_{isv} + r_{iv}K_{isv} \tag{13}$$

subject to a Cobb Douglas production function

$$\log Q_{isv} = \alpha_{L_{is}}\log L_{isv} + \alpha_{K_{is}}\log K_{isv} + \sum_{d\in S}\alpha_{dis}\log x_{.disv} \tag{14}$$

where

$$x_{.disv} = \left(\sum_{j \in W} \beta_{jdis} x_{jdisv}{}^{(\sigma_{di}-1)/\sigma_{di}} \right)^{\frac{\sigma_{di}}{\sigma_{di}-1}} \tag{15}$$

are composite intermediate inputs in terms of geographical origin, x_{jdisv} is the amount of intermediate goods purchased by sector s of region i from sector d of region j in period v, and p_{jdiv} is the price of goods d sold by region j to region i in period v, and σ_{di} is the Armington elasticity of substitution of good d in region i.

To guarantee homogeneity of degree one of the unit costs in prices, we set

$$\alpha_{L_{is}} + \alpha_{K_{is}} + \sum_{d \in S} \alpha_{dis} = 1 \tag{16}$$

where α and β are share parameters and $\beta_{jdis} = 0, \forall j \neq i$ if d is non-tradable. Profit maximization, in this perfect competitive setting, implies prices equal marginal cost.

$$p_{isv} = v_{isv} \tag{17}$$

<u>Instantaneous General Equilibrium</u>

The instantaneous general equilibrium is defined as a static allocation, supported by a vector of prices $(p_{is.v}, P_{idjv}, w_{iv}, r_{iv})$, $i, j \in W$, consistent with the inter-temporal constraints and choices, such that

- Consumers maximize (9) subject to (10);
- Investors minimize (11) subject to (12);
- Firms minimize (13) subject to (14);
- Supply equals demand in each market:

$$Q_{isv} = \sum_{j \in W} \left[c_{isjv} + I_{isjv} + \sum_{d \in S} x_{isjdv} \right], \quad s \in S, \ i \in W; \qquad (18)$$

$$k_{iv} = \sum_{s \in S} k_{isv}, \quad i, j \in W$$

$$L_{iv}^{\text{sup}} = \sum_{s \in S} L_{isv}, \quad i \in W$$

where L_{iv}^{sup} denotes fixed labour supply.

Dataset and calibration procedure

The base year for the model's data set is 1999. The current model consists of five regions, three Canadian regions, the United States (USA), and the Rest of the World (ROW) aggregated as one region. The three Canadian regions are:

- Canada East comprising Atlantic Canada and Québec.
- Ontario
- Canada West comprising the Prairies, North West Territories, Nunavut, Alberta, British Columbia and the Yukon.

The forty-six commodities, level S, from the trade flow data were mapped into nine sectors. The sectoral mapping from the S level to the 24-sector breakdown of Version 1.0 and the 9-sector breakdown used in Version 2.0 are shown in Table 1.

Table 1: Sectoral Aggregation

9 Sector aggregation	24 Sector groups	S level groups
Agriculture and Forestry	Agriculture and Forestry	1,2,3,4
Food, Beverages & Tobacco	Food, Beverages & Tobacco	9,10,11,12
Textiles and Apparel	Textiles	14,15
Mining	Mining &Quarrying other than Petroleum	5,7,8
Wood and Related Products	Wood products	16,17,18,19
Other Manufacturing	Chemicals, Fertilizers & pharmaceuticals	6,13,20,21,25,26, 27,28
Machinery	Non-electrical machinery	22,24
Transport Equipment	Transport equipment	23
Services	Communication Services & Other Utilities	29,30,31,32,33,34, 35,36,38,39-46

Source: Statistics Canada, National Account Division, Table 386-0001, 1999

Data requirements for our model consist of nominal bilateral (international and inter-regional) trade flows; input-output tables, national accounts data (consumption demand by sector, labor and capital earnings).

Maintaining consistency among the sources is a challenging and time-consuming task. Therefore, many CGE models have turned to existing databases such as the Global Trade Assistance and Production (GTAP) data package. Despite the convenience, GTAP data had some major disadvantages: most importantly for our exercise, the GTAP database does not provide with Canadian provincial data.[4] For this reason, we have opted to develop our own database, collecting data from a variety of national and international sources.

The Canadian inter-provincial and international trade data were obtained from the National Accounts Division of Statistics Canada and Industry Canada Trade Data. The trade flows of the USA and the Rest of the World were retrieved from Industry Canada Trade Data (Strategis.ca), the World Trade Organizer and GTAP version 5.

The three Canadian economic regions were assumed to share the same production technology as Canada as a whole[5]. Therefore, the Canadian input-output table was used to derive the production technology coefficients; i.e., the share of intermediate inputs, labour and capital in final production. The Canadian input-output table was retrieved from CANSIM II database (tables 381009 and 3810010) for 1997. The Bureau of Economic Analysis provided the USA input and output tables, level M, for 1999.

Given the lack of an input-output matrix for the composite Rest of the World, intermediate technology coefficients were

[4] An additional consideration during the model building phase was the desire for more timely data; the GTAP database then available had data only for 1997 (GTAP version 5). The GTAP version 6, available since March 2005, updated the data to 2001.

[5] Due to confidentiality issues, provincial input-output tables have many cells with non-available data ("suppressed") that renders their use impractical.

generated on the basis of the GTAP database which provides estimates on intermediate demand by sector for the Rest of the World region. The value added for ROW, was retrieved from 'Sources of Factors Income', also from the GTAP 5 database.

The nest step after collecting the data is to ensure the consistency of the baseline data set. This requires that a) supply equals the demand for all commodities; b) all industries make no excess profits; c) all domestic agents' budget constraints are satisfied; and d) bilateral trade flows are mutually consistent.

The calibration of the static side of the model follows the approach developed by Srinivasan and Whalley (1986). The calibration of the dynamic side of the model follows the approach developed by Mercenier and Michel (1994), and Mercenier and Akitobi (1993). Table 2 reports on some parameters characterizing the dynamic behavior of the economy, assuming a finite-time horizon of 60 years.

Table 2: Some Parameters that Characterize the Dynamic Behaviour of Version 2.0

Parameter	Value
Number of periods	11
Time horizon	60 years
Discount rate ρ :	9.0 percent
Inter-temporal substitution elasticity $1/\gamma$:	1.0
Capital-output ratio (calibrated):	
Canada East:	4.65
Ontario	4.49
Canada West	5.06
USA	5.00
ROW	4.98
Depreciation rate of capital δ (%, calibrated):	
Canada East:	2.97
Ontario	3.10
Canada West	2.63
USA	3.01
ROW	2.67

Concluding Comments

The development of the dynamic CGE model, Version 2.0 described above, adds to the toolkit of International Trade Canada in evaluating quantitatively the implications of possible policies affecting Canada's trade and investment. It complements the static Version 1 model, the GTAP model which is also in use within the Department, as well as partial equilibrium and gravity models.

The present note describes the model to serve as a reference and as part of International Trade Canada's ongoing efforts to maintain transparency and to engage the professional trade policy and economics communities in its work.

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Adapting the COMPAS model for Foreign Affairs and International Trade Canada

Shinji Kinjo*

Introduction and overview

The partial equilibrium model plays an important role in the quantitative analysis of trade and trade policy, complementing the computable general equilibrium model, which is the tool of choice for assessing the effects of major trade policy changes such as multilateral trade rounds or bilateral/regional free trade agreements, and the so-called "gravity model", which has proved to be particularly successful in helping understand the role of geography, both physical and human, in shaping global trade patterns. As Krugman and Obstfeld (2000:188) explain, trade policy for a particular sector or good can be reasonably well understood without going into detail about the ripple effects of that policy in the rest of the economy. Accordingly, the partial equilibrium model's relative simplicity and economy in terms of data requirements have made it the tool of choice for more narrowly focussed trade issues.

A particularly convenient set of partial equilibrium models was developed for the US International Trade Commission (USITC) by Francois and Hall (1997)[1], the Commercial Policy

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[1] Joseph. F. Francois and H. Keith Hall (1997). "Partial Equilibrium Modeling" in Joseph F. Francois and Kenneth A. Reinert (eds.), *Applied Methods for Trade Policy Analysis – A Handbook* (U.S.A: Cambridge University Press): 122-155.

Analysis System (COMPAS) models. These models, although theoretically sound, require information on only a handful of key parameters and can be executed in standard spreadsheets. A good example of COMPAS models in practice was provided by the World Trade Organization's Article 22.6 arbitration regarding the economic and trade effects of the Continued Dumping and Subsidy Offset Act of 2000 (CDSOA), the well-known "Byrd Amendment". The United States submitted a number of COMPAS simulations to support its views regarding the size of the trade effects of the CDSOA disbursements.[2]

At the same time, the discussion of the reliability of the results of such simulations reveals the extent to which the results depend on the choice of key parameters.[3] In particular, the determination of the various elasticities that largely determine the outcome becomes one of the big and difficult problems in applying the partial equilibrium model.

This Chapter sets out the theoretical structure of the partial equilibrium model and develops a modified version of the COMPAS model for applications in International Trade Canada. The results of this model are compared to those derived using the COMPAS model by the United States in the context of the WTO arbitration on the trade effects of the Byrd Amendment disbursements..

The theoretical structure of the partial equilibrium model

Following Francois and Hall (2003), we describe the market that we want to analyze with a set of elasticities – i.e., elasticities of supply, aggregate elasticities of demand and elasticities of substitution. We concentrate on one market which has trade with two countries.[4] In order to identify each country, we use

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[2] World Trade Organization (2004). *United States – Continued Dumping and Subsidy Offset Act of 2000 (WT/DS234/ARB/CAN)*. Retrieved January 20, 2005, from http://www.wto.org/

[3] WTO (2004); at p. 32.

[4] Francois and Hall (2003) deal with 25 markets.

the following suffixes: 1 = domestic country, 2 = exporting country A, and 3 = exporting country B.
The elasticities required for the model are defined as follows:

Elasticities of substitution in the domestic market

$$\sigma_{ij} = \sigma_{ji} = -\frac{d\ln(Q_i / Q_j)}{d\ln(P_i / P_j)} (> 0) \tag{1}$$

where: σ_{ij} : elasticity of substitution ($i \neq j$)

Q_i : quantity of trade for goods made in country i (demand side)

P_i : price of goods made in country i (demand side)

Elasticities of supply to the domestic market

$$\varepsilon_{Si} = \frac{d\ln Q_i^S}{d\ln P_i^S} (> 0) \tag{2}$$

where: ε_{Si} : elasticity of supply of goods made in country i.

Q_i^S : quantity of trade for goods made in country i. (supply side)

P_i^S : price of trade for goods made in country i. (supply side)

Aggregate elasticity of demand in the domestic market

$$N_A = \frac{d\ln Q_A}{d\ln P_A} (< 0) \tag{3}$$

where : N_A : aggregate elasticity of demand.

