The Future of North American Trade Policy:
Lessons from NAFTA
The Future of North American Trade Policy:
Lessons from NAFTA

Conveners
Kevin P. Gallagher
Enrique Dussel Peters
Timothy A. Wise

Task Force Members
Rodolfo García Zamora
Kenneth C. Shadlen
Robert K. Stumberg
Gus Van Harten
Christian E. Weller
Occasionally, the Pardee Center convenes groups of experts on specific policy questions to identify viable policy options for the longer-range future. This series of papers, *Pardee Center Task Force Reports*, presents the findings of these deliberations as a contribution of expert knowledge to discussions about important issues for which decisions made today will influence longer-range human development.

Series Editor: Professor Adil Najam

The Frederick S. Pardee Center for the Study of the Longer-Range Future at Boston University convenes and conducts interdisciplinary, policy-relevant, and future-oriented research that can contribute to long-term improvements in the human condition. Through its programs of research, publications, and events, the Pardee Center seeks to identify, anticipate, and enhance the long-term potential for human progress, in all its various dimensions.

The Frederick S. Pardee Center for the Study of the Longer-Range Future
Boston University
Pardee House
67 Bay State Road
Boston, Massachusetts 02215
Tel: 617-358-4000 Fax: 617-358-4001
www.bu.edu/pardee
E-mail: pardee@bu.edu

Cover photograph courtesy of istockphoto.com.

The views expressed in this paper represent those of the individual authors and do not necessarily represent the views of their home institutions, the Frederick S. Pardee Center for the Study of the Longer-Range Future or the Trustees of Boston University. The publications produced by the Pardee Center present a wide range of perspectives with the intent of fostering well-informed dialogue on policies and issues critical to human development and the longer-range future.

Produced by Boston University Creative Services
© 2009 Trustees of Boston University


Completed on recycled paper

1109 984131
# TABLE OF CONTENTS

iv  Acronyms and Abbreviations  
v  Foreword by Adil Najam

**Executive Summary**  
by Kevin P. Gallagher, Timothy A. Wise, and Enrique Dussel Peters

1. **NAFTA Services and Climate Change** ............................................ 11  
   by Robert K. Stumberg

2. **Manufacturing Competitiveness: Toward a Regional Development Agenda** ................................................................. 27  
   by Enrique Dussel Peters

3. **Reforming NAFTA's Agricultural Provisions** ................................. 35  
   by Timothy A. Wise

4. **Reforming the NAFTA Investment Regime** .................................. 43  
   by Gus Van Harten

5. **Intellectual Property for Development in Mexico** .......................... 53  
   by Kenneth C. Shadlen

6. **NAFTA and the Environment: Lessons from Mexico and Beyond** ................................................................. 61  
   by Kevin P. Gallagher

7. **Rethinking Labor Rights** ............................................................... 71  
   by Christian E. Weller

8. **Migration Under NAFTA: Exporting Goods and People** ............ 79  
   by Rodolfo García Zamora

**Task Force Members** ........................................................................ 85
ACRONYMS AND ABBREVIATIONS

BIT: Bilateral Investment Treaty
BNDES: Brazil's National Development Bank
CAPTA: Dominican Republic – Central America Free Trade Agreement
CANACINTRA: Mexico's National Chamber of Transformation Industry
CANSIM: Statistics Canada
CARB: California Air Resources Board
CARBOB: California Reformulated Gasoline Blendstock for Oxygenate Blending
CEPAL: Economic Commission for Latin America and the Caribbean
CL: Compulsory License
CONACYT: Mexico's National Science and Technology Council
DESA: United Nations Department of Economic and Social Affairs
DESTIN: Development Studies Institute, London School of Economics
DFAIT: Canadian Department of Foreign Affairs and International Trade
FAO: Food and Agriculture Organization of the United Nations
FMCS: U.S. Federal Mediation and Conciliation Service
FTA: Free trade agreement
FTAA: Free Trade Area of the Americas
GATS: General Agreement on Trade in Services
GATT: General Agreement on Tariffs and Trade
GHG: Greenhouse gas
GM: Genetically modified
ICSID: International Centre for the Settlement of Investment Disputes
ICT: International Chamber of Commerce
IISD: International Institute for Sustainable Development
ILO: International Labor Organization
IP: Intellectual property
M & A: Mergers and Acquisitions
MEA: Multilateral environmental agreement
NAECEC (or CEC): North American Commission for Environmental Cooperation
NADBDAN: North America Development Bank
NIH: National Institutes of Health
NRDC: Natural Resources Defense Council
LCS: Low carbon fuel standard
LCIA: London Court of International Arbitration
OECD: Organization for Economic Cooperation and Development
PERI: Political Economy Research Institute
RBT: Regional and bilateral trade agreements
RICYT: Network on Science and Technology Indicators
RPS: Renewable portfolio standards
SCC: Stockholm Chamber of Commerce
SDT: Special and differential treatment
SMD: Small and medium-sized enterprises
SP: Special products
SPS: Sanitary and phyto-sanitary
SSM: Special safeguard mechanism
TRADE Act: Trade Reform, Accountability, Development and Employment Act
TP: Agreement on Trade-Related Intellectual Property Rights
TPA: Trade promotion agreement
UNAM: National Autonomous University of Mexico
UNCITRAL: United Nations Commission on International Trade Law
USITC: United States International Trade Commission
USTR: Office of the United States Trade Representative
Foreword

The Future of North American Trade Policy: Lessons from NAFTA is the inaugural paper in this new publication series called Pardee Center Task Force Reports. It gives me great pleasure to introduce this timely and thought-provoking report on an issue that has immediate policy salience and on which decisions made today will impact longer-range development futures not only within North America but well beyond it.

The mission of the Boston University Frederick S. Pardee Center for the Study of the Longer-Range Future is to convene and conduct interdisciplinary, policy-relevant, and future-oriented research that can contribute to long-term improvements in the human condition. As part of fulfilling its mandate, the Pardee Center occasionally convenes groups of experts on pertinent policy issues with longer-range impacts. The Pardee Center Task Force Reports will publish the findings and deliberations of these groups in a format designed to speak to the concerns of policy-practitioners and policy-scholars. The views expressed in these reports always are those of the individual authors and do not represent the views of their home institutions, of the Pardee Center, or of Boston University.

I am delighted that we launch this series with this report on the future of trade policy and the North American Free Trade Agreement (NAFTA). The Task Force was convened by Kevin Gallagher (Associate Professor of International Relations at Boston University and a Pardee Center Faculty Fellow), Timothy A. Wise (Director of Research and Policy at the Global Development and Environment Institute, Tufts University), and Enrique Dussel Peters (Professor of Economics at the Universidad Nacional Autónoma de México). The membership of the Task Force includes leading experts on trade policy, and especially on NAFTA-related policy, from Mexico, the United States and Canada representing a variety of academic disciplines and policy expertise. The outcome of a stimulating meeting of the Task Force, held at the Pardee House at Boston University in March 2009, this report reflects cutting-edge ideas about the future of North American trade policy, including that of NAFTA. There are plans to translate this report into Spanish so that it can have wider circulation amongst relevant stakeholders.

There is continuing and lively discussion in the fields of economics, the environment, development, and international relations, among others, about the impacts—intended and not—that regional trade agreements are having on the
overall well-being of nations and regions. This Task Force Report comes at an important point in time when NAFTA countries, including the United States, are reviewing their trade policies and may make important decisions that have long-term economic, social, and environmental implications for the region and the world. This Task Force Report is one contribution to that debate—one that comes from a multi-national, inter-disciplinary, and future-oriented perspective.

I am deeply grateful to all the conveners and members of the Task Force for the enthusiasm and hard work they have invested in this report, producing an excellent document in a very short period of time. I would especially like to thank Prof. Kevin Gallagher, a Pardee Center Faculty Fellow, for conceiving the project, assembling the eminent membership of the Task Force, and leading the effort with his usual grace and good humor. I would also like to thank Rachel Denae Thrasher, a Pardee Center Research Fellow, for her hard work as a rapporteur and editor of this report, and Cynthia Barakatt, the Pardee Center Communications Specialist, for leading the work on conceiving and implementing this new publication series.

Let me end by congratulating all the Task Force members for having produced a timely and intellectually stimulating report that, I am sure, will make a meaningful contribution to this important policy discussion, and will have long-lasting impacts.

**Professor Adil Najam**

*The Frederick S. Pardee Professor of Global Public Policy*

*Director, The Frederick S. Pardee Center for the Study of the Longer-Range Future*

Boston University
Executive Summary

Kevin P. Gallagher*
Timothy A. Wise
Enrique Dussel Peters

The North American Free Trade Agreement (NAFTA) went into effect in January of 1994. The agreement not only lowered tariffs among the countries of Canada, Mexico, and the United States, but also liberalized foreign investment, services, intellectual property rules, and more. The agreement was intended to be a permanent one. Indeed, it was intended to be a stepping stone to even deeper integration in North America. After just 15 years, however, there have been broad calls to revisit NAFTA rather than use it as a springboard. Citizen groups and legislators in all three countries have called for major reforms to the treaty, and some have demanded renegotiation. In the U.S. presidential election campaign in 2008, NAFTA became a lightning rod for dissatisfaction with free-trade policies. Since taking office, U.S. President Barack Obama has followed his campaign promise to revisit the agreement by initiating a comprehensive review of U.S. trade policies, which will include a detailed review of NAFTA.

To contribute to this review process—and the broader discussion of NAFTA as the prevailing template for trade agreements—Boston University’s Frederick S. Pardee Center for the Study of the Longer-Range Future convened the inaugural meeting of the Pardee Center Task Force on Trade Policy in North America in early 2009. Chaired by Kevin P. Gallagher, Enrique Dussel Peters, and Timothy A. Wise, the Task Force consists of a panel of academic experts from the three NAFTA countries. Its aim is not only to identify the areas that are in need of reform under NAFTA but to put forth concrete proposals for such reform. Task Force members drafted an initial set of background papers and proposals

*We would like to thank the Frederick S. Pardee Center for the Study of the Longer-Range Future for generously supporting the Task Force meeting and the publication of this report. In particular we would like to thank Rachel Denae Thrasher, a Fellow at the Pardee Center, for her hard work as a rapporteur and editor of this report. In addition to the support of the Pardee Center, as research associates at the Global Development and Environment Institute (GDAE), Kevin Gallagher and Timothy Wise would like to thank the following foundations for supporting our ongoing NAFTA-related work at GDAE: the Rockefeller Brothers Fund, the General Service Foundation, and the Moriah Fund.
on some of NAFTA’s most important provisions.\(^1\) They were asked to identify needed reforms, proposing not only changes that could be made without fully re-opening the agreement, but also those that were more ambitious. The goal was to identify key reforms that could make NAFTA—and future trade agreements based on the NAFTA template—the foundation for longer-run prosperity and equity throughout North America.

The Task Force took as its starting points:

- NAFTA has fallen short of achieving many of its own objectives. Rather than promoting a convergence of incomes, wages, and standards, NAFTA has tended to accentuate pre-existing economic and regulatory asymmetries in North America.

- NAFTA is in need of comprehensive reform, as is the template for future trade agreements negotiated by North American governments.

- Such reforms must go beyond the limited bipartisan agreement reached May 10, 2007, in the United States. These reforms—already incorporated into the Peru, Panama, and Colombia agreements—principally affect the labor, environment, and intellectual property provisions, and while they are important first steps, they fall far short of the comprehensive change that is needed.

To that end, this report provides detailed proposals for reforming NAFTA and future trade agreements based on the NAFTA experience. For future trade agreements, the Task Force concludes that any free trade agreement (FTA) will have to look sharply different than the NAFTA model, that FTAs have to be accompanied by collateral regional efforts to ensure long-run sustainability and to overcome pre-existing asymmetries among trading partners, and finally that an FTA is no substitute for national economic development policies.

**I. THE NEED FOR REFORM**

On paper at least, NAFTA was intended to do more than simply increase the flows of trade and investment. As the agreement’s preamble states, NAFTA was supposed to allow all three countries to:

- Enhance the competitiveness of their firms in global markets; foster creativity and innovation, and promote trade in goods, and services that are the subject of intellectual property rights; create new employment opportunities and improve working conditions and living standards in their respective territories; undertake each of the preceding in a manner consis-
tent with environmental protection and conservation; preserve their flex-
ibility to safeguard the public welfare; promote sustainable development;
strengthen the development and enforcement of environmental laws and
regulations; and protect, enhance and enforce basic workers’ rights.²

Standard economic theory was certainly on NAFTA’s side. The hope was that
reduced trade barriers would allow North American nations to produce those
goods and services where they were most efficient and thus accelerate trade and
investment in the region. Such a surge in trade and investment would generate
more employment and growth. In the long run it was hoped that the agreement
could facilitate wage and regulatory convergence among the parties.

After 15 years there is now widespread agreement that NAFTA fell far short
of these goals. Rather than triggering a convergence across the three nations,
NAFTA has accentuated the economic and regulatory asymmetries that had
existed among the three countries. Since 2001, the region has actually seen a
decline in levels of integration in key areas such as manufacturing.

Thus, it is no surprise that the agreement has remained controversial. While pro-
ponents credit the agreement with stimulating the flow of goods, services, and
investment among the North American countries, critics in all three countries
argue that this has not brought improvements in the standards of living of most
people. In the United States, the agreement is blamed for job losses, for adding
downward pressure on wages, particularly in manufacturing, and for contributing to a large
U.S. trade deficit. In Canada, critics point to job losses, the declining competitiveness
of the manufacturing sector, and the constraints NAFTA has put on Canada to
deploy adequate policies for public welfare. In Mexico, NAFTA is blamed for
creating few new jobs while decimating many existing sources of livelihood,
particularly in agriculture. In all three countries, citizen groups and government
officials alike decry the rights given to foreign investors to sue governments if
legislation has an adverse impact on their profits.

It is beyond the scope of this report to provide a comprehensive review of
NAFTA’s impacts in all three countries.³ Suffice it to say that controversy over
NAFTA has not abated. An anti-NAFTA presidential candidate nearly won

---

Rather than triggering a convergence across the three nations, NAFTA has accentuated the economic and regulatory asymmetries that had existed among the three countries.

---
Mexico’s disputed 2006 elections. In the United States, the issue became a key campaign theme in the 2008 Democratic Party primaries. In the run-up to the primary election in the key manufacturing state of Ohio, then-candidate Barack Obama stated:

I voted against CAFTA, never supported NAFTA, and will not support NAFTA-style trade agreements in the future. NAFTA’s shortcomings were evident when signed and we must now amend the agreement to fix them. While NAFTA gave broad rights to investors, it paid only lip service to the rights of labor and the importance of environmental protection.4

Since being elected to office President Obama has reiterated the need to rethink NAFTA and to change the template for U.S. trade agreements. Perhaps more important, Obama’s statements have re-invigorated constituents across the NAFTA countries who have long been critical of NAFTA. In addition to numerous civil society efforts, in June 2009 lawmakers from Canada, Mexico, and the United States who represent a task force of legislators in the three countries calling for NAFTA renegotiation sent a letter to the NAFTA Presidents pledging their commitment to work for a different NAFTA. In the United States, reformers introduced the Trade Reform, Accountability, Development and Employment Act (TRADE Act) of 2009 in the summer of 2009, with an initial set of more than 100 co-sponsors from both chambers of the U.S. Congress. The TRADE Act requires a review of existing trade pacts, including NAFTA, and sets forth instruments that should be included in the template for future agreements.

These demands for change go well beyond the so-called “May 10th agreement,” the concessions in 2007 won by the newly elected Democratic majority in the U.S. Congress from the Bush Administration to reform the labor, environmental, and intellectual property provisions of future trade agreements. These were incorporated into the pending agreements with Peru, Panama, and Colombia, though as of September 2009 only the first has been approved.

II. PROPOSALS FOR REFORM

In the context of this renewed debate, the Pardee Center Task Force on Trade Policy in North America made up of experts from Canada, Mexico, and the U.S. on NAFTA and its outcomes, has collectively produced this report. The Task Force identified three broad areas for reform: reforms that accentuate the positive aspects and mitigate the negative effects of NAFTA at the national level; reforms that repair NAFTA in a comprehensive manner, beyond the May 10th
agreement; reforms that reinvigorate regional institutions established to support NAFTA and to address the asymmetries among its trading partners.

Following are brief summaries of the more detailed reform proposals from Task Force members for the eight areas they addressed: services, manufacturing, agriculture, investment, intellectual property, environment, labor, and migration. These specific proposals form a comprehensive set of changes to NAFTA that can achieve a more prosperous and sustainable path for North American integration. With all three NAFTA countries facing similar economic challenges in the wake of the financial crisis, this is an opportune time to discuss regional solutions.

While each chapter is the responsibility of the member who wrote it, Task Force members share three broad conclusions:

1. **NAFTA and the other trade agreements based on the NAFTA template need deep reform.** These changes must go beyond the important but limited reforms outlined in the May 10th agreement. For NAFTA to promote prosperity and sustainable economic development, the treaty needs to be re-opened.

2. **Trade agreements need to address the asymmetries among trading partners with supporting and well-funded institutions.** NAFTA established some important institutions, such as the North American Commission for Environmental Cooperation (CEC) and the North America Development Bank (NADBANK). However, they have been given neither the mandate nor the funding to allow them to help make Mexico more of an equal economic partner.

3. **A trade agreement is no substitute for a coherent national development strategy.** Developing countries should learn from Mexico’s experience that increasing trade and foreign investment will not alone generate dynamic economic development.

**III. CHAPTER SUMMARIES:**

Each chapter in this report offers specific reforms to a different part of NAFTA. They are summarized as follows:

**Services and Climate Change**

Though more attention has focused on goods than services, NAFTA’s services chapter is in greater need of reform. One prominent dispute (Mexican trucking)
and one potential dispute (Canadian tar sands oil production) highlight the ways in which NAFTA limits governments’ ability to regulate services trade effectively in areas “necessary to protect human, animal or plant life or health” or measures “relating to the conservation of exhaustible natural resources…” Such exceptions are available for trade in goods, but not services, and challenges under NAFTA’s provisions for cross-border trade in services can undermine the efforts of national, state, and local governments to regulate in the public interest. This is particularly important now in relation to new efforts to address energy and climate change. NAFTA needs to be reformed to allow exceptions or broad carve-outs for such key policy measures; otherwise, trade disputes may deter governments from implementing new laws to address climate change. In addition, future trade agreements need to treat goods and services trade in comparable ways.

