NORTH AMERICA 2.0

Forging a Continental Future

Edited by Tom Long and Alan Bersin

Wilson Center

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Acknowledgments

The genesis of this volume occurred during 2018, at a moment when North America was under unremitting battering (even by its own piñata-like standards). At that juncture, "forging a continental future" appeared out of the question. Still, North America's nadir also seemed like a necessary—and ultimately propitious—time to review the bidding on the region. Accordingly, Duncan Wood, Chris Wilson and Laura Dawson at the Wilson Center, Juliette Kayyem and Alan Bersin at the Homeland Security Project at the Belfer Center for Science and International Affairs (BCSIA) at Harvard's Kennedy School of Government, Adalberto Palma and (subsequently) Luis Gerardo del Valle and Ambassador Enrique Berruga Filloy at Aspen México, Patrick Schaefer at the Hunt Institute at University of Texas at El Paso, and Emmanuel Brunet-Jailly at the University of Victoria, commenced an effort to that end.

For many reasons, including multiple rearrangements in people's professional and personal lives—and then, of course, the pandemic—this project has followed a circuitous path to completion. Nonetheless, four years later, with its chapters fully updated, this edited volume reaches publication just in time for the North American Leaders Summit, set to convene in Mexico in late 2022. It is our expectation that the volume can assist Canadian, Mexican, and U.S. leaders and policymakers in reassessing the region's potential, now in an environment that has changed dramatically since 2018. We hope that the extensive analysis offered across the book's chapters will spur a sustained follow-up in the Summit's aftermath to address the myriad matters confronting North America. Canada, Mexico, and the United States—and often their neighbors in the Central America and the Caribbean—have much to gain through a focused effort to address shared challenges cooperatively, in a selected and sequential fashion.

Given the backdrop of this project's long gestation, there are many, many individuals who have contributed, in one way or another, over several years, to the publication of this book—so many that we are compelled to apologize in advance for those we have inadvertently omitted mention of here.

First and foremost, we acknowledge the participation—and patience—of the authors who have contributed to this project, including those who have chapters in this volume and others whose contributions were shared in workshops and/or as electronic versions appearing on the Wilson Center's website. Second, we gratefully acknowledge the institutional support and encouragement offered without constraint—notwithstanding multiple responsibilities—by Andrew I. Rudman and Christopher Sands at the Wilson Center's Mexico and Canada Institutes. Both Andrew and Christopher assumed, respectively, their leadership roles in the midst of the pandemic, and the happy outcome here could not have been achieved without them.

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An intellectual effort of this magnitude cannot be accomplished in the absence of thought partners from across a variety of networks. In this respect, we are indebted for the generous willingness to engage over periods, short and long—before and during the project—with us in this work as well as the for the signal contributions each of them has made to understanding the concept, promise and pitfalls of North America. Without attributing any of the volume's errors or misjudgments to them, we offer our heartfelt thanks and appreciation to the following colleagues: Abraham Lowenthal and Chappell Lawson, who have contributed mightily and specifically to the current publication; and to Edward Alden, Nathan Bruggeman, Guadalupe Correa-Cabrera, Kathryn Friedman, Manuel Haces, Eric Hershberg, Beatriz Leycegui, Meredith Lilly, Doris Meissner, Colin Robertson, Ben Rohrbaugh, Matthew Rooney, Andres Rozental, Richard Sanders, Andrew Selee, Andrew Sullivan, Laurie Trautman, and participants in American University's Robert A. Pastor North American Research Initiative, all of whom have shared insights on North America in, and beyond, the context of this project. Chris Wilson and Mariana Sánchez played key organizational and intellectual roles in the earlier development of the project. This project owes an intellectual debt to the aspiration and dedication to the "North American idea" of the late Robert Pastor; his guidance and mentorship played a formative and lasting role for Tom Long, especially, as well as for several contributors to this volume.

In assembling this volume, we received crucial editorial assistance from Samantha Kane Jiménez and Zoe Reid from the Wilson Center, Diego Marroquín Bitar (now at Brookings), and Karen Heinrich. We appreciate the speedy and efficient collaboration with Lynne Rienner Publishers, particularly from Allie Schellong and Lynne, herself. Lisa Scholey provided a sharp eye for proofreading. Many thanks to Xavier Delgado at Wilson for his work designing the cover for this volume

Finally, although he needed to be overruled (repeatedly) by his co-editor to include this—the fact remains that this volume could not have made its way over the finish line without the genuinely Herculean effort of Tom Long, whose insight, skill and knowledge of and commitment to North America 2.0 is amply reflected in its pages.

Introduction

Alan Bersin and Tom Long

The construction of North America has often happened offstage, while the critics of integration and regionalism occupied the limelight. Steadily over the years, businesses and bureaucrats, migrants and border residents, have forged robust ties among Canada, Mexico, and the United States. During the last thirty years, these connections have converted the region into an economic and trading giant. North Americans' relations with one another are economic and social—from commerce to cousins, from trade to *tíos*. These networks increasingly extend into the Caribbean and Central America. As a result of these myriad interconnections, we now live—and governments and firms operate—on a continent characterized by interdependences, transnational flows, and a shared position in the world.

Despite the reality of our multifaceted relations, the *idea* of North America remains contested and, frankly, little loved in the region's politics. North America's evolution during some three decades has been characterized by seemingly contradictory dynamics: on the one hand, there is a regional connectedness that touches millions of lives daily; on the other, few voices trumpet the benefits of "the North American idea" and many attack it.[1] Although such fierce debates are as old as the region itself, in recent years they took on a sharper and more polarized edge, especially in the United States. These contradictions and concerns are part of the North American fabric. It is futile to wish them away or pin them to a single political figure. Instead, any pragmatic vision of a continental future must embrace the region's differences and paradoxes while recognizing and building on the astounding interaction that already exists.

This volume aspires to stoke debate on just what such a pragmatic vision should encompass, with a focus on North America's shared challenges, its potential common agenda, and the region's place in a changing world. In the chapters that follow, North American experts from government, the private sector, civil society, and academia will assess the challenges the region faces across sixteen different issues. They have been tasked with identifying where cooperation is necessary and possible, what might be gained by working together, and where we might fashion a vision of shared, North American regional interests, if we take a step back to gain greater perspective.

Both in national policy debates and on the world stage, North America often seems to be something of an also-ran, rarely topping the agenda. Despite that, we believe that North America must be a crucial element in how policymakers respond to the current moment's risks and opportunities. As the Canadian, Mexican, and U.S. heads of state gather for the 2022 North American Leaders Summit (NALS), they must grapple with the region's place at an unprecedented conjuncture: economic uncertainties in the wake of the COVID-19 pandemic, political challenges to democracy in the United States and Mexico as elsewhere in the world, the hardening of geopolitical fault lines, and the aftershocks of the contentious renegotiation of North America's charter accord.

Although the negotiation of the North American Free Trade Agreement (NAFTA) introduced some welcome updates, the contentious process—and some features of the new accord itself—have heightened concerns from U.S. neighbors north and south about their vulnerabilities vis-à-vis the unpredictable Gulliver next door. The new agreement, the United States-Mexico-Canada Agreement (USMCA), is often dubbed "NAFTA 2.0."[2] This update hardly exhausted the possibilities for regional cooperation. There is a need to go further, with an expansive, albeit pragmatic, vision for *North America 2.0*. To lay the groundwork for such a vision, this volume returns to basic issues and raises fundamental questions. Some thirty years after "NAFTA 1.0," what characterizes our shared region today? More importantly, what sort of region can advance our shared interests and well-being for the next generations?

Rethinking an Innovative Region

When NAFTA catalyzed North American integration in the 1990s, the trade pact embodied a then-pathbreaking approach to international regionalism.[3] Three decades later, NAFTA remains notable for how it connected disparate economies and remade a region that had long been associated narrowly with the United States and Canada. NAFTA achieved its intended goals of massively boosting trade and creating a friendly environment for U.S. and Canadian investment, especially in Mexico. Over this period, NAFTA fostered the creation of a trilateral business community; in turn, these businesses built a shared continental production platform of imposing stature and resilience.[4] Trade among the three countries now exceeds $1.2 trillion annually, but the commercial connections are more multifaceted than even that enormous figure suggests. It has become commonplace to observe that the three countries do not so much trade with one another as make things together, especially in automobile manufacturing.[5]

Despite this success, NAFTA failed to generate broader social or governance results at a regional level.[6] In some ways, this was unexpected. Theories of regional economic interdependence expected that trade ties, especially complex networks like those in North America, should spur greater political and technical cooperation. For the most part, that "spillover" has not occurred.[7] In North America, these limitations were at least partly by design. NAFTA functioned more like a contract to structure economic relations than an invitation to build regional international organizations like those in Europe.[8]

From the beginning, the integration of North America reflected the deep divisions within, and among, the countries of the region. Born of diverse histories and cultures, Canada, Mexico, and the United States possess strong attachments to their own national identities and robust ideas of sovereignty. In the early 1990s, region-building in North America responded to a vision of economic opportunity, not to reflections on how to escape the scourge of internecine war, as in Europe. This North American approach facilitated economic expansion, especially from 1994 until 2001, while preserving national autonomy as a guiding principle.[9]

The North American approach has been substantially less apt when the region is faced with non-economic transnational challenges, or when it needs to adjust to a changing global environment. As a result, dual bilateralism has remained the default means of responding to many issues, perhaps because bilateral forms of cooperation were familiar and often sufficed. Absence of political will, nonetheless, has been the region's bane, as emphasized by Richard Sanders.[10] Unlike in many other world regions, few politicians in Canada, Mexico and the United States want to be branded as North American enthusiasts at home or abroad. Notably, North America's integration was slowed, if not derailed, by a series of external shocks and by the rise of China as the world's predominant manufacturing exporter.[11] North America's inattention to governance, however, left the region without a coherent agenda, or clear advocates in times of domestic political polarization to counter this development in a coordinated, much less united fashion.

To the contrary, the readily exploitable sensitivities associated with three distinct sovereignties and histories, three cultures and many languages, and three currencies, have often converted the vision of North America into a fearful specter and a regular target of populist agitation and demagoguery. Regional camaraderie in North America has long been episodic, but it reached a nadir recently as a result of Trump Administration threats and tariffs. Even usually amicable U.S.-Canadian relations were soured by unprecedently bitter presidential-prime ministerial relations. Politically, North America remains a piñata in ready reach, even as the continental production platform keeps showering significant economic benefits.

Now, as a result of the NAFTA renegotiations, a complete lack of trilateral camaraderie appears to have been institutionalized. Fifteen years ago, an academic observer of regionalism referred to North America as "a region that dares not speak its name."[12] That quip was prescient, as "North America" has now been dropped from the name of the region's central pact. Even though none of the signatories of "NAFTA 2.0" agree on what to call the agreement (USMCA in the United States, TMEC in Mexico and CUSMA/ACEUM in Canada), they did agree that it is not "North America." After a quarter-century of continuity under NAFTA, "North America" no longer even appears on the map of the world's regional economic accords.