Q_A : aggregate quantity of trade for goods. (demand side)

P_A : aggregate price of trade for goods. (demand side)

With these parameters, we can calibrate the own- and cross-price demand elasticities. Following Francois and Hall (1997:135-9), we derive these elasticities as follows:

Own-price elasticities of demand in the domestic market:

$$\eta_{ii} = \frac{\partial \ln Q_i}{\partial \ln P_i} = \theta_i N_A - \sum_{j \neq i} \theta_j \sigma_{ij} \cdots (<0) \tag{4}$$

where θ_i : domestic market share (in quantity) of the good made in country i.

Cross-price elasticities of demand in the domestic market:

$$\eta_{ij} = \frac{\partial \ln Q_i}{\partial \ln P_j} = \theta_j (\sigma_{ij} + N_A) \cdots (>0) \tag{5}$$

Using (2-4) and (2-5), the change in demand for the good made in country i in response to a change in its price (e.g., due to a tariff) can be depicted as follows:

$$d \ln Q_i = \eta_{ii} d \ln P_i + \eta_{ij} d \ln P_j + \cdots = \sum_j \eta_{ij} d \ln P_j \tag{6}$$

Using (2-2), we also get the change in supply of goods made in country i as follows:

$$d \ln Q_i^S = \varepsilon_{Si} d \ln P_i^S \tag{7}$$

Finally, a policy is added by introducing a tariff on goods i. The impact on the supply price is then given by the following equation:

$$d \ln P_i^S = \ln P_i^{S*} - \ln P_i^{S\#} = \ln(\frac{P_i^{S*}}{P_i^{S\#}}) \tag{8}$$

where: P_i^{S*} is the equilibrium price for goods made in country i (supply side)

$P_i^{S\#}$: offer price given the tariff (supply side)

The condition for market clearing can be written as follows:

$$d\ln Q_i = d\ln Q_i^S \tag{9}$$

$$P_i^* = P_i^{S*} \tag{10}$$

$$P_i = P_i^S \text{ except policy applied country.} \tag{10'}$$

where: P_i^* is the equilibrium price for goods made in country i (demand side).

In other words, market behaviour is perfectly competitive; however domestic goods and imports are differentiated. In this case, we have three countries to consider. If we assume that the tariff is applied to the goods made in country 2, the equation can be written as follows:

$$\begin{cases} \eta_{11}\ln(\frac{P_1^*}{P_1}) + \eta_{12}\ln(\frac{P_2^*}{P_2}) + \eta_{13}\ln(\frac{P_3^*}{P_3}) = \varepsilon_{S1}\ln(\frac{P_1^*}{P_1}) \\ \eta_{21}\ln(\frac{P_1^*}{P_1}) + \eta_{22}\ln(\frac{P_2^*}{P_2}) + \eta_{23}\ln(\frac{P_3^*}{P_3}) = \varepsilon_{S2}\ln(\frac{P_2^*}{P_2^{S\#}}) \\ \eta_{31}\ln(\frac{P_1^*}{P_1}) + \eta_{32}\ln(\frac{P_2^*}{P_2}) + \eta_{33}\ln(\frac{P_3^*}{P_3}) = \varepsilon_{S3}\ln(\frac{P_3^*}{P_3}) \end{cases} \tag{11}$$

If we assume $\varepsilon_{Si} - \eta_{ii} \neq 0$, we obtain the solution as follows:

$$\begin{pmatrix} \ln(\frac{P_1^*}{P_1}) \\ \ln(\frac{P_2^*}{P_2}) \\ \ln(\frac{P_3^*}{P_3}) \end{pmatrix} = \begin{pmatrix} -1 & \frac{\eta_{12}}{\varepsilon_{S1}-\eta_{11}} & \frac{\eta_{13}}{\varepsilon_{S1}-\eta_{11}} \\ \frac{\eta_{21}}{\varepsilon_{S2}-\eta_{22}} & -1 & \frac{\eta_{23}}{\varepsilon_{S2}-\eta_{22}} \\ \frac{\eta_{31}}{\varepsilon_{S3}-\eta_{33}} & \frac{\eta_{32}}{\varepsilon_{S3}-\eta_{33}} & -1 \end{pmatrix}^{-1} \begin{pmatrix} 0 \\ \frac{-\varepsilon_{S2}}{\varepsilon_{S2}-\eta_{22}}\ln(\frac{P_2^{S\#}}{P_2}) \\ 0 \end{pmatrix} \tag{12}$$

The equation above assumed that the determinant of the matrix is not zero.

$$\det A = \begin{vmatrix} -1 & \dfrac{\eta_{12}}{\varepsilon_{S1}-\eta_{11}} & \dfrac{\eta_{13}}{\varepsilon_{S1}-\eta_{11}} \\ \dfrac{\eta_{21}}{\varepsilon_{S2}-\eta_{22}} & -1 & \dfrac{\eta_{23}}{\varepsilon_{S2}-\eta_{22}} \\ \dfrac{\eta_{31}}{\varepsilon_{S3}-\eta_{33}} & \dfrac{\eta_{32}}{\varepsilon_{S3}-\eta_{33}} & -1 \end{vmatrix} \neq 0$$

The possibility that either $\varepsilon_{Si} - \eta_{ii} = 0$ or that $\det A = 0$ cannot be excluded although these are unlikely outcomes. In the event that these values did obtain, some modifications to the above analysis would be necessary.

Validating the Model: reproducing COMPAS model results

Various versions of the COMPAS model are available from Francois and Hall (1998), including:

1) Price Dumping Model,
2) Cost Dumping Model,
3) Subsidy Model, and
4) Tariff Model.

To demonstrate the consistency of our model with the COMPAS model, we consider first the price dumping model.

The definition of a dumping margin is as follows (Boltuck et al. 1991:155):

$$DM = \frac{FV - P}{P}$$

where: DM is the dumping margin (%),
FV is "fair value" (price without dumping)
P is dumped price.

Therefore with dumping distortion, we get the price as follows:

$$P = \frac{FV}{1+DM}$$

Without consideration of domestic tariff rate or transportation costs, we can introduce this distortion directly as follows:

$$P_2^{S\#} = \frac{P_2}{1+DM}$$

$$\begin{pmatrix} \ln(\frac{P_1^*}{P_1}) \\ \ln(\frac{P_2^*}{P_2}) \\ \ln(\frac{P_3^*}{P_3}) \end{pmatrix} = \begin{pmatrix} -1 & \frac{\eta_{12}}{\varepsilon_{S1}-\eta_{11}} & \frac{\eta_{13}}{\varepsilon_{S1}-\eta_{11}} \\ \frac{\eta_{21}}{\varepsilon_{S2}-\eta_{22}} & -1 & \frac{\eta_{23}}{\varepsilon_{S2}-\eta_{22}} \\ \frac{\eta_{31}}{\varepsilon_{S3}-\eta_{33}} & \frac{\eta_{32}}{\varepsilon_{S3}-\eta_{33}} & -1 \end{pmatrix}^{-1} \begin{pmatrix} 0 \\ \frac{-\varepsilon_{S2}}{\varepsilon_{S2}-\eta_{22}} \ln(\frac{P_2^{S\#}}{P_2}) \\ 0 \end{pmatrix}$$

From this equation, as shown in Appendix Table 1, we obtain the same results as Francois and Hall (1998).

To demonstrate consistency with the COMPAS tariff model, we introduce tariffs into our model. If we put the tariff in country 2 at the rate t %, then the price of imports from country 2 at the domestic country can be written as follows:

$$P_2^{S\#} = (1+t)P_2$$

Francois and Hall (1998) deal with two countries in their tariff model; accordingly, we derive the equation as follows. The consistency of results with the COMPAS model is demonstrated in Appendix Table 2

$$\begin{pmatrix} \ln(\frac{P_1^*}{P_1}) \\ \ln(\frac{P_2^*}{P_2}) \end{pmatrix} = \begin{pmatrix} -1 & \frac{\eta_{12}}{\varepsilon_{S1}-\eta_{11}} \\ \frac{\eta_{21}}{\varepsilon_{S2}-\eta_{22}} & -1 \end{pmatrix}^{-1} \begin{pmatrix} 0 \\ \frac{-\varepsilon_{S2}}{\varepsilon_{S2}-\eta_{22}} \ln(\frac{P_2^{S\#}}{P_2}) \end{pmatrix}$$

Validating the model: comparison to COMPAS model results developed for the Byrd Amendment arbitration.

On November 11, 2004, seven countries (Canada, Japan, EU, Mexico, Brazil, India and Korea—the "Requesting Parties")[5] requested authorization from the WTO to suspend concessions to the United States for its failure to comply with the WTO's recommendation that the United States withdraw the Continuing Dumping and Subsidy Offset Act (CDSOA). In the course of the arbitration, the United States provided analysis describing the trade effects of the CDSOA disbursement in various goods sectors (WTO 2004:28).

For the purposes here, we consider the analysis of the effect of the CDSOA disbursement on Canadian alloy magnesium exports to the US market. In this case, the trade policy measure in question is equivalent to a domestic subsidy.

For this application, the partial equilibrium equation (12) can be written as follows:

$$\begin{pmatrix} \ln(\frac{P_1^*}{P_1}) \\ \ln(\frac{P_2^*}{P_2}) \\ \ln(\frac{P_3^*}{P_3}) \end{pmatrix} = \begin{pmatrix} -1 & \frac{\eta_{12}}{\varepsilon_{S1}-\eta_{11}} & \frac{\eta_{13}}{\varepsilon_{S1}-\eta_{11}} \\ \frac{\eta_{21}}{\varepsilon_{S2}-\eta_{22}} & -1 & \frac{\eta_{23}}{\varepsilon_{S2}-\eta_{22}} \\ \frac{\eta_{31}}{\varepsilon_{S3}-\eta_{33}} & \frac{\eta_{32}}{\varepsilon_{S3}-\eta_{33}} & -1 \end{pmatrix}^{-1} \begin{pmatrix} \frac{-\varepsilon_{S1}}{\varepsilon_{S1}-\eta_{11}}\ln(\frac{P_1^{S\#}}{P_1}) \\ 0 \\ 0 \end{pmatrix} \tag{13}$$

The suffix identifiers are in this application are as follows:

1 = domestic country (US);
2 = exporting country (Canada); and
3 = exporting country (Rest of the World).

[5] Chile joined the group December 7, 2004.

The domestic subsidies, by reducing costs for US domestic industry result in a price change that can be written as follows:

$$P_1^{S\#} = \frac{C}{S+C} \tag{14}$$

where: C represents the costs for production of the US domestic industry without subsidy; and

S is the subsidy paid by the government

In the Canadian 2001 case, C is assumed to be equal to the value of domestic shipments (US$158 million), while S was equal to US$687,716. So the price reduction can be calculated as being about 0.435%. The model parameters provided by the United States were as follows:

Key parameters, Alloy Magnesium from Canada, 2001	
elasticity of substitution	5
elasticity of domestic supply to US market	7.5
elasticity of Canadian import supply to US market	100
elasticity of other countries import supply to US market	10
aggregate elasticity of demand	-0.875

As we can see in Appendix Table 3, the trade effect produced by the model with the above assumptions is a reduction of Canadian exports by US$ 342,357.