Manufacturing

NAFTA stimulated a significant reorganization of North American manufacturing, particularly in automotive, apparel, and electronics, changes that produced expanding trade and investment in the sector while also causing job losses that were inadequately addressed by trade adjustment measures. Since 2000, however, North American manufacturing has shown a competitiveness problem. The region as a whole has lost more than one-quarter of its manufacturing jobs, and the downward trend predated the current recession. The three NAFTA countries need to develop a new regional strategy to compete effectively with other manufacturing exporters, particularly China. This effort needs to take NAFTA’s promise of regional integration seriously by expanding economic cooperation, increasing funding for development in strategic industries (with help from a revitalized NADBANK), and allowing governments to take measures to ensure that future expansion of manufacturing results in more than “enclave development,” without broader stimulus to the economy.

Agriculture

NAFTA has had harsh socio-economic and environmental impacts in Mexico due to the wide development gap in agriculture between the United States and Mexico. The Mexican government did not take advantage of the transition periods built into NAFTA’s liberalization schedule, nor did it come through with
public investment in yield-enhancing projects such as irrigation. Now, Mexico faces high rural poverty, the loss of rural livelihoods, rising food dependency, and significant outmigration from rural areas. Reforms need to address continued asymmetries in agricultural development by borrowing from other trade negotiations. Borrowing from the WTO, Mexico needs “special and differential treatment” as a developing nation, with the right to designate key food crops as “special products” free from full liberalization and to defend itself from import surges with a “special safeguard mechanism.” Borrowing from European integration, a renewed NADBANK needs to invest in productivity-enhancing projects to stimulate agricultural development. Finally, governments need to address persistent market failures, such as environmental externalities from industrialized agriculture and high levels of market concentration.

Investment

NAFTA’s Chapter 11 on investment has been controversial since it was learned, after the treaty took effect, that it granted foreign investors the right to sue governments for actions that are deemed by international arbitrators to be unfair, discriminatory, or “tantamount to expropriation” by impeding the investors’ rights to profit. This has resulted in a wide range of threatened and actual investor suits against governments, many for environmental or health regulations. NAFTA authorizes the Free Trade Commission (FTC)—made up of Cabinet-level representatives of each NAFTA state—to make interpretations of the treaty that are binding on tribunals. This is an important tool to clarify the treaty. An FTC interpretation would not require reopening the agreement and could restrain suits against non-discriminatory measures in the public interest and establish investor-state arbitration as an exceptional remedy after others have been exhausted. Other administrative actions could appropriately limit the discretion of tribunals and ensure fairer and more independent panelists with policy-related expertise. Some reforms, such as removing the investor-state regime from the treaty, require reopening the agreement. So too would reforms to the investment chapter’s restrictions on the limited use of capital controls, key for managing financial crises, and performance requirements, which have proven useful in stimulating technology transfer and local development.

Intellectual Property

While NAFTA’s intellectual property (IP) provisions have introduced some restrictions that go beyond the World Trade Organization’s Agreement on Trade-Related Intellectual Property Measures (TRIPs), the main problem for Mexico is not
NAFTA but the Mexican government’s adoption of IP rules that make it more difficult for innovation to be disseminated and widely used within the country. Mexico thus retains significant policy space within NAFTA to adopt important reforms, such as limiting the granting of second-use patents and reversing more recent reforms that restrict the use of compulsory licensing to obtain reduced prices on drugs. That said, some important reforms would require changes to NAFTA, such as allowing parallel importing of less expensive patented drugs from a third country, a procedure allowed under TRIPs. Finally, Mexico needs to strengthen local actors’ capacities for innovation, an effort that could be enhanced by greater regional cooperation on research and development, and also funding through a strengthened NADBank or other regional institutions.

**Environment**

This is one of the few areas in which there is agreement to make modest reforms, based on the May 10th agreement in the United States and the subsequent revisions of the Peru, Panama, and Colombia FTAs. Those changes—making the environment a chapter with violations subject to full enforcement measures—would be an important first step, but a small one. The environmental damage from expanding trade in North America is large. The Mexican government estimates the cost of environmental degradation at 10 percent of GDP annually. North America needs deeper reforms to NAFTA’s environmental provisions to ensure gradual improvement in environmental standards and enforcement in all three countries. It needs institutions with expanded funding to address chronic problems. Beyond the environment chapter, NAFTA also needs reforms to: its investment rules, to ensure governments have the right to demand transparency and environmental compliance; its IP rules to promote the transfer of green technologies and adequate benefit-sharing; and the services agreement to allow exceptions for regulations in the public interest, particularly as they relate to climate change.

**Labor**

NAFTA’s side agreement on labor, the first of its kind in a trade agreement, had the stated goal of promoting an upward convergence of labor standards in North America. There is little evidence that this happened, which is why the side agreement has been targeted for reform in subsequent agreements. Incorporating those reforms into NAFTA would be valuable. They recognize the International Labor Organization’s (ILO) core labor standards and establish enforcement mechanisms more likely to ensure compliance. Reforms should also strengthen
the funding and mandate of the Labor Commission set up by NAFTA. The United States could gain from improvements in Mexico’s labor standards, as researchers have shown that low standards contribute to trade deficits, primarily because rising incomes in trading partner countries create rising demand for U.S. goods.

**Migration**

The promise at NAFTA’s inception was that economic prosperity would enable Mexico to “export goods, not people.” Yet migration from Mexico to the United States has more than doubled since, driven by weak job creation in Mexico and strong demand for migrant labor in the United States, and undeterred by expanding border-control measures. NAFTA liberalized trade in goods, services, and investment but not labor. That is unlikely to be addressed by upcoming reforms to NAFTA, but some measures can make a difference. The Mexican government needs to make job creation the top priority in its economic policies, with particular attention to depressed regions. Regional financial institutions, such as a revitalized NADBANK, must assist these efforts. Reforms to NAFTA’s agricultural provisions, outlined elsewhere, can slow the relatively recent flow from the Mexican countryside. Reforms to NAFTA’s labor rights provisions should include protections for the rights of migrants. Finally, the United States needs a comprehensive immigration reform that decriminalizes the flow of workers—a flow that has increased as a direct result of NAFTA-led economic policies.

---

1. The Task Force addressed the issues of services, manufacturing, agriculture, investment, intellectual property, environment, labor, and migration. While this is by no means a comprehensive list of the areas of the agreement that merit review and reform, these important areas have been the subject of significant debate since NAFTA took effect.


1. NAFTA Services and Climate Change

Robert K. Stumberg

Six chapters of NAFTA cover services. For the first 15 years, the face of NAFTA services has been a sleep-deprived Mexican trucker. Citing safety concerns, the United States maintains an indefinite moratorium on Mexican long-haul trucking. It does so despite the fact that Mexico filed—and won—the first NAFTA services dispute against the moratorium under chapter 12, Cross-Border Trade in Services. When Mexico finally imposed $2.4 billion in trade sanctions, the Obama Administration quickly announced its intent to negotiate safe and gradual access for Mexican trucks. That was in March 2009.

That was the month that Canada shifted the spotlight to the northern border. In a bicoastal lobbying campaign, Canada complained that proposed climate measures in the U.S. Congress and the State of California would discriminate against distribution of crude oil ("bitumen") extracted from Alberta tar sands. Canada also asserts that state renewable energy policies discriminate against exports of Canadian hydropower.

Other cross-border services have generated controversy about NAFTA, but trucking and energy are the cross-border services where a trade dispute—or the threat of one—has the power to shape major policy decisions.

During the 2008 presidential campaign, candidate Barak Obama proposed to “amend” NAFTA. While recanting ambitions to reopen NAFTA’s text, his Administration is evaluating trade agreements for lessons on how to change the model for future agreements.

Several lessons emerge from the trucking dispute and the energy conflict under chapters 6 (energy) and 12 (cross-border services). Regardless of the outcome, the debates provides a revealing snapshot of structural imbalance, which NAFTA shares with its successor free trade agreements. For purposes of national treat-
ment, for example, NAFTA does not provide parallel exceptions (compared to goods) for measures that relate to cross-border services. In the absence of parallel exceptions for health and resource conservation, a trade dispute based on services chapters can undermine the exceptions for measures that regulate goods. These vulnerabilities persist in the most recent free trade agreements (FTAs).

A similar comparison holds between NAFTA and WTO provisions on national treatment of services. NAFTA’s provisions on services have both broader coverage and more limited exceptions than the WTO’s General Agreement on Trade in Services (GATS). In cases where coverage overlaps, then, NAFTA could constrain the flexibility built into the WTO system. In theory, NAFTA provides mechanisms to preserve policy space by carving out new climate agreements and policies as they emerge. But by the time a policy emerges, the lines of trade conflict are already drawn. In the end, the realistic lesson is to fix NAFTA’s shortcomings by not repeating them. Future agreements should treat goods and services as the parallel sectors that they are—with parallel exceptions for legitimate policy objectives.

I. NEED FOR REFORM

Dual Coverage: NAFTA and the WTO

Mexico’s trucking sanctions remind us that NAFTA rules on services still have teeth. We may need reminding because a year after NAFTA took effect, the NAFTA countries joined a broader services agreement with global reach and additional trade rules, the GATS.9 Like NAFTA,10 GATS prohibits discrimination with rules on National Treatment and Most-Favored Nation Treatment (MFN).11 But GATS goes farther to prohibit non-discriminatory limits on number, quantity or legal form of services and suppliers.12

However, the GATS eclipse of NAFTA is only partial. GATS rules apply to specific “committed” sectors, while NAFTA covers all sectors, with only a small number of measures that are excluded by the annexes.13 Although NAFTA annexes could exclude state and provincial measures, negotiators never completed the process for future measures due to complexity and political resistance surrounding such measures.14

In addition to broader coverage than GATS, NAFTA provides fewer exceptions. A NAFTA country can defend a challenge to treatment of goods by invoking the general exceptions of GATT, the General Agreement on Tariffs and Trade, for measures “necessary to protect human, animal or plant life or health” or measures “relating to the conservation of exhaustible natural resources…”15
There is some speculation that GATT exceptions might apply to other WTO agreements (e.g., procurement, services, subsidies, etc.). However, the WTO agreements demonstrate the intent to selectively include the same exceptions as GATT in some cases and exclude them in others. NAFTA explicitly incorporates GATT environmental exceptions into its energy chapter, but only for goods and not for services.

NAFTA does provide one lone exception for services: measures “necessary to ensure compliance” with a measure that is otherwise consistent with NAFTA. However, as interpreted by the NAFTA panel in Cross-Border Trucking, the measure being defended must enforce “another law,” not itself. In addition, the measure being enforced must be consistent with NAFTA. That condition is not met if the law being enforced is the same measure being challenged.

**Dual Coverage: Goods and Services**

NAFTA does not define the distinction between “goods” and “services.” Instead, it defines goods by referring to the Harmonized Tariff System of tariff classifications. In the case of energy and petrochemical goods, that includes the product categories for electricity, natural and artificial gas, crude oil, specific refined petroleum products, etc. For services, NAFTA refers to business activities such as transmission, distribution and storage of energy and petrochemical goods. As with other trade agreements, the question is not whether a law is covered only by a NAFTA chapter on goods or a chapter on services because both can apply. For example, California’s Low-Carbon Fuel Standard (LCFS) is likely covered by NAFTA chapters on:

- **Goods**—which applies to “trade in goods,” and it incorporates GATT coverage of internal regulations “affecting the internal sale, offering for sale, purchase, transportation, distribution or use…”

- **Energy and petrochemicals**—because it is a measure “relating to … basic petrochemical goods originating in the territory of the Parties… and to cross-border trade in services associated with those goods.”

- **Cross-border services**—because it is a measure “relating to cross-border trade in services.”

Each chapter applies to a broader scope of measures than those that directly regulate goods or services, respectively. A measure that regulates distribution services can easily “affect” trade in the goods being distributed. A measure that
regulates a good can also “relate to” distribution services for that good. In other words, a single regulation can be covered by two or more chapters of NAFTA.

One reason for the absence of service exceptions is that NAFTA provides alternate routes to safeguard service regulations. One was to carve them out of the energy chapter, as Mexico did; the other is to carve them out by listing them in Annex II, which the United States could still do through negotiations. The United States did not use either approach for energy or climate policy.

The bottom line is that even if a NAFTA country could defend a measure under the exceptions for trade in goods, it could lose a challenge based on national treatment of services. This distinction comes to life in the context of Canadian exports of energy services to the United States.

Table 1. Comparing NAFTA's General Exceptions

<table>
<thead>
<tr>
<th>Goods—Selected Exceptions, Incorporated from GATT art. XX</th>
<th>Cross-Border Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Measures necessary to protect public morals.</td>
<td>Measures necessary to ensure compliance with laws or regulations that are not inconsistent with the provisions of this Agreement…</td>
</tr>
<tr>
<td>b. Measures necessary to protect human, animal or plant life or health.</td>
<td></td>
</tr>
<tr>
<td>d. Measures necessary to ensure compliance with laws or regulations that are not inconsistent with the provisions of this Agreement…</td>
<td></td>
</tr>
<tr>
<td>g. Measures relating to the exhaustion of exhaustible natural resources…</td>
<td></td>
</tr>
<tr>
<td>i. Measures essential to distribution of products in short supply…</td>
<td></td>
</tr>
</tbody>
</table>

Source: NAFTA article 2101.1, which for measures that relate to trade in goods, incorporates GATT article XX.

II. ENERGY AND CLIMATE SERVICES

As Robert Howse and Petrus van Bork observe, “Energy is inherently dynamic—it is a process of transformation. The product is the process.” NAFTA’s chapter 6 requires national treatment of energy goods (like electricity and petroleum); and cross-border suppliers of energy services (like distribution of those goods). Chapter 14 covers energy-related financial services (like trading in carbon credits and offsets). A NAFTA country can challenge a measure that relates to distribution of goods under NAFTA chapters on goods or
services or both. This is consistent with the WTO's interpretation that both GATT and GATS can cover the same measure.

A GATS claim would give Canada the opportunity to ally with other countries, some of which (e.g., Venezuela and Brazil) have won WTO disputes against the United States. And like NAFTA, GATS is also lacking an exception for conservation of resources. But unlike NAFTA, GATS provides an exception for human and animal life and health. This exception is untested in a climate context, but it is theoretically available as a defense.

Assuming that a country wants to challenge a measure based on national treatment of services, the threshold question is whether the measure is covered under NAFTA, GATS, or both? As noted above, NAFTA covers measures that “relate to” cross-border supply of energy, whereas GATS applies national treatment to measures that “affect” trade in sectors where the United States has a specific commitment. The United States has a commitment on wholesale distribution of goods (including petroleum products) and other existing and proposed commitments. In short, there is a reasonable prospect of coverage under both GATS and NAFTA services chapters.

Canada could use these services chapters to frame its discrimination argument against two state-level measures. While a full analysis exceeds the scope of this paper, two important lessons can be highlighted. First, the scope of NAFTA services conflict is not likely to be over the environmental objective, per se, but over how governments “count things as green” or “how green they are.” Second, neither NAFTA nor GATS allows a country to defend a services claim with the natural resource exception that applies to trade in goods.

The scope of NAFTA services conflict is not likely to be over the environmental objective, per se, but over how governments “count things as green” or “how green they are.”

Tar Sands Oil from Canada

Canadian production of crude oil made from Alberta tar sands is projected to grow 158 percent between 2007 and 2015, with most of the oil to be exported to the United States. Expansion of exports above 2007 levels will require investments of $31 billion in new pipelines, mixing stations and refinery capacity, much of it between Alberta and refineries in Oklahoma and Texas.
Some of this increase will reduce dependence on “foreign” sources, but unfortunately, tar sands crude releases three times more greenhouse gas (GHG) than conventional crude oil. Since 2004, GHG emissions from oil extraction in Canada have increased 57 percent, largely from tar sands crude destined for the U.S. market.

The government of Canada is lobbying against U.S. climate measures that might constrain Canada’s share of the crude oil market. These measures include a federal LCFS and border “adjustment” on the carbon content of products.

The governments of Canada and Alberta also complain that California is developing its state-level LCFS in a way that discriminates against tar sands crude. The California LCFS (March 5, 2009) requires fuel suppliers to meet a carbon intensity standard. The baseline for measuring petroleum products is a “lookup chart,” which applies to 98 percent of the fuels sold in California in 2006, but not tar sands crude. The letters from Canada translate into a NAFTA national treatment argument along the following lines:

**Like service.** NAFTA requires California to give Canadian fuel suppliers treatment that is no less favorable than it gives, “in like circumstances,” to suppliers from California or elsewhere in the United States. To challenge the LCFS, Canada would have to establish the “likeness” of its suppliers before it could assert that they are being treated less favorably. On the surface at least, the LCFS rule treats new suppliers differently only because their production “path” is more carbon-intensive (that is, not comparable) than the California baseline average. That California average was based on diverse sources of crude oil consumed in 2006, including heavy crude from within the state of California.

Canada has yet to present a services argument under NAFTA. However, Canada has highlighted facts that support an argument that distribution of tar-sands crude is a comparable “like service” to distribution of the heavy crude oil within California’s 2006 fuel mix. Distributors blend oil from many sources, and crude oil sources vary in carbon intensity. Alberta has commissioned a study to prove that the carbon intensity “of conventional crude oils, domestic and imported, is significant and in some cases comparable to heavy oil and oil sands derived crude.” In other words, Canada is likely to argue that distributing tar sands crude is “like” distributing the crude oils within California’s baseline with respect to extraction process and carbon intensity.