So, what is North America's place in the world today? The core question in a world, increasingly, of fragmented regions is whether North America will be more than a collection of countries united by the gravitational pull of the U.S. market, unevenly stitched together by productive regional value chains. It would be a loss for all countries involved if the frustrations of the past years led leaders to downgrade the economic and political importance of the region, even as regions are becoming a more prominent feature of global politics. Yet, few "North American leaders" exist to promote their region abroad with the result that the rest of the world does not engage with North America as a cohesive region. This severely devalues the potential value of the brand.

Set on the world stage, the region possesses a dazzling array of assets that confer on it unmatched comparative global advantages. As a continental and maritime bloc, centered around its core of Canada, Mexico, and the United States, the broader North American region boasts a half billion people with distinctly favorable demographics; economies that generate 30% of global goods and services; shared production platforms with trillion-dollar annual trade flows accounting for 17% of global commerce; a shared (if imperfect and now constantly threatened) commitment to democracy, rule of law and demilitarized borders; the prospect for total energy independence; a huge natural resource base, including enormous navigable rivers and copious amounts of arable land; and unimpeded access to the Atlantic, Pacific and Arctic Oceans.

Despite these assets—and in contrast to Europe and other regions—North America has arisen largely despite official inaction and indifference.[13] The European Union, building on Jean Monnet's post-WWII vision, has been led by government and bureaucracy from the outset. African, Asian, and Latin American regionalism has been driven by the converging views and commitments of heads of state. But after NAFTA created a predictable and permissive environment, North America has been built mostly from the bottom-up. As a result, demographic, business, professional, and cultural ties among the United States, Canada, and Mexico, especially, are deep, varied, and strong. Although "NAFTA" was long an unpopular symbol in domestic politics, the three publics once again are plainly supportive of free trade with their neighbors;[14] and there is evidence that most Canadians, Mexicans, and U.S. respondents also favor cooperation in some other limited spheres, as well.[15]

Nonetheless, relations between and among their governments remain sporadically conflict-ridden and counterproductive. Consistent attention from the top is scarce. Too often, there has been little vision or strategy for cooperative problem-solving to achieve shared goals in North America. Notwithstanding some incremental cooperation—mostly in parallel bilateral border management arrangements—more must be accomplished to address significant challenges at a regional level: transnational illicit markets, insecurity, disparities in productivity and wages, and regional and national inequalities. Nor has there been sustained cooperation to address conditions in the countries and territories of their extended neighborhood—Central America and the Caribbean—though conditions in those nearby countries often have important consequences for the societies, economies, labor markets, welfare, culture, and politics of the three core countries themselves.[16]

Crisis and Opportunity

Thirty years ago, NAFTA offered an innovative vision of regional cooperation and remade North America as a trilateral region. The USMCA did not dramatically alter this, albeit preserving the economic basis of the region amidst a hostile environment. At first glance, this seems to have settled the issue. However, we suggest it did not; instead, North America faces crises and opportunities that go beyond the USMCA. The challenge for policymakers—and this volume—then, is less to rethink the USMCA than to think more seriously, systematically, and regionally about the gamut of shared challenges—many omitted by design from the agreement. We hope the reflections and suggestions on these problems presented here may suggest new forms of regional cooperation, once again redefining North America and its place in the world.

At a global level, now may be a propitious time to reassess strategy for getting North America the attention it deserves. The accelerating splintering of the last generation's world order is evident in the re-emergence of great power rivalry—highlighted by Russian aggression in Ukraine and China's pivot away from the West. Strategically, this has led to a renewed emphasis on cooperation through the North Atlantic Treaty Organization (NATO); economically, similar forces revitalize the strategic "geoeconomic" logic for North America. Given the ramifications of conflict and climate for energy markets, the promise of North America should be even clearer.

These developments, coming on top of a stubborn pandemic, have thrown global supply chains into disarray and ignited a frantic search for supply chain visibility among government regulators and the regulated private sector alike. These trends could produce a rush to nearshore production capacities, at least in select industries.[17] At the extreme, this could end the model of "Globalization 1.0;" at the least, considerations of political risk and resilience will now temper firms' searches for efficiency and savings. Firms and their value chains are likely to retain far-flung constellations, but these shifts open opportunities to realign production networks. As the explosion of trade in the years following NAFTA suggests, these realignments will be led by the private sector—but only if governments help create the right context through policy environments and strategic investments.

Given the region's relative stability, enormous assets, and the benefits of proximity, relations among the United States, Canada, and Mexico are even more important in periods of international disarray and transition which now appear likely to be the case for the foreseeable future. Flows north and south among them are arguably more important now than the border lines running east and west between them. These facts have created a relationship between the United States and each of Canada and Mexico that is neither international in a traditional sense, nor classically domestic in light of the separate sovereignties involved. Instead, in a phrase coined by Bayless Manning, the relationship is more fittingly characterized as "intermestic."[18] What drives these relationships is not regions of shared sovereignty as in the European Union, but rather shared markets and borders, leading to interlocking societies and challenges.

By extension and for these reasons, the region's three large countries should increasingly view North America in the context of its Central American and Caribbean neighborhood. Large and small, all of these states matter deeply to one another in terms of investment and trade in goods and services. Their societies are connected by the movement—inadequately coordinated—of people, the commerce in goods and services, and the exchange of ideas and culture. They are also vital for coping with public health challenges, including the COVID-19 pandemic.[19] They face many similar and interlinked consequences of climate change, including managing and conserving water and other resources. They have shared stakes in protecting continental security—not only from military or terrorist attacks, but in terms of citizen security. More broadly, North America's security cooperation should include public health, responding to natural disasters, cybersecurity, staunching the spread of small arms, curtailing violence, and confronting human and narcotics trafficking and organized crime.

The three key North American countries are very closely linked but at the same time are often divided by underlying and diverse demographic processes, involving decades of migration flows that have led 11 million Mexicans to make their homes in the United States, while 1.5 million people from the United States have moved to Mexico.[20] They are also tied together by integrated chains of economic production, interrelated labor markets, vast commerce and investment, and active political and social movement and currents that transcend borders and exert influence in multiple directions. All these forces interact to produce cooperation and discord, conflicts and positive problem-solving, significant challenges and potential cooperative solutions. But these trends are not the subject of much in-depth consideration in any of the three countries' governments nor their centers of research, and even less are they being actively considered on a region-wide basis.

Grand Designs and Critical Details

What, then, should "North America 2.0" look like? This is not the first volume to ask that question. Earlier in this century, several thinkers and leaders in Canada, Mexico, and the United States pointed to the advantages of a "North American Community," variously defined. For example, Robert A. Pastor's seminal 2011 book, *The North American Idea,* broke new ground on rethinking the key issues that both bind and divide the three countries. Pastor argued that regional relationships must change so that challenges can be addressed in new, cooperative ways to the benefit of societies in the three countries.[21]

Proceeding from a similar song sheet, the New York-based Council on Foreign Relations (CFR) collaborated with Canadian and Mexican counterparts to organize a 2005 task force on "Building a North American Community." The resulting report included an ambitious proposal for the establishment of an economic and security community with a common external tariff and an outer security perimeter. But ten years later, it was clear that little progress had made toward realizing this vision—in fact, forces of opposition had become more vocal and visible in response to the Security and Prosperity Partnership.[22] In 2014, CFR organized a second task force. Its report, "North America: Time for a New Focus," urged policymakers in Canada, Mexico, and the United States, to "elevate and prioritize the North American relationship." It recommended concrete steps in four pivotal areas: energy security; economic competitiveness; continental security; and comprehensive immigration reform to facilitate labor mobility.[23] In line with these efforts, initiatives like the North American Forum sought to keep proposals for the region's future on the agenda through more regular exchanges. The Stanford University-based Forum—jointly chaired by former U.S. Secretary of State George Shultz, former Mexican Finance Minister Pedro Aspe, and former Alberta Premier Peter Lougheed—convened periodic meetings of leading figures to discuss North America's evolving ties, challenges, and potential.[24]

However, proposals from Pastor and CFR ran into an increasingly adverse political context. There was little appetite from then-Canadian Prime Minister Stephen Harper. Mexico was supportive but often preoccupied with rising insecurity at home. Most evidently, the demonization of North America took center stage in the 2016 U.S. presidential elections. Many involved with regional efforts rallied support for North America, but given the focus on playing defense, there was little space for offering ambitious new visions. Somewhat counterintuitively, the fact that the renegotiation of NAFTA into the USMCA was concluded under nationalist, quasi-populist presidents in both United States and Mexico, underscores that North American economic integration is here to stay. The USMCA was eventually supported by both Trump and a bipartisan group in Congress, somewhat defanging the "NAFTA issue" in U.S. politics. Although Canada and Mexico remain concerned about nationalist backlash from their largest economic partner, both countries have more pro-regionalist orientations that may extend beyond trade and investment. If the political constraints have eased, the strategic case for North American production, energy, and cooperation has only gained force. The reconvening of NALS in 2021 after a five-year hiatus, and its renewal for late 2022, should be seized as an opportunity to bring a North American perspective to more issues among and beyond Canada, Mexico, and the United States.

It is with this backdrop that the current volume—*North America 2.0: Forging a Continental Future*—was prepared and is presented. This edited volume offers an inventory of issues where North American cooperation is needed and/or could offer substantial benefits. To make sure that NALS 2022 is more than a "Three Amigos" photo opportunity, the governments should initiate in its aftermath a series of sustained issue-driven ministerial and cabinet dialogues, inviting representatives from countries beyond Canada, Mexico, and the United States where appropriate.

Volume Overview

What should that inventory of issues for North American leaders include? Although by no means an exhaustive list, the volume covers sixteen different issues across its three sections. The first section addresses *shared challenges* that already are salient topics on the North American agenda: migration, environment, trade, borders, emergencies and natural disasters, and energy. Although these issues are already commonly recognized as shared challenges much work on developing *shared responses* is still needed.

The second section emphasizes issues of growing importance that have not received the attention they need, at least as North American issues. This *agenda for a regional future includes* higher education, workforce development, anti-corruption, demographic change, and cybersecurity and critical infrastructure.

The third section takes a step back from the agenda for intra-North American cooperation, and instead looks at *North America in the world*. In examining this broader context, the volume explores North America in terms of global value chains, relations with the European Union, regional defense, the North American Arctic, and relations with China. This context of global change—especially geopolitical and environmental shifts—is likely to play an even greater role in shaping North America's future than it has during the recent past. We turn to these sections and chapters in brief.

Section 1: Shared Challenges, Shared Responses

In Chapter 1, Andrew Selee and Carlos Heredia—leading migration experts from the United States and Mexico—highlight important changes in the migration dynamics of North America. These shifts have led to greater identities of interest among Canada, Mexico, and the United States in some respects, which opens opportunities for greater cooperation for humanitarian and enforcement reasons in border management and to facilitate productivity-enhancing labor mobility. **In Chapter 2,** trade-policy expert **Inu Manak** assesses the challenges for building North America economic cooperation; in her view, the USMCA took one step forward, but two steps back by fragmenting important trade mechanisms along dual-bilateral lines. North America's tremendous trade and production networks depend on efficient management on the continent's borders. However, as **Chappell Lawson, Jorge Tello, and Jennifer Fox** observe in **Chapter 3**, border management has been hampered by excessive politicization and uneven capacity. Although many issues are bilateral by nature, the authors point to areas where North American consultations and cooperation could materially enhance security, reduce costs, and facilitate regional commerce. In **Chapter 4, Duncan Wood and Diego Marroquín Bitar** point to the paradigmatic shift in North America's energy environment to one of regional energy abundance. This change, and the challenge of capitalizing on the region's massive renewable energy potential, opens the door for new cooperation ranging from data-sharing to infrastructure planning and more. **In**

Chapter 5, researchers **Daniela Stevens and Mariana Sánchez Ramírez** emphasize the benefits of building greater environmental cooperation in North America; they note that while the USMCA took some preliminary steps in this direction, it fell far short in advancing North American cooperation on climate change.