It is of interest to compare the results of the above calculation with the model submitted by the Requesting Parties to the arbitrator (WTO 2004:27).

$$\Delta V_m = \left(\frac{\Delta Q_m / Q_m}{\Delta P_d / P_d}\right) * (\Delta P_d * Q_d) * \left(\frac{P_m Q_m}{P_d Q_d}\right) \tag{15}$$

where: ΔV_m is the reduction in value of imports,

ΔQ_m : reduction in quantity of imports,

Q_m : quantity of imports,

ΔP_d : reduction in domestic shipment price,

P_d : domestic shipment price,

Q_d : quantity of domestic shipment,

P_m : import price.

The arbitrator determined that the Requesting Parties' model should be modified by adding a term to capture the less-than-100 percent pass through of the CDSOA disbursements into the offer price of US suppliers (WTO 2004:33). Taking into account the pass-through effect, equation (15) can be written as follows:

$$\Delta V_m = \eta * \alpha S * R \tag{16}$$

where: $\eta = \dfrac{\Delta Q_m / Q_m}{\Delta P_d / P_d}$: the elasticity of substitution,

α is the rate of pass through of the subsidy to prices

$S = \Delta P_d * Q_d$: the total value of payments,

$R = \dfrac{P_m Q_m}{P_d Q_d}$: the ratio of the value of imports to the value of domestic shipments in the markets in question.

At a glance, the modified Requesting Parties model (16) appears to be quite different from the partial equilibrium model developed earlier or the COMPAS model on which it is based. What is the difference between them? In order to reconcile these models, we use our model (13) and reduce the number of countries from three to two. Thus, we rewrite (13) as follows,

$$\begin{pmatrix} \ln(\frac{P_1^*}{P_1}) \\ \ln(\frac{P_2^*}{P_2}) \end{pmatrix} = \begin{pmatrix} -1 & \frac{\eta_{12}}{\varepsilon_{S1} - \eta_{11}} \\ \frac{\eta_{21}}{\varepsilon_{S2} - \eta_{22}} & -1 \end{pmatrix}^{-1} \begin{pmatrix} \frac{-\varepsilon_{S1}}{\varepsilon_{S1} - \eta_{11}} \ln(\frac{P_1^{S\#}}{P_1}) \\ 0 \end{pmatrix}$$

Assuming the initial prices to be unitary, we derive the change in the value of imports as follows:

$$\ln(\frac{V_2^*}{V_2}) = -\frac{(\varepsilon_{S2} + 1)\varepsilon_{S1}\eta_{21}}{\eta_{12}\eta_{21} - (\varepsilon_{S1} - \eta_{11})(\varepsilon_{S2} - \eta_{22})} \ln(P_1^{S\#}) \tag{17}$$

Assuming perfect competition in the initial stage, the cost of production of domestic producer is equal to the value of domestic shipments. So, with using (14) we can rewrite (17) as follows:

$$\ln(\frac{V_2^*}{V_2}) = \eta_{agg} \ln(\frac{V_1 + \alpha S}{V_1}) \tag{18}$$

where $\eta_{agg} = \dfrac{(\varepsilon_{S2}+1)\varepsilon_{S1}\eta_{21}}{\eta_{12}\eta_{21} - (\varepsilon_{S1}-\eta_{11})(\varepsilon_{S2}-\eta_{22})}$

Finally, we apply the Taylor expansion to (18) to derive the following expression:

$$\Delta V_2 = \eta_{agg} * \frac{\alpha S}{V_1} * V_2 + \eta_{agg} * (\eta_{agg} - 1) * \frac{(\frac{\alpha S}{V_1})^2}{2!} * V_2 + \cdots \tag{19}$$

Comparing with (16) and (19), and taking into account the fact that $\eta = \eta_{agg}$ and $R = \dfrac{V_2}{V_1}$,

we can conclude that the Requesting Parties' model (3-4) is in fact the first order approximation of our model or COMPAS.

Conclusion

As this Chapter shows, the partial equilibrium model developed comes from the same theoretical background as does the COMPAS model. The difference is the way the equations are solved. COMPAS uses Cramer's Rule; the approach taken here relies on the inverse matrix directly.

As a trial empirical analysis, the results are validated by reproducing the COMPAS-based estimates of trade effects calculated by the United States in the Byrd Amendment arbitration. As well, the relationship between the partial equilibrium model developed here, based on COMPAS, and the model used by the arbitrator in Byrd Amendment is set out.

The theoretical framework for the partial equilibrium model is straightforward. It is a simple matter to add additional countries for analytical purposes. And the model can be edited freely. That being said, the difficulties of applying the model in novel situations where the parameters of the model must be estimated from actual data should not be underestimated. However, as the United States stated (WTO 2004:25), "The fact that an exercise is complex, tedious, or even burdensome does not mean it can be dispend with." As practitioners in the trade policy field, we officers should brush up our literacy about economic models. I wish this paper can make a contribution for that purpose.

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Appendix Table 1: Price Dumping Model (reproducing COMPAS model result #1)

Partial Equilibrium Model for Domestic (country l)

Inputs

Output

Inputs (Elasticities)

Elasticities of substitution

Country	1	2	3
1	-	**3**	**3**
2	3	-	**3**
3	3	3	-

Elasticities of supply to demand market

Country	1	2	3
	5	**10**	**10**

Aggregate Elasticities of demand **-0.5**

Inputs (Market Data - initial state)

Country	Import Price (F.O.B)	Transaction Cost	MFN	Market Price
1	N.A.	N.A.	N.A.	**1**
2	**1**	**0%**	**0%**	1
3	**1**	**0%**	**0%**	1

Country	Quantity	Share of Quantity	Market Value (F.O.B)	Share of Value
1	113,142,857	55%	$113,142,857	55%
2	72,000,000	35%	$72,000,000	**35%**
3	20,571,429	10%	$20,571,429	**10%**
Sum	205,714,286	100%	$205,714,286	100%

Inputs (Market Distortion for supply side - offering state)

Country	Price Dumping Rate	Transaction Cost	Cost Dumping (NG)	Subsidy
1	**0%**	**0%**	**0%**	**0%**
2	20%	30%	0%	0%
3	0%	30%	0%	0%

Country	Tariff(Tax)	Price Change
1	**0%**	100.00%
2	**0%**	86.67%
3	**0%**	100.00%

Calibration

Own elasticities of domestic demand

Country	1	2	3	Own elasticities
1	-0.275	1.050	0.300	-1.625
2	1.650	-0.175	0.300	-2.125
3	1.650	1.050	-0.050	-2.750

Cross elasticities of domestic demand

Country	1	2	3
1	-	0.875	0.250
2	1.375	-	0.250
3	1.375	0.875	-

Equation

From Demand change

-1.000	0.132	0.038
0.113	-1.000	0.021
0.108	0.069	-1.000

Inverse Matrix

-1.020	-0.138	-0.041
-0.118	-1.017	-0.025
-0.118	-0.085	-1.006

From Supply change

0.000
0.118
0.000

Solution

Ln(P1*/P1)	-1.6%
Ln(P2*/P2)	-12.0%
Ln(P3*/P3)	-1.0%
Ln(Q1*/Q1)	-8.1%
Ln(Q2*/Q2)	23.0%
Ln(Q3*/Q3)	-10.0%
Ln(V1*/V1)	-9.7%
Ln(V2*/V2)	11.0%
Ln(V3*/V3)	-11.0%

Percentage Change (Same as estimated impacts in Francois and Hall 2003)

P1	-1.6%
P2	-11.3%
P3	-1.0%
Q1	-7.8%
Q2	25.9%
Q3	-9.5%
V1	-9.3%
V2	11.7%
V3	-10.4%

Appendix Table 2: Tariff Model (reproducing COMPAS model result #2)

Partial Equilibrium Model for Domestic (country l)

Inputs

Output

Inputs (Elasticities)

Elasticities of substitution

Country	1	2	3
1	-	**3**	**3**
2	3	-	**3**
3	3	3	-

Elasticities of supply to demand market

Country	1	2	3
	5	**10**	**10**

Aggregate Elasticities of demand	**-0.5**

Inputs (Market Data - initial state)

Country	**Import Price (F.O.B)**	**Transaction Cost**	**MFN**	**Market Price**
1	N.A.	N.A.	N.A.	**1**
2	**1**	**0%**	**0%**	1
3	**1**	**0%**	**0%**	1

Country	**Quantity**	**Share of Quantity**	**Market Value (F.O.B)**	**Share of Value**
1	1,000,000,000	50%	$1,000,000,000	50%
2	1,000,000,000	50%	$1,000,000,000	50%
3	-	0%	-	0%
Sum	2,000,000,000	100%	$2,000,000,000	100%

Inputs (Market Distortion for supply side - offering state)

Country	**Price Dumping Rate**	**Transaction Cost**	**Cost Dumping (NG)**	**Subsidy**
1	**0%**	**0%**	**0%**	**0%**
2	**0%**	**0%**	**0%**	**0%**
3	**0%**	**0%**	**0%**	**0%**

Country	**Tariff(Tax)**	**Price Change**
1	**0%**	100%
2	**10%**	110%
3	**10%**	110%

Calibration

Own elasticities of domestic demand

Country	1	2	3	Own elasticities
1	-0.25	1.50	0	-1.75
2	1.50	-0.25	0	-1.75
3	1.50	1.50	0	-3

Cross elasticities of domestic demand

Country	1	2	3
1	-	1.25	0
2	1.25	-	0
3	1.25	1.25	-

Equation

From Demand change

-1.000	0.185	0
0.106	-1.000	0
0.096	0.069	-1.000

Inverse Matrix

-1.020	-0.189	0
-0.109	-1.020	0
-0.109	-0.116	-1

From Supply change

0
-0.081
-0.073

Solution

Ln(P1*/P1)	1.5%
Ln(P2*/P2)	8.3%
Ln(P3*/P3)	8.3%
Ln(Q1*/Q1)	7.7%
Ln(Q2*/Q2)	-12.6%
Ln(Q3*/Q3)	-12.6%
Ln(V1*/V1)	9.2%
Ln(V2*/V2)	-4.3%
Ln(V3*/V3)	-4.3%

<u>Percentage Change (Same as estimated impacts in Francois and Hall 2003)</u>

P1	1.5%
P2	8.6%
P3	8.6%
Q1	8.0%
Q2	-11.8%
Q3	-11.8%
V1	9.6%
V2	-4.2%
V3	-4.2%

Appendix Table 3: Model for the Byrd Amendment arbitration (reproducing COMPAS model result #3)

Partial Equilibrium Model for Domestic (country l)

Inputs

Output

Inputs (Elasticities)

Elasticities of substitution

Country	1	2	3
1	-	**5**	**5**
2	5	-	**5**
3	5	**5**	-

Elasticities of supply to demand market

Country	1	2	3
	7.5	**100**	**10**
Aggregate Elasticities of demand			**-0.875**

Inputs (Market Data - initial state)