**Less-favorable treatment.** Canada asserts that the California LCFS will treat suppliers of tar sands crude less favorably. Its suppliers will have to calculate their...
unique carbon intensity,\textsuperscript{56} which will require extensive new record keeping and changes in supply chain management.\textsuperscript{57} Since their oil is more carbon intensive than the 2006 average, they will also have to take measures such as carbon sequestration in order to sell into the California market (or any other state that adopts a similar fuel standard).\textsuperscript{58} California-based suppliers can use the baseline average as their measure of carbon intensity, but Canada claims that some of the California crude is “similar to or higher than” the GHG emissions from tar sands.\textsuperscript{59} Canada has not presented evidence that California heavy crude is as carbon-intensive as tar-sands crude. However, California’s LCFS report acknowledges that 16 percent of California’s baseline oil came from sources that required steam extraction,\textsuperscript{60} as does oil from tar sands. In short, Canada may be able to prove that the state-level LCFS gives California’s dirty oil an advantage over Alberta’s dirty oil.\textsuperscript{61}

In considering “less favorable” treatment, the NAFTA panel in Cross-Border Trucking reasoned that differential treatment is justified so long as it is no more trade-restrictive than necessary to achieve a non-discriminatory purpose of regulation.\textsuperscript{62} The NAFTA panel’s necessity test for trucking regulations sounds a lot like the exceptions (measures necessary to protect public morals, human health, etc.) that NAFTA pointedly does not provide for services. Eric Leroux observes that the panel’s approach is “surprising and appears unjustified and in conflict” with NAFTA exceptions.\textsuperscript{63}

Nonetheless, even without reference to general exceptions, several GATT decisions recognize that a legitimate regulatory purpose can justify differential treatment of like products that compete with each other (e.g., asbestos vs. asbestos-free insulation).\textsuperscript{64} In other words, GATT allows governments to treat products differently if one poses a threat the other does not, even if they are “like” in terms of commercial use.

Natural Resources Canada does not contest the legitimacy of California’s regulatory objective. Instead, it offers alternatives to the LCFS treatment of tar sands oil as a special case: either assign all crude oil the same carbon intensity, or “treat each pathway on its own merits.”\textsuperscript{65} Alberta asserts that six additional alternatives will meet California’s objectives.\textsuperscript{66}

\textbf{Exception.} If Canada succeeds in proving less favorable treatment, then the United States would not be able to invoke the sole services exception for “measures necessary to enforce” a NAFTA-consistent measure. The measure being
defended must enforce another law, not itself. The California LCFS is authorized by state legislation, but it does not enforce another NAFTA-consistent measure, as the exception requires. Further, the measure does not meet the “consistent with NAFTA” test if it is the subject of the NAFTA dispute.

There is one more NAFTA article about exceptions that deserves mention because it is controversial in Canada. A coalition of environmental advocates is urging the Canadian government to ban extraction of tar sands oil and stop exports to the U.S. market. NAFTA article 605 says that NAFTA parties may not use the GATT exception for conserving exhaustible natural resources, article XX(g), to defend a measure that reduces exports or changes the export proportion among “specific energy goods” (e.g., tar sands bitumen versus conventional crude). Known as the “proportionality” rule, article 605 basically says that Canada cannot itself try to limit exports of tar sands oil and then use the exception for conserving resources to defend itself in a subsequent trade dispute should the United States challenge the measure. As the tar sands industry builds out its infrastructure for expanded bitumen exports, article 605 could be a constraint on Canadian federal climate policy. It turns off a NAFTA exception for trade in goods, but it does not change the scenario for a services dispute simply because there is no services exception to turn off.

To summarize, a NAFTA panel might recognize that California’s LCFS serves a legitimate regulatory purpose. However, it would apply a necessity test akin to some exceptions in GATT article XX and GATS article XIV. “Necessity” is a more demanding exception than the one for measures that “relate to” conservation of exhaustible resources. This means the California LCFS would face a higher burden of proof if the United States has to defend a NAFTA services challenge than a comparable challenge under GATS or NAFTA provisions on energy goods.

**Renewable Electricity from Canada**

The United States is also Canada’s customer for cross-border distribution of electricity, 96 percent of which comes from large dams (greater than 30 megawatts). However, use of large hydro is excluded by Renewable Portfolio Standards (RPS), which have been adopted by 28 states as a way to stimulate development of renewable sources. RPS obligates utilities to purchase a growing percentage of their electricity from renewable sources including wind, solar, geothermal, biomass, and small-scale hydro (less than 30 megawatts). Canada’s trade ministry argues that state RPS laws deny national treatment.
Like service. Canada argues that large-scale hydro is comparable to “like” renewable sources that the RPS laws favor. There is a long-standing debate about whether renewable and nonrenewable energy are “like” products. However, a Canadian challenge of RPS would likely frame the comparison between two renewable service suppliers; one is included (small hydro), and one is not (large hydro). In defense, the United States could argue that large-scale hydro is excluded because it blocks salmon migration, causes sedimentation, concentrates toxins, and, in some boreal settings, increases GHG emissions.

Less-favorable treatment. The RPS laws provide less favorable treatment of large hydro by excluding it from the program altogether. In defense of the RPS programs, they treat U.S. hydro the same as they treat Canadian hydro. A NAFTA panel might accept the objective of protecting salmon habitat, but it might not accept the extraterritorial application of that objective.

Exception. If Canada makes its national treatment argument, the United States would not be able to invoke an exception. RPS programs do not enforce another NAFTA-consistent measure, as the exception requires.

III. OVERARCHING PRINCIPLES AND GOALS FOR REFORM

This brief review shows that NAFTA retains the power to constrain public policies in service sectors other than trucking, notably the cross-border supply of transportation fuels and electricity.

The overarching principle for reform is to preserve policy space, especially for measures that evolve beyond the status quo of 1994 when NAFTA took effect. Specifically, NAFTA does not provide parallel exceptions (compared to goods) for measures that relate to cross-border services. In the absence of parallel exceptions, a trade dispute based on services chapters can undermine the exceptions for measures that regulate goods.

Instruments for Reform

The absence of health or resource exceptions for NAFTA services chapters is a structural problem; it would require renegotiation of NAFTA in one of these formats:

- Exceptions for trade in services. For measures that regulate services, NAFTA could provide exceptions that parallel the ones it provides to trade in goods under GATT article XX, including measures necessary to protect public morals, life and health, and conservation of exhaustible resources.
Exclusion of measures under Annex II. The United States did not avail itself of the opportunity to exclude (or “reserve”) future energy, environmental or climate measures in U.S. Annex II. It is not an accident that the energy measures sparking NAFTA controversy arise from new and experimental policies at the state level. Back in 1993, NAFTA negotiators did not complete the framework of exclusions that NAFTA authorizes for future state and provincial measures. When confronted with political resistance from some provinces and too many proposed exclusions from some states, the negotiators simply gave up. Furthermore, in addition to state and provincial measures, in the post-NAFTA FTAs, the U.S. schedule to Annex II carves out measures from coverage by market access rules to the extent that the measure is not covered by the U.S. schedule of GATS commitments. That carve-out could be broadened to read: “The United States reserves the right to adopt or maintain any measure that is consistent with U.S. obligations under the General Agreement on Trade in Services.” This broader language would synchronize NAFTA and GATS with respect to national treatment.

New environmental agreement. Another way to negotiate an exception is to add an environmental agreement to Annex 104.1. However, the exception would be limited by a necessity test that requires implementing measures to be the least-restrictive alternative. On the other hand, NAFTA’s proportionality rule under article 605 would not apply to measures that enforce an environmental agreement.

The last option shows how myopic NAFTA is. At its inception in 1994, NAFTA sought to preserve policy space to implement the leading environmental agreements of the day. Neither the U.N. Framework Convention on Climate Change nor the Kyoto Protocol existed when NAFTA was drafted in 1994.

NAFTA provides mechanisms to preserve policy space by carving out new environmental agreements and policies as they emerge. But the lesson of NAFTA is that by the time a new policy emerges, the lines of trade conflict are already drawn. The realistic lesson is to “fix” NAFTA’s shortcomings (Mr. Obama’s words as a candidate) by not repeating them in future agreements.

Future trade agreements should treat goods and services as the parallel sectors that they are—with parallel exceptions for legitimate policy objectives. The United States should also learn from its neighbors and carve out sectors where policy requires experiments to evolve.
Six NAFTA chapters apply to government measures that regulate services: Chapter 6, Energy and Basic Petrochemicals; Chapter 9, Standard-Related Measures; Chapter 11, Investment; Chapter 12, Cross-Border Trade in Services; Chapter 14, Financial Services; and Chapter 15, Competition Policy, Monopolies and State Enterprises. The Investment chapter is explained in the paper by Gus Van Harten. It covers enterprises that provide a service through commercial presence (e.g., as a subsidiary) in a country, and it enables private investors to seek compensation for violations of the chapter. The other chapters enable governments, not private investors, to enforce rules through trade sanctions. In an investment dispute about cross-border transport of hazardous waste that Canada lost, the tribunal made clear that NAFTA chapters are “cumulative,” meaning that Chapter 11 and Chapter 12 could apply to the same measure. S.D. Myers v. Canada, Partial Award (Merits) (2000, November 13), 40 International Legal Materials 1408, ¶ 292.


5 NAFTA service sectors that have generated controversy (but not a likely trade dispute) include:


11 GATS art. II (MFN) and art. XVII (National Treatment).
12 GATS art. XVI (Market Access). GATS also authorized negotiations on new trade rules for domestic regulation, subsidies and procurement of services, which are now in progress. GATS art. VII(4) (Domestic Regulation), art. XIII (Government Procurement) and art. XV (Subsidies).

13 Annex I excludes listed measures that existed in 1993, including all inconsistent state and provincial measures. Annex II excludes types of future inconsistent measures.


15 NAFTA art 2101; General Agreement on Tariffs and Trade (GATT) (1994, Apr. 15). Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, United Nations Treaty Series, 1867, 187, art. XX(b) and (g).


17 For example, the Agreement on Subsidies and Countervailing Measures (SCM) (1994, April 15). Marrakesh Agreement Establishing the World Trade Organization, Annex 1A. United Nations Treaty Series, 1867, 14, art. 8 (Non-Actionable Subsidies), which is terminated under art. 31, Provisional Application (“The provisions of ... Article 8 shall apply for a period of five years...”).

18 For example, the Agreement on Trade-Related Investment Measures (TRIMS) (1994, April 15). Marrakesh Agreement Establishing the World Trade Organization, Annex 1A. United Nations Treaty Series, 1868, 186, art. 3 (“All exceptions under the GATT 1994 shall apply, as appropriate, to the provisions of this agreement.”).

19 NAFTA, art. 2101.1 (“For purposes of (a) Part Two (Trade in Goods), except to the extent that a provision of that Part applies to services, and Part Three (Technical Barriers to Trade), except to the extent that a provision of that Part applies to services, GATT Article XX and its interpretive notes... are incorporated into and made part of this Agreement. The Parties understand that the measures referred to in GATT Article XX(b) include environmental measures necessary to protect human, animal or plant life or health, and that GATT Article XX(g) applies to measures relating to the conservation of living and non-living exhaustible natural resources.”)

20 NAFTA art. 2101.1.


22 Cross-Border Trucking.


24 As an example, see NAFTA art. 602.3.1.

25 NAFTA chapter 3 (National Treatment and Market Access for Goods), art. 1; GATT art. III:1.

26 NAFTA chapter 6 (Energy and Basic Petrochemicals), art. 602.1.

27 NAFTA chapter 12 (Cross-Border Trade in Services), art. 1201.


29 NAFTA art. 606; NAFTA art. 301.
30 NAFTA art 1202.
34 GATS art. XIV.
35 Compare GATS art. XIV(b) to NAFTA art. 2101. GATS art. XIV(b) is similar to GATT art. XX(b).
37 NAFTA art. 602(1); NAFTA art. 1201(1).
38 NAFTA art. 1201(1); GATS art. l:1, art. XVII:1.
40 United States Revised Services Offer (2005), including the relevant sectors:

Commitment—Services incidental to energy distribution: 1. Business Services, F. Other Business Services, (j) Services incidental to energy distribution, 46 (no limitations on mode 1, cross-border supply)

Offer—Bulk storage of fuels: 11. Transport Services, (Offer) H. Services Auxiliary to All modes of Transport, (b) Storage and warehouse services (except maritime transport services or services to which the Annex on Air Transport Services Applies) (CPC 742), 104 (no limitations on mode 1, cross-border supply).

Promise to commit to settle a WTO dispute—Bulk storage of fuels: Joint letter of the United States and the European Communities pursuant to paragraph 5 of the Procedures for implementation of article XXI of the General Agreement on Trade in Services (2007, December 17). Doc. S/L/80.


42 The base of Alberta’s production of bitumen (the heavy product of extraction from tar sands) was 1.2 million barrels per day in 2007; the increase is projected to be 3.1 million barrels per day by 2015. Sword (2008).
43 Ibid.
44 Ibid.


48 Letter from Kevin Stringer, Director General of Petroleum Resources Branch, Natural Resources Canada, to the California Air Resources Board (2009, March 4) (Natural Resources Canada letter).


50 For gasoline, the carbon-intensity standard starts at 95.61 grams of carbon dioxide per unit of energy in 2010 and then declines by 10 percent over 10 years. California Air Resources Board (CARB) (2009, March 5). CARB, Proposed Regulation to Implement the Low Carbon Fuel Standard, Vol. I, Subchapter 10, Art. 4, Subarticle 7, § 95482(b), Table 1 (Proposed LCFS); Public Hearing to Consider Adoption of a Proposed Regulation to Implement the Low Carbon Fuel Standard, Staff’s Suggested Modifications to the Original Proposal, Modifications to section 95486 (2009, April 23). Attachment B, Lookup Table IV-20.

51 CARB, Proposed LCFS, § 95486(b) Method 1—CARB Lookup Table.


54 Natural Resources Canada letter; Alberta Energy letter.


57 Natural Resources Canada letter; Alberta Energy letter.

58 CARB, Proposed LCFS, § 95486(a)(2)(A)(2), For All Other CARBOB, Gasoline or Diesel Fuel, Including Those Derived from High Carbon-Intensity Crude Oil.

59 Letter from Minister of Natural Resources, Hon. Lisa Raitt, to Gov. Arnold Schwarzenegger (2009, April 21) (‘… crude oil derived from Canada’s oil sands may be discriminated against as a high CI crude oil, while other crude oils with similar upstream emissions are not singled out. This could be perceived as creating an unfair trade barrier …’).

60 CARB, Proposed LCFS, Staff Report: IV-6 (Table IV-3, Fuel Pathways Completed for Use in the LCFS, Fuel Pathway Description of the Pathway, California Reformulated Gasoline Blendstock for Oxygenate Blending (CARBOB): 1 average pathway based on the average crude oil used in California refineries), www.arb.ca.gov/fuels/lcfs/022709lcfs_carbob.pdf); Staff Report: IV-13 (“Crude recovered in California amounts to approximately 40 percent of all crude delivered to California in 2006. Of the crude produced in California, 40 percent requires tertiary methods to recover the crude and requires steam generation for the process. Therefore, the energy use is higher compared to primary extraction.”).

61 Ibid.; Alberta Energy letter.

62 NAFTA Panel—Cross-Border Trucking.


65 Natural Resources Canada letter, p. 2, ¶11.

66 Alberta Energy letter.

67 NAFTA art. 2101(1)-(2).

68 See NAFTA Panel—Cross-Border Trucking, ¶ 269.

NAFTA art. 605 reads as an exception to an exception: “... a Party may adopt or maintain a restriction otherwise justified under Article XI:2(a) or XX(g), (i) or (j) of the GATT with respect to the export of an energy or basic petrochemical good to the territory of another Party, only if: (a) the restriction does not reduce the proportion of the total export shipments of the specific energy or basic petrochemical good made available to that other Party relative to... the most recent 36-month period for which data are available... and (c) the restriction does not require the disruption of normal channels of supply... or normal proportions among specific energy or basic petrochemical goods... such as, for example, between crude oil and refined products and among different categories of crude oil and of refined products.” (emphasis added)

However, the scenario for a U.S. government challenge of Canadian climate policy is unlikely. More likely, Canadian or U.S. investors would use NAFTA chapter 11 to challenge climate policy in either country that significantly constrains, burdens or imposes performance requirements on trade in tar sands oil. In general, see Laxer, Gordon and John Dillon (2008). Over a Barrel: Exiting from NAFTA’s Proportionality Clause. Parkland Institute and Canadian Centre for Policy Alternatives. Available at www.ualberta.ca/PARKLAND/research/studies/OverABarrel.pdf.


DFAIT (2007); NAFTA arts. 602:1 and 1205.


NAFTA art. 2101(1)-(2).


For a narrow interpretation of NAFTA’s exception for listed environmental agreements in the context of an investment dispute under chapter 11, see S.D. Myers, ¶¶ 210-215, 298. (investor rights trump Canada’s policy for processing hazardous waste (PCBs) in Canada, even though the Basel Convention encourages countries to avoid cross-border shipment of hazardous waste).

NAFTA art. 104 provides an exception for measures that are necessary to enforce environmental agreements; NAFTA art. 605 turns off exceptions under GATT arts. XX and XI, but not measures excepted under art. 104.

2. Manufacturing Competitiveness: Toward a Regional Development Agenda

Enrique Dussel Peters

One of the Mexican government’s goals in signing NAFTA was to expand its manufacturing sector by stimulating exports. In the early years following implementation, Mexico succeeded in attracting foreign investment and increasing manufacturing exports, with notable expansion in automotive, apparel, and electronics, among others. Yet this apparent success masks fundamental weaknesses, as the three NAFTA countries together have been losing their ability to compete in manufacturing in the global market. This suggests the need for a more proactive and long-term regional response.