Emergencies and disasters know no borders, and responses demand cooperation, argue **Juliette Kayyem, Daniel Jean, and Luis Felipe Puente Espinosa in Chapter 6**. Highlighting examples of successful cooperation—as well as a few notable failures—the authors call for a comprehensive North American Emergency Management Compact to address growing challenges that results from a changing climate and interwoven connections.

Section 2: Agendas for a Regional Future

If the foregoing issues are essential to managing and improving North American cooperation today, there are many more topics that demand attention if we are to forge a continental future in which North America is more competitive, opens new frontiers in economics and governance, and improves the well-being of its citizens. We highlight several such issues in the second section.

The first two chapters emphasize the need for North American collaboration in education and skills development. In **Chapter 7,** addressing educational and skills needs from the perspective of workforce development, **Earl Anthony Wayne and Sergio M. Alcocer**, illustrate how skills gaps and maldistribution are holding back the region's competitive edge. Greater coordination among business, education, private sector, and governments—including, importantly, local and subnational authorities, is required to give workers the training they need for better, rewarding careers while also making employers more competitive. Rounding out the section on human capital, in **Chapter 8**, university leaders in the three countries, **Fernando León García, Sergio M. Alcocer, Taylor Eighmy and Santa J. Ono**, retrace the long—if often overlooked—history of cooperation in exchange, research, and innovation amongst North American universities. Cooperative endeavors have borne fruit, but they have had inconsistent support and inadequate connection with government and the private sector—gaining greater backing from these leaders could produce substantial benefits for the region.

In **Chapter 9,** Mexican scholars **Agustín Escobar Latapí, Víctor M. García-Guerrero, and Claudia Masferrer** assess current population patterns in North America to demonstrate the region's eminently positive demographic window—if it can enact the right policies—compared to competitor economies in Europe and China. Although often considered a domestic issue, corruption and anti-corruption have gained a place on the global stage. In **Chapter 10, Eric Miller & Alfonso López de la Osa**

Escribano explain the emergence of national and international efforts at curbing corruption in North America, and make the case for how the regional initiatives could complement them.

Increasing levels of interconnectedness among the half-billion North Americans have highlighted securing critical infrastructure, especially in cyber, energy, and finance. In **Chapter 11, Paul Stockton, Luisa Parraguez-Kobek, and Gaétan Houle** examine just how crucial these networks are to North America's well-being. Canada, Mexico, and the United States have each taken efforts to enhance the security of these grids, but they remain distinctly uneven. Coordination to respond to shared risks here plainly lags the level of integration—to each nation's peril.

Section 3: North America in the World

From the outside, North America is rarely seen as a coherent region, let alone actor, in world politics. Few would even bother to echo for North America the famous, if apocryphal, cry of Henry Kissinger saying: "Whom do I call if I want to speak to Europe?"[25] But that does not mean that North America's international position is devalued, let alone irrelevant. In **Chapter 12, Karina Fernandez-Stark and Penny Bamber** place the North American economy into the emerging context of new global value chains—the interlinked production networks being established by the private sector. The region retains leadership in many of these, but its advantages have waned. Expanding those links to "greater North America" and beyond could restore that competitive edge and remedy the absence of cohesive North American positions in global economic talks where major actors continue to address Canada, Mexico, and the United States individually. **Michelle Egan** reviews the development of North American trade and regulatory relations with Europe in **Chapter 13**, suggesting that a more coordinated approach would permit the region to advance its own preferences and interests across the Atlantic. China, too, approaches the three North American economies and governments separately and rarely thinks about "North America" in its approach to the world, **Jorge Guajardo and Natalia Cote-Muñoz** argue in **Chapter 14**. China's rise has already affected North America's economic trajectory profoundly; now, increased geopolitical tensions are creating new possibilities and challenges for Canadian, Mexican, and U.S. leaders.

In Chapter 15, former high-ranking military commanders from the three countries, **Victor E. Renaurt, Thomas J. Lawson, and Carlos Ortega-Muñiz**, provide an overview of the evolution, challenges, and possibilities for trilateral defense cooperation to be considered in this context. Changes of another sort—to the global climate—are reshaping the North American Arctic. As **Jack Durkee** shows in **Chapter 16**, environmental change is leading to unprecedented geopolitical competition in the far north as well as posing existential risks to indigenous communities and threats to longstanding patterns of U.S./Canadian cooperation there.

Although these issues deserve attention from North American heads of state and ministers as they gather in late 2022, building North America is not a challenge to be addressed in a single summit. Our contributors sketch out far-sighted agendas for how North America's leaders could advance over time an expanded agenda at trilateral, bilateral, and even subnational levels. The cooperative environment established in the early 1990s facilitated the creation of the region's trademark, shared and dynamic production networks during the decades to follow. Trade and investment remained dynamic, but many other opportunities for coordination were missed due to distraction and domestic politics. We acknowledge that the "deepening" of the regional project has stagnated in the face of internal and external challenges. Fortunately, however, at the same time, North America—a region possessed of tremendous natural and human resources—has already traveled a considerable distance in crucial directions. After several disruptive years, we submit that North America must redouble its cooperative efforts if it is to reposition itself in competitive global environment—and it may now find itself in a position to do so.

Endnotes

Alan Bersin is a Global Fellow and Inaugural North America Fellow (Canada and Mexico Institutes) at the Wilson Center; Senior Fellow in the Homeland Security Project at the Belfer Center for Science and International Affairs (BCSIA) at Harvard's Kennedy School of Government; and former Commissioner of U.S. Customs and Border Protection and Assistant Secretary of Policy and International Affairs at the Department of Homeland Security. **Tom Long** is Reader in International Relations at the University of Warwick and Affiliated Professor at the Centro de Investigación y Docencia Económicas in Mexico; since 2016 he has chaired American University's Robert A. Pastor North American Research Initiative. We express particular appreciation for comments on this chapter from Chappell Lawson and Abraham F. Lowenthal.

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SECTION 1

Shared Challenges, Shared Responses

1

Increasing Opportunities to Address Migration in North America

Andrew Selee and Carlos Heredia

The North American agenda, to the extent it still exists, has never had a common understanding with regard to mobility and migration. With the exception of a small class of North American Free Trade Agreement (NAFTA) visas, which still allow for a degree of mobility among certain groups of professionals, migration has been far too politically sensitive for the three countries to discuss in the trilateral context. This was true at the outset, during the first NAFTA negotiations in the early 1990s, and the issue was even more contentious during the United States-Mexico-Canada Agreement (USMCA) negotiations under the Trump administration.

Given that longstanding reticence, it is notable that the 2021 North American Leaders Summit (NALS) featured central—if inconclusive—discussions of migration. There, the three leaders enunciated some shared priorities and approaches for a "regional compact on migration and protection in the Americas," mentioning temporary labor mobility, asylum and resettlement, and aid to address "root causes of irregular migration and forced displacement."[1] And based on our conversations with policymakers in all three countries, the decision to draft the Los Angeles Declaration on Migration and Protection, which was signed by twenty-one governments in the hemisphere at the Summit of the Americas in June 2022, appears to have had its origin in the NALS meeting,[2] which suggests a certain advance at least in terms of basic principles agreed on by the three countries, if not always in practical initiatives.[3]

While perhaps incipient, the growing convergence goes beyond the NALS and the Los Angeles Declaration. Interestingly, the three partners are becoming more similar in their migration profiles than could have been imagined thirty years ago. Canada and the United States have historically been migrant-receiving countries, but Mexico, until recently, was primarily a migrant-source country. However, that has shifted in recent years, as Mexico is increasingly a destination for migrants from other countries (including Canada and the United States) and a transit country for other migrants trying to reach the United States. It is still a source country, too, though far less than twenty years ago.

North America has experienced an increasing structural convergence in migration with significant policy divergence. The key question for the future is whether the structural convergence could, at some point, lead to greater policy convergence and even coherence among the three countries, especially as they try to manage receiving and integrating large immigrant populations and creating some order in migration flows across the Americas, which affect all three. The three countries have held some initial conversations on high-skilled visas (which is facilitated through the NAFTA visa process) and have increasingly tried to develop a common position on Central American migration, both to address "root causes" of migration and to help structure migration movements through expanded legal pathways. The common position, however, cannot simply be a greater coordination to stop or dissuade flows of migrants bound for the United States, but to work together on making Guatemala, El Salvador and Honduras livable for their own peoples. Additionally, there have been gradually increasing conversations on managing migration from other countries, including Cuba, Haiti, Nicaragua, and Venezuela, although so far these are primarily discussions between the United States and Mexico.

Beyond this, shared opportunities exist, too, to build on joint "smart border" management, something that has largely followed separate tracks between the United States and Canada and the United States and Mexico so far. Canadian, Mexican, and U.S. policymakers could also be thinking creatively and collaboratively about attracting global talent and facilitating the movement of professionals and key workers throughout the region. Doing so is crucial for the future competitiveness of the North American economy.

Despite the structural convergence and the growing rhetoric on collaboration around migration, the three countries still perceive their interests regarding migration as divergent. Immigration remains a hot-button issue in the domestic politics of all three countries, but especially the United States. Combined with the United States' size and centrality, fear of electoral backlash has complicated cooperation for U.S. policymakers, who fret about giving away sovereignty by engaging in multilateral negotiations on migration issues. For decades, Congressional calculations have blocked progress on fundamental reforms in U.S. domestic immigration policies. Even the Biden administration, which promised rollbacks of some of the restrictive policies of the previous administration, has been exceptionally cautious in the wake of the pandemic.

For Mexico, advocacy on behalf of its citizens in the United States has become an important issue. This is suggested by the earlier growth of a more active consular presence and community engagement—although through three and a half years in office, until June 2022, President López Obrador had not met with the leaders of the Mexican communities in the United States, either in Mexico or abroad. Conversely, as Central American and other transmigration has increased, Mexican governments have seen at least a degree of interest in intensifying controls directed at those migrants, both at its southern border and in Mexico. This shift has created some shared interests with the United States. For Canada, of course, immigration is central to economic policy and human capital formation, but most immigration to Canada does not come from the Western Hemisphere, so the issue of migration with the other two North American neighbors is much less salient politically and in policy terms.

As a result of this patchwork of interests and heightened political sensitivities (in the United States and Mexico, but not in Canada), it is probably a bridge too far to think of common or even coordinated migration policies any time soon. However, as the successful example of the NAFTA visa suggests, there may be discrete areas of migration cooperation that could grow over the next few years. This could lead to conversations about common approaches to mobility among professional workers that go beyond existing mechanisms built into NAFTA. Similarly, the three countries may be able to find common cause in expanding legal pathways for migration from Central America (and perhaps Haiti), especially through seasonal labor programs, and perhaps through protection mechanisms as well.