Country	**Import Price (F.O.B)**	**Transaction Cost**	**MFN**	**Market Price**
1	N.A.	N.A.	N.A.	**1**
2	**1**	**0%**	**0%**	1
3	**1**	**0%**	**0%**	1

Country	**Quantity**	**Share of Quantity**	**Market Value (F.O.B)**	**Share of Value**
1	158,000,000	54%	$158,000,000	54%
2	44.769,000	15%	$44.769,000 (b)	15%
3	88,202,000	30%	$88,202,000	30%
Sum	290,971,000	100%	$290,971,000	100%

Inputs (Market Distortion for supply side - offering state)

Country	**Price Dumping Rate**	**Transaction Cost**	**Cost Dumping (NG)**	**Subsidy**
1	**0%**	**0%**	**0%**	**.435%**
2	**0%**	**0%**	**0%**	**0%**
3	**0%**	**0%**	**0%**	**0%**

Country	**Tariff(Tax)**	**Price Change**
1	**0%**	99.57%
2	**0%**	100%
3	**0%**	100%

Calibration

Own elasticities of domestic demand

Country	1	2	3	Own elasticities
1	-0.475	.769	1.516	-2.760
2	2.715	-0.135	1.516	-4.365
3	2.715	.769	-.265	-3.7495

Cross elasticities of domestic demand

Country	1	2	3
1	-	0.635	1.250
2	2.240	-	1.250
3	2.240	0.635	-

Equation

From Demand change

-1.000	0.062	0.122
0.021	-1.000	0.012
0.163	0.046	-1.000

Inverse Matrix

-1.022	-0.069	-0.125
-0.024	-1.002	-1.015
-0.168	-0.058	-1.021

From Supply change

0.003
0
0

Solution

Ln(P1*/P1)	0.3%
Ln(P2*/P2)	0.0%
Ln(P3*/P3)	-0.1%
Ln(Q1*/Q1)	0.8%
Ln(Q2*/Q2)	-0.8%
Ln(Q3*/Q3)	-0.5%
Ln(V1*/V1)	0.5%
Ln(V2*/V2)	-0.8%
Ln(V3*/V3)	-0.6%

Percentage Change (Same as estimated impacts in Francois and Hall 2003)

P1	**-0.3%**
P2	**0.0%**
P3	**-0.1%**
Q1	**0.8%**
Q2	**-0.8%**
Q3	**-0.5%**
V1	**0.5%**
V2	**-0.8%**
V3	**-0.6%**

After Distortion (Trade Values etc.)

P1*	0.9968
P2*	0.9999
P3*	0.9995
Q1*	159,307,491
Q2*	44,430,020
Q3*	87,733,977
V1*	158,791,477
V2*	44,426,643 (b)
V3*	87,687,311

Memo: Reduction = (a) – (b) = $342,357

Trade Specialization in the Gravity Model of International Trade

Dan Ciuriak and Shinji Kinjo*

Introduction

The gravity model of international trade has become one of the standard tools for analyzing trade patterns and trade. In its usual modern articulation, the gravity model hypothesizes that the larger, the richer, the closer together two countries are, the more they trade. And they trade more intensively the more things they have in common, such as currency, language, shared political histories or colonial connections, a border, etc.. Coastal states trade more than landlocked states because they connect more easily. Standard gravity models explain about two-thirds of the variation in global trade, leaving only one-third to be explained by other trade theories.

One criticism of the gravity model is that it takes no account of comparative advantage, which still forms the bedrock of economists' understanding of international trade. This critique is particularly important when the gravity model is considered for policy applications such as identifying priority markets for trade promotion programs. For example, the potential for trade expansion through programs to reduce the impact of various types of "frictions" that impede trade might be greater with countries that have complementary patterns of comparative

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advantage, as opposed to with countries with similar patterns of comparative advantage.

To address this problem, we introduce a trade specialization variable into a gravity model to capture the degree of complementarity of trading partners' comparative advantage. This short paper describes the test of this thesis.

Our general findings are as follows. The trade specialization index clearly distinguishes countries that are generally believed to be "most similar" from those that are believed to "most different". Its explanatory power in the gravity equation is good, comparing well with other established variables and it improves the overall goodness of fit of the gravity equation. It thus appears to be a useful addition to the gravity model toolkit. At the same time, it still leaves a large residual unexplained variation that weakens the gravity model's utility for some policy applications.

The balance of this note is organized as follows: the next section describes the construction of the trade specialization index that captures the degree of complementarity of two trading partner's comparative advantage, and of the gravity model developed to test this variable. The third section comments on the results of the estimation. The final section provides some concluding comments.

Capturing comparative advantage in a gravity model

From a practical perspective in applying the gravity model, it is of interest to take explicit account of comparative advantage. A well-established empirical approach to describing a country's comparative advantage is to infer it from the commodity structure of the country's trade. A variety of indexes have been established for this purpose; for our purposes, the most intuitively appealing measure is the Trade Specialization Index (TSI). This is defined as net exports (exports minus imports) in a given sector divided by total two-way trade in that sector. The range of this variable is from 1 if a country only exports in a given sector to –1 if it only imports in that sector.

We calculate a country's TSI for each sector defined at the 2-digit HS code level. We then calculate the simple correlation coefficient between two trading partner's TSIs. This variable can take values from 1 if the TSIs are identically distributed over the various sectors, to –1 if the TSIs are perfectly negatively correlated. Pairs that have an TSI correlation in positive territory would tend to be natural competitors in international trade while those in negative territory would tend to be natural trading partners, according to the principle of comparative advantage.

The pattern of TSI correlation corresponds well to general notions of similarity and dissimilarity of economies. For Canada, the most similar country is Australia with an TSI correlation of 0.57. A highly dissimilar country is China with an TSI correlation of -.39.

Table 1
Trade Specialization Correlation: Canada an its trading partners

Partner Country	RCA2004
Australia	0.57
Russia	0.51
Argentina	0.44
Norway	0.42
Finland	0.41
Chile	0.40
South Africa	0.40
Iceland.	0.34
Venezuela	0.31
Sweden	0.31
United States	0.29
New Zealand	0.29
Denmark	0.23
Luxembourg	0.22
Peru	0.17
Brazil	0.15
Poland	0.15
Greece	0.14

Netherlands	0.14
France	0.12
United Kingdom	0.11
Colombia	0.10
Germany	0.06
Austria	0.06
Ireland	0.05
Singapore	0.03
Belgium	0.01
Spain	0.00
Turkey	-0.04
Korea	-0.05
Sri Lanka	-0.08
Portugal	-0.12
Mexico	-0.14
Malaysia	-0.15
Japan	-0.15
Philippines	-0.15
Thailand	-0.19
Switzerland	-0.20
India	-0.24
Indonesia	-0.24
Hong Kong	-0.29
Taiwan	-0.31
China	-0.39
Italy	-0.40

To test the explanatory power of this variable, we apply a standard gravity equation to a reduced set of countries, choosing the 44 largest trading economies (with the exception of Taiwan, for which the full set of gravity model data was not readily available). The gravity equation that we estimate is as follows:

$$\ln F_{ij} = const. + \ln D_{ij} + ComLang_{ij} + Landlocked_i + Landlocked_j + RCA_{ij} + RTA01_{ij} + RTA02_{ij} + RTA03_{ij} + \ln GDP_i + \ln GDP_j + \ln Area_i + \ln Area_j + \varepsilon_{ij} \quad \text{(eq.1)}$$

where

F_{ij} : amount of trade (export + import) between i and j.

D_{ij} : distance from i to j.

ComLang: Common Language (when at least 9% of popul-tion of both countries uses same language, then unit, other-wise the variable takes the value zero.)

Landlocked: If country i or j has no coast, then unit, otherwise zero.

RCA: the correlation of a trading pair's trade specialization indexes, as a measure of the degree of complementary of their respective revealed comparative advan-tage.

GDP: GDP (at current price in USD millions)

RTA_{ij} : Regional Trade Agreement between countries i and j

RTA01: Free Trade Agreement and Service Agreement with EFTA.

RTA02: ASEAN Free Trade Area

RTA03: General System of Trade Preferences among de-veloping countries.

$Area_i$: area of country i or j

The sources for the data used to estimate the model are set out in Table 2.

Table 2
Sources of data

Variable	Unit	Source
F	million USD	World Trade Atlas
D	km	cepii
comlang_ethno	dummy	cepii
Landlocked	dummy	cepii
Area	km2	cepii
GDP	million USD	UN
RCA2002	-	Ciuriak and Kinjo (2005)*
RTA0x	dummy	WTO

* based on trade data from World Trade Atlas

Results

Using 2002 data, we obtain the following regression result (see Table 3).

Table 3
The result of estimation

Variables	Coefficient	t-value
Log Distance	-0.80	-27.77
Common Language	0.79	10.32
Landlocked Importer	-0.47	-4.43
Landlocked Exporter	-0.69	-6.56
RCA	-0.49	-4.13
RTA01	-1.85	-4.26
RTA02	1.70	6.55
RTA03	0.48	5.60
Log Exporter GDP	0.95	46.99
Log Importer GDP	1.00	49.52
Log Area of Importer	-0.08	-6.49
Log Area of Exporter	-0.13	-10.57
Summary statistics		
Constant	-34.89	
Number of observations	1880	
R^2	0.80	
Root MSE	1.058	

The coefficients of distance and GDP have the usual high level of significance found in other gravity models. Other variables have the right sign and, as typical of gravity models, a good level of significance. As we can see, the variable constructed to capture the complementarity of a pair of trading partner's trade patterns (RCA) has a reasonably good level of significance, as well. Overall, the model fits very well, with an R^2 of .80.

Nonetheless, the RCA variable reduces the amount of unexplained variation by less than might be hoped for, given the expected importance of comparative advantage in shaping global trade flows. Table 4 highlights this; it compares the estimated level of two-way trade between Canada and each partner country with actual trade. The difference ("over-trading" if actual trade exceeds estimated trade, and "under-trading" if the reverse holds) can be contrasted with the pattern of RCA complementarity or similarity. Trading partners with complementary patterns of comparative advantage are shaded. As can be seen, most of Canada's trading partners with complementary trade patterns "over-trade" and are clustered at the top of the table; they account for the most intense degree of over-trading and the bulk of the volume. Conversely, those countries that "under-trade" tend to have similar trade patterns. This suggests that perhaps more of the variation could be explained by comparative advantage in a more refined model.