Figure 1. Manufacturing Employment, NAFTA Region: 1990–2009/03 (2000=100)

Source: Department of Labor (United States); Statistics Canada (CANSIM); and Secretaría del Trabajo y Previsión Social (Mexico).
Even before the recent global financial and economic crisis\textsuperscript{1}, the manufacturing sectors in the NAFTA-region were under similarly extreme pressures. The share of manufacturing in terms of GDP and employment has been falling in the three NAFTA countries, particularly since 2000 (See Figure 1). Contrary to the period 1994–2000, which saw increasing regional integration in a highly competitive global market, from 2000–2009 (March) the NAFTA region together lost 6.3 million jobs in manufacturing, or 27 percent of total employment in the sector.\textsuperscript{2}

This suggests that in general, and in particular since 2000, the process of regional integration has deteriorated; in fact, an increasing process of “disintegration” has been taking place since then. These tendencies have only deepened since the second half of 2008 with the global crisis. In recent years, the original NAFTA integration agenda among the NAFTA countries has given way to one focused on security topics, with little sustained attention to socioeconomic, infrastructure, and other regional development issues.

Manufacturing is of particular relevance to both regional and NAFTA-specific discussions. According to a wide variety of modeling and debates during 1991–1993, if a sector in Mexico’s economy was going to benefit through economic integration, it was manufacturing.\textsuperscript{3}

This brief analysis is divided into three parts. Beginning with a brief analysis of the current conditions of Mexico’s manufacturing sector, this chapter moves on to discuss overarching principles and goals for an agenda toward competitiveness and development in the NAFTA region. The final section proposes specific instruments and policies to achieve those goals.

I. CURRENT CONDITIONS IN MEXICO’S MANUFACTURING SECTOR

Mexico’s economy has faced severe limitations to growth since the 1980s, both in comparison with its own historical experience in the 1940–1970 period, as well as from an international comparison. From 1980 to 2007, for example, Mexico’s per capita GDP growth rate was one-tenth that of China. Manufacturing, more than any other sector, has experienced the impacts of these growth limitations. Four key issues stand out as we seek to understand the current conditions of Mexico’s manufacturing sector.\textsuperscript{4}

Falling Manufacturing

First, Mexico’s manufacturing share in GDP has fallen constantly since the end of the 1980s, from levels above 23 percent to levels below 19 percent in the last
quarter of 2008 (and since 2001). In terms of formal permanent employment, the conditions have been harsher: from 1994 to March 2009 manufacturing’s share of total formal and permanent employment fell from 33 to 26 percent. Since its peak in October 2000, the sector lost 1.04 million permanent jobs through March 2009—or 25 percent. In the recent economic crisis, manufacturing has been hit particularly hard, suffering 59 percent of the country’s total employment losses from October 2008 to March 2009.

**Weakening Integration**

Second, the integration process within NAFTA, and concretely between Mexico and the United States, has been weakening steadily since 2000. From a Mexican perspective, the share of trade with the United States fell from levels above 86 percent in the 1990s to 73 percent in 2008. In manufacturing the fall has been more substantial, with Mexico’s share of U.S. manufacturing imports dropping from levels above 80 percent in the 1990s to 45 percent in November 2008. Similarly, as measured by the Grubel-Lloyd Index that calculates the percent of trade that is within industries, intra-industry trade (at the four-digit level of the Harmonized Tariff System) reached its highest level in 1998 with 48 percent and fell since then to levels below 43 percent. This trend is a clear indicator of declining economic integration between Mexico and the United States.

**Dependence on the U.S.**

Third, these tendencies have been evident in value chains that are of particular regional importance—yarn-textile-garments, electronics, and auto parts-automobiles. The current global crisis has taken a heavy toll on these industries. In automobiles, for example, it is very possible that only one or two of the Big Three U.S. auto companies—GM, Chrysler and Ford—will survive the crisis. Mexico’s auto parts-automobile industry is highly dependent on these three firms, since they account for almost 60 percent of total auto parts and automobile production.

**New Competitiveness**

Finally, it is worth remembering that during the period 1994–2000, the implementation of NAFTA helped the auto parts-automobiles, electronics, and yarn-textile-garments industries restructure. In both the United States and Mexico, this increasing integration contributed to new competitiveness in North America to better compete with Asia.
Causes and Effects

A number of factors contribute to these trends. NAFTA made the auto, electronics, and garment industries more dynamic. Yet the dynamism was largely cut off from the broader economy because the firms in this sector tended to ignore Mexico as a source of inputs or markets, preferring to import the majority of its inputs and export the majority of its output. Thus, much of Mexico's domestic manufacturing sector was hollowed out. This was a result of certain preferential programs in Mexico that favored importing inputs, a persistently overvalued exchange rate due to Mexico's tight monetary policy, and low tariffs under NAFTA. NAFTA's investment and intellectual property rules also made it difficult to pursue East Asian-like policies to enhance industrial competitiveness (though it is not clear the Mexican government would have used such policies if they had the space to do so).

China's accession to the WTO accentuated these forces. Mexico's exchange rate became even more overvalued relative to competitors (China) in the U.S. market. These factors, in addition to the preference toward imports in national programs and in NAFTA, made importing all more important. More importantly, those sectors that experienced dynamism from 1994 to 2000 began to lose competitiveness in the U.S. market with respect to China.

Manufacturing sectors in all three NAFTA countries are in a deep crisis, a crisis which has been growing since the end of the 1990s. More worrisome than the short term is probably the medium- and long-term state of the sector in terms of its competitiveness in Mexico and in the U.S. market, particularly in comparison with China and the rest of Asia.

II. OVERARCHING PRINCIPLES FOR A COMPETITIVENESS AND DEVELOPMENT AGENDA IN THE NAFTA REGION

To face these challenges, Mexico, Canada, and the United States should start a new framework—either within NAFTA or beyond it—to allow for a new development agenda to improve regional competitiveness, with an emphasis on the region's manufacturing sector. Having this goal in mind, regional leaders need to come together to address several specific issues:

- The region's weak internal dynamism since 2000 in terms of overall socio-economic integration, including trade, investment, migration, and regional patterns within the three NAFTA countries.
• The challenges facing priority value chains such as energy, yarn-textile-garments, electronics, infrastructure, telecommunications, transportation, agriculture, automobile-auto parts, and the financial and banking sector, among others.

• Each country’s priority sectors, which vary significantly. From a Mexican perspective, for example, issues such as agriculture, transportation, and migration are critical.

• The competitiveness of the three countries with other regions, and specifically with Asia and China. The three NAFTA countries today have similar socioeconomic challenges with Asia and in particular with China, not just in terms of increasing Asian trade and investment, but also regarding massive current account deficits. Thus, the NAFTA countries should envision a new North American regional relationship with Asia and China.

III. SPECIFIC INSTRUMENTS AND POLICIES

The general framework for instruments and policies from a regional and NAFTA perspective should be one that accepts the legacy of NAFTA and focuses on the need to update, reframe, or go beyond NAFTA after 15 years. In addition to creating the policy space under the investment, intellectual property, and other parts of NAFTA itself discussed in this report, this is, in effect a proposal for a new integration and development agenda in the NAFTA region. Within this framework, socioeconomic topics and the issue of manufacturing’s competitiveness are of critical importance. They should be considered in the context of the first NAFTA-period (1994–2000) in which specific value chains survived and restructured through NAFTA.

Having this general spirit in mind, the “Development and Competitiveness Agenda for NAFTA’s Manufacturing Sector” should include at least the following policies, provisions, and instruments:

**NAFTA Development Commission**

The three NAFTA countries should engage in negotiations to establish a Development Commission that defines the depth and breadth of specific NAFTA reforms, much as the countries negotiated between 1991 and 1993. This NAFTA-Commission should, in a few weeks, outline the future of regional reforms and delegate most of the concrete policies and provisions for the future of the development agenda to various sub-committees. The Commission should include
not only officials of the public and private sectors, but also non-governmental organizations, academics, and experts in the respective fields.

One of the sub-committees should address the “Competitiveness Agenda of Manufacturing in the NAFTA Region” by creating panels for priority value chains, as discussed earlier, for example, in yarn-textiles-garments, electronics, infrastructure, telecommunications, transportation, agriculture, automobile-auto parts and the financial and banking sectors. Another panel should specifically discuss the new proposed relationship with Asia, and in particular with China.

**Rules of Origin Evaluation**

One of the main results of regional integration and negotiations during 1991–1993 were the rules of origin, i.e., the value-added that was created in the NAFTA region so that the commodity was considered from the region. A strict evaluation of the rules of origin in manufacturing is required. This should consider increases or decreases in the negotiated levels in the current legal framework of NAFTA. For example, in the automotive sector the rules of origin have been important to regional development but the levels are now routinely ignored.

**“Buy North American”**

Similarly, the three countries have engaged in formal and informal programs of “Buy American, Buy Canadian, and Buy Mexican” during the current economic crisis. From a regional perspective, a “Buy North American” program could respond better to regional challenges and spur regional competitiveness.

**Development Financing**

One of the main weaknesses of the NAFTA framework was its lack of regional development financing. The original NADBANK proposals called for a regional development bank that could address the asymmetries among the NAFTA countries and fund regional integration projects. The institution still exists, but its mandate has been significantly reduced. It should be revitalized and recapitalized, as others in this group have urged. Part of its broadened mandate should include stimulating competitiveness in North American manufacturing through initiatives such as support for small- and medium-sized industries, financing of joint venture projects, financing technological transfer, export promotion, and expanding domestic markets, research and development, and innovation, as well as public infrastructure projects.
All three NAFTA countries face competition issues in their manufacturing sectors. If any of them is going to emerge from the current economic crisis with a strong manufacturing base, together they will need to devise a regional development strategy that can reestablish the competitiveness of the sector in global markets that are now quite different than they were when NAFTA was negotiated. It is time for a new phase of regional cooperation to achieve a more competitive manufacturing sector, which is vital to all three countries’ futures.

1 Nevertheless, the current global crisis is also a regional—NAFTA—issue, since the three countries have been particularly hard hit in terms of employment, GDP, and in manufacturing, and much deeper than other countries in Asia and Europe, for example.

2 In the period 1994–2000 all three countries increased employment in manufacturing, by 8.4% in the region, 1.4 percent in the U.S., 23.4 percent in Canada, and 39.2 percent in Mexico.


Timothy A. Wise

NAFTA's agricultural provisions have always been controversial, particularly for people in Mexico. Mexico’s geographically-based comparative advantages in supplying off-season fruits and vegetables to a hungry U.S. market were undeniable. Equally undeniable were the risks to Mexico’s large smallholder population, many of whom relied on crops that competed with U.S. imports proposed for liberalization. NAFTA’s liberalization of agricultural trade produced the expected results, with staple crops and meats flowing south and seasonal fruits and vegetables flowing north. The problems relate to the social and environmental consequences of market failures that plague the sector and to asymmetries between the trading partners, which are particularly acute in agriculture. NAFTA should be reformed to guarantee a more sustainable and equitable plan for agricultural integration.

I. THE NEED FOR REFORM

Corn is emblematic of NAFTA's problems. In Mexico corn (maize) is produced by a wide range of growers, including a small number of high-yield industrialized farms and some three million smallholders employing a wide range of farming practices and generally getting yields one-third (or less) of those of U.S. producers. Add to this already-vast asymmetry at the time of NAFTA's implementation the high levels of U.S. corn subsidies and the Mexican government's commitment to reduce its own extensive systems of support. When the Mexican government unilaterally liberalized corn markets, well ahead of NAFTA's 14-year transition schedule, U.S. corn flooded the Mexican market. Over two million people have since left agriculture, a drop of more than 25 percent. With limited employment-generation elsewhere in the economy, many have added to the rising flow of migrant laborers.
The trade flow results of NAFTA's agricultural provisions have been entirely predictable, if accelerated by Mexico's unilateral liberalization of most crops:

- **Mexican producers** increased exports of fruits and vegetables to the United States significantly. Exports came overwhelmingly from a small number of states with highly industrialized agriculture and relatively developed infrastructure. Though there was employment growth, new jobs were limited in these capital-intensive production systems, except for a rise in seasonal employment filled by migrant labor from other parts of Mexico.

- **U.S. producers** saw some loss of market share in these sectors, though impacts were limited due to the seasonal nature of most Mexican production and restrictions on imports during U.S. growing seasons. (Impacts were limited in sugar due to a long-running dispute over the treatment of U.S. corn sweetener exports.)

- **U.S. producers** saw significant increases in their exports of maize, soybeans, meats, and a variety of other staple goods.

- **Mexican producers** of those same goods saw prices fall significantly (50 percent in real terms for maize) with the dramatic rise in imports. Though vulnerable families did not overwhelmingly abandon their farms, many entered or increased their participation in the migratory labor force, either seasonally within Mexico, permanently to growth centers in Mexico such as tourist areas, or permanently to the United States.

Thus the principal need for reform of NAFTA's agricultural provisions is rooted in the wide development gap between the United States and Mexico in key staple and food crops. The Mexican government did not take advantage of the transition periods built into NAFTA's liberalization schedule to improve the competitiveness of most producers, though the largest industrialized growers received some assistance. Promised public investment in yield-enhancing projects such as irrigation never materialized, in part because Mexico's financial crisis at the start of NAFTA and its bank bailout drained public coffers. But it is worth stressing here that a more sensible transition period and higher levels of public investment would likely not have addressed the asymmetries between the staple-food sectors in Mexico and the United States.

It is critical to address these problems because job creation in Mexico has been disappointing and poverty remains high, particularly in rural areas, fueling the migratory flow to the United States. Mexico's food dependency
has grown dramatically under NAFTA, and the food crisis, which sparked tortilla riots and protests, highlighted the fallacy that Mexico could count on the United States for a reliable supply of cheap food. Finally, weak regulatory regimes have contributed to repeated food-safety issues in highly integrated supply chains while providing little market oversight to prevent anti-competitive business practices.

II. OVERARCHING PRINCIPLES AND GOALS FOR REFORM

The main goal for reforming NAFTA's agricultural provisions is to address the continued asymmetries between Mexico's agricultural systems and those of its NAFTA counterparts and to restore public policy flexibility, principally in Mexico, to allow the government to address those asymmetries and the many market distortions that pervade agricultural trade. Successful measures should lead to improved food security, declining rural poverty, reductions in rural migration, greater attention to the environmental impacts of agricultural trade, and a slow shrinking of the gaps between Mexico and its agricultural trading partners.

Reform measures primarily involve concessions from the governments of the United States and Canada. What they get in return is the long-term economic prosperity of one of their most important trading partners, prosperity that will lead to increased trade in goods, reductions in Mexico's exportation of its people, and potentially reductions in social unrest and illegal business activities.

III. RECOMMENDED INSTRUMENTS, POLICIES, AND PROVISIONS

The reforms needed to achieve these goals are relatively straightforward but require political will, particularly in Mexico, to execute. Up to now, that political will has been lacking. For example, there are steps the Mexican government could take without changing the substance of NAFTA, to better protect and develop its smallholder sector, particularly in maize. Mexico can:

- Justify the imposition of protective tariffs as countervailing measures to offset high U.S. farm subsidies.

- Expand its own government support for smallholders, since subsidies are not restricted under NAFTA and Mexico's current support levels remain billions of dollars below the country's allowable limits under the WTO.
• Use its participation in the Cartagena Protocol on Biosafety to restrict imports from the United States, because they contain large quantities of genetically modified corn and Cartagena recognizes the precautionary principle.

• Seek voluntary export restraints from the United States on sensitive products such as white corn and beans.  

**Deeper Reforms**

To address continued asymmetries and Mexico’s need for food security and livelihoods, more extensive reforms to NAFTA would be required.

**Borrow from the Doha Round.** NAFTA countries could incorporate into the agreement concepts now being developed in the Doha Round of WTO negotiations: special and differential treatment (SDT), special products (SP), and special safeguard mechanisms (SSM).

*Special and Differential Treatment*—The concept of SDT recognizes asymmetries in development between trading partners. NAFTA incorporated few SDT measures, and many of those in agriculture, such as the transition periods for sensitive crops, were not implemented. Asymmetries remain, and they are particularly acute in agriculture. SDT can be made concrete in NAFTA’s agricultural provisions through:

*Special Products*—In the Doha negotiations, these are defined as crops of particular importance for food security, livelihoods, or rural development. At the WTO, much work has gone into defining criteria a country would need to meet to justify declaring a crop a special product. Current proposals call for granting developing countries the right to declare up to 12 percent of their agricultural tariff lines special products. Many of the import-sensitive crops grown by Mexico’s smallholders would clearly meet these criteria, most notably maize and beans, the staples of the Mexican diet. Farm groups have offered a minimum list of six agricultural products—maize, beans, milk, coffee, sugar, and meats—for SP status at the WTO. These and five others—wheat, sorghum, rice, eggs, and fish—are included in Mexico’s Ley de Desarrollo Rural Sustentable as agricultural goods Mexico should
petition the WTO for SP status. All but coffee are import-sensitive products in North American trade. Because NAFTA supersedes the WTO, SP exemptions at the WTO would be largely meaningless for Mexico. Establishing a Special Product category within NAFTA, with clear and agreed criteria for its use consistent with emerging WTO disciplines, would by itself address many of the concerns over the impacts of NAFTA in agriculture. The proposed U.S.–Korea FTA offers a precedent for flexible treatment as it excludes rice from liberalization.

*Special Safeguard Mechanism*—NAFTA included an emergency safeguard measure consistent with the principle that developing countries be permitted to cushion their producers from import surges. The NAFTA clause expired with the completion of the final phase-out of protection in the transition period. This needs to be amended and made more timely and effective for the party affected by the import surge, in line with G33 proposals at the WTO.

**Borrow from European integration.** Others in this project address the need for public investment directed primarily toward Mexico to address asymmetric development, as with a revitalized North American Development BANK (NADBANK) with an expanded mandate and budget. Such North-South public investment certainly served the European Union well in its efforts to integrate disparate trading partners. As many have pointed out, the disparities are much greater in North America. The NADBANK funds have been miniscule by comparison to EU integration funds. Such funds would be critical to addressing asymmetries in agricultural development. Mexican researchers have shown that Mexico could more than double the country’s maize production using existing technologies if there were public investment in communications infrastructure, irrigation, credit, and agricultural extension. Most important, the water-rich areas where such investment makes the most sense are in the relatively underdeveloped southeastern parts of Mexico. Such poverty-reducing public investments are beyond the resources of the Mexican government alone. They would go a long way toward addressing several of the persistent market failures in the sector.