The leaders of the three countries should build on their initial commitments from November 2021 and the Los Angeles Declaration in the upcoming NALS by focusing on a set of concrete and pragmatic steps forward. With that goal in mind, this chapter presents a few ideas of how to build cooperation from the ground up, around discrete and useful areas of possible collaboration, in a way that one day could lead to a more comprehensive North American labor mobility and migration agenda. Mobility is defined here as the temporary movement of labor from one region to another—keeping permanent residence in the home country—while migration implies the movement of labor with a simultaneous change of residence. There are clear advantages for the competitiveness of all three countries in generating a common agenda around mobility and migration, but it is less clear when this will become realistically possible. In the meantime, small steps could serve as meaningful building blocks for future cooperation.

A Long-Term Convergence in Migration Profiles and Policies in North America

When NAFTA was first negotiated, the three countries could not have been more different in their migration profiles and policies. Mexico was one of the largest migrant-sending countries in the world, as well as the largest source of immigration into the United States. Pressures were mounting in the United States to reinforce its border with Mexico to stop this flow—something that has happened in various stages over the past three decades. Mexico, by contrast, had little in the way of intentional migration policy. It did not even have an immigration law as such until 2011. Previous Mexican governments had made some efforts to court the diaspora in the United States, as well as managing limited engagements with prior refugee flows from Guatemala and El Salvador.

At the time of the NAFTA negotiations, Canada and the United States looked similar on paper from a migration perspective. Both were major immigrant-receiving nations that had robust visa programs for employment-, education-, and family-based migration, as well as a few programs for temporary migrants. But they were headed in profoundly different directions. The United States was doubling down on its mostly family-based immigration policies, which also served as a *de facto* integration strategy, and keeping a clear distinction between temporary visas (including those for foreign students studying in U.S. universities) and permanent residency. Canada, meanwhile, was increasingly orienting its visa program toward those with high levels of human capital who could meet specific needs in the Canadian economy, while investing heavily in integration programs to ensure successful outcomes for those settling in Canada. Moreover, the Canadian government was intentionally building pathways between some temporary visa holders—especially students who excelled in Canadian universities—and options for permanent residency. Over the next decade, these differences would become even more accentuated, as Canada continued to refine its unique points-based approach to immigration, while successive efforts at immigration reform failed in the United States.

Although it often passes unremarked, there is also a significant and longstanding migration relationship between Canada and the United States. This migration includes significant short- and long-term residency and labor mobility in both directions. Historically, migration between the two countries was largely unrestricted, as Emma Israel and Jeanne Batalova note. However, in the decades following the United States landmark 1965 immigration reforms, roughly 800,000 to a million Canadians have resided in the United States, which is by far the main destination for Canadians living abroad. NAFTA visas facilitated the movement of Canadian professionals; large numbers of students and retirees also move from Canada to warmer locations in the United States.[4] The share of U.S. citizens migrating to Canada has generally been much smaller, with some 10,000 to 12,000 admitted as permanent residents in recent years before the onset of the pandemic—less than 4% of new Canadian immigrants.[5]

Mexico, meanwhile, was a major migrant-sending country, with most of its migrant population heading north to the United States. Before the mid-1990s, there was much more of a cross-border, circular movement of labor between Mexico and the United States. However, as border enforcement expanded in the mid and late 1990s, many Mexican workers preferred to stay in the United States for fear that if they visited Mexico, they would not be allowed back into the United States. In the aftermath of the September 11th attacks, circular migration was reduced even further. The Mexican-born population in the United States grew exponentially as those who had sought labor mobility decided to stay as migrants. By 2010, there were 11.7 million Mexicans, roughly 10% of Mexico's population, living in the United States. Canada had a guest worker program with Mexico, with the number of participants nearing 30,000 in some years. The program has been largely focused on agricultural labor. Despite Canada's expansive immigration admissions, there have only been a handful of Mexican immigrants, and these are largely well-educated professionals. In general, migration patterns between the two countries have been far less significant than between the United States and its two neighbors.[6]

Growing Symmetries

After three decades, however, the three countries' immigration positions may be more similar than they have ever been before. This structural convergence is likely to increase over the next two to three decades. The first and most dramatic change is that Mexico has ceased to be a country of net migration to the United States. A constant flow of Mexican migrants continues to enter the United States, mostly through legal channels, but even with that, the number of persons born in Mexico who live in the United States has dropped from 11.7 million to 11.3 million between 2000 and 2017.[7] Recent data suggest net migration may once again be slightly positive; even so, it remains far below the levels of decades past.[8]

Each year, around 150,000 to 200,000 Mexicans are apprehended at the border as they try to cross into the United States, though this number has increased noticeably since 2021.[9] Paradoxically, the application of Title 42 since March 2020 may actually have incentivized unauthorized immigration from Mexico, since the measure, which allows rapid expulsions of migrants to Mexico, eliminated tougher consequences for multiple unauthorized crossings at the border (which included possible prison terms for a second or third apprehension at the border). In addition, several tens of thousands of Mexicans arrive in the United States each year with green cards, thanks to petitions from their relatives.[10] A further 250,000 to 300,000 Mexicans enter to the United States each year as temporary workers. Of this group, the largest number come through the H-2A agricultural worker program, another significant number through the H-2B nonagricultural worker program, and a smaller number through the TN NAFTA professionals visa program—over 36,000 in U.S. fiscal year 2021.[11]

However, even with this ongoing number of Mexicans coming to the United States, either as migrants or through temporary mobility pathways, more Mexicans had been returning to Mexico than those arriving in the United States in recent years. This dramatic turn-around from previous patterns appears to be the result of the combined effect of voluntary returns and increased enforcement. According to Mexico's 2015 census figures, more than 700,000 U.S.-born persons are living in Mexico; today, this figure may be greater than 1.5 million, according to the U.S. Embassy. The largest spike in the U.S.-born population in Mexico comes from the children and spouses of Mexicans who have returned to their home country, including more than 550,000 U.S.-born children registered by the Mexican census. There is also a large community of U.S. citizens who have retired (or semiretired) in Mexico, and another set of U.S.-born persons living on the Mexican side in border communities and commuting to jobs on the U.S. side. Finally, there is a growing number of U.S.-born persons who work in Mexico either because their employers have transferred them there, as part of the intense economic integration between the two countries, or because they are remote workers or self-employed and have chosen to live in Mexico.[12]

There is a similar pattern between the United States and Canada, with millions of Canadian and U.S. citizens living in each other's country, either temporarily or permanently. Many temporary workers from each country, mostly professionals, are part of the other's workforce, although the exact number is hard to know because of the ease with which the NAFTA visa operates between the two countries. (The U.S. and Canadian governments publish only the requests for the visa, rather than people who receive them.) Hundreds of thousands of immigrants in each country have arrived through family-based green cards, student visas, or transitions from work-based visas or (in the Canadian case) student visas to permanent residency.

There are far fewer Canadians in Mexico and Mexicans in Canada, but the numbers of both groups have increased over time. Around 3,000 Mexicans migrate to Canada each year with visas for permanent residency, and another 2,000 to 3,000 apply for asylum. There are also agricultural guest workers who are invited each year, now more than 30,000 each year.[13] Officially, there were fewer than 10,000 Canadians living in Mexico, though the real number is almost certainly much higher.[14]

Remaining Structural Asymmetries

To be clear, this is not a fully symmetrical set of relationships. There are temporary workers in all three countries, but only Mexicans come to the United States and Canada to work in agriculture and low-wage occupations in large numbers. And whereas all three countries now have notable populations from the other two, the Mexican-born population in the United States, at 11.3 million, remains by far the largest, and almost half of this population does not have legal status in the United States. These demographics are the legacy of a long period of irregular migration that lasted through most of the 20th and early 21st centuries and continues in a much lesser measure today.[15]

Mexican migrant workers are essential for key sectors of the U.S. economy, including the dairy, fruit, vegetable, meat, and meat-packing industries. They are not exactly temporary seasonal workers; some have toiled for the same employer for 20 years or more, even if they may lack legal status. However, even the recognition of their role as essential workers in keeping the U.S. economy running during the COVID-19 pandemic did not lead to an initiative to provide these workers with a path to regularization. In the United States, the DACA (Deferred Action on Childhood Arrival) program, which would allow business, government, and economic activity in general to benefit from the talent of more than 600,000 immigrant youth (of which over three-quarters were born in Mexico), was targeted for elimination by the Trump administration, but survived because of a Supreme Court decision. Overall, Mexico has a labor force whose median age is much younger than that of Canada and the United States, though aging quickly. Pooling resources could make the North American region even more globally competitive in comparison with other economic and trade blocs, such as Western Europe and East Asia.

However, underlying these complementarities are deep differences, reflecting an ongoing asymmetry within North America that still conditions its existence as a shared region. The United States and Canada are among the wealthiest countries in the world, while Mexico, despite significant gains along most economic and social indicators over the past three decades, remains an emerging economy with a fraction of the average income per person as that in the United States and Canada. According to the World Bank, the figures for per capita income in 2019 were $9,863, $46,194 and $65,118 for Mexico, Canada, and the United States, respectively.[16]

Mexico's ongoing economic development has been sufficient to sharply reduce irregular migration and even attract Mexicans to return and U.S.- and Canadian-born people to move there, but not enough to make the profiles of those who want to migrate similar. The bulk of work-based mobility between the United States and Canada is about professional and skilled occupations, while between Mexico and the two other countries it is often about less-compensated occupations.

Policy Divergence

Notwithstanding this growing similarity among the migration positions of all three countries, their respective policies remain different. Migration was not on the table in any significant way during the NAFTA negotiations, because it was still a period of large-scale Mexican irregular migration to the United States, with some lesser flows to Canada. Although the U.S. government does apprehend many Mexicans at the U.S.–Mexico border each year, and the Canadian policymakers remain vigilant and concerned about overstays from Mexico's visa-free travel status in Canada, the main irregular flows into North America now come from other countries.

For the United States and Mexico, the main concern in recent years has been flows from Guatemala, Honduras and El Salvador, with additional migration from Cuba, Haiti, Nicaragua, Venezuela, and a few countries in Africa and Asia. But while Donald Trump began his administration in 2017 by decrying unauthorized migration from Central America and seeking to build a wall on the border with Mexico, Mexico's Andrés Manuel López Obrador started his six-year term on December 1, 2018, by declaring "Our immigration policy is built on the basis of full respect to human rights with an approach that is multi-sectoral, pluri-dimensional, co-responsible, across-the-board, inclusive and with a gender perspective." López Obrador promised development support for Guatemala, Honduras, and El Salvador, and humanitarian visas for those who wanted to work in Mexico. Mexican policy eventually would shift under strong U.S. pressure, including a threat of tariffs on Mexican goods, to focus instead on enhanced border control in the south.