Table 4
Comparison between the result of estimation and actual trade volume in 2002, millions of US dollars or percent

Trade partner	Estimated level of two-way trade	Actual level of two-way trade (a)	Over- or under-trading (b)	Percentage over- or under-trading (b)/(a)
China	3,194	12,828	9,635	75%
Mexico	4,357	9,654	5,297	55%
Japan	11,544	15,148	3,604	24%
Norway	780	3,124	2,344	75%
Malaysia	250	1,600	1,349	84%
Thailand	363	1,470	1,107	75%

Korea	3,496	4,385	889	20%
Australia	1,181	1,841	660	36%
Venezuela	544	1,132	588	52%
Indonesia	378	928	550	59%
Brazil	1,256	1,702	446	26%
Sweden	939	1,367	428	31%
Chile	200	606	406	67%
Philippines	517	907	390	43%
New Zealand	297	489	191	39%
Austria	620	796	177	22%
Singapore	829	996	167	17%
Finland	493	633	140	22%
Peru	233	294	61	21%
Denmark	884	912	28	3%
Sri Lanka	56	84	28	33%
South Africa	458	473	15	3%
Luxembourg	94	108	13	12%
Iceland	62	69	7	11%
Colombia	474	469	-4	-1%
Argentina	259	234	-26	-11%
Netherlands	2,199	2,067	-133	-6%
Turkey	656	427	-229	-54%
Ireland	1,686	1,340	-346	-26%
Russia	775	394	-381	-97%
Greece	542	161	-381	-237%
Hong Kong	1,828	1,403	-424	-30%
Poland	742	285	-458	-161%
Portugal	736	251	-485	-193%
Switzerland	2,258	1,295	-963	-74%
Germany	8,188	7,166	-1,022	-14%
Belgium	3,161	2,109	-1,052	-50%
India	2,914	1,276	-1,638	-128%
Spain	2,990	1,258	-1,732	-138%
Italy	5,803	3,777	-2,026	-54%
UK	15,591	9,027	-6,564	-73%
France	12,985	5,013	-7,972	-159%
United States	421,008	359,017	-61,991	-17%
Total	517,822	458,514	-59,308	-13%

Two things stand out from this table apart from the pattern of over- and under-trading compared to the model's predictions: the highest volume of under-trading is with the three countries with which Canada has had the closest historical relationship, the UK, France and the United States. Meanwhile, China, which puts the gleam in the eye of those looking for greater diversification of Canada's trade already accounts for a much larger share of Canada's trade than would be expected given the kinds of factors that gravity models take into account..

Conclusion

The gravity model is one of the most empirically successful models in the economic toolkit. It serves to emphasize the importance of geography, both physical and human, in shaping the pattern of global economic interaction. Yet, by ignoring the most fundamental theory of trade, comparative advantage, it meets with skepticism in policy applications.

We have developed a way to augment the standard gravity model to take explicit account of comparative advantage using the correlation of trading partners' revealed comparative advantage. The results are intuitively plausible and statistically reasonably robust.

We believe this to be a practically useful development of the gravity model although admittedly one would have hoped for a greater reduction in the amount of unexplained variation in trade patterns from integrating comparative advantage into the gravity model.

The Role of Embassies and Consulates in Promoting Trade: Does Economic Freedom in the Host Economy Matter?

Dan Ciuriak and Shinji Kinjo*

Introduction

Are exports systematically associated with diplomatic representation abroad? Given the expenses of maintaining posts abroad, this question is obviously of deep interest to governments seeking to promote their country's export performance while coping with budgetary pressures.[1] In a recent article, Andrew Rose found that, yes, posts abroad do systematically increase trade with each post adding 6-10 percent additional exports; the effect is non-linear, with the first post adding more and additional posts adding less, suggesting diminishing returns to representation.[2]

To be sure, Rose's findings represent only the opening salvo in what is undoubtedly going to be a hotly debated issue. There are many unanswered questions about how exactly these export promotion gains are made (which goes to the microeconomic question of what is the role of government in this activity). Moreover, the model used to generate these results, the so-called "gravity model" of inter-

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[1] For example, Canada's recent International Policy Statement set out ambitious targets for export growth in key emerging markets. How best to achieve these goals depends on the cost-effectiveness of alternative instruments of export promotion, one of which is the role of posts abroad.

[2] Andrew K. Rose, "The Foreign Service and Foreign Trade: Embassies as Export Promotion", *NBER Working Paper* No. 11111, February 2005.

national trade, although gaining increasing acceptance in theoretical terms, is only starting to gain standing in policy debates. A lot of people will need convincing before strategic decisions are made on the basis of this model's predictions.

Yet, the success of the gravity model in explaining the general pattern of global trade cannot be ignored and the desire to ground policy decisions in empirical research is intensifying. As an additional tool in a trade ministry's toolkit, its value needs to be better understood.

In this spirit, we take up a question that immediately arises with Rose's thesis: does it matter whether the host economy is economically "free", in the sense that the host government intervenes little in economic decision making? This question is salient for an understanding of *how* posts abroad affect exports: do they serve primarily to help would-be exporters connect with private sector purchasers abroad (i.e., a "networking" role), or do they serve also or even mainly to reduce red-tape associated with government intervention in economic decisions abroad?

To investigate this question, we construct a variable for representation abroad weighted by an index of economic freedom. We find that, using the same data base as Rose, the value of an additional post in an economically less free economy (e.g., China) is worth more in terms of a percentage increase in exports than one in a freer economy (e.g., New Zealand). Encouragingly, this specification of the foreign post variable improves the overall goodness of fit of the conventional gravity equation and increases the significance level of the parameter for posts. We conclude that, all else being equal (which in this instance is a particularly important stipulation, especially as regards the size of the foreign economy), the value of a post abroad is to some extent based on the role of the foreign service in smoothing the interface with foreign governments, over and above any role the post might have in developing private-private networking.

The balance of this Chapter is organized as follows. The next section sets out the basis on which trade promotion programs implemented by posts abroad are understood to promote exports to motivate the analytical distinction between trade facilitation in the private-to-government dimension versus in the private-to-private dimension. The third section describes briefly the construction of the variable to test this distinction. The fourth section describes the results of the experiment. The fifth section provides some concluding comments.

Situating Trade Promotion in an Economic Framework

International business development activities can be situated in a standard trade theoretical framework. Analysis shows that there exists a strong "home bias" in commerce: commercial transactions across borders are much less likely than within national borders.[3] Home bias is explained by the presence of frictional costs of conducting international commerce, including transport costs, tariffs, non-tariff barriers and others. The business of international business development is essentially the reduction or removal of various types of frictional costs.

The kinds of activities that first come to mind when thinking about facilitation of international commerce address costs embedded in the institutional setting that can be and are addressed by the private sector:

- export financing and risk management, which are addressed by banks;
- contractual aspects of international commercial transactions, which are addressed by legal firms;
- information brokerage, which is provided by various types of consultancies; and
- the deepening of business networks through, for example, sectoral conferences/trade fairs, which are organized by industry associations and other private agents.

Government involvement in these areas thus requires that a *prima facie* case be made that some degree of market failure exists. The *prima facie* case is based on the following:

- The observed "home bias" in commercial transactions is larger than can reasonably be explained by standard economic explanations.

[3] The seminal paper in this regard was by John McCallum, "National Borders Matter: Canada-US Regional Trade Patterns." *American Economic Review* No. 3 (1995): 615-623.

- The commercial supply of international business facilitation is likely to be restricted by the same costs that deter international trade in goods and services. In a context of high entry costs, industry structure tends towards fewer large suppliers and higher prices than would be observed in a competitive market. In other words, there is an expectation of an undersupply of private sector facilitation for international business.
- There are positive externalities to an economy from its firms becoming exporters. For example, market knowledge spillovers can bring other home country firms into a market pioneered by one firm. The pioneer firm does not capture these benefits but the home economy more broadly does.
- The archetypal multinational enterprise today is a medium-sized firm with plants and technology partners in several countries selling highly specialized products, with sales in the tens of millions but a large share of the world market.[4] For SMEs, entry costs to the global market are high relative to their resources, which implies that high international market entry costs would be a deterrent at the margin.

On the basis of these arguments, the extensive engagement of government in facilitating international commerce can thus be readily understood. The tools available to government in this set of activities include principally:

- export financing agencies, which fill gaps in export finance, risk management tools, and market intelligence concerning country risk and sectoral trends;
- trade promotion officers, who administer domestic programs to help domestic companies get export ready, and when posted abroad provide local market intelligence and facilitate the development of business-to-business and business-to-government contacts for trade, investment and innovation.

Some costs to international commerce, such as those imposed by government policies, can be addressed through negotiated agree-

[4] See Peter F. Drucker, "Trading Places", *The National Interest*, Spring 2005; available on-line at http://www.nationalinterest.org.

ments, either multilaterally through the World Trade Organization or through bilateral or regional free trade agreements (FTAs), and a number of similar instruments such as: bilateral air service agreements (BASAs) which expand trade in air transport services and can thus facilitate international commerce; foreign investment protection agreements (FIPAs) which establish minimum levels of protection for foreign investors against expropriation etc.; and bilateral taxation agreements which remove tax impediments to bilateral investment flows (e.g., double taxation).

Some costs to international commerce are embedded in the institutional and infrastructural context in which commerce takes place. The tools available to the government in these areas of facilitation of international commerce tend to apply primarily to their own domestic economies as opposed to the environment abroad. Actions in this area include measures to improve efficiency of airports, ports and borders in general by reducing red tape in customs procedures, the procedures governing movement of persons and regulatory obstacles to trade. Although it is a bit of stretch, posts could even play a role in some of these areas; for example, in highlighting to domestic agencies unnecessary costs imposed on their host country's business travellers or students applying to their home country's schools. Subsequent action to reduce such costs can directly or indirectly facilitate two-way trade.

And finally there is the concept of the overarching political "relationship" between the two countries. There are various ways in which a well-maintained diplomatic relationship can reduce costs of doing international business.

(a) Building political capital: Developing a friendly political relationship (e.g., support for partners' agendas in areas important to them) can facilitate initiatives to deepen bilateral economic relationships through agreements such as FTAs, etc.
(b) Advocacy: more general diplomatic efforts and advocacy in support of trade deepening to deepen understanding of the benefits of trade can work in the same direction.
(c) Reducing political risk: political risk is a deterrent to companies contemplating international business, whether in committing the capital to develop export markets and/or in investing in a foreign country. Particularly in countries which are less "economically free" and where governments influence business decisions, culti-

vating a good working political relationship can in principle reduce political risk for private firms.

(d) Resolving bilateral irritants: Although trade disputes are launched by private actors, a good political relationship can facilitate the working out of issues underlying trade disputes, including assuring timely completion of regulatory agency procedures necessary to resolve disputes.

The linkages between diplomatic presence and export performance are thus potentially wide-ranging and often indirect. And it is possible that the less visible indirect roles may be even more powerful than the obvious business client-oriented services for exporters if the latter are in fact displacing private sector support rather than complementing it.

One way to shed light on the relative importance of the alternative channels through which posts influence export performance is to consider the degree of economic freedom in the partner country. Arguably, the less economically "free" a country is, the greater the importance assumed by the political relationship and the government-to-government elements of trade facilitation. The trade benefits of these latter elements would be an "add-on" to the benefits from direct trade promotion that focuses on market intelligence, building networks etc.

Adjusting the diplomatic presence variable for economic freedom

We propose a simple adjustment to the variable describing the number of posts that a country has in its trading partner. We weight the posts index developed by Rose with the inverse of the economic freedom index (EFI) published by the Fraser Institute it is annual *Economic Freedom of the World Report.* The Fraser Institute defines economic freedom as "the extent to which one can pursue economic activity without interference from government. Economic freedom is built upon personal choice, voluntary exchange, the right to keep what you earn, and the security of your property rights."[5]

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[5] Fraser Institute website http://www.fraserinstitute.ca/economicfreedom/index.asp?snav=ef; accessed June 21, 2005.