**Address environmental externalities.** Environmental externalities abound in agriculture. When more highly industrialized, high-input agricultural systems, with many negative externalities, are brought into direct competition through trade with more sustainable low-input systems, with their positive externalities, the effect is what has been referred to as the globalization of market failure. The management of agricultural trade needs to take such externalities into account, recognizing, for example, that the price of chemical-intensive U.S. corn does
not reflect its true costs, nor is the true value of the native Mexican maize it is
displacing reflected in its market price. It is unlikely such costs and values will
soon be incorporated into market-based pricing mechanisms. It will be impor-
tant to develop payment for environmental services schemes, backed by public
funds, to address the problem.

Respect precaution, protect maize biodiversity. Special measures should be
taken to protect maize biodiversity in Mexico, the center of origin for this im-
portant global food crop. The issue of genetically modified corn is of particular
importance and highlights both the promise and the failure of NAFTA’s envi-
ronmental regime. Through a model and inclusive citizen-petition process, the
CEC commissioned a high-level study of GM contamination, first documented
in Oaxaca. The wide-ranging peer-reviewed study, completed in 2003, may still
represent the most exhaustive research into transgenic gene flow ever conduct-
ed. The findings included the clear recommendation that more precaution was
warranted, particularly in the importation of GM corn in kernel form from the
United States, the likely source of the contamination. Not only was this study
largely suppressed due to opposition from the three governments (the papers
still have not been published in book form), the recommendations from NAFTA’s
environmental body have been ignored. Clearly NAFTA’s environmental institu-
tions need more teeth, a matter that is addressed in more detail by others.

Reform related intellectual property rules. A reformed agreement should allow
parties to exclude living organisms from patenting, permit sui generis systems
to protect native plant varieties, require disclosure of the sources of genetic
material used in new inventions, and observe the highest standards for consent
and benefit-sharing. NAFTA should recognize the pre-eminence of important
environmental treaties, as recommended in the Environment chapter of this
document, particularly the Convention on Biological Diversity and the Cartagena
Protocol and the International Treaty on Plant Genetic Resources for Agriculture,
known as the Law of the Seed.

Address market concentration and commodity market speculation. Anti-
trust enforcement has been weak to non-existent in both the United States and
Mexico. This has serious implications for agricultural markets, which were
highly concentrated before NAFTA took effect and are even more so now. There
is an urgent need to address competition issues in agriculture, as are measures
to regulate speculation in commodities markets. Financial speculation gener-
ates price increases and volatility through U.S. commodity exchanges, which
undermine cash prices and reduce public and private investments in agriculture, due to the unpredictability of rate of return. Because anti-competitive business practices and speculation represent significant distortions to agricultural markets, government measures to correct those distortions are warranted. Again, the use of a more expansive and effective SSM could help address such issues in the absence of effective anti-trust enforcement. For example, when the full liberalization of NAFTA’s agricultural provisions was imminent in January 2008, the large corn buyers that control an overwhelming share of flour markets used the threat of purchases in the United States to drive down producer prices at key harvest times in Mexico. Such uncompetitive practices need to be regulated, and governments need to be empowered to intervene.

Ideally, a tri-national body would oversee competition issues as they affect cross-border trade. For example, livestock operations are now highly integrated, with different operations performed in different countries. Ranchers have long complained of anti-competitive practices, such as so-called “captive supply” by packers that can result in price manipulation. Regulating such practices is now beyond the scope of any one government, suggesting the need for stronger measures at the regional level. Similarly, anti-trust actions in response to proposed mergers and acquisitions (M&A) are empowered only to address competition issues within each nation’s borders. Given the levels of integration, in agriculture and other sectors, NAFTA needs a tri-national body to establish clear regulations for M&A activities that may contribute to uncompetitive business practices.

Other Suggested Reforms

There are many additional reforms that would improve the integration of North American food and agricultural markets. A few are worth noting briefly.

**Grain reserves.** Public food reserves are critical both to food security and to smoothing the price volatility that characterizes most agricultural markets. A well-functioning regional grain reserve for a key crop such as corn could ease price volatility while improving food security.

**Allowing an international coffee agreement.** NAFTA explicitly forbids Mexico from entering into any new international coffee agreement that restricts trade in coffee (Art. 703.3). Such international supply-management schemes should not be excluded by NAFTA. In fact, the recent volatility in commodities prices highlights their value in stabilizing markets.
Improved food safety regulation. The lack of effective continental food safety and animal and plant health regulations has caused significant disruption to agricultural trade. The current NAFTA sanitary-phyto-sanitary (SPS) rules and the related consultation process are not adequate to address the underinvestment in SPS infrastructure, training and best practices, which has resulted in trade disputes.

NAFTA has shifted agricultural trade in North America in predictable ways. The social and environmental consequences of those shifts are severe and should be addressed. Mexico remains far behind its North American counterparts in agricultural development. These asymmetries should have been addressed before liberalization proceeded, particularly in sensitive crops. They should be addressed now.


4. Reforming the NAFTA Investment Regime

Gus Van Harten

NAFTA’s investment regime should be reformed. This paper elaborates a tiered set of reforms that are designed to (1) encourage foreign investment, while (2) affording appropriate policy space for governments to develop and regulate their economies in a sustainable manner and (3) ensuring equitable governance of investment disputes such that foreign investors are not privileged, procedurally or substantively, over domestic investors and citizens.

The proposals have been tiered according to their feasibility, based especially on whether they would require an amendment of NAFTA.

I. THE NEED FOR REFORM

Investment Protection and Regulation for Sustainable Development

An important aim of NAFTA is to encourage and protect foreign investment in order to create jobs, develop the economy, and support the shift to a green economy. Toward this end, foreign investors are given robust protections, especially by the provision in NAFTA Chapter 11 for compulsory international arbitration to decide investor claims against governments. In various respects, however, NAFTA goes too far in favoring investors over other interests.

Foreign investors are protected under NAFTA by broad standards on expropriation, non-discrimination, fair and equitable treatment, and other topics. However, the past decisions of some NAFTA tribunals have interpreted these standards in an overly expansive, pro-investor direction. This calls for clarification that the treaty does not require payment of public compensation to investors where they are affected negatively by laws or regulations passed in good faith for a public purpose.¹
It is likely that governments in each NAFTA state have been influenced in their regulatory decisions by the risk of a NAFTA claim. Foreign investors have shown clearly that they will challenge virtually any government measure. For example, NAFTA Chapter 11 has to date been used to challenge: measures to control gasoline content and protect groundwater resources; a legislative ban on the export of hazardous wastes; a phase-out of the agricultural chemical lindane; a court decision leading to a large punitive damages award; the creation of an ecological park; the environmental assessment of a quarry project; the regulation of open-pit mining near Native American sacred sites; and, most recently, the implementation of safety standards for foreign trucks.

Various post-NAFTA reforms appear to accept that arbitration tribunals have used their discretion to take investment treaties too far in favor of investors. Likewise, in its review of the Metalclad award against Mexico, the British Columbia Supreme Court observed with respect to the tribunal’s definition of ‘indirect expropriation’:

The Tribunal gave an extremely broad definition of expropriation for the purposes of Article 1110. In addition to the more conventional notion of expropriation involving a taking of property, the Tribunal held that expropriation under the NAFTA includes covert or incidental interference with the use of property which has the effect of depriving the owner, in whole or in significant part, of the use or reasonably-to-be-expected economic benefit of property. This definition is sufficiently broad to include a legitimate rezoning of property by a municipality or other zoning authority.

Despite this, the court was unable—under the existing rules of the NAFTA regime—to correct this aspect of the Metalclad award.

**Concerns about Regulatory Chill**

Pro-investor interpretations of indirect expropriation and other standards are troubling because they raise the risk of ‘regulatory chill’. They enable foreign investors to entangle governments in international litigation and expose them to costly awards, even where the government has acted in good faith in pursuit of a worthy objective. In the words of one lawyer, the ability to sue under an investment treaty is:
an open invitation to unhappy investors, tempted to complain that a financial or business failure was due to improper regulation, misguided macroeconomic policy, or discriminatory treatment by the host government and delighted by the opportunity to threaten the national government with a tedious expensive arbitration.  

Various studies have raised this concern. They have highlighted the danger that NAFTA (and other investment treaties) frustrate government efforts to protect health and the environment, preserve natural resources (such as fresh water), counteract climate change, promote economic development, regulate utilities and deliver government services, make zoning decisions, reform health care, or regulate the financial sector.  

It is difficult, if not impossible, to establish definitively that any particular measure was abandoned as a result of a NAFTA claim. But it appears that various government measures have been withdrawn in the face of threatened claims. Documented cases include, for example, withdrawn proposals in Canada to require plain packaging of cigarettes, to establish public auto insurance, and to privatize a water filtration plant.  

Box 1. The Ethyl Case  

Perhaps the clearest case of regulatory chill is the Ethyl arbitration. Faced with a NAFTA claim, the Canadian government withdrew its restrictions on a gasoline additive called MMT—restrictions that had been justified on the precautionary basis that burning MMT posed an unacceptable risk of nerve and brain damage in humans and especially in children—after a NAFTA tribunal allowed the manufacturer of MMT to bring its claim under Chapter 11. Besides withdrawing its regulation, the Canadian government also agreed to (1) issue a statement that MMT did not pose a health threat and (2) pay (U.S.)$13 million in compensation to the manufacturer, an amount that exceeded Environment Canada’s annual budget for enforcement and compliance. The case indicates how NAFTA can be used by foreign investors to pressure a government to ‘purchase its environmental sovereignty by settling its way out of Chapter XI claims’.  

Not all NAFTA claims have been successful (many are still pending). But the fact that they can be brought with such ease enables foreign investors to pressure or harass governments and to frustrate important initiatives. An ongoing claim by Dow AgroSciences against Canada, for example—in response to Quebec’s restrictions on cosmetic use of the chemical pesticide 2,4-D—appears aimed as much at deterring other governments from taking similar steps to reduce pesticide use for health and environmental reasons, as much as it is meant to win compensation of $2 million, as claimed, for the incidental impact on Dow’s sales in Quebec.
The Threat to Financial, Economic, and Environmental Reform

Beyond NAFTA Chapter 11, foreign investors have used investment treaties to bring more than 250 investor-state claims against countries, usually in the developing world, over the last 15 years. They have challenged a wide range of policies and decisions. Perhaps most ominous are the 46 claims brought against Argentina for its reforms in the face of the country's financial and economic crisis in 2001. These claims have led to hundreds of millions of dollars in awards against Argentina and will likely generate billions more. Moreover, some tribunals have relied on dubious pro-investor readings of the treaties to support awards. In response, Argentina has declined to pay awards, thus calling into question the utility of the system, even for investors.

So long as the U.S., Canada, and Mexico do not take steps to limit their exposure to claims, they continue to put their public treasuries and regulatory processes at risk. Law firms specializing in investment arbitration are currently drumming up business by advising investors on how to bring investor-state claims for losses caused by government reforms in response to the present financial crisis. For example, according to a client pamphlet issued recently by one London-based firm:

States are coming under increasing pressure to take measures to bolster their national economies in response to the global economic downturn. Whilst it may be appropriate for States to take measures to address the financial crisis, foreign investors could be entitled to compensation if such measures are taken in breach of the terms of investment treaties... Since the Argentinean crisis has similarities with the financial difficulties now being encountered around the world, it is instructive to see how claims arising from huge losses suffered at the time are now being resolved...

Useful Development Measures that are Specifically Prohibited

Capital controls and performance requirements are prohibited under NAFTA even though they can play an important role in avoiding financial crises or boosting productivity and employment. Tailored use of such measures should be facilitated based on evidence of their utility to prevent capital flows from undermining financial systems or to ensure that foreign investment contributes to economic development. For policy coherence, the use of these measures could be subject to supervision by a regional commission, rather than by investor-state arbitration.
Equitable Governance of Investment Disputes

Investment disputes should be resolved fairly, via an independent adjudicative process that is accountable to public decision-makers. Investors may have good cause to seek protection through judicial review, even for apparently legitimate government action. But the investor-state model under NAFTA is overly dependent on a small group of arbitrators in its resolution of important matters of public policy.

For all investors, foreign or domestic, protection should be (and usually is) provided by domestic courts. Exceptionally, back-up protection may be required at the international level. But international adjudication should be an exceptional remedy, not a first resort. Foreign investors should not be able to circumvent domestic courts that offer a forum for justice that is at least as fair and independent as investor-state arbitration. In this and other respects, foreign investors should not be privileged over domestic investors and citizens, who are also profoundly affected by government decisions, and should be entitled to participate in arbitration alongside investor interests.

The Privileging of Foreign Investors over Citizens

Investor-state arbitration in its current form gives foreign investors the tremendous power to force states to submit the decisions of their legislatures, courts, and administrations to intensive review and discipline by arbitrators, outside of any court process.\(^\text{13}\) Many disputes that can and should be resolved at the domestic level are thus brought before international tribunals. The system is particularly lopsided in that, while investors can claim tax-funded compensation, they are not themselves subject to regulation through the adjudicative process.\(^\text{14}\)

The Lack of Independence of Investor-state Arbitrators

The use of arbitration to make final decisions in public law—especially where it involves legislative choices or public budgets—undermines judicial independence. Arbitrators are reasonably seen to have an interest to interpret the law in favor of investors so as to encourage future claims and grow the arbitration industry. This apparent bias offers a credible explanation for the surprisingly pro-investor approaches of numerous tribunals (e.g., Metalclad; Pope & Talbot;
These tribunals have required payment of public compensation for a range of non-discriminatory measures where foreign investors have sustained incidental loss as a result of government action. Moreover, tribunals are insulated from review by independent judges, whether domestic or international.

These are fundamental concerns, especially because NAFTA allows for such broad review of legislative and general policy decisions. Arbitrators are given authority that goes well beyond that of courts and tribunals under other treaties (other than other trade and investment agreements).

II. OVERARCHING PRINCIPLES AND GOALS FOR REFORM

The Principle of Sustainable Development

Investment treaties should allow appropriate policy space for governments to take action, free of the risk of a ruinous damages award, to enact laws and regulations on pressing issues, so long as the measure in question does not target foreign investors in a specific way for abuse or discrimination. This policy space should be widest for legislatures and courts, and for general policy decisions of the executive. Reforms should aim to establish a regime in which states have appropriate options to regulate in good faith without risk of international claims.

The Principle of Equitable Governance

To ensure equitable governance, NAFTA adjudication must be insulated from inappropriate influence by investors and other private actors. The process should defer to the democratic legitimacy of legislatures, the independence of domestic courts, and the expertise of executive agencies. Foreign investors should not be allowed to circumvent domestic courts where the courts offer justice. NAFTA arbitration itself should offer an independent and fair process, both for the investor and the state, consistent with principles of judging in the constitutional traditions of the NAFTA states and in international law.

III. RECOMMENDED INSTRUMENTS, POLICIES, AND PROVISIONS

Recommended reforms to NAFTA, and their key components, are summarized below. Notably, many of the revisions adopted in post-NAFTA treaties are based on the May 10th Agreement in the U.S. Congress and Administration. This post-NAFTA position is an important starting point for NAFTA reform. For reasons discussed above, though, it falls short, especially because it does not address (1)
the danger that arbitrators will continue to interpret the treaty—however carefully it is re-worded—in an unduly pro-investor way or (2) the procedural privileges that investor-state arbitration unfairly provides to foreign investors.

The recommended reforms are summarized as follows:

**Reform the Dispute Settlement Regime**

- consider the option of removing the investor-state regime outright from NAFTA (requires amendment);

- provide for standing in the process for persons or entities whose interests are directly affected by an investor-state dispute, and allow states to bring counter-claims against foreign investors for breaches of their own duties or obligations (requires amendment);

- establish a regional adjudicative body to replace or supplement the role of private arbitration, and to ensure independence and enhance coherence in the decision-making process (requires amendment);

- provide for the members of the regional adjudicative body to develop rules to govern the resolution of investor-state disputes (requires amendment);

- as a temporary measure to ensure independence, and as provided for in NAFTA Article 1124(4) itself, designate a roster of experts—preferably sitting judges—from which presiding arbitrators must be chosen (does not require amendment);

**Ensure that Investor-State Arbitration is an Exceptional Remedy**

- take steps to limit forum-shopping and ‘claims of convenience’ by non-NAFTA investors (may not require amendment);

- preclude foreign investors from circumventing domestic courts where the courts offer justice (may not require amendment);

- expand NAFTA’s screening mechanism to ensure flexibility and predictability in key fields of regulation, such as financial regulation and health/environmental protection (requires amendment);

**Clarify Broadly-Framed Substantive Standards**

- limit the concepts of indirect expropriation and ‘fair and equitable treatment’ to preclude their application to non-discriminatory measures that are adopted
in good faith for a public purpose, based for example on the awards in Methanex\textsuperscript{19} and Glamis Gold\textsuperscript{20} (does not require amendment);

- clarify that national treatment requires evidence of either (1) intentional discrimination or (2) de facto discrimination against foreign investors as a group, based for example on the ADF award\textsuperscript{21} (does not require amendment);

- clarify that most-favored-nation treatment does not defeat exceptions in NAFTA or extend to dispute settlement provisions of other treaties, based for example on the Plama award\textsuperscript{22} (does not require amendment);

**Check the Discretion of Investor-State Tribunals**

- direct tribunals to defer to legislative and judicial decisions, and to policy decisions of the executive, where the decision does not target foreign investors for abusive or discriminatory treatment (does not require amendment);

- clarify that tribunals should defer to the shared views of the NAFTA governments participating in an investor-state arbitration regarding the proper interpretation of NAFTA (does not require amendment);

- clarify that tribunals may award partial damages, or simply a costs award or declaratory award, as adequate satisfaction for a foreign investor, and that any damages award should account for the degree of blameworthiness of the respondent state (does not require amendment);

**Provide Exceptions to Protect Legitimate Regulation**

- incorporate exceptions from post-NAFTA treaties that aim to safeguard the financial system (may not require amendment);

- allow for tailored use of capital controls and performance requirements where justified to maintain financial stability or boost productivity and employment (requires amendment);

- extend NAFTA’s general exceptions to its investment chapter (requires amendment);
Revise the Treaty’s Statement of Objectives

- revise the statement of objectives of both NAFTA and its investor-state regime by referring, among other things, to the equitable governance of investment disputes based on judicial openness, independence, and accountability (requires amendment).