On June 7, 2019, the United States and Mexico issued a joint declaration, stating that under the Migrant Protection Protocols (MPP), asylum seekers who crossed the southern U.S. border would be rapidly returned to Mexico to await the adjudication of their asylum claims.[17] However, as of July 17, 2020, MPP had processed 63,623 individuals, of which only 523 had been granted relief; that is only eight out of every thousand cases.[18] Although the Government of Mexico committed to providing documentation, education, healthcare, and employment for those waiting in Mexico under MPP, support for these migrants has been minimal. Furthermore, several human rights and humanitarian organizations that work with migrants and asylum seekers have pointed out that the MPP policy endangers their lives, as they are vulnerable and trapped in areas known for violence, extortion, and kidnapping.[19] The Biden administration sought to end the MPP, but a court order forced it to reopen the program. In June 2022, the

Supreme Court ruled that Biden could end the MPP, though his administration was waiting on a lower court decision before repealing the policy, as of this writing. In this interregnum, however, MPP had only a fraction of the original number of migrants enrolled. Mexico systematically refused to engage *de jure* in a Safe Third Country agreement with Washington, although signing the June 2019 joint declaration ended up in a similar, if certainly not identical, commitment.[20] Neither in MPP 1.0 nor in MPP 2.0 did the Mexican government allocate resources to help those individuals get jobs, afford them healthcare or provide education, as offered in the joint declaration. The *de facto* concessions also included the "metering" of those seeking asylum at border ports of entry; the acceptance of immediate expulsion to Mexico of some non-Central American individuals under Title 42; and the deployment of the National Guard to Mexico's borders with both Guatemala and the United States.[21]

Even as the Trump administration, through a set of overlapping rules, programs, and agreements, sought to limit the right to access to asylum at the border as a way of deterring migration, the Mexican government vastly increased its asylum system to accommodate those fleeing from violence in Central America and elsewhere.[22] The two countries have converged on an enforcement-first strategy, imposed from Washington but accepted in Mexico City. Nonetheless, the Mexican government has maintained significant openness to asylum.[23] In the midst of the pandemic and this hardening of U.S. policy, Mexico received record-breaking numbers of asylum requests in 2020 and 2021. According to the Mexico Office of the UN High Commissioner for Refugees, Mexico received an unprecedented 131,000 new asylum requests in 2021, with the largest number of requests coming from Haitians and Hondurans.[24]

Meanwhile, the Canadian government has continued to focus primarily on labor migration and maintained robust integration efforts to ensure long-term success in a high-immigration society. Immigration has occasionally emerged as a contentious issue in Canada and, to a lesser extent, Mexico, yet polls consistently show that most Canadians continue to support high immigration levels. Some Canadian politicians have raised concerns about irregular arrivals, but these protests are relatively few and far between compared to the experience of the other two North American countries. Canada has directed significant efforts in recent years to refugee and asylum programs for those fleeing violence in Afghanistan, Syria, and Ukraine.

In the case of the global migration paradigm, Mexico and Canada also diverge from the United States in their approaches to the issue. The former two countries have formally signed and ratified most international instruments, promoted by the United Nations, that promote the respect of the human rights of migrants.[25] By contrast, the Trump administration derided calls from the United Nations and human rights networks to protect the rights of migrants and asylum seekers regardless of their immigration status. Washington voted against the Global Compact for Migration at the United Nations during the Trump administration, although Biden later announced an endorsement of the non-binding document in December 2021. The decisions of the Biden administration to freeze funding for the U.S.-Mexico border wall, and to pursue a migration declaration at the Summit of the Americas, which would lay out broad principles for managing mobility in the hemisphere, marked a dramatic departure from the Trump administration's deterrence-only approach.

Opportunities for Policy Coordination in the Near-Term

It will be many years before the three countries of North America can discuss common migration policies and practical applications for these policies. Their asymmetries and sharply divergent approaches to policy mean that there are simply too many differences to make any formal attempt at common strategies meaningful. Sensitivity around national sovereignty in all three countries compounds this further. However, in several bounded areas of policy, it would make sense to look at common efforts in order to learn from each other's migration systems. There are specific opportunities to be more coordinated around border management, at least in terms of learning proactively about the similar, but also slightly distinct, approaches between the two pairs of borders. During the COVID-19 pandemic, for example, the three countries of North America have reached agreements (in a Canada–U.S. negotiation and a separate Mexico–U.S. negotiation) on the kind of restrictions to put in place. That said, there are ways of further developing the joint management of borders that makes them safer and more secure.

Should future governments of Canada, the United States and Mexico wish to cooperate more closely on migration issues, the emphasis on "smart" border management will slowly lead to greater joint border management, including constructing common approaches to shared border challenges. Indeed, some key efforts already are underway to co-manage border installations, experiment with pre-inspection facilities inside each other's countries, and create trusted traveler programs.[26] While the agreements that allow for these developments are likely to remain bilateral, the symmetries between what happens on the two shared borders makes it useful to have a broader conversation about what shared border management should look like across North America.

There is also an opportunity to discuss priorities for attracting global talent within the framework of USMCA, not as coordinated policy but as an attempt to create the optimal conditions for economic success within the regional trading bloc. This discussion could include looking at how the three countries are approaching the issue and what approaches in each country might help ensure greater long-term competitiveness. Although any such conversation would need to focus on specific national decisions at this point, it provides an opportunity for learning among the three countries and encouraging more in-depth thinking about how to jointly attract and retain talent. The NAFTA visa process, especially for Mexicans moving to the other two countries, could be broadened and simplified as part of a joint human capital strategy.

Finally, there are opportunities—and a significant and urgent need—to address the massive, forced migration of people from several different countries in the region. A mixture of economic, political, and climate shocks have generated a massive amount of movement unlike anything seen in the hemisphere in decades. The largest flow has come from Venezuela: in recent years more than six million Venezuelans have left their country. Most have settled in other countries in South America, though a significant number of Venezuelans have arrived in the three North American countries as well. In addition, recent climate events in the Caribbean, such as hurricanes, have forced many individuals and families to look to North America for better opportunities. Steady outmigration has also continued from the collapsing economies of Haiti and Cuba, and displacement out of El Salvador, Guatemala, Honduras, and Nicaragua, as some people flee a mixture of political, organized crime, and gang violence.

The future is likely to provide opportunities to rebuild the protection system in the hemisphere to address these forced migrations, bringing the joint leadership of the three North American countries to bear on how to best address the root causes and provide protections to those fleeing systemic violence, natural disasters, and state collapse. Restoring a more robust asylum system at the U.S.–Mexico border, as Title 42 and MPP draw to a close, will be an essential ingredient in this new architecture. The rule to improve the U.S. asylum system at the border that was issued by the Biden administration in June 2022 should serve as a template for restoring asylum access.

The three countries could also do more to coordinate their joint offerings for legal pathways, especially seasonal work, so that it is possible for people in eligible countries to know how to sign up for all of the programs in a single place. Scaling up all of these programs and having a shared place where people could sign up for all three would help alleviate pressures for irregular migration by providing a viable legal alternative.

In the case of the U.S.–Mexico bilateral relationship, a group of six former U.S. ambassadors to Mexico and six former Mexican ambassadors to the United States gathered in Texas in January 2020 to discuss a shared agenda. On the specific issue of migration, they generated key recommendations, including that the United States and Mexico should develop a bilateral migration framework which, to the extent possible, facilitates legal migration and modernizes border management while prioritizing the humane treatment of migrants and refugees. According to the group: "Though cooperation has increased, the United States and Mexico have yet to find the best or most sustainable framework to address migration. Historical precedent makes clear that bilateral cooperation is preferred to unilateral action. Ultimately, migration is a transnational challenge requiring solutions that embody shared responsibility and reflect the shared opportunity that comes with an integrated framework."[27] The above statement is about the U.S.–Mexico relationship, but it could as easily be applied to all three countries and the larger North American partnership. Similar ideas made their way into the 2021 NALS, accompanied by a more positive tone regarding migrations as an economic opportunity and humanitarian duty. However, there has been little implementation so far, at the regional level or within the U.S. domestic context. This should be at the core of the migration agenda for the next trilateral summit.

The United States, Mexico, and Canada have a unique opportunity to enter a new era of cooperation to manage, rather than try to suppress, the ongoing flow of migrants who will inevitably move within the free trade zone that has been created among the three countries, and from nearby countries that are also closely linked through trade and demographics.[28] Issues of migration have remained largely off the table to date in the discussion of North American integration, but their inclusion would help build a more prosperous, equitable, and sustainable future for all who live within the North American region.

Endnotes

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2

North America, Interrupted: Trade, Politics, and a Stunted Continental Vision

Inu Manak

Trade connects the North American continent. With over $1 trillion in annual merchandise trade, North America accounts for 14% of world merchandise exports. Notably, half of North American exports stay within the region.[1] The consequences of North American trade go well beyond the exchange of goods; trade has driven the growth and reshaped the nature of cross-border relationships between businesses, people, and governments across the United States, Canada, and Mexico. The deepening of our trilateral trading relationship began with the entry into force of the North American Free Trade Agreement (NAFTA) in 1994, bringing almost all tariffs to zero, and opening opportunities for investment. NAFTA succeeded in facilitating trade growth. However, NAFTA was a political lightning rod from the very beginning. In addition, the global context changed dramatically in the years after the pact was negotiated. These two factors converged to spur a renegotiation of North America's economic character, reborn as the United States-Mexico-Canada Agreement in 2020.

Despite its successes in trade and investment, NAFTA was never enough. It was built on two bilateral relationships, each characterized by two defining forces—asymmetry and ambivalence. One of the largest shortcomings of NAFTA was what it failed to imagine, resulting in an institutional deficit that has hampered efforts at trilateral cooperation.[2] While the USMCA managed to salvage the trading relationship from the political tempest, it completely ignored these deeper challenges of continental governance and collaboration. What we are left with is a "new" NAFTA that moves the region backwards instead of forwards, and cements dual bilateralism as the standard operating procedure for U.S. relations with its two neighbors. The same forces and institutional deficit underpin the challenges that face the three countries as the North American Leaders Summit (NALS) returns.

This chapter examines the renegotiation of NAFTA and explains why the changes are consequential for the future of North American integration. Focusing on a few policy changes within the USMCA, I elaborate why the new pact is less a "NAFTA 2.0" than a mixed bag of updates. In some cases, it is a step backwards. Has this new status quo permanently interrupted North American integration? Or is there hope for a reinvigorated continental vision? As vice president, Joe Biden articulated hope for a continental future that would make North America a competitive region. I outline ways in which that vision can be realized, starting at the 2022 NALS. While North America suffered a setback, what binds this continent is larger than any single president. The persistent challenge is to build a resilient region that can withstand political disruption.

NAFTA, the Bad Word

The relationships among Canada, Mexico and the United States are characterized by two major forces: asymmetry and ambivalence. Rooted in the historical experiences of each country, these forces shape how each state sees its neighbors and the world.[3] The economic and political power of the United States runs like a thread through our shared history, hanging over every policy decision. Power has shaped the United States' approach to its region, encouraging its preference for dual bilateralism instead of a continental vision. This, in turn, has colored its partners' responses, as each country vies for attention to its priorities. This shaped the original NAFTA negotiations, which, while cutting-edge at the time, reflected a careful balance of the offensive and defensive interests of all three parties.