Following Rose (2005:6) we estimate the following benchmark equation:.

$$\ln F_{ij} = const. + FM_{ij} / (EFI_j / Average(EFI_j)) + \ln D_{ij} + \ln GDPC_i + \ln GDPC_j$$
$$+ \ln POP_i + \ln POP_j + RTA_{ij} + CurrUni_{ij} + \ln Area_{ij} + ComLang_{ij} + Border_{ij}$$
$$+ Landlocked_i + Island_i + Colony_{ij} + \varepsilon_{ij}$$

(eq.1)

where

F_{ij} : is the amount of export from i to j.

FM_{ij} : Number of foreign missions of country i in country j.

EFI: Economic Freedom Index.

D_{ij} : distant from i to j.

GDPC: GDP per capita

POP: population

RTA_{ij} : Number of Regional Trade Agreement between i and j

CurrUni: Currency Union (When both countries have same currency, then unit, else zero.)

$Area_{ij}$: Power of areas of export country i and import one j

ComLang: Common Language (English) (When both countries use English, then unit, else zero.)

Border: Border sharing (When both countries share border, then unit, else zero.)

Landlocked: If export country has no sea shore, then unit, else zero.

Island: If export country has no land border, then unit, else zero.

Colony: If both country has colonial links with each other, then unit, else zero.

By construction, the EFI variable will imply a greater contribution to exports from a post in a less economically free country. The real test of the theory thus is whether the weighted posts index has a higher level of significance compared to the unweighted index and explains more of the variation in export performance.

The Results

We start with Rose's data, obtained from his website. Because the coverage of the Economic Freedom Index is limited to 123 countries, the number of observations is reduced.

First, we estimate a new benchmark equation, using Rose's data for the trimmed down data set covering 123 countries and using his foreign posts index without taking into account the degree of economic freedom.

Table 1
Benchmark results

Variables	Coefficient	t-value
Number of foreign missions	0.08	5.70
Log Distance	-0.56	-12.46
Log Exporter GDP per capita	0.88	31.04
Log Importer GDP per capita	0.92	52.82
Log Exporter Population	1.00	34.57
Log Importer Population	0.99	49.30
RTA	0.91	9.60
Currency Union	-0.58	-3.38
Log Product Area	-0.20	-16.64
Common Language	0.64	8.89
Land Border	1.02	6.40
Landlocked	-0.52	-11.11
Islands	-0.18	-5.01
Summary statistics		
Constant	-35.70	
Number of observations	2622	
R2	0.80	
Root MSE	1.259	

Second, we re-estimate the equation using the foreign posts index weighted by degree of economic freedom. These results are shown in Table 2. As can be seen, the explanatory power of the number of foreign missions, importer GDP and common language parameters is slightly increased; however the explanatory power of the remaining variables declines a little. The overall goodness of fit of the model is unchanged.

Table 2
Results with Foreign Posts Index weighted by Economic Freedom

Variables	Coefficient	t-value
Number of foreign missions modified with EFI	0.09	5.76
Log Distance	-0.56	-12.39
Log Exporter GDP per capita	0.88	30.86
Log Importer GDP per capita	0.93	53.96
Log Exporter Population	1.00	34.43
Log Importer Population	0.99	48.39
RTA	0.90	9.58
Currency Union	-0.57	-3.34
Log Product Area	-0.20	-16.64
Common Language	0.64	8.94
Land Border	1.00	6.29
Landlocked	-0.52	-11.08
Islands	-0.18	-4.98
Summary statistics		
Constant	-35.62	
Number of observations	2622	
R2	0.80	
Root MSE	1.260	

We noted some problems in Rose's data set as regards distance and common language. CEPII has alternative data. Distance is defined by the great circle distance between main cities, mainly meaning biggest population, of both countries; common language means the use of the same language, not only English, is used by both nations by at least 9% of each population. The estimation results using these alternative data are shown in Table 3.

Table 3
Re-estimation with CEPII data

Variables	Coefficient	t-value
Number of foreign missions	0.06	4.74
Log Distance (CEPII)	**-0.90**	**-22.49**
Log Exporter GDP per capita	0.87	32.69
Log Importer GDP per capita	0.92	56.25
Log Exporter Population	1.01	37.05
Log Importer Population	0.98	51.60
RTA	0.38	4.13
Currency Union	-0.60	-3.78
Log Product Area	-0.17	-14.50
Common Language (CEPII)	**0.72**	**10.70**
Land Border	0.36	2.37
Landlocked	-0.52	-11.82
Islands	-0.09	-2.74
Summary statistics		
Constant	-32.89	
Number of observations	2622	
R2	0.82	
Root MSE	1.181	

Compared to Table 1, significance level of each coefficient is higher except the coefficients for the number of foreign missions, RTA, product of area, border and islands. Both the impact and the significance level of distance and common language is increased and the overall goodness of fit of the model is also improved somewhat.

Finally, again, we re-estimate the equation using the foreign posts index weighted by degree of economic freedom. These results are shown in Table 4.

As can be seen, the explanatory power of some parameters, i.e., importer GDP per capita, RTA and common language increase. However, the explanatory power of the others declines marginally. As a result, the overall goodness of fit is unchanged.

Table 4
Re-estimation with CEPII data with Foreign Posts Index weighted by Economic Freedom

Variables	Coefficient	t-value
Number of Foreign Missions modified with EFI	0.07	4.49
Log Distance (CEPII)	**-0.89**	**-22.37**
Log Exporter GDP p/c	0.87	32.55
Log Importer GDP p/c	0.92	57.46
Log Exporter Population	1.01	36.92
Log Importer Population	0.98	50.82
RTA	0.38	4.15
Currency Union	-0.59	-3.73
Log Product Area	-0.17	-14.5
Common Language (CEPII)	**0.72**	**10.76**
Land Border	0.36	2.35
Landlocked	-0.52	-11.78
Islands	-0.09	-2.72
Summary Statistics		
Constant	-32.89	
Number of observations	2622	
R2	0.82	
Root MSE	1.181	

Conclusions

The degree of economic freedom in the partner country plays a statistically significant, if overall modest, role in determining the extent to which posts abroad contribute to a country's export performance. The less economically free a country is, the more important the role of posts.

While it is tempting to draw conclusions from these results about the relative value of an additional consulate in, say, China versus the United States, we would caution against drawing such conclusions on the basis of the present analysis for several reasons:

(a) First, the posts index does not reflect the number of personnel, including commercial officers, in posts abroad.

(b) Second, an additional post in a larger importer will be found to generate a larger volume of trade because the overall trading relationship is larger.
(c) Third, the likelihood of diminishing returns to additional posts is not taken into account. In point of fact, the predicted level of exports into a market in which a country has an unusually large number of posts (e.g., Canada's 20 posts in the United States [6] or Japan's similarly large number of posts, 18 in all, in the United States[7]) is much larger than actual exports.

Accordingly, more in-depth analysis of this issue is required to support such decisions. However, the present analysis does provide support for the proposition that the role of posts is more important in host countries which are less free economically. Thus, when it comes to two broadly similar markets in which a country has a similar number of posts, it is reasonable to conclude that an additional post in the economically less free market would give greater value in promoting exports.

[6] Department of Foreign Affairs and International Trade (DFAIT). (2005). *Canadian Government Offices in the U.S.* Retrieved June 23, 2005, from http://www.dfait-maeci.gc.ca/can-am/menu-en.asp?mid=1&cat=16

[7] Ministry of Foreign Affairs (MOFA), Japan. (2005). Zaigai Koukan List. (in Japanese). Retrieved June 23, 2005, from http://www.mofa.go.jp/mofaj/annai/zaigai/list/n_ame/usa.html

Multilateralism, the Club Scene or Entrepreneurial Activism? Choices in an Age of Change

John M. Curtis*

The contemporary discussion of the international institutional system engages, explicitly or implicitly, a range of extraordinarily broad themes. First, there are varying levels of dissatisfaction with the multilateral economic institutions conceived at Bretton Woods against a background of deep concern over the viability of the mother ship itself, the United Nations. Second, there is a search for new, intermediate institutional structures such as the "G-somethings" (or, at the national leaders' level, the "L-something") to act as catalysts or brokers on issues stalled at the multilateral level. Third, there is a concern over the ways and means for continued bilateral collaboration between friendly nations based on shared values, interests and obligations in global affairs.

This discussion is taking place in a context that brings together the political with the economic and the security dimensions of international relations in today's world. I should therefore ask for the reader's indulgence: the remarks below are somewhat speculative and necessarily in a personal rather than governmental capacity. My main messages are as follows:

First, Canada, one of the most open of the G-7 countries, has an uncommonly deep interest in maintaining a well-functioning global trading system and stable currency frame-

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works; by the same token, Canada, while playing only a limited role in the main imbalances and tensions in the international trade and finance systems, has a deep interest in being part of the solution intellectually and, to the extent possible, operationally.

Second, the traditional exclusive "club scene", flattering as it is to be a member, might not hold out the opportunities for medium-sized powers like Canada that it did in the past. For Canada, this reflects largely geo-economic inevitability. At the same time, there might be more life and promise in the club scene than many might believe, but primarily in the context of the multilateral institutions: I refer in particular to the role of new informal groupings that organize to address the issues of the day in context of institutions such as the World Trade Organization. These provide, I would argue, ample opportunity for middle-power states, through entrepreneurial activism, to make a difference.

Third, if John Maynard Keynes was correct in his restatement of the aphorism that the "pen is mightier than the sword" when he famously said that those who fancy themselves men of action are in reality the slaves of a defunct economist, the first step in identifying solutions to the current global economic problems might not lie in determining the invitation list to the next G-something, but in identifying the defunct economist in whose thrall we currently toil—and I would add, the defunct scribbler on international relations whose influence in that field appears to be no less great!

The primacy of ideas over institutions

Let me start with the last theme first. In economic terms, the global community, frankly, is in uncharted waters.

The world has become trade dependent to a degree that I believe it safe to say is, notwithstanding the high degree of openness attained by 1913, unprecedented. Counting both cross-border trade in goods and services and the sales of foreign affiliates—Mode 3 or "commercial presence" trade in WTO jargon—international commerce is roughly equivalent to 2/3 of global GDP. Given the extensive degree of fragmentation of production across borders—or, put another way, the integration of economies through outsourcing and trade in intermediate goods (the so-called "global value chain")—our economies are if anything even more interdependent than that figure suggests. If one were to trace the pedigree of even the most humble of domestic products intended for domestic consumption, it would be hard to find one that does not have some degree of international content, whether in terms of components, intellectual property, or the capital equipment or financing used in its production. When a Canadian barber gives a Canadian customer a haircut, a quintessentially "domestic" economic transaction, chances are that either the scissors, the comb, the electric razor used to trim the sideburns or perhaps even the barbershop chair are foreign products, most likely from China!