Not all of these reforms require amendment of NAFTA. NAFTA authorizes the Free Trade Commission—made up of Cabinet-level representatives of each NAFTA state—to make interpretations of the treaty that are binding on tribunals. This is an important tool to clarify the treaty. That said, other reforms that require amendment should also be pursued in order to address key concerns.

---


9 CMS Gas Transmission Company v Argentine Republic (Merits) (2005), International Legal Materials, 44, 1205 (May 12).


5. Intellectual Property for Development in Mexico

Kenneth C. Shadlen

Intellectual property (IP) regimes serve dual purposes: to provide incentives for the generation and commercialization of innovations and to foster dissemination and use of knowledge. An IP regime alone cannot maximize these two objectives simultaneously. After all, IP establishes incentives to innovate precisely by restricting use, so absent other regulations (competition policy, price controls) a country that establishes IP regulations that are most geared toward encouraging innovation potentially does so at the expense of dissemination and use of knowledge. Countries have typically sought to tailor their IP regimes, setting incentives to achieve different objectives, in line with local capacities and to satisfy local needs.1

While NAFTA’s IP provisions have introduced some restrictions that go beyond the World Trade Organization’s TRIPs agreement, the main problem for Mexico is not NAFTA but the Mexican government’s adoption of IP rules that go beyond the agreement. These have the effect of making it more difficult for innovation to be disseminated and widely used within the country.

I. NEED FOR REFORM

The principal problem with Mexico’s IP regime is that it is geared to promote innovation and the commercialization of new knowledge as if the country were much more developed and therefore capable of generating and absorbing inventions at a rapid pace. That is, in 1991, prior to NAFTA (in fact as a precondition for beginning negotiations), Mexico adopted a patent system that is appropriate for a country with significantly more advanced scientific, technological, and industrial infrastructures. We can assess patent systems along three dimensions: 1) what sorts

---

The principal problem with Mexico’s IP regime is that it is geared to promote innovation and the commercialization of new knowledge as if the country were much more developed and therefore capable of generating and absorbing inventions at a rapid pace.
of knowledge can be owned as private property; 2) the rights of owners vs. users of property; and 3) the effective duration of property owners’ rights. In Mexico, the scope of patentable knowledge is broad, and patent-holders have both strong and long rights of exclusion. In fact, Mexico subsequently reformed the patent system in 2003–04 to make issuing compulsory licenses (CLs) of patented drugs exceedingly difficult and effectively to extend patent-holders’ periods of market exclusivity.\(^2\)

As simple illustrations of the mismatch between Mexico’s patent system and the country’s scientific and technological capacities, consider that the absolute number of patent applications made by residents of Mexico increased by only 4 percent in the period since the new IP law was introduced, from 564 patents in 1991 to 584 in 2005. In contrast, the number of non-residents’ applications tripled over the same time period, from 4,707 in 1991 to 13,852 in 2005\(^3\). Net licensing and royalty payments to foreigners (payments minus receipts) increased from US$341 million in 1991 to US$713 million in 2004, an increase of 109 percent.

These data suggest that the new IP system set incentives to which Mexican actors have minimal ability to exploit, while raising the cost of accessing and using cutting-edge knowledge. Nor does Mexico’s IP system appear to meet health needs. Despite significant investment in the pharmaceutical industry, the price of medicines in Mexico remains high, and—most importantly—the government’s capacity to use the IP system to leverage price reductions from patent-holding firms is extremely low. Patent-holding pharmaceutical firms do not fear CLs, and thus feel little compulsion to reduce prices. To provide one example, Abbott prices its patented version of lopinavir/ritonavir, a key second-line treatment for HIV/AIDS, more than five times higher in Mexico than in Brazil.\(^4\)

On most dimensions Mexico’s IP regime is inappropriate. The question, then, is how the situation could be improved. In line with the other contributors, we can think of responses along three lines: reforms to Mexican policy, reforms to NAFTA itself, and regional efforts.

II. REFORMS TO MEXICAN POLICY

One can think of two responses to the mismatch between the IP system and the country’s scientific, industrial, and technological capacities:

- increase Mexico’s level of scientific, industrial, and technological development to make it more appropriate for the new IP system;
• alter the IP system to make it more appropriate for Mexico’s level of scientific, industrial, and technological development.

Mexico could do both, though in practice the focus (since early 2000s) has been almost exclusively on the former. Here I refer to the restructuring of science policy under the Fox government, the centerpiece of which were reforms to the operations of the National Science and Technology Counsel (CONACYT), the government’s most important instrument for promoting scientific research. These reforms included the creation of new funding mechanisms that aimed to increase collaboration between public research institutions and private industry. The government also introduced measures that involve the private sector more explicitly in innovation policy. For example, the Fox government created a new consultative forum on science and innovation to link government, academia, and industry; in fact, key individuals from Mexico’s most innovative firms were essentially “poached” by CONACYT with an eye on imparting the lessons from these successful innovation and IP management efforts.

Reforms to address the innovation challenge would also take into account the increasing evidence that innovation can be spurred through collaboration. To the extent that openness and sharing (rather than privatization and exclusion) are mechanisms for spurring innovation, policies could be introduced to encourage these conditions. Tax incentives can be used to reward collaborative research programs and “open innovation,” for example, and a greater share of CONACYT resources can be dedicated to promoting innovation via prizes. The reordering of CONACYT’s structure and operations creates a basis for moving forward in some of these directions, particularly to the extent that the mechanisms for supporting R&D in public and private enterprises can be informed by recent scholarship regarding collaborative innovation and the importance of extending the scientific commons. Such reforms are, in effect, more changes in effort and emphasis than changes in policy per se. NAFTA’s extremely broad restrictions on the use of performance requirements and other regulations on inward foreign investment eliminated a key policy tool that the Mexican government could use to encourage such collaboration.

These efforts also will require significantly more funding. An important implication, then, is that recognition of the importance of science and technology policy must become more than just rhetorical and be reflected in the Treasury’s allocation of resources. Although total (public and private) expenditure on research and development increased from 0.37 percent of GDP in 2000 to 0.50 percent in 2005,
this level is extraordinarily low. Among middle-income countries the global average for R&D expenditure in 2005 was 0.94 percent, while the average of high-income OECD countries was 2.32 percent. It is reasonable to expect that a revitalized and expanded NADBANK could contribute to such collaborative R&D spending if its mandate were broadened, as others have called for in this publication.

It is also important for Mexico to introduce reforms that make the IP system more appropriate for the country’s current level of development, because efforts to promote more innovation will take time to bear fruit. Until that happens, Mexico should:

- regulate licensing agreements to cap royalties, and that could also include a firm requirement that research funded by the public sector be licensed on a non-exclusive basis and at low fees.

- limit the breadth of patents and introduce a higher threshold of novelty and inventiveness as criteria for granting pharmaceutical patents.

- reverse the reforms introduced in 2003–04 on compulsory licensing of drugs, and revisit the system of linkage that was established between the patent office and Health Secretariat.

- introduce a more flexible and useful CL system (as Brazil did).

The idea behind these reforms is to keep more knowledge in the public domain and to facilitate public and private actors’ abilities to access and use knowledge. These policies would be complemented by reforms to Mexico’s competition laws, to prevent the abuse of monopoly rights. All of the above reforms could be adopted without changing NAFTA’s IP chapter, though the first would require changes in the investment chapter.

**III. REFORMS TO NAFTA**

The most egregious aspects of Mexico’s IP system come from how Mexico exceeded its NAFTA obligations. For example, the reforms to the compulsory licensing and drug registration arrangements were introduced a decade after NAFTA went into effect and were not required by NAFTA.

Still, in two important pharmaceutical-related areas NAFTA’s patent provisions do exceed those in the WTO/TRIPS, and these should be addressed. The first, and most simple, regards parallel importing. Parallel importation consists of allowing patented goods to enter the market once patent-holders have placed
the goods on the market elsewhere. So, for example, if the patent-holder prices a drug at $15/pill in Mexico and $5/pill in Bolivia, parallel importation would make it legal to bring them from Bolivia to Mexico.\textsuperscript{10} TRIPS allows parallel importing, but NAFTA does not.

A second area of reform regards NAFTA’s requirement that Mexico grant “pipeline patents.” Prior to the passage of a new patent law in 1991, Mexico did not grant patents on pharmaceutical products. This meant that a drug that was invented in 1988, for example, was not eligible for a patent at the time it was new. The drug would also be ineligible for patenting in 1991, even with the introduction of pharmaceutical patents, because it was no longer new. Since drugs are patented before marketing authority is secured, the 1988 drug in this example would most likely be undergoing clinical trials in 1991—it would be in the “pipeline.” Not only does NAFTA obligate countries to offer “pipeline patents,” it also requires Mexico to adjust the terms of patents when their expiry date is adjusted in the original application country. Reforming the pipeline system would release many drugs into the public domain.\textsuperscript{11}

As noted elsewhere in this report, NAFTA’s IP provisions should also allow parties greater flexibility to exclude from patenting living organisms and permit greater protections and benefit-sharing for native plant varieties. (See Agriculture and Environment chapters.)

**IV. REGIONAL RESPONSES**

Policymakers in the three NAFTA countries should consider the creation of a genuine regional science and technology area—something along the lines of a regional R&D treaty. Elements of this could include provisions that allow Mexican scientists to tap into U.S. funding (e.g., NIH) and Mexican students to have access to U.S. (and Canadian) doctoral fellowships. Indeed, recent research suggests that international academic exchanges and linkages of this sort provide key boosts to innovation in developing and developed countries,\textsuperscript{12} so this could be a benefit to Canada as well.\textsuperscript{13} Such an agreement might also direct some share of the royalties and licensing fees that Mexico currently pays into a fund that is applied to Mexican science. A strengthened NADBANK could also help fund such endeavours.

Taken together, these suggestions range from reforms the Mexican government could undertake unilaterally to some that involve changes to NAFTA itself. They illustrate what needs to be done to make IP a tool for development in contempo-
itary Mexico. If we want Mexico to become more innovative and to participate in and benefit from the “knowledge economy,” then it is not enough to create an IP system appropriate for a more developed country and wait for Mexico to grow into it. More pro-active steps—including at the regional level—will be essential to create an IP environment that is more favorable for development.


2 I contrast Mexico’s IP reforms on these dimensions with Brazil’s in Shadlen (2009a, forthcoming). Few countries issue compulsory licenses, since the threat to do so ordinarily is enough to obtain price reductions. In Mexico, however, a reform that makes the process of CLs exceedingly difficult reduces the availability of this negotiating tool.

3 Data are from the Network on Science and Technology Indicators (RICYT). Indicators by country. Retrieved August 6, 2009 from RICYT website: www.ricyt.org/interior/interior.asp?Nivel1=1&Nivel2=1&idioma=ENG. In making comparisons the key is to examine growth in patents after new IP laws were introduced. In the six years after Argentina and Brazil introduced new IP regimes in 1995 and 1996, respectively, residents’ patent applications increased by 57 percent in Argentina and 36 percent in Brazil, while in the longer period from introduction of the new laws until 2005, residents’ patent applications increased by 56 percent in Argentina and 88 percent in Brazil (RICYT).

4 Shadlen, Kenneth C. (2009b, forthcoming). Harmonization, Differentiation, and Development: The Case of Intellectual Property in the Global Trading Regime. In Silvia Sacchetti and Roger Sugden (eds.), Knowledge in the Development of Economies: Institutional Choices under Globalisation. Northampton: Edward Elgar. As for the environment, the significance of Mexico’s IP system remains unclear. To the extent that patented environmental technologies are based on older—no longer patented—technologies, we would expect to see multiple (and often functionally equivalent) products competing with each other. Research on the introduction of renewable energy technologies in Mexico City, for example, reveals that competition among providers of similar products for converting biogas meant that local actors could access the technologies at reasonable prices, and in the case of solar water heaters the most significant costs that impede use were not due to IP but rather the rising price of raw materials. See Mallett, Alexandra (2009 forthcoming). Trade and competitiveness policies and urban technology cooperation: re-examining Renewable Energy Technology (RET) adoption in Latin American cities. PhD thesis, Development Studies Institute (DESTIN), London School of Economics. One useful area of future research is to get a clearer sense of what green technologies are patented and, where patents exist, the extent to which functional substitutes exist.


8 This latter figure is most relevant, because Mexico has introduced a patent system as if the country were a high-income OECD country.


10 Note that parallel importation does not involve generics, as the drugs that would be imported in this way are the ones placed on the market by the patent-holder.

11 Although both of these reforms to NAFTA would be helpful, neither are contemplated in the May 2007 agreement between Congress and the USTR. It’s also worth pointing out that the reforms to the pipeline system would need to happen immediately to have any effect.


13 This would be similar to schemes that operate in the European Union.
6. NAFTA and the Environment: Lessons from Mexico and Beyond

Kevin P. Gallagher

U.S. President Barack Obama, and the head of the Office of the United State Trade Representative (USTR), Ronald Kirk, have consistently committed to strengthening NAFTA's environmental provisions on repeated occasions. After initial reluctance, Mexican President Felipe Calderon and Canadian Prime Minister Stephen Harper now express a willingness to revisit the environmental ramifications of the agreement. This short essay looks at the case of NAFTA's environmental record in Mexico to highlight the need for reform beyond the relatively modest environmental measures included in the May 10th agreement and to provide specific proposals that can help NAFTA spur environmental sustainability across North America.

I. THE NEED FOR REFORM

NAFTA was a landmark trade agreement in terms of linking trade and environment. NAFTA was the first significant trade agreement that included environmental provisions through a side agreement, and established parallel institutions for monitoring and finance. These achievements have been positive, but limited.

On the one hand, the side agreement and the institutions surrounding it fostered an unprecedented level of tri-national environmental diplomacy and cooperation among parties to the agreement. NAFTA's environmental side agreement, “The North American Agreement on Environmental Cooperation,” created a North American Commission for Environmental Cooperation (CEC) that is in part overseen by a transparent and representative public advisory committee. One concrete achievement stemming from these efforts has been the
establishment of a “Pollutant Release and Transfer Registry” law in Mexico that is broader in scope than similar laws in the U.S. and Canada. The CEC also boasts a “citizen submission” process whereby third parties can file claims identifying where they see violations of environmental laws in the three countries. This process has given rise to interesting fact-finding missions that have publicized coastal pollution and the genetic contamination of corn in Mexico. CEC has also hosted (but no longer does) an innovative funding mechanism for communities and small businesses to help them monitor and comply with environmental law. Finally, another collateral NAFTA institution of importance for the environment was the creation of the North American Development Bank (NADBANK) and the Border Environmental Cooperation Commission. These institutions fund and monitor water and sanitation projects in the U.S.-Mexico Border region.

In terms of environmental quality, NAFTA did not result in Mexico becoming a “pollution haven” for dirty U.S. firms seeking weaker environmental regulations, as many environmentalists feared. Indeed, in some cases foreign investment triggered through NAFTA brought clean technologies. Unfortunately, these gains are exceptions rather than the rule. According to Mexican government figures, the economic costs of environmental degradation have continued to average 10 percent of GDP since NAFTA. Hazardous waste and air pollution are on the rise. Eight million tons of hazardous waste are generated in Mexico each year, but Mexico can only absorb one million tons per year. This has led to a large pile-up of hazardous waste, and to illegal waste trade as well. Biological and genetic diversity have become increasingly threatened under NAFTA from import floods and bio-prospecting. The expansion of export-oriented industrial agriculture has had high environmental costs in the form of unsustainable water use, loading of nitrogen and other agro-chemicals.

Mexico’s poor environment record has been due to the Mexican government’s lack of commitment to environmental protection in the post-NAFTA period. Indeed, real spending and inspection levels have all declined since NAFTA took effect. A consistent theme throughout this report is that NAFTA goes too far in regulating government authority. In the case of Mexico, NAFTA’s investment rules made it difficult for Mexico to maintain a hazardous waste site. Finally, NAFTA’s environmental side agreement and related institutions lack the authority to deal with these and other problems. In addition, they have been under-funded, relegating them to the role of interesting pilot projects rather than comprehensive tri-national mechanisms to address environmental issues.
II. OVERARCHING PRINCIPLES AND GOALS FOR REFORM

For markets to work more efficiently in the three nations, both positive and negative externalities need to be incorporated into pricing mechanisms across North America. Given that externalities are not included the decisions of private actors in the marketplace, governments are needed to act as “second-best” options for correcting market failures. NAFTA should afford appropriate policy space for governments to provide the necessary incentives to internalize externalities in the least trade-restrictive manner.

Four overarching principles should guide these goals:

• **Polluter pays principle** where those responsible for pollution pay for the external environmental costs of production.

• **Precautionary principle** that states that policies should account for uncertainty by taking steps to avoid outcomes that could potentially cause irreversible damage in the future.

• **Access and benefit sharing** where the action of sharing a portion of profits derived from the use of biological and/or genetic resources with its original providers and allowing those original providers the access to the resources in question.

• **Right to know** where producers and governments share environmental information with their populations.

III. POLICY RECOMMENDATIONS

Repairing NAFTA so that it can enhance environmental sustainability throughout North America will entail revisiting some of the core components of the NAFTA agreement. Such reform goes well beyond the May 10th agreement discussed throughout this report. Consistent with the May 10th agreement however, NAFTA's side agreement on the environment will need to be a standalone chapter of the agreement that adheres to the same enforcement and dispute mechanisms as NAFTA. Finally, NAFTA's environmental institutions need to be reformed and reinvigorated.