NAFTA was also the product of ideational and domestic political convergence, reflecting new economic realities and a unique political opportunity.[4] A region was beginning to take shape. The NAFTA negotiations catalyzed the formation of transnational epistemic communities of business leaders, political elites and civil society actors. But each country had reservations that any form of "deep" integration, or supranational institutions like those found in Europe, would erode sovereignty. This resulted in a limited agreement that precluded deep integration.

What NAFTA lacked in institutions, it made up for in liberalization. NAFTA eliminated virtually all tariffs between Canada, Mexico and the United States, many immediately, with others gradually phased out. Notable areas of reductions were in agriculture, textiles, and automobiles.[5]

It provided significant access to services sectors and opened government procurement markets. Beyond market access, NAFTA included detailed rules of origin, intellectual property rights, foreign investment, dispute resolution, worker rights, and environmental protection, which would later serve as a template for future U.S. trade agreements. After NAFTA, North American trade tripled, hitting $1 trillion annually in 2011.[6] Buoyed by its ratification, the Clinton Administration set its sights on expanding the accord through the Free Trade Area of the Americas (FTAA). However, a backlash towards globalization was growing, manifested in the 1999 Battle of Seattle protests against the World Trade Organization (WTO) and the failure of the FTAA.

NAFTA became a bad word politically, condemned by overselling from politicians and a lack of public understanding of the agreement. U.S. public opinion on NAFTA has been marked by stark divisions, and these views have often differed from generally positive views toward free trade.[7] NAFTA is seen in a much better light in Canada and Mexico, where a 2017 poll found 74% and 60% support, respectively, compared to 51% support in the United States.[8] Thus, it was not surprising that the Trump Administration sought to "rebrand" NAFTA; by erasing its name, Trump claimed to have tossed out the deal entirely despite considerable continuities.

As Robert Pastor once wrote, NAFTA has always been a piñata for pandering pundits and politicians, despite evidence that NAFTA has been a net positive for all three countries.[9] But Trump's approach to NAFTA and North American trade differed from run-of-the-mill criticism: he did not just disrupt integration between the United States and its neighbors but attempted to reverse it. As the next section shows, the latest speed bump on the North American highway may have long-lasting consequences.

NAFTA Renegotiated

The renegotiation of NAFTA began in August 2017, and in a little over a year, the text was signed by the three leaders on the sidelines of the G20 meeting in November 2018. However, a change in House leadership after the U.S. midterm elections led Democrats to push for changes, particularly on labor and enforcement. A "Protocol of Amendment" was concluded in December 2019. All three countries then had to ratify the new deal, with Mexico leading the way. The new NAFTA—now the United States-Mexico-Canada Agreement (USMCA)—entered into force on July 1, 2020.

While negotiations proceeded quickly, they were not always amicable. Chrystia Freeland, who played a key role in the negotiations for Canada, at times clashed with the Trump Administration. She lamented the "winner-takes-all mindset" and U.S. proposals to weaken the trade pact.[10] The tensions came to a head when Canada sat out negotiations in the summer of 2018, as the United States and Mexico finalized a bilateral deal. Although Canada brushed off the absence as insignificant, claiming that there were issues the U.S. and Mexico needed to sort out on their own, it was an admission that the trilateral relationship had hit a nadir. The process demonstrated an acceptance of a dual bilateral, hub-and-spoke model for North American relations, and a Canadian realization that the United States had no truly special relationship.

U.S. Trade Representative Robert Lighthizer criticized a perceived lack of significant concessions from Canada and threatened that the Canadians were "running out of time."[11] On reaching an agreement with Mexico, Lighthizer stated that "Today the President notified the Congress of his intent to sign a trade agreement with Mexico—and Canada, if it is willing—90 days from now."[12] Canada rejoined the talks shortly after, but relations remained strained. Freeland appeared on an anti-Trump panel called "Taking on the Tyrant," prompting Trump to say: "We're very unhappy with the negotiations and the negotiating style of Canada. We don't like their representative very much." As negotiations went down to the wire, Trump exclaimed that Freeland "hates America."[13]

The fracturing of the talks was evident early on and followed general U.S. rhetoric and actions on trade, including the earlier renegotiations with South Korea (KORUS) and the withdrawal from the CPTPP.[14] Trump's approach was centered around a key premise—that the United States was being taken advantage of by other countries, and the only way to remedy the situation was to put "America First." Trading relationships should be rebalanced with greater preference towards the United States, especially geared to boosting the U.S. industrial base.[15] This approach has led to a heightened preference for bilateral deals, which the administration argued gave it more leverage. It also prompted the administration to table ideas that seemed to be non-starters. For example, in the NAFTA renegotiations (which the administration originally suggested reconfiguring as two bilateral agreements), the Trump administration proposed a 50% U.S. content requirement for North American autos—a virtual impossibility.

But such a request was not so different from the administration's general, zero-sum, approach to trade. The KORUS renegotiation resulted in two sets of outcomes: new issues and side deals and small modifications and amendments. It was concluded rapidly as well. The United States reinstated its 1980s trade policy, with voluntary export restraints (VERs) through which South Korea agreed to limit steel exports to 70% of the last three years' average volume. In exchange, South Korea received a permanent exemption from the Trump Administration's Section 232 "national security" tariffs on steel.[16] Other modifications delayed liberalization in the automotive sector, extending a 25% tariff on light-truck imports by another twenty years. The tariff effectively blocked the possibility of developing Korean light-truck exports.[17] Lighthizer claimed victory: "The Koreans don't ship trucks to the United States right now and the reason they don't is because of this tariff," he said. "So, that's put off for two decades."[18]

The negotiations between South Korea and the United States foreshadowed three changes in U.S. trade policy that shaped the NAFTA renegotiation: first, the preference for quick—even if shallow—deals; second, securing symbolic, rhetorical "wins" for the United States; third, eschewing international rules and norms by using threats of withdrawal and unilateral trade measures to extract concessions, undercutting dispute settlement, and pursuing VERs. This shift in U.S. trade policy all but guaranteed a suboptimal outcome for the NAFTA renegotiation. The United States fully embraced asymmetry in North America and exploited it to interrupt North American integration. This period of particularly strained relations will have long lasting consequences. In the next section, I examine the changes wrought by the USMCA and what they mean for North America's future.

NAFTA 2.0?

The USMCA is not an entirely *new* NAFTA: much of its content was carried over from the previous accord. Most importantly, tariff liberalization was unchanged, preserving the duty-free access that undergirds the North American market. Essentially, the foundation of NAFTA is intact. But in the process, significant changes were made. The process also placed strain on the relationship, as the U.S. emphasis on "rebalancing" and trade deficits replaced reciprocity with a full-fledged logic of asymmetry. Mexico conceded on many points to preserve the agreement, while Canada chafed at perceived U.S. bullying. The outcome was less than ideal, even if it was better than no deal at all.

A comprehensive evaluation of the USMCA is beyond the scope of this chapter. However, a few examples suggest how the USMCA departs from NAFTA and may pose some challenges to North American integration going forward. It is important to note that updates to NAFTA were warranted in many areas. After all, NAFTA went into force twelve years before the first iPhone was released. Some elements of the USMCA "modernize" the deal; many of these have been borrowed from the CPTPP, WTO agreements, and the Canada-EU Economic and Trade Agreement (CETA). For example, the USMCA now incorporates digital trade, an area not contemplated in NAFTA. The basis for the negotiations over the USMCA digital trade chapter was, in fact, the CPTPP chapter on electronic commerce. That deal also includes a ban on customs duties for digital products, and anti-spam laws, for instance. The USMCA expanded upon several CPTPP provisions, leading to stronger obligations, such as barring data localization requirements in additional sectors.[19]

USMCA also updated CPTPP rules on sanitary and phytosanitary (SPS) measures and technical barriers to trade (TBT). When NAFTA was negotiated, the Uruguay Round agreements on these issues were still being negotiated. As a result, the NAFTA chapters on SPS and TBT were out of date even when they were implemented. The USMCA incorporates these innovations, adds in some WTO-plus provisions from the CPTPP, and goes beyond the CPTPP in some areas as well. For example, the USMCA includes stronger measures on transparency in the development of SPS measures, emphasizes science-based risk assessments, and streamlines processes for determinations of equivalency and regionalization. The TBT chapter, while heavily incorporating principles from the WTO TBT agreement, also goes beyond the CPTPP by including provisions on regulatory alignment and the use of U.S. standards as international standards.

Despite this borrowing from the CPTPP, there were a few notable differences. The chapter on "Good Regulatory Practices" goes beyond provisions included in current trade agreements, including by blending elements of the CPTPP (Chapter 25) and the CETA (Chapter 21).[20] Its scope incorporates the entire regulatory process, with science-based decision making and transparency figuring prominently. These are issues that the United States has raised repeatedly at the WTO and in other talks. It is too early to tell whether the Good Regulatory Practices chapter will lead to greater regulatory alignment in North America, but the principles are all there. The chapter allows for the parties to pursue other avenues for cooperation as well—essentially keeping the Canada–United States Regulatory Cooperation Council (which was established in 2011) intact and on a parallel track. While many see this as positive, it also solidifies the dual-bilateral approach and excludes Mexico from some future discussions on regulatory alignment.

Perhaps most contentiously, the USMCA hollowed out investor–state dispute settlement (ISDS). Lighthizer disdained ISDS, calling it "risk insurance" for big business, and vowing to eliminate it from NAFTA.[21] While the USMCA did not completely remove ISDS, it has been scaled back substantially. There is no general recourse to the mechanism in USMCA. Legacy investments are covered, but subject to consent to arbitration three years after USMCA's entry into force. For Mexico, there is coverage for government contracts, including oil and natural gas, although this is qualified by strict requirements for exhaustion of domestic legal remedies (thirty months). If there are future investment claims between Canada and Mexico, the parties could access ISDS through the CPTPP. But for U.S. companies, recourse to ISDS is nonexistent or severely limited under USMCA. Opposition to the remedy enjoyed significant bipartisan consensus, perhaps signaling the end of ISDS for future U.S. trade pacts.

USMCA also features some “symbolic wins” for the Trump administration’s efforts to boost the U.S. industrial base. This is clearest in the changes to rules of origin (RoO), with a central focus on automotive manufacturing. NAFTA required automakers to make cars with 62.5% of components originating in NAFTA countries to qualify for duty-free treatment. The USMCA increased this to 75% for passenger vehicles and light trucks, to be phased in over a period of 3 years. This is likely to make the North American auto industry less competitive globally by forcing less-efficient sourcing decisions on companies. It was also a step backwards from the CPTPP, which reduced the regional content for passenger vehicles to 45% to encourage the use of diverse supply networks. The new auto rules also include a “buy North American” provision that requires vehicle producers to source 70% of their steel and aluminum from North America in the previous year in order for vehicle exports to qualify as “originating.”