Yet the price structure that internationally links this web of production and consumption on which we so depend works through a system of exchange rates which since the breakdown of the Bretton Woods system in 1971-1973 has exhibited a degree of volatility that is hard to understand in terms of any current theory of exchange rate determination. It is not unusual these days for the Canada-US exchange rate to move by a full cent in a trading day—annualized, this represents a rate of change (calculated over some 250 trading days) of well over 2,000 per cent. While much of this is high frequency "noise" in the price system with a powerful tendency for excessive movements in one direction one day to be corrected by offsetting movements the next, the extent of movement over periods of months and years has confounded experts and often defied explanation, even with 20-20 hindsight. Common sense suggests that, as firms and countries adapt to cope with volatility, through various forms of hedging for example, the latitude for volatility increases. And periodically, such as during the Asian Crisis, the volatility breaks completely out of control and acquires an elemental destructiveness that, in the economic sphere, resembles a force 5 hurricane breaking on land.

Further, the system—which in theory is supposed to prevent the build-up of imbalances, being self-correcting in nature—is generating imbalances that are not only puzzling to economists but increasingly disturbing to the markets themselves. Of course, the most significant imbalance currently is the US current account deficit, which has been 4 percent or larger since 2000, has recently surpassed six percent of GDP, and is still growing. Conventional forecasts project it to remain in this range for the foreseeable future. The US net international asset position has deteriorated from a positive net balance for most of the postwar period to a negative balance of about US$2.5 trillion at the end of 2004. While the world works on an international dollar standard, which means that the US faces no hard constraint since it borrows in terms of its own currency and can always pay its debt by printing more dollars, the US still does face an uncertain constraint in terms of the willingness of foreigners to hold its fiat money. Similarly, while a US dollar depreciation could correct its external asset imbalance, the foreigners holding net positions in US-denominated assets face a substantial capital loss if that happens. While to a large extent the resolution to this issue lies in a correction of the US internal savings-investment balance, insofar as part of the solution is to shift the burden internationally, the system faces an interesting adjustment, to say the least.

Thirdly, problems in the development process have emerged that our conventional economic theories simply did not anticipate. The basic theory of international trade, that of comparative advantage, does not suggest that some nations will be left behind; quite the reverse—even if a given state has an absolute competitive disadvantage in the production of every conceivable product, it would have a comparative advantage in some product and so would be able to participate in the global trading system. In a similar vein, going by the basic concepts of scarcity and diminishing returns, capital-scarce regions of the globe ought to offer high returns to capital while capital-rich countries ought to offer comparatively lower rates of return. But the direction of flow of international capital is not in line with these theoretical expectations. To be sure, theoretical refinements have been introduced to explain actual patterns and "save" the basic theory; the problem is that the "wrinkles" to the theories have to do enough heavy lifting that they stand the expectation of the basic theory on it head! That this is too much to ask of basic theory should have long been obvious to all.

We may choose to express dissatisfaction with the multilateral institutions responsible for the global systems of trade, finance and promoting development; but to me that makes about as much sense as shooting the messenger for bad news or firing the manager of a sports team because the players are truly awful. Put another way, the IMF and World Bank did not invent the so-called Washington Consensus—this was distilled from the experience of successful emerging markets and applied as a prescription for development in other countries. The problem was that, like other prescriptions previously used, it did not seem to consistently work as a prescription. Similarly, the WTO is merely the forum in which countries negotiate the rules of the road or rules of the game for important aspects of international commerce and their own terms of engagement; changing the forum will not in any way change the nature of the issues faced by its members, which today include most of the international community.

To be sure, sometimes an entrenched bureaucracy is part of the problem in preventing a change from failed solutions to more promising approaches; and in terms of the metaphor used earlier, sometimes the manager of a sports team is part of the problem. However, it is not obvious to me that presently the problems lie so much in the institutions as in the state of our understanding of the dynamics of the systems of international commerce and of the process of economic development.

Surprising life in the multilateral system

Two recent events have helped rather dramatically to confound trend watchers perceiving an unstoppable momentum towards regionalism, bilateralism and even unilateralism. I refer to the Duelfer Report on the success of the UN in its arms inspections in Iraq and the July 2004 agreement in the WTO on a negotiating framework for the Doha Round.

There are certainly costs to going the multilateral route. Easy things are harder and more complicated to achieve; however, the really big, hard things are often only attainable through that route. For example, in the world of international trade, a process such as a "Single Undertaking" in the context of a broad round that puts enough diverse things on the table to form the basis of positive-sum or "win-win" outcomes for all participants might well be the only way to break through on otherwise intractable problems such as agricultural subsidies.

Further, whatever the frustrations, the multilateral process has the serious advantage of legitimacy that smaller groups simply do not. The legitimacy conferred by multilateral agreement in the security sphere is clear. But this is also true in the world of trade. For example, the WTO, through Article XXIV in the GATT and Article V in the GATS, establishes the conditions under which regional trade agreements are consistent with multilateral obligations. Thus, not only does a multilateral system help minimize the downsides of regional trade arrangements—such as trade diversion—but it also defuses the potential for such regional agreements to spiral out of control into economic conflict between rival blocs.

Generally, middle powers need little counsel or persuasion regarding the benefits of a sound multilateral system. However, in Canada's case, it has been spoiled by long having had an insider's position through membership in the G-7. But seen in historical perspective, clubs such as the G-7 form to deal with particular issues and cannot be taken complacently as being permanent fixtures.

The origins of the G-7 date back to the breakdown of the Bretton Woods system of fixed exchange rates. On March 25, 1973, US Treasury Secretary George Shultz invited the finance ministers of France, Great Britain and Germany to an informal discussion on the international monetary issues caused by the US's decision to abandon the gold standard a year and a half earlier. This initial meeting led to a series of informal meetings over the following months of the four plus the Japanese finance minister. Thus emerged the original "Group of Five" or G-5. Two of the finance ministers at these meetings were Valéry

Giscard d'Estaing and Helmut Schmidt who subsequently became President and Chancellor of France and Germany respectively. It was the initiative of Giscard to replay the experience of these informal finance ministers' meetings at his new Presidential level; thus was conceived the first summit of the world's leading industrialized nations, at the Château de Rambouillet, on November 17, 1975. Giscard of course invited Italy and this in turn led to Canada being extended an invitation the following year.

The salient point here is that the make up of the group was dictated by the key issue: the G-5 brought together the main parties that had been central in the breakdown of Bretton Woods. As will be recalled, it was the decision of France and Great Britain to request, in accordance with the terms of Bretton Woods, an exchange of gold for excess dollar holding which prompted the Nixon Measures of August 1971 that abrogated that agreement. Germany and Japan meanwhile represented the two countries with the most important roles to play in the international balance of payments position of the US in terms of their weight in both the trading and currency systems.

It is instructive in light of that experience to consider how the more recent July 2004 agreement in the Doha Round negotiations came about. The emerging WTO dynamic included first the formation of two blocking coalitions: of key emerging markets (the new G-20), and of the poor countries (the G-90). These coalitions had earlier balked at the offer from the industrialized countries that was on the table at the WTO Ministerial meeting in Cancun in September 2003. The collapse of the Cancun Ministerial then prompted a flurry of activity including the emergence of a new "non-group" of five countries, the so-called "Five Interested Parties" which "worked the room" in Geneva and succeeded both in terms of achieving agreement on some issues and constructively papering over divisions in others areas to allow the Doha Round to proceed. The five included the US, the EU, seen as "representing" the industrialized countries, Australia "representing" the Cairns Group of agricultural exporters and India and Brazil which were the leading activists in the G-20. The invited group thus straddled the key divide that had scuttled the WTO Ministerial conference at Cancun. A parallel to the original Finance G-5 is clearly suggested in this process.

For institutional architects, the fact that the July 2004 WTO agreement was not brokered by the semi-permanent clubs was perhaps a setback of sorts; for enthusiasts of self-organizing "emergence", a feature of complex adaptive systems, in this case in clear support of multilateralism, this was affirmation of the importance of informality and of the need to be prepared for surprising developments which such systems routinely conjure up.

Implications for middle powers

The club scene in international relations is not permanent; just as with night clubs, some become less "fashionable"—or in our context less relevant—while others emerge. Thus, even as the WTO scene has been energized by the formation of the G-20 of dynamic emerging markets, the "Five Interested Parties", and the G-90, "traditional" alliances are gradually disappearing from the scene, including the Quad and the Cairns Group. Recent years have also witnessed a flurry of "mini-Ministerials" that involved a changing mix of WTO Members meeting for various WTO-related reasons, but generally serving to inform and persuade various parties to the negotiations. In the world of finance, we see a similar evolution of institutional structures with the invitation to China to join on occasion the G-7 Finance Ministers discussions on international financial matters. Further, a proposal was recently mooted by the US Council on Foreign Relations for a new Quad of the US, the EU, China and Japan to serve as the core group to manage the "big picture" in the international finance domain.

What do all these developments imply for middle powers such as Canada which might not always be part of the problem that drives the structure of emerging clubs? One answer is that the key to being part of the club scene is to be energetically involved—including by providing new perspectives and innovative ideas—in the multilateral process which is the breeding ground for the clubs. Perhaps a second way is to build on Denmark's "Copenhagen Consensus" process, an issue-driven invitational approach to crack large, difficult issues.

The world has moved a long way since George Schültz launched the process that brought Canada into the G-7. It is timely for us now to look forward.

The Convergence of Law and Economics: Implications for the World of Trade

John M. Curtis *

Introduction

Law and economics are two distinct disciplines, rooted in very different soils, developed to solve different problems encountered by evolving societies. Each has created its own characteristic traditions. Each draws on its own set of epistemological tools. Law is largely deductive, reasoning from principle and precedent to establish new precedents (and perhaps even new principles); reality is tested against the law and if necessary is constrained to conform to the law. Economics is inductive, discerning systematic elements in the chaotic froth of economic life that are then labeled "economic laws"; these laws are tested against reality and, when found wanting, it is the law that is reshaped or restated to conform with the reality (although sometimes ideologues in the field of economics do precisely the reverse!)

Yet law and economics also have fundamental similarities. Both are concerned, for example, with procedural and substantive "fairness". In law, we have the well-known concepts of *due process* and *mete justice*. It is less well understood that there are essentially similar concepts at play in economics. For example, the notion of a market transaction incorporates the notion of procedural fairness in the sense that the transaction must be between a willing seller and a willing buyer with no coercion ap-

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plied in the setting of the terms and conditions of the transaction. The notion of a market transaction also incorporates the notion of substantive fairness in that such a transaction is deemed to represent an exchange of value for value—hence the notion of "fair market value". Indeed, the very possibility of exchange is seen as allowing each party to be better off than before the trade.