**Investment Rules**

Although NAFTA did not cause foreign investors to flock to Mexico in order to exploit Mexico's weaker environmental standards, many foreign investors were not model environmental firms when they decided to locate in Mexico. While
some firms brought strict environmental standards with them, others were quite lax and not in compliance with Mexican law.7 Furthermore, in all three NAFTA countries foreign firms challenged environmental laws claiming that such laws were “tantamount to expropriation,” or that they were in violation of the “minimum standards of treatment” accorded to foreign investors under NAFTA.8 A reformed investment regime for North America needs to give all three governments the policy space to internalize environmental externalities in all firms within its borders, regardless of their national origin. In addition, governments and citizens should have a right to know about the environmental performance of all firms in their economies.

Five general improvements are needed to repair the investment chapter of the NAFTA:

• Negotiate an “interpretive note” to reinforce recent NAFTA cases that affirm how indirect expropriation and minimum standard of treatment rules cannot trump genuine environmental regulations that internalize externalities. This could be accomplished by formally recognizing the Methanex and Glamis rulings under NAFTA tribunals.9

• Require environmental impact statements by foreign investors before locating in a NAFTA country.

• Preserve the ability of governments to conduct “pre-establishment screening” whereby possible investors are screened for their environmental and other priorities.

• Grant governments GATT Article XX-like exceptions to use selective performance requirements to ensure that foreign firms are transferring environmental technologies and practices.

• Establish “right to know” provisions whereby citizens and governments have access to information regarding an investor’s environmental performance.
Many of these provisions have precedent under recent NAFTA cases, in the World Trade Organization, United States’ Preferential Trade Agreements that have come after NAFTA, and elsewhere. NAFTA investment tribunals in the Methanex and Glamis cases both affirmed that nations have the policy space for bona fide environmental laws. Under the WTO, foreign investors are granted no greater treatment than domestic investors and rules on indirect expropriation are absent. The “OECD Guidelines for Multinational Enterprises” which were separately signed by Mexico, Canada, and the United States, recognize the need for right-to-know provisions and environmental impact statements in foreign firms.\textsuperscript{10}

**Intellectual Property Rights**

A reinvigorated NAFTA will need to have an intellectual property rights regime that recognizes the different levels of development among its parties and ensures that all parties can put in place systems of innovation, technology, and product development in an environmentally sustainable manner. Under NAFTA and similar agreements in the hemisphere, there has been an incentive for private multinational firms largely located in the U.S. to monopolize domestic and traditional knowledge and exclude these constituents from the benefits of innovation and new product development. There are also increasing concerns that the current intellectual property regime will prohibit Mexico from developing or deploying new clean technologies for climate-friendly development. With respect to the environment, a new intellectual property regime for North America would:

- Require patent applicants to disclose the source and country of origin of genetic and biological resources.

- Require patent applicants to show evidence of prior informed consent and fair and equitable sharing of benefits for patents entailing the use of genetic or biological resources.

- Ensure that intellectual property rules facilitate the transfer of clean technologies and grant parties to the agreement equal opportunities to develop new clean technologies.

- Re-affirm the right to exclude plants and animals from patentability and to use sui-generis systems of protection for plant varieties.

Again, many of these provisions have precedent in the post-NAFTA World Trade Organization, United States’ Preferential Trade Agreements, and elsewhere.
Article 27.3(b) of the Trade Related Intellectual Property agreement in the WTO grants countries the flexibilities to exclude plant and animals for patentability and grants nations the flexibility to use *sui-generis* systems of protection on plant varieties, as do the current NAFTA provisions on intellectual property. In the U.S.-Peru Free Trade Agreement and in the draft of the U.S.-Colombia Free Trade Agreement both parties agreed to a side letter whereby prior informed consent and access and benefit sharing for genetic resources are covered. Making commitments like these on access and benefit sharing part of the intellectual property chapter of NAFTA would make such provisions more enforceable and help alleviate some of the concerns over bio-prospecting/bio-piracy in Mexico. Intellectual property rules and clean technology transfer and development are a relatively new concern not largely debated during NAFTA negotiations, but have begun to become primary concerns under the WTO. Key among those concerns are the extent to which developing countries like Mexico will have to pay monopoly prices to install already expensive clean energy technologies and/or face insurmountable obstacles if they chose to develop indigenous clean energy technologies to adapt to and combat global climate change.

**Services**

As shown in Robert Stumberg’s chapter on services and climate change in this report, NAFTA does not extend to the services sector the limited environmental coverage that can be found for goods in the agreement. The ongoing case concerning Mexican trucks is emblematic of NAFTA’s services provisions running head-on into environmental policy. NAFTA’s services chapters may also collide with future efforts to deploy renewable energy and mitigate global climate change.

To reform NAFTA’s services provisions for environmental policy, policymakers should provide GATT Article XX-like exceptions for trade in services. For measures that regulate services, NAFTA could provide exceptions that are necessary to protect public morals, life and health, and conservation of exhaustible resources. Compared to goods trade, NAFTA does not provide parallel exceptions to national treatment for measures that relate to cross-border services. Without such exceptions for health and environmental policy a trade dispute based on services chapters can undermine the exceptions for measures that regulate goods.

**Environment Chapter**

NAFTA was a landmark for including environmental provisions as part of the agreement. However, many post-NAFTA agreements have gone on to have more
enforcement power and to have a larger environmental scope than NAFTA. First and foremost, the side agreement should be enshrined as a standalone chapter within NAFTA and be subject to the same enforcement and dispute resolution parts of the agreement. With greater responsibility will be the need for a greater mandate and funding.

Five general improvements are needed to create an environment chapter of the NAFTA:

• Subject the environmental provisions to the same enforcement and dispute resolution provisions as commercial parts of the agreement
• Require parties to maintain, improve, and effectively enforce a set of basic environmental laws and regulations
• Re-affirm the precedence of, and expand upon, the list of Multilateral Environmental Agreements (MEAs) that parties are to implement
• Commit to gradually harmonizing environmental standards
• Expand the mandate and funding for the North American Commission for Environmental Cooperation.

The North American Commission for Environmental Cooperation has been praised by independent assessments and by environmental organizations for its role in sparking tri-national initiatives on the environment under NAFTA, such as pollutant release and transfer registries. It has also been praised for its tri-partite nature that grants civil society an advisory role on how the organization works. Most important, the commission has a “citizen submissions” process whereby non-governmental organizations can allege failures to effectively enforce environmental laws. Such allegations can be followed up on by the commission in the form of “factual records” which have been shown to shame violators into compliance. The commission has also been criticized for its lack of information and data gathering, and its limited mandate for enforceability. However, the commission has been provided with a paltry $9 million dollar budget and has not been able to change the course of environmental events in North America.

Renewed Institutions for Environment and Development

In order for the expanded role of environmental issues under NAFTA to work and be accepted, the existing mechanisms for financing environmental initia-
The environmental provisions of NAFTA are seen as an unfunded mandate there will be great reluctance or ability on the part of the Mexican government to carry those provisions out. Indeed, there is some evidence that such perceptions persisted when NAFTA was signed, partly explaining why the environmental record under NAFTA has been poor in Mexico.\(^{14}\)

The NADBANK was originally proposed by prominent economists Albert Fishlow, Sherman Robinson, and Raul Hinojosa-Ojeda.\(^{15}\) The idea was that the institution would serve as a regional development and adjustment assistance bank to help harmonize development in North America. The NADBANK was indeed established under NAFTA, but in the end only to address environmental problems in the U.S.-Mexico border. The organization was long plagued by difficulties and reformed by the Bush and Fox administrations in 2001, but only to strengthen its mandate to U.S.-Mexico border environmental issues.

A revitalized NADBANK would go back to its originally proposed idea of being a development bank and adjustment assistance facilitator, modeled after the structural funds under European economic integration and Brazil’s national development bank, (BNDES). To that end, the NADBANK would have to be recapitalized by NAFTA governments and be able to sell bonds and take equity stakes in order to raise more funds when needed as well. In relation to the environment in all three NAFTA countries, a revitalized NADBANK would have to:

- support small scale, sustainable agriculture initiatives.
- provide loans for small- and medium-sized enterprises (SMEs) for innovation and to comply with environmental regulations.
- provide loans and financing support for public infrastructure, renewable energy development, and environmental cleanup projects.
- support public-private partnerships for environment-related research and development activities.
- develop and maintain an active research team that examines the environment and development aspects of the NAFTA countries and bank activities.
This short essay confirms the concerns expressed by U.S. President Obama, the U.S. Congress, and civil society. NAFTA has clearly fallen short of enabling the three countries to protect their collective environment. This note also confirms that improving NAFTA’s ability to tackle trade-related environmental issues in the region will require comprehensive changes throughout the treaty, as well as the bolstering of existing collateral institutions for trade, environment, and development in North America.


3 Sistema de cuentas económicas y ecológicas>Indicadores de síntesis: PIN ecológico. Gobierno de Mexico: INEGI.


7. Rethinking Labor Rights

Christian E. Weller

The promotion of greater labor rights by the United States can create a more level playing field and boost incomes while taking pressure off U.S. trade deficits. The United States for decades now has racked up large and growing trade deficits with the rest of the world, including Mexico, especially after passage of the North American Free Trade Agreement (NAFTA) in 1994. These total U.S. deficits—at or above 5 percent of gross domestic product since the middle of 2004—could contribute to much lower U.S. living standards in the future since the United States will eventually have to repay the debt it incurred to repay those deficits.

Trade between the United States and Mexico swelled under NAFTA, but contradictory to the predictions by NAFTA’s proponents and standard trade theory, NAFTA did not produce remarkable wage gains in Mexico.²

The agreement also created imbalances among its parties. Before NAFTA went into effect, the United States enjoyed a small trade surplus with Mexico. In 1993, this trade surplus amounted to $1.7 billion. In 1994, the first year of NAFTA, the United States showed a smaller surplus of $1.3 billion, which quickly gave way to massive deficits. By 2007, the U.S. trade deficit with Mexico had soared to $75 billion. This is an erosion of 4,386.4 percent in nominal terms. In comparison, the U.S. trade deficit with China only deteriorated by 1,024.8 percent during the same period. The U.S. competitive position with Mexico clearly took a beating in the years since the NAFTA went into effect.

Repaying the total accumulated debt for all the U.S. deficits—at the end of 2007, the United States owed $2.4 trillion more to foreigners than it held in foreign
assets abroad—will become increasingly costly to U.S. living standards. Defaulting on this debt through higher inflation, which reduces the value of assets in the United States, or a rapidly falling currency, which debases the currency value of U.S. assets held by foreign investors, is unpalatable and would have serious adverse consequences for future U.S. economic growth. Because of these threats to future living standards, new public policy solutions are necessary to address these unsustainable deficits.

Labor rights were addressed in the agreement, but such rights were fairly weak, lacked strong enforcement mechanisms, and were not met with collateral efforts to address labor rights in North America. Repairing these weaknesses in NAFTA and other U.S. trade agreements would be good for our trading partners’ income profile and help repair U.S. deficits.

I. THE OVERARCHING GOALS OF REFORM

An alternative approach to NAFTA’s ineffective labor provisions is to promote the creation of a global middle class. Such a strategy is not simply for the benefit of our trading partners, but such a middle class can buy more high-end U.S. goods and services. An integral part of this virtuous circle strategy is the promotion of enforceable labor rights, including, but not limited to, negotiating them as part of trade agreements, such as NAFTA.

Better labor standards in Mexico can positively affect U.S. exports and U.S. imports. Better labor rights could increase demand for U.S. exports by boosting the incomes of Mexican workers. And, better labor standards reduce the cost advantage of production in Mexico since workers could no longer be paid so poorly. This effect should contribute to fewer U.S. imports from Mexico, assuming nothing else changes.

Labor reform in Mexico through the international relations between the United States and Mexico thus has three distinctive goals. First, public policy needs to improve the institutions that make up enforceable labor rights, such as labor law, courts, and independent trade unions, but also institutions that are more indirectly connected to labor rights, such as education. Second, policy makers should focus on raising the living standards of workers in Mexico relative to those in the United States. Third, to achieve increased economic stability in both countries, public policy needs to ensure that better worker rights in Mexico translate into more balanced U.S. trade.
II. LABOR RIGHTS IN U.S. FREE TRADE AGREEMENTS: THE NEED TO UPDATE NAFTA

Beginning with NAFTA, labor rights have since become an integral part of U.S. trade policy. NAFTA needs to be updated to include many of the improvements in more recent treaties, and expand upon those advances to fulfill the promise of higher living standards in all partner countries and to achieve more balanced trade between the trading partners, especially Mexico and the United States.

The integration of labor rights into trade agreements centers on the so-called core labor standards of the International Labor Organization (ILO) as a possible benchmark for labor protections. In June 1998, the ILO’s members adopted the Declaration on Fundamental Principles and Rights at Work. The generally recognized core labor standards that appear in trade agreements of varying forms are derived from this declaration. Box 1 outlines the major labor rights that are found in various U.S. trade treaties that should be included in NAFTA and future trade agreements.

**Box 1. Expansive Labor Rights for U.S. Trade Agreements**

- Freedom of association and protection of the right to organize.
- The right to bargain collectively.
- The right to strike.
- Prohibition of forced labor.
- Labor protections for children and young persons.
- Minimum employment standards.
- Elimination of employment discrimination.
- Equal pay for women and men.
- Prevention of occupational injuries and illnesses.
- Compensation in cases of occupational injuries and illnesses.
- Protection of migrant workers.

Under NAFTA most of these rights cannot be enforced under the agreement since they are part of a separate side agreement on labor. The wording of the labor provisions in the U.S.-Jordan FTA was not significantly different from the labor standards included in NAFTA, but the inclusion of the labor provisions in the body of the U.S.-Jordan FTA left some of these provisions subject to dispute settlement procedures—an added enforcement layer to the labor standards in
trade agreements.\(^3\) As set forth in the FTA, dispute settlement procedures lead the parties involved to a Dispute Settlement Panel, which produces a non-binding report of its determinations. If the dispute remains unresolved 30 days after this report is presented, the affected party can take “any appropriate and commensurate measure,” ostensibly including sanctions.\(^4\)

Now that we have 15 years of perspective on NAFTA, the United States, Mexico, and Canada should reengage in dialogue about their experiences with the FTA, keeping a strong eye to addressing unresolved and new labor issues that could benefit all three countries. In particular, this conversation should include “strengthening the labor secretariats’ capacity to monitor, adjudicate, and provide technical assistance in respect of labor standards enforcement.”\(^5\) Ideally, this dialogue could ultimately lead the countries to strengthen the Labor Commission that was created as part of a side agreement to NAFTA. The labor side agreement should be renegotiated to increase funding levels, strengthen its mandate, and increase the authority of the Labor Commission so that it can better resolve labor rights cases.\(^6\)

### III. BEYOND NAFTA

In rethinking NAFTA, though, it is important to keep in mind a few additional issues. Rather than impose equivalence to U.S. law, which creates a number of practical problems, the United States “should support local, country-driven approaches” to developing institutions abroad that promote labor rights.\(^7\) And, for real progress to be made, international agreements must contain concrete labor standards and a set of benchmarks to map progression over time. Past and current signatories of trade agreements with the United States are subject to a “soft obligation” to the “principles” underlying the internationally recognized core labor standards.\(^8\) In this regard, international agreements must provide signatories with the tools to provide positive incentives for moving toward better labor standards, and negative incentives, including sanctions, when benchmarks are not met.\(^9\)

This is a tall order for international engagement and unlikely to be accomplished with a single trade agreement, never mind a renegotiation of an existing one. Instead, the United States needs to broaden its engagement with Mexico and
Canada to invest in improved labor standards in Mexico through additional channels. Of particular relevance can be the training and skill development of those involved in the actual realization of labor rights on the ground: labor negotiators, labor-management mediators, and labor law judges. Much of this is already occurring through the cooperation of U.S. labor unions and parts of the U.S. government, such as the Federal Mediation and Conciliation Service (FMCS). Public policy thus should support ongoing efforts and help to increase such activities, where they have proven to be effective.

In a similar vein, the United States should help strengthen Mexico’s social insurance programs and promote institution building within the country. Such actions would help protect and promote the livelihood of Mexican workers and their families and enable a more attractive environment for private investment. This would also be a productive use of U.S. resources in that it would increase the potential for gain from a trade relationship with Mexico.

### IV. THE IMPACT OF BETTER LABOR RIGHTS ON U.S. TRADE

The reforms discussed above would boost Mexican incomes and trim the U.S. trade deficit. The combination of all factors that result from better labor standards point toward lower U.S. trade deficits. Exports should increase because of higher standards of living abroad and imports should decline as overseas producers have to bear more of their production costs, even if part of the additional cost is offset by higher productivity levels. Economic theory and evidence suggest that labor standards can play a role in creating more balanced international trade and thus should be taken seriously as part of the overall international economic policy agenda.

But do these hypotheses hold in reality? An investigation of data on U.S. trade with a range of countries shows that U.S. trade would indeed become more balanced if the United States traded more with countries with strong labor rights and less with countries with poor worker rights.

For one, the U.S. trade deficit has grown more slowly with countries that have stronger labor standards. Between 2000 and 2007, the gap between U.S. exports and U.S. imports widened faster for countries with limited or no labor rights than for countries with some or strong labor rights.

The United States has also held smaller trade deficits with countries that have better labor rights. Specifically, on average U.S. exports amounted to 74.5
percent of U.S. imports in countries with strong or some labor rights in 2000—indicating a trade deficit—compared to an average ratio of 36.0 percent—and thus a larger trade deficit—for countries with limited or no labor protections.

Moreover, trade with less industrialized countries with weak or no worker protections has contributed substantially to the increase in the U.S. trade deficit from 2000 to 2007. If the United States had just traded with less industrialized economies that had some or strong worker rights during those years, the trade deficit in 2007 would have been $123 billion smaller than it actually was.