The USMCA’s auto rules also include a novel Labor Value Content (LVC) requirement. Now, vehicle producers must show that a certain percent of their production for passenger vehicles is made by workers making $16 an hour, to be phased in to 40% by 2023. The LVC is a complicated calculation, because the 40% LVC requirement can be made up of 25% high wage material and manufacturing expenditure, 10% R&D expenditure, and 5% assembly expenditure.[22] The wage requirement is directly targeted at Mexico, which pays its workers much less than Canada and the United States (and does less R&D), and it speaks to Lighthizer’s concerns on outsourcing. The auto RoO are intended to benefit U.S. over Canadian and Mexican producers, but they are primarily focused on reducing the use of foreign components from Asia. If industry cannot adjust during the implementation period, the new rules will disrupt auto supply chains, amplifying problems caused by the COVID-19 pandemic. Ultimately, these new rules could backfire: given their complexity, automakers may find it easier to pay the 2.5% most-favored nation duty than comply with the new rules. They may also further incentivize automation or shifting production to lower wage regions; any of these changes could make U.S. autoworkers worse off.[23]

The USMCA also incorporated a labor chapter into the text of the agreement (under NAFTA, labor was addressed in a side letter). The December 2019 Protocol of Amendment—added after bargaining between Lighthizer and House Democrats—includes a novel labor enforcement mechanism as an annex to the state-to-state dispute settlement chapter. The protocol reflected Democrats’ attempts to add their signature to the USMCA, although it then gained Trump’s support ahead of the 2020 election. Indeed, the USMCA represents many longstanding Democratic trade policy positions—a stronger labor and environment chapter, the scaling back of ISDS, and industrial policy. Both sides were quick to declare victory, a notable departure from past, highly partisan ratification fights.

A few elements of the labor chapter stand out.[24] The USMCA reverses the burden of proof on whether an action or inaction is "in a manner affecting trade," an issue that has been of concern since the CAFTA *Guatemala* labor case.[25] Procedural changes should speed the process for bringing disputes, addressing a common complaint by U.S. labor groups. Finally, the USMCA includes rules of evidence to the Rules of Procedure for labor panels, such as the submission of anonymous testimony, which some scholars have pointed to in light of *Guatemala*.[26]

The Protocol of Amendment is largely focused on the rapid response mechanism (RRM) that will be established to enforce specific labor obligations. The RRM offers a way to handle a specific denial of the right of free association and collective bargaining by a private entity at a particular worksite, as opposed to addressing sustained or recurring state failures to enforce labor standards. The RRM is not a claims process but instead a quick way to address the "belief" that some denial of rights is underway through state-to-state discussions. There are restrictions with respect to what types of claims can be brought, namely the qualification that enforcement only applies to "covered facilities" in "priority sectors," although what these terms mean is not defined.[27] The RRM offers penalties on imports from the factories in question as a remedy for disputes. This remedy was most recently used in June 2022 by the United States against the Teksid Hierro facility in Mexico, which makes iron castings for heavy trucks. The RRM process builds in steps that encourage parties to reach a solution potentially before penalties are seriously considered, but as the most recent case shows, that is not a hard and fast rule. The AFL-CIO has been vocal in its desire to put forward cases, regardless of how long implementation of Mexican labor reforms may take.[28] As it stands, the RRM further cements asymmetry in North America, as it is specifically targeted at Mexico at the behest of U.S. labor interests. Early disputes have already raised significant concerns about the RRM's unbalanced focus and lack of transparency, as well as questions about due process.[29]

More potential troubles emerge from one of the Trump administration's "poison pills" added to the final text of the USMCA. The so-called "sunset clause" allows the USMCA to expire sixteen years after it enters into force, unless the parties agree to continue it. It institutes a joint review beginning six years after entry into force. While reviewing trade agreements is a good thing, NAFTA had already provided for this through the Free Trade Commission. But the sunset clause is not just about review. Instead, it reflects Trump's tactics across trade policy actions—the threat that a negotiation is never truly over. The sunset clause could also be envisioned as an enforcement tool. If Canada or Mexico has not implemented certain provisions to the United States' liking within six years, the U.S. could threaten to withdraw or renegotiate. The sunset clause is a new and untested enforcement tool, and there is no reason to think it will lead to compliance.[30] In addition, it further transfers Congress' constitutional authority over trade to the executive branch, itself a cause of concern.[31] The sunset clause could thus exacerbate asymmetry between the United States and its neighbors. Disconcertingly, it *bakes in* uncertainty to USMCA—something that trade agreements are supposed to limit.

Despite that, the U.S. International Trade Commission's economic assessment praised the USMCA for reducing uncertainty. That reduction was credited for the lion's share of the economic gains, estimated to be $68.2 billion, or a 0.35% increase in real GDP for the United States, over six years.[32] Provisions on digital trade were especially important in this calculation, as these are expected to induce more U.S. investment.[33] However, the digital trade chapter, with some exceptions, reflected the CPTPP, to which Canada and Mexico are parties, and from which Trump withdrew. The USITC's analysis did not take this fact into account, inflating its topline figure for economic gains.[34]

Without considering reduced uncertainty in its methodology, the picture for the USMCA is less favorable. The USITC's alternative model estimates that the net impact of USMCA on the economy is negative, at -0.12% GDP, or a loss of some US$22.6 billion, largely due to new provisions, such as stringent RoO, which will reduce trade in North America. Likewise, Canada's economic assessment expects vehicle exports to the United States to decline by US$1.5 billion relative to NAFTA as the new rules increase production costs.[35] Projections of benefits from USMCA depend heavily on modeling assumptions, such as comparing USMCA to having no agreement at all, or the reimposition of Section 232 tariffs.[36] So while Prime Minister Justin Trudeau's government has been very vocal in praising the benefits of the "new NAFTA," if the USMCA retreats from the gains of NAFTA, it is hard to see how this praise is warranted.

In fact, Dan Ciuriak, Ali Dadkhah, and Jingliang Xiao conducted an assessment of the USMCA's impact on all three economies, and they found *negative impacts on real GDP across all three NAFTA countries*: -0.396% for Canada, -0.791% for Mexico, and -0.097% for the United States.[37] In an update, Dan Ciuriak concluded that "on the basis of what can be reasonably determined, the new Agreement represents a significant step back from the three-decades-old partnership in North America launched with the 1989 Canada-United States Free Trade Agreement (CUSFTA) and further developed with the addition of Mexico in the NAFTA."[38]

In short, Trump's interruption of North American integration was qualitatively different from those that came before. In this case, the Trump administration attempted to dismantle past integration, instead of building on it or shifting its terms. In contrast to the institutional layering that North America saw previously, 2016 to 2020 represented a real disruption.

USMCA did not add to NAFTA in the way that previous initiatives, such as the Security and Prosperity Partnership,[39] and the Regulatory Cooperation Councils[40] attempted to do. Instead, it surgically weakened some aspects of the relationship, while doubling down on asymmetry, even embedding asymmetries within the agreement itself. Trump was not the first to throw a wrench in the wheels of continental deepening, but he may have inflicted the greatest amount of damage by trying to put the wheels into reverse. As its attentions have largely been focused elsewhere, the Biden Administration has yet to articulate how it will move North America forward. The next section advances ideas for how North America's leaders can start reversing the damage and increasing opportunities for economic integration.

Whither the North America Idea?

The renegotiation of NAFTA laid bare challenges the region has always faced and amplified them through tweets from the Trump White House. The region's asymmetry of power has long existed but had not been so indelicately exercised in the trading relationship since NAFTA. The threats of NAFTA withdrawal, the imposition and threat of tariffs, and other bullying tactics seriously damaged the U.S. relationship with Canada and Mexico. While these neighbors have mostly avoided airing their concerns in public, heightened ambivalence towards the United States continues to simmer just below the surface. It did not have to be this way.

NAFTA was never meant to be the final destination for North America's economic integration. Its framework was never sufficient to ensure a dynamic and competitive region well into the future. NAFTA desperately needed an update, but what the USMCA provided is less update than interruption. Even the name of the new deal speaks volumes about how the United States views its region—the "North American" label has been cast aside and "free trade" removed. This signifies, perhaps, a broader turning point in U.S. trade policy, isolationist and America First. The USMCA was an exercise of the Trump administration's vision of a new "reciprocity" where U.S. interests predominate, and others bend to its will. The initial desire to negotiate USMCA as two bilateral deals is still reflected in a title that demarcates three, separate states. It suggests no vision, no larger regional identity.

The Canadian political scientist, the late Stephen Clarkson, asked, "Does North America Exist?" North America lacked regional governance, he argued, and what one observes is merely "continentalism from below."[41] Clarkson's skepticism is shared by many, and there are many reasons for this. NAFTA's promoters overpromised on what the deal could deliver: more jobs, less migration. There was little explanation of other benefits generated by regional competitiveness.[42] Instead, criticisms highlighted job losses and transfers. But trade is not zero-sum, and a job lost does not mean another job cannot be created elsewhere. A 2014 study found a net loss of about fifteen thousand jobs per year due to imports from Mexico. However, the authors also show that NAFTA led to approximately $450,000 in gains for each job lost, taking the form of lower prices for consumers, access to a broader range of goods and services, and higher productivity.[43] NAFTA's benefits to consumers were often overlooked.

Though cutting edge at the time, NAFTA failed to anticipate the broader changes to the global economy. These required deepening economic ties and tapping into supply chains in other regions. Without a follow-up plan, NAFTA's initial boom proved unsustainable. This was quickly clear after the terrorist attacks of September 11, 2001 provoked border closures, setting off immediate and lasting economic impacts. After the attack, trucks were backed up on the Windsor Bridge for twenty miles to enter Detroit; meanwhile, Ford, Toyota and Chrysler either shut plant operations or closed several assembly lines.[44] The scramble at the border illustrated how little North America had invested in continental governance. The COVID-19 pandemic exposed similar failures in cooperation: at one point, President Trump tried to stop 3M from sending medical masks to Canada.[45]

While political maneuvering has had a real impact on North America, the longstanding issue is a divergence between our leaders' lack of vision for North America and the continued reliance on the robustness of "continentalism from below." North America's societies and economies continue to cross borders and integrate in countless ways. The vast disruption to people's often-transnational lives caused by the COVID-19 pandemic illustrates how connected we have become, including the millions of people who normally would cross borders to live, work, shop, and see family.[46] (Speaking for myself, as a dual Canadian-American citizen, I wrote this chapter in Vancouver, Canada, as I awaited the return of flights to Washington amidst travel restrictions.) No matter what policies are enacted in the three North American capitals, the impact is felt across the continent in people's everyday lives.

So, what vision might one offer for our continental future? When Robert Pastor wrote *The North American Idea*, the United States was at another turning point in its trade policy. The Obama Administration was pursuing the TPP and also launching talks with the European Union. North America was not high on the trade agenda. But Pastor saw an opportunity. In expanding U.S. economic interests beyond the continent, he envisioned a coherent approach where Canada, Mexico and the United States would stand side-by-side in these efforts. Not only would the United States benefit, but the region could cement its place on the global stage. Pastor worried that the U.S. approach to the TPP appeared to "tack on" Canada and

Mexico, without separately addressing what would happen to the institutions created by NAFTA, such as the Commission on Environmental Cooperation. He was right to be concerned.