In terms of their roles in societal development, law and economics are in many ways symbionts. Economics, if it be given its due, helps to drive the evolution of our economies. But ever larger, more complex, socioeconomic arrangements generate new problems to be overcome in order that their benefits can be accessed and indeed sustained. Law helps to establish the institutional frameworks that regulate the new forms of social interaction stimulated by developments in the economic sphere. Law provides the disciplines that mediate the frictions that inevitably emerge. And, by injecting its own norms and values into the socioeconomic DNA, law in some sense helps shape the emergent socioeconomic form, allowing it to serve as a more viable base for the erection of the next stages of the socioeconomic edifice.

Let me give a few practical examples from various fields of economics and law.

The term *legal tender* preserves the memory of the transition from metallic to fiat money. As economic growth generated increasingly large incomes and transactions volumes, these outstripped the capacity of the mines and mints to supply what once was known as the "coin of the realm" to meet the resulting demand for a medium of exchange. The institutional development of fiat money was made possible by the legal requirement that it be accepted in fulfillment of debts. A gold sovereign had its own intrinsic value; no law was needed to require its acceptance. Not so with paper. Trust amongst a small group known to each other, as in the Italian financial brokers whose practice of borrowing and lending money through IOUs issued on benches in city squares gave rise to the term "bank" (from the Italian for "bench"), also has its limits. To function in the anonymity of an evolved marketplace, fiat money proved necessary. But economics did not rest there; it sought out further innovations. Thus was called into existence the vast superstructure of financial institutions and markets that now forms an essential part of the livelihood of the great financial capitals. And of course, in turn, these economic developments spawned another layer of legal development: thus do we arrive at the full complexity of modern banking and securities laws.

The enforcement of contracts, a quintessentially legal concept, is seen by the Peruvian economist Hernan De Soto as an essential element of economic development. He observes that gold is traded on the London Exchange and on the streets of Lima. What distinguishes London, he argues, is the large volumes and low cost of trading, which are made possible by the legal framework in which the London Gold Exchange operates which gives confidence to traders. One market flourishes and the other does not because of the legal infrastructure that the one possesses and the other does not. And here as well, economics continues to build, once a sound basis is established: witness the activities of commodities exchanges which produce exotic contracts such as puts and calls in pork belly futures contracts and so forth.

The notion of private property is couched and circumscribed in legal language. Yet it is at the heart of economic frameworks. China's modern economic miracle is widely held to have been kicked off by a policy change that effectively created property rights in the agricultural sphere—the so-called family responsibility system. In other words, in a socioeconomic system without property rights, the introduction of such rights unleashes economic energies previously held in check as we have seen since the reforms that began in 1978.

Conversely, economics concerns itself deeply with normative, indeed moral, issues and thus invades territory that the law might consider properly within its own domain. In the early development of economics, there was no border between it and philosophy. David Hume and Adam Smith had one foot firmly planted in each discipline; their economics was situated in a moral universe. John Stuart Mill's reworking of classical economics was in good measure based on the notion that the distribution of wealth was not based on natural law but on the "laws and customs" of a society—in other words on its institutions. Friedrich von Hayek's later defence of the market system was, as we were recently reminded by Amartya Sen in a Financial Times op-ed[1], based on the individual freedoms which the market system delivered, not on the wealth that it might generate. Here we have economists setting out the economic basis of individual liberty and fair distribution of a nation's wealth. The contribution of John Maynard Keynes in articulating the role of government in regulating economic activity as a guarantor of an implicit social contract, at the expense of its own treasure rather than for the increase thereof, needs little description.

Law and economics are not, of course, the only disciplines at play in shaping the evolution of modern socioeconomic frameworks. At a minimum, one must add political science to the mix. But the interface between law and economics is of particular interest in this Chapter. And it is this interface that I should like to explore more deeply with reference to the world of trade.

The Convergence of Law and Economics in Trade

International trade can legitimately be described as being at the very root of modern economic thought from its first stirrings in the European Renaissance to its first full flowering in the Enlightenment. For example, one of the very first recognizably modern economic texts was written by Thomas Mun of the East India Company in defence of the Company's exporting capital in order to transact business abroad. The title of his work, *England's Treasure by Foreign Trade*, written ca. 1630, speaks for itself. It provides an essentially complete description of the principles behind the international balance of payments, which would require only up-dating of the language to sound perfectly modern. To be sure, much of the early pre-Adam Smith theorizing was in defence of mercantilist practices; but equally, it

[1] Amartya Sen, "An insight into the purpose of prosperity" *Financial Times*, 20 September 2004

must be pointed out, the major seminal works of modern economics, including that of Smith himself, were very much motivated as an attack on mercantilism. David Ricardo's articulation of the theory of rent, for which he is primarily known today, found its first application in the debate over Britain's Corn Laws. Ricardo's arguments helped make the case for the abolition of these agricultural protections, which in turn had (arguably) much to do with the Britain's emergence as the pre-eminent industrial power of the 19th Century.

And international trade was also at the very root of the establishment of the post-World War II economic order at Bretton Woods: it was the damage wrought by protectionism in the 1930s that motivated the framers of the agreements that established the International Monetary Fund, the World Bank and the provisional General Agreement on Tariffs and Trade (GATT) —the latter as stand-in for the proposed but never approved International Trade Organization.[2]

The early postwar economic order was not much concerned with institutions, however. *Laissez faire,* as qualified by Keynes and the Keynesians, relied on market forces with a judicious admixture of government macroeconomic intervention to regulate economic growth and propel development. It was only when this approach stumbled in the 1970s with "stagflation" (a combination of economic stagnation and high inflation that was not anticipated under the Keynesian economic model) at home, major currency and commodity price fluctuations and trade imbalances internationally, not to mention an unexpected cessation and even reversal of broad-based development in what came to be called the Third World, that a fundamental rethinking of economics was prompted.

And in good measure, it was to the institutional frameworks in which economies functioned to which economists turned their attention. One of these institutional features was money; the result was the monetarist revolution in macroeconomics. In development economics, successive waves of reform were

[2] Diebold, W. J. (1952). "The End of the I.T.O.", *Essays in International Finance No.16*. Princeton: Princeton University. October: 1-37.

launched by the institutional architects sitting in the international financial institutions--infrastructure, education, family planning, rule of law and legal/technical institutions such as bankruptcy laws and latterly political institutions themselves each of which came to be seen in their turn as the "silver bullet" to restore development. In the world of trade, it is perhaps no surprise that the Tokyo Round, which was negotiated in that pivotal decade of the 1970s, was noted less for tariff cuts than for several supplementary agreements that reached for the first time inside borders to address institutional matters. These supplementary agreements included the codes on dumping, government procurement, standards and subsidies, as well as strengthened procedures that substantially expanded GATT's role in resolving trade disputes.

Trade lawyers soon had plenty of grist for their mills. In 1979, the same time that saw the conclusion of the Tokyo Round, the United States transferred the administration of important elements of its trade remedy laws from the Treasury Department, which tended not to see injury in alleged dumping cases, to the Commerce Department, which appeared to have had no trouble finding dumping or injury—even in much-celebrated cases where exporters selling into the United States charged higher prices in that market than at home! The "legalization" of international trade was thus well underway well before the Uruguay Round which many observers tend to identify as the watershed event in that regard.

Trade scholars tend to see a sort of natural, inevitable pattern in the evolution of trade policy from a primarily economic discipline, focused on addressing the distortions caused by tariffs and other trade barriers to prices and consequently to the basis for competition between domestic and imported goods, towards a legalistic discipline epitomized by the dispute settlement panel operating in an unmistakably legal setting, replete with judicial procedures and practices. In the WTO agreements, many trade scholars see a nascent constitution for the world economy; in the WTO's Appellate Body, they see a semblance of a Supreme Court. Even the controversy that has embroiled the WTO—that of "legitimacy"—has been described by trade lawyer and theorist Joseph Weiler, as "part of the standard vocabulary of court watching".[3]

Trade scholars tend to attribute this pattern of evolution as being due to deepening "integration": as trade barriers fall, sharper price competition causes states to fall back on non-tariff measures to protect domestic commercial interests. Trade rules then necessarily reach "inside the border" to root out these measures. In so doing, these trade rules can start to affect even measures that were not erected for protectionist purposes—which are conceded, perhaps somewhat grudgingly in the case of the trade policy community, to be "legitimate": Sylvia Ostry's "system friction". However, many economists' paradigm allows them to interpret differences in domestic laws and practices as not being due to democratic choice but as mere departures from the most efficient way to organize society. If trade rules reach in and force tax regimes into line with the most efficient international regime, they would argue, so much the better.

In making such interpretations, trade scholars and economists more generally are simply echoing the well-rehearsed arguments established by the free traders critiquing the mercantilists. And if they are right, we are seeing not so much the convergence of law and economics in trade, but rather the passing of the torch from economists as the advocates of free trade to the lawyers—implicitly, the role that economics can play in establishing a liberal international trading order has largely been played or, put another way, there is little powder that economists have not spent. The remaining task is to ensure that the gains made by application of economic principles are not eroded and that the liberal trading order is not undermined, a task that falls essentially to the legal domain.

But I am not convinced that this interpretation is correct.

First, at the microeconomic level, the organization of society features an interplay between economics (especially in terms of the incentive structures which characterize a socioeco-

[3] J.H.H. Weiler, "The Rule of Lawyers and the Ethos of Diplomats: Reflections on the Internal and External Legitimacy of WTO Dispute Settlement", 35(2) Journal of World Trade 2001, 191-207, 193.

nomic construct), law (especially the constraints on behaviour which laws establish), and politics (in recognition that relations among people cannot be reduced to those aspects that are tractable in economic models!). If we wish to understand the impact of trade agreements, surely the analytical approaches that we adopt must integrate these three perspectives.

Second, at the macroeconomic level, the 1970s which saw the first major wave of legalization in the trade system also witnessed a remarkable upheaval in the international price system. Waves of instability have subsequently rolled through the global macroeconomic system. These are manifest in shifting external imbalances, wide swings in real exchange rates, the emergence and deflation of bubbles, and regional crises in various parts of the world. From the anti-dumping literature, a fairly persuasive case can be built that much of the activity in this domain is prompted by macroeconomic developments, such as real exchange rate swings. In other words, the legalization of the trade system was driven by macroeconomic dislocations: arguably, responses in the legal domain require a complementary and nuanced economic analytical input.

Conclusion

I see accordingly much scope in the coming years to fruitfully integrate law and economics, together with political science, both at:

(a) the micro level, in understanding how, in shorthand, incentives, constraints, and customs combine to shape the evolution of our societies and economies; and

(b) the macro level, to ensure that the rules-based framework builds in appropriate flexibility to accommodate the disequilibria in which our economies continually find themselves, while at the same time maintaining the disciplines on behaviour that are necessary to promote cooperative behaviour.

In practical terms, that might have several general implications:

One would be the development of interdisciplinary institutes within academia integrating law, economics and political science, where basic pre-policy micro analysis of the sort that I have described can be furthered.

Second would be the professionalization of policy departments within government, with high-level "receptor" capacity in these three areas to absorb and apply the lessons learned in research and analysis in academia—and to stimulate that research by formulating questions and issues on which research would be most valuable.

Third and finally would be interdisciplinary support for policy development and issue management within government—including for example of trade disputes and of trade agreements.

This clearly is the future.