Furthermore, U.S. exports have tended to be greater when worker rights are stronger. In 2000, U.S. exports to countries with strong or some worker rights were 182.3 percent larger than U.S. exports to countries with limited or no worker rights. In 2007, the difference was 93.5 percent. The link between labor rights and U.S. exports remains robust in a multivariate analysis.13

Stronger labor rights have also been associated with fewer U.S. imports. U.S. imports grew faster from 2000 to 2007 for countries with limited or no labor rights than for countries with some or strong labor rights. The link between worker rights and U.S. imports, though, disappears in a multivariate analysis, suggesting that the descriptive analyses picked up a spurious correlation with another determining variable. Put differently, the primary benefit from the promotion of labor rights around the world, including Mexico, would arise from higher living standards abroad, including Mexico, and thus the potential for more U.S. exports.

Are these trends large enough to matter? A simple calculation shows that the U.S. trade deficit would have been $123 billion smaller than it was if the United States had traded only with countries with some or strong worker rights. Another way to answer this question is to estimate a regression-based simulation. This analysis shows that on average, real U.S. exports would have been roughly three times as large if incomes and relative export prices in countries with weak or no worker rights had been similar to incomes and relative export prices in countries with some or strong worker rights. At the same time, U.S. imports would have largely remained unchanged if incomes and relative import prices in countries with weak or no worker rights had become similar to incomes and relative import prices in countries with some or strong worker rights. No matter how the data are cut, the results are robust and indicate that U.S. trade deficits would have been smaller if the United States had engaged more in promoting
worker rights. This follows primarily from higher living standards abroad that can contribute to more U.S. exports, while U.S. imports seem to be less impacted by better labor standards abroad.


2 The discussion only focuses on the relation between the United States and Mexico since the primary concern arises over the U.S. trade deficit. The same arguments, though, should hold in the bilateral relationship between Canada and Mexico. On the other hand, it is unlikely that labor reform will change the trade relationship between the United States and Canada since both countries have relatively strong labor institutions, at least in the international context.


6 Ibid.


8 Tarullo (2007).

9 Barenberg (2007).

10 Samans and Jacoby (2007).


12 All descriptive data reference the period from 2000 to 2007 since it is a complete U.S. business cycle and since data for earlier business cycles are incomplete.

The promise at NAFTA’s inception was that economic prosperity would enable Mexico to “export goods, not people.” Yet migration from Mexico to the United States has more than doubled since, driven by weak job creation in Mexico and strong demand for migrant labor in the United States, and undeterred by expanding border-control measures. NAFTA liberalized trade in goods, services, and investment but not labor. That is unlikely to be addressed by upcoming reforms to NAFTA, but some measures can make a difference. The Mexican government needs to make job creation the top priority in its economic policies, with particular attention to depressed regions. Regional financial institutions, such as a revitalized North American Development Bank (NADBANK), must assist these efforts. Reforms to NAFTA’s agricultural provisions, outlined elsewhere, can slow the relatively recent flow from the Mexican countryside. Reforms to NAFTA’s labor rights provisions should include protections for the rights of migrants. Finally, the United States needs a comprehensive immigration reform that decriminalizes the flow of workers, which is the direct result of NAFTA-led economic policies.

I. THE NEED FOR REFORM

One of the main arguments made at the time NAFTA was proposed was that free trade would reduce Mexican immigration to the United States. Free trade would encourage investment, create jobs, increase the income of Mexicans, and bring about an economic convergence between the two countries which in turn would slow the flow of Mexicans to the United States. Unlike the markets for goods, services, and capital, however, the flow of labor was explicitly not liberalized under NAFTA.
The results have been clear: Mexican migration to the United States more than doubled, under strong labor demand in the United States and weak job creation in Mexico. The overwhelming majority of the migration was illegal. The U.S. government, particularly after September 11, 2001, increased border enforcement, which may have deterred some migrants but it also encouraged more of those who made it into the United States to stay rather than risk what had become a tradition of seasonal migration. Thus, rather than “exporting goods, not people,” Mexico exported both in rising quantities after NAFTA.

Since the mid-1990s, migration to the United States grew steadily until 2007. Between 2000 and 2006, an estimated 575,000 Mexicans emigrated each year. The World Bank puts the figure even higher, at 644,000. Calculations indicate that, in 2008, 12 million of Mexico’s inhabitants were residing in the United States, half in a situation of undocumented migration. New migration patterns emerged. Women comprised 45 percent of all migrants. An increasing number of migrants came from rural areas hard-hit by NAFTA’s impacts in the Mexican countryside. States with more limited historical migration, such as Oaxaca, Puebla, Guerrero, Morelos, Estado de México and Mexico City, became major “sending” states. Yucatán and Chiapas, from which there was very little migration until the 1980s, now have important migration networks in the San Francisco Bay Area, Georgia, and Florida.

Migration between Mexico and the United States is complex, with a long history dating back to the end of the 19th century and with structural roots on both sides of the border. NAFTA accelerated the trends that have always driven Mexican migration: the persistent demand for Mexican labor in the agricultural, industrial, and service sectors of the United States; the considerable difference in salaries between the two economies; the demographic growth of Mexico’s working-age population; weak job-creation in Mexico; and strong migratory networks between the two countries, networks that grow stronger as migration increases.

After NAFTA, the United States began what would become the longest economic expansion in the nation’s history. This kept the demand for Mexican labor high. Meanwhile, Mexico’s economic woes, exacerbated immediately after NAFTA went into effect by the peso crisis, increased the “push factors” leading to migration. In the 1994–95 crisis, national income contracted by 6 percent. The resulting migratory flows represent a strong indictment of the economic logic behind NAFTA. The criminalization of migration, and the militarization of the U.S.-Mexican border, continue to take a high toll on Mexican families.
II. PRINCIPAL AREAS FOR REFORM

Political realities make it unlikely the roots of the migration problem will be addressed. That would require at least the partial liberalization of labor flows to go along with liberalized goods and capital markets. Still, important measures can be taken to guarantee basic human and labor rights to migrants while addressing the push factors leading Mexicans to leave their country. These have to do with addressing the asymmetries between Mexico and its North American trading partners, a long-term process that will require a long-term commitment of resources.

III. REFORMS TO NAFTA

Since migration was left out of NAFTA, the reforms to the agreement that can help address the issue are those that can spur economic development and job-creation in Mexico while guaranteeing the rights of migrants. These are discussed in other parts of this document, so they are only noted here:

- **Labor rights**—The incorporation of labor rights agreed to in the ILO Convention, as per the May 10 Agreement in the United States should be extended to include the rights of migrants. Workers in all three countries are harmed by the existence of a large group with limited rights.

- **Job creation**—In manufacturing, the enclave nature of foreign investment has led to limited new employment. The Mexican government needs the policy space to direct investment in such a way that it maximizes job creation and ensures that foreign investment stimulates dynamic economic development in the areas it is most needed.

- **Protecting farmers**—Agriculture remains an important employer in Mexico, and NAFTA has impacted small-scale farmers severely, leading to increasing migration from rural areas. Mexico needs the right to protect and support small-scale farmers, as outlined in the Agriculture chapter of this report.

IV. REFORMS TO GOVERNMENT POLICIES

The United States needs to reform its immigration policies in fundamental ways. It is beyond the scope of this chapter to address the complexities of the U.S. immigration debate. Suffice it to say that reform should lead to the decriminalization of migration and to greater respect for the rights of migrants. This could include but should not be limited to an expanded temporary-worker program.
The Mexican government, for its part, needs to rethink economic development strategy. The government should establish a coherent Migration and Development Plan to guide public policies. The plan should prioritize social and economic development to reduce migratory pressures.7 Such a plan would include:

- **Regional development**—The government needs to stimulate development in the many regions of the country that are lagging behind, areas that increasingly are the source of new migrants.

- **Pro-growth macroeconomic policies**—Mexico needs to adopt macroeconomic policies that stimulate growth and create new jobs. Policies in the NAFTA era have been overly restrictive.

- **Policies to promote rising wages and farm incomes**—The best way to stimulate growth in Mexico is to ensure that those at the bottom see rising incomes from their work. This can help overcome the yawning gaps between U.S. and Mexican wages and living standards, differences that contribute to migratory pressures.

**V. REFORMS TO REGIONAL INSTITUTIONS**

NAFTA brought together trading partners with wide disparities in economic development. The hope was that such asymmetries would be reduced through trade-led growth. That has not happened. As others in this report have stressed, these asymmetries need to be addressed at a regional level. Elsewhere, Robert Pastor, among others, has stressed that the migration issue will not be resolved without a “Marshall Plan” for development in Mexico. He calls for a regional development fund with a ten-year program to address these asymmetries, with particular attention to underdeveloped regions in Mexico. While the United States and Canada would need to put up the vast majority of the funds, the Mexican government would need to carry out a long-overdue reform of its tax system to put the state in a stronger position to spur development.8 A revitalized NADBANK could be a good vehicle for such a development fund, as others in this report have argued.
In the long run, only a regional development framework will reduce the mass migration flows of Mexicans to the United States. If North America moves successfully towards a shared prosperity, there will be greater possibility of reaching an agreement regarding the ordered mobility of workers.

4 Juan Balboa (2007). “En el sexenio foxista 3.4 millones de mexicanos expulsados a EU.” La Jornada (March 4).
Task Force Members

Enrique Dussel Peters is a Professor at the Graduate School of Economics, Universidad Nacional Autónoma de México (UNAM). He coordinates the Center for Chinese-Mexican Studies at the National Autonomous University of Mexico. Publications include: *Polarizing Mexico: The Impact of Liberalization Strategy* (Lynne Rienner Publishers, 2000); *Inversión extranjera directa en México: desempeño y potencial* (2007, with Michael Mortimore, Luis Miguel Galindo Paliza and Eduardo Loria); *Economic Opportunities and Challenges Posed by China for Mexico and Central America* (Bonn, 2005, with assistance from Liu Xue Dong); *China y México: implicaciones de una nueva relación* (2007, with Yolanda Trápaga Delfín); *Oportunidades en la relación económica y comercial entre China y México* (México, 2007).

Kevin P. Gallagher is an Associate Professor of International Relations at Boston University, where he directs the Global Economic Governance Initiative at the University's Frederick S. Pardee Center for the Study of the Longer-Range Future. He is also senior researcher at the Global Development and Environment Institute at Tufts University. Professor Gallagher is the author of *The Enclave Economy: Foreign Investment and Sustainable Development in Mexico’s Silicon Valley* (with Lyuba Zarsky), and *Free Trade and the Environment: Mexico, NAFTA, and Beyond*. He has been the editor or co-editor of a number of books, including *Rethinking Foreign Investment for Sustainable Development: Lessons from Latin America*, and *Putting Development First: the Importance of Policy Space in the WTO and IFIs*. He writes a monthly column on globalization and development for *The Guardian* (UK) newspaper.

Rodolfo García Zamora is a Professor of Development Studies at the University of Zacatecas in Mexico. He is an expert on international migration, remittances, and development. His books include: *Migración, Remesas y Desarrollo Rural* (University of Zacatecas, 2005); *Migración Internacional, Remesas, y Desarrollo Local en América Latina y el Caribe* (edited with Manuel Orozco, 2009); *Cambiando perspectivas: de la gestión de flujos hacia la construcción de políticas de migración con enfoque de desarrollo* (with Sin Fronteras, 2008). Professor García is also a visiting professor at several universities and serves as an advisor to the Iberoamerican Secretary General.
Kenneth C. Shadlen is a Senior Research Fellow with the GDAE's Globalization and Sustainable Development Program in the Global Development and Environmental Institute at Tufts University. He is also a senior lecturer (associate professor) of Development Studies at the London School of Economics and Political Science. He is the co-editor of The Political Economy of Hemispheric Integration: Responding to Globalization in the Americas (Palgrave Macmillan, 2008) and the author of Democratization Without Representation: The Politics of Small Industry in Mexico (Penn State University Press, 2004). His current research addresses the politics of intellectual property (IP) and North-South economic integration, focusing on the implications of the new global regime for IP on industrialization and also public health (especially HIV/AIDS treatment) in the developing world. The working title of his new book is The New Politics of Intellectual Property in Latin America.

Robert K. Stumberg is a Professor of Law at Georgetown University Law Center, where he also directs the Harrison Institute for Public Law. The Institute is a teaching and service program that works with public officials and nonprofit organizations. His past positions include policy director at the Center for Policy Alternatives and legislative counsel for Montgomery County, MD. Most recently, he has studied the impact of trade agreements on state and local government, including energy, water services, prescription drugs, foreign investor rights, and agricultural subsidies. Professor Stumberg's work on trade policy includes: Procurement and Decent Work (ILO, forthcoming 2009); The WTO, Services & the Environment (in Handbook on Trade & Environment, Kevin Gallagher, ed., 2008); GATS & Electricity (NCSL 2005); Federalism & Political Accountability Under Global Trade Rules (Publius, 2001, with Matthew Porterfield); Preemption & Human Rights (Law & Policy in International Business, 2000); International Investor Rights & Local Economic Development (1999, with William Schweke); and Sovereignty by Subtraction: The Multilateral Agreement on Investment, (Cornell Journal of International Law, 1998).

Gus Van Harten is an Associate Professor at Osgoode Hall Law School of York University in Toronto, Canada. His research specialties are international investment law and administrative law. His book, Investment Treaty Arbitration and Public Law (Oxford University Press, 2007), offers a critique of the system of investment arbitration and its implications for policy space and as a governing arrangement. He also advocates the establishment of a regional investment court based on institutionalized principles of judicial independence to address perceptions of pro-investor bias in investment arbitration. He has published
articles on investment law in the *International and Comparative Law Quarterly*, the *European Journal of International Law*, the *Review of International Political Economy*, and *Arbitration International*, and has contributed chapters on the subject to various collected works and conferences. He also conducts research on the procedures of public inquiries and on closed proceedings in the national security context.

**Christian E. Weller** is a Senior Fellow at the Center for American Progress and an Associate Professor of Public Policy at the University of Massachusetts Boston. His expertise is in the area of retirement income security, macroeconomics, money and banking, and international finance. He is also a Research Scholar at the University of Massachusetts Amherst's Political Economy Research Institute and an Institute Fellow at the University of Massachusetts Boston's Gerontology Institute. Prior to joining the Center, he was on the research staff at the Economic Policy Institute, where he remains a Research Associate. Dr. Weller is the co-author (with E. Wolff) of *Retirement Income: The Crucial Role of Social Security* (Washington: Economic Policy Institute, 2005) and the co-editor (with T. Ghilarducci) of *Employee Pensions: Policies, Problems and Possibilities* (Ithaca, NY: Cornell University Press, 2007). In 2006, he was awarded the Outstanding Scholar-Practitioner Award from the Labor and Employment Relations Association.

**Timothy A. Wise** is Director of the Research and Policy Program at the Global Development and Environment Institute, Tufts University, where he also directs the institute's Globalization and Sustainable Development Program. His principal research is on the impact of trade liberalization on rural livelihoods. He has written extensively on U.S. agricultural and trade policies, particularly the role of farm subsidies in lowering international commodities prices. Mr. Wise is the co-author of *Confronting Globalization: Economic Integration and Popular Resistance in Mexico* (Kumarian Press, 2003). He is also the co-author of *A Survey of Sustainable Development: Social and Economic Dimensions* (Island Press, 2000). Prior to joining the Global Development and Environment Institute, Mr. Wise directed the international aid agency, Grassroots International.
RECENT PARDEE CENTER PUBLICATIONS

The Pardee Papers series

Global Aging: Emerging Challenges  
Alexandra Crampton (No. 6), August 2009

Managing Hazardous Chemicals: Longer-Range Challenges  
Henrik Selin (No. 5), March 2009

Beyond GDP: The Need for New Measures of Progress  
Robert Costanza, Maureen Hart, Stephen Posner, John Talbeth (No. 4), January 2009

Does Nuclear Energy Have a Future?  
Moeed Yusuf (No. 3), November 2008

21st Century Trade Agreements: Implications for Long-Run Development Policy  
Rachel Denae Thrasher and Kevin P. Gallagher (No. 2), September 2008

Issues in Brief series

Learning from the Past: The Future of Malaria in Africa  
Melissa Graboyes (No. 8), June 2009

Food Crises in Developing Countries: The Role of National Governance  
Abid Qaiyum Suleri (No. 7), May 2009

Seeing Hunger through New Eyes: From Lack to Possibility  
Frances Moore Lappé (No. 6), April 2009

Sustainable Development in Africa: Agriculture, Trade and Climate Change  
Kati Kulovesi (No. 5), March 2009

Transportation in Mega-Cities: A Local Issue, A Global Question  
Nadaa Taiyab (No. 4), November 2008
The Frederick S. Pardee Center for the Study of the Longer-Range Future at Boston University convenes and conducts interdisciplinary, policy-relevant, and future-oriented research that can contribute to long-term improvements in the human condition. Through its program of research, publications, and events, the Pardee Center seeks to identify, anticipate, and enhance the long-term potential for human progress, in all its various dimensions.

Occasionally, the Pardee Center convenes groups of experts on specific policy questions to identify viable policy options for the longer-range future. The *Pardee Center Task Force Reports* present the findings of these deliberations as a contribution of expert knowledge to discussions about important issues for which decisions made today will influence longer-range human development.

**The Pardee Center Task Force on Trade Policy in North America**

The Pardee Center Task Force on North American Trade Policy was convened on behalf of the Pardee Center by Kevin P. Gallagher, Associate Professor in the International Relations Department at Boston University and a Pardee Center Faculty Fellow; Timothy A. Wise, Director of the Research and Policy Program at the Global Development and Environment Institute (GDAE) at Tufts University; and Enrique Dussel Peters, Professor in the Graduate School of Economics at Universidad Nacional Autónoma de México. The group met at Pardee House at Boston University in March 2009 and included participants from Canada, Mexico, and the United States who work in various disciplines, contributing many perspectives and a range of policy options for the longer-range future of trade in North America. Additional Task Force members include Rodolfo García Zamora, Professor of Development Studies at the University of Zacatecas, Mexico; Kenneth C. Shadlen, Senior Research Fellow at GDAE, Tufts University; Robert K. Stumberg, Professor of Law at Georgetown University Law Center; Gus Van Harten, Associate Professor at Osgoode Hall Law School at York University; and Christian E. Weller, Associate Professor of Public Policy at the University of Massachusetts, Boston.