While the CPTPP would have replaced or updated elements of NAFTA had the U.S. not withdrawn, it would not have alleviated many challenges North America has faced in issues closely related to trade. For instance, labor mobility—always a politically charged topic for the United States and its neighbors—was kept far from the TPP talks. Meredith Lilly called the CPTPP "a missed opportunity to advance global labour mobility for the twenty-first century," with inclusion thwarted mainly by the United States.[47] Regulatory cooperation was watered down in CPTPP, with a greater focus on improving domestic regulatory processes instead of reducing regulatory barriers to trade and encouraging alignment.

As such, even re-entering the CPTPP (a highly unlikely option) would not solve North America's overarching problems. Biden's biggest challenge is to distance himself from the Trump administration's approach to trade. So far, there has been significant continuity on trade, though the there is greater scope for cooperation with allies. Biden, too, has flirted with economic nationalism, and showed a similar propensity for taking executive action on trade. For instance, the Biden administration has not sought trade promotion authority from Congress to negotiate new trade deals. Instead, trade executive agreements are being pursued, which do not require Congressional approval. Biden's latest trade initiative, the Indo-Pacific Economic Framework, does not even include market access, and little resembles a trade agreement at all. Tariffs on steel and aluminum have also been lifted only slowly, "Buy America" policies have been included in spending plans and electric vehicle subsidies, and the attitude toward vaccines and medical supplies during the pandemic was distinctly "America First." It is hard to say how long this "America First hangover" will last.[48] On the other hand, there are some positive signs, such as the renewal of the NALS and the recognition there of the need for cooperation in health, supply chains, climate, and more.

Certainly, Biden's past words and actions suggest openness to a bolder vision. At the Ministry of Foreign Affairs in Mexico City in September 2013, Biden offered a bold, inclusive, continental vision. He emphasized the region's economic ties, stating: "There is no question that our economic partnership has been a success. But there is also no question that there's much, much, much more potential. And I would add, there's also no question lest we seize the opportunity, it may pass us by because the world is moving rapidly."[49] One area of potential that he outlined was to build capacity for a "strong, integrated North American economy" that could help improve economic outcomes across the Western Hemisphere—"From Canada to the tip of Argentina," he said, "there is no reason why in the 21st century the hemisphere will not be the most potent economic engine in the world." After Trump, such proposals seem a distant memory, but there were echoes of this in calls for North American cooperative leadership in climate and migration.

Biden's vision and language was far from the zero-sum rhetoric now in vogue. Consider his words: "What benefits Mexico and the people of Mexico ultimately has a resounding benefit in the United States." Biden called for attention to growth and innovation across the continent, including through more investment in the North American Development Bank, modern trade rules, investing in community colleges and technical education, doubling the number of Mexican students in the United States by 2020, and improving border infrastructure. The stark contrast between how trade and economic integration were discussed during the Obama Administration and today is telling. This divergence reflects how deeply the Trump administration ruptured North American relations and also made trade a weapon, instead of a means to achieve peace and prosperity.

This does not mean that a continental vision is out of reach. But North America integration will need to move beyond its recurring lack of political will and inability to see beyond parochial interests. North America is about more than autos, steel, oil, lumber, dairy and produce. It is a region that, as macroeconomic indicators suggest, rises and falls together. It is a region with a shared history and culture that transcends whoever is currently occupying the White House. The greatest challenge to a continental vision is a failure to imagine what could be possible. Pastor was by far the boldest thinker in this regard; in his absence, few articulate such big-picture visions.

As a former student of Bob Pastor, I had the good fortune of working with, and learning from, him during the final years of his life. He left me a box of papers—speeches, notes, syllabi—a compilation of years of thought on North American integration. At a meeting titled "Rethinking North American Integration," Pastor argued that we cannot "re-think" North American integration because we've never thought about it adequately. Canada debated free trade with the United States and the United States debated it with Mexico, but almost no one has seriously thought about integration on a continental scale. One of the major problems he identified, salient during the George W. Bush years, was the inability to look beyond the problems of the moment. Pastor was constantly frustrated at our leaders' lack of vision; at the same time, he drew inspiration from the close connections among the people of our three countries. He believed that a North American identity did exist, something he and Clarkson vigorously debated.

Pastor mapped out seven characteristics of a North American identity, which remains relevant today. First, North Americans are defined by a pragmatic desire to improve the quality of their lives. He often pointed out that, in public polling, views on trade tended to change depending on how the question is asked, but that generally people in all three countries favored trade with one another. Second, Pastor's research found that people in Canada, Mexico and the United States support closer cooperation and integration on economic, security, and environmental areas while maintaining national identities and cultural pluralism. He saw the diversity of North America as one of its strengths and believed that embracing such diversity would help the United States become less insular.

Third, he found that the residue of uncertainty always held by Mexico and Canada—what I refer to as "ambivalence"—turns to resentment or even anger when provoked by the United States. This explains the ramifications when the resident of the White House is particularly insensitive to asymmetry. In fact, a set of surveys coordinated by Pastor, Frank Graves, and Miguel Basáñez in October 2013, combined into the "Rethinking North America" survey, revealed that much of the conventional wisdom was wrong: the publics of the three countries like each other, are more like one another than we often think, and are more prepared to consider new forms of collaboration.[50] However, insults from the United States, particularly towards Mexico, bring out hostile and resentful feelings from the others, chilling the prospects for collaboration.

Fourth, he saw a shared respect for the market across all three countries. This was a positive force for integration, he argued, and often guided government action. The recent turn inwards by the United States, and increasing support for industrial policy, has unsurprisingly disrupted integration. Mexico has also witnessed significant backsliding under President Andrés Manuel López Obrador. It is unclear whether both countries will return to more pro-market ways of thinking. Fifth, Pastor was a supporter of increased labor mobility, but noted that immigration was the major concern for the United States and Canada, and for Mexico, emigration. To that, today, he would likely add transmigration. These different vantage points would always be a challenge among the three countries.

Sixth, Pastor was well aware of the distinctiveness of North American regionalism. Contrary to some caricatures of his work, Pastor was critical of approaches that simply replicated the European project. Canada, Mexico, and the United States were uninterested in supranational institutions, and that was OK. Instead, North Americans needed to find the right compromise to create institutions that could preserve some continuity while still adapting to the problems of the day. Finally, he suggested that the North American identity was adventurous—open to new political forms of collaboration, as seen with initiatives like the Pacific Northwest Economic Region—but that both Canada and Mexico always wanted to ensure that they would not be swallowed up by the United States. Perhaps this is why sub-regional initiatives have had appeal.

Reflecting on this characterization of North America, Pastor's description of the U.S.–Mexico relationship, as one defined by intensity, complexity, and asymmetry, comes to mind. This could, in fact, be used to describe North America as a whole. So many of the issues we face are "intermestic" blurring the lines between domestic and foreign policy. As James Eayrs observed in 1964 about Canada and the United States:

> Natural frontiers exist between nations, but the border between Canada and the United States is not one of them. Birds fly over it, fish swim through it, ore bodies lie under it, stands of timber straddle it, rivers traverse it. As in the movement of trade, so in the disposition of resources. The continent is an economic unit. Its bisection is political, not geographic.[51]

With USMCA in effect, it may seem like the road to that better future is far off. As noted earlier, USMCA deepened the dual-bilateral structure of North American relations, with the United States at the center of the hub-and-spoke trading model, in particular. It is doubtful that the United States under Biden will undo the legacy of USMCA. The Biden Administration seems to have doubled down on "enforcement," particularly on labor.[52] But mechanisms for trilateral cooperation remain. NAFTA Article 2001, which was largely carried over into USMCA, allows for the elaboration of the agreement by the Free Trade Commission, which is made up of high-level representatives from the three countries, usually the trade ministers.[53] The parties can, at any point, convene the Commission. If the United States is not responsive to improving the North American trading relationship through meetings of the Free Trade Commission, Canada and Mexico can also push for changes in 2026, when the sunset clause kicks in. At that time, the three parties will have the opportunity to negotiate modifications and amendments.

What changes should be considered by Canada, Mexico and the United States? While some modifications, such as rolling back restrictive auto rules of origin requirements, should be made at the earliest possible stage, I want to focus on three ideas that could help revitalize North American economic cooperation and continental integration.

First, we should commit to trade liberalization and to invest in trade facilitation. Canada, Mexico, and the United States should limit regulatory trade barriers and resist the temptation to implement buy local requirements, which saw a resurgence amidst the pandemic. The parties should take full advantage of the new Good Regulatory Practices chapter and attempt trilateral regulatory cooperation wherever feasible. While the continuation of the United States–Canada Regulatory Cooperation Council is a positive development to ensure continuity of work, it should not become the only forum within North America where deep regulatory integration is possible.

In addition, facilitating trade through investment in border infrastructure is an urgent priority. In 2005, the North American Development Bank commissioned a report from the American University's Center for North American Studies, which proposed the creation of a North American Investment Fund to support transportation and infrastructure projects, as well as rural community education in Mexico.[54] The authors saw such a fund as a way to help close the gap between Mexico and its northern neighbors. At the same time, such a fund could improve border infrastructure and facilitate the vast majority of North American trade that traverses land ports of entry.

Second, we should rethink our shared institutions. The Free Trade Commission, for instance, should meet at least annually; it should include more than trade ministers on a regular basis. Myriad concerns impact our shared economies, and the region would benefit from regular and early dialogue. For example, during the pandemic border restrictions for nonessential travel into Canada were ad hoc and extended on a monthly basis, without public discussion of how the border was to be safely reopened and economic activity resumed. The Commission should take the lead on deliberating such issues, bringing relevant agencies to the table, to ensure disruptions to the lives of citizens and trade remain limited.

Another NAFTA institution, unchanged in USMCA, is the secretariat. This body has an office in each country, maintained by each of the parties. A single and permanent secretariat, that rotates between the three capitals, and with citizens from each, would help preserve institutional memory and encourage cooperation from the ground up.

Third, we should take down barriers to building a North American community. The vast limitations to integration in North America are, mostly, self-imposed. North America is a region, but "the very idea of 'North America' has not penetrated our consciousness."[55] Border communities may understand this shared identity and the benefits that trade has brought to each of our countries, but big swaths of the United States in particular have little visible interaction with Canada and Mexico. North American leaders should give serious consideration to adding a North American version of the European Erasmus program, which has facilitated student exchanges across its member states. Allowing American, Canadian, and Mexican students to learn with each other, build friendships, and share ideas will enrich our intellectual discussions and go a long way in fostering a more cooperative atmosphere. This could help dispel the many myths that North Americans hold about one another. Indeed, calls for enhancing such exchanges across the Americas have political currency, and a North American approach makes sense. Exchanges between Canada and Mexico could help narrow the region's traditionally most distant relationship.

Likewise, North American leaders must find routes to enable greater labor mobility across the continent, making it easier to attain a visa. Some have suggested the creation of a labor agreement between the United States and Canada modeled off the EU's Schengen agreement,[56] as well as a separate bilateral worker agreement between the United States and Mexico for nonseasonal workers.[57] Labor mobility would work hand in hand with deeper economic integration, help limit illegal entry, and potentially help to build a dynamic regional labor market.

These ideas, while bold, suggest what may be possible if we allow ourselves to put politics aside for a moment and instead think first about how to make North America more competitive and vibrant. Of course, politics never goes away. But changes in leadership in the past have offered new opportunities to rethink old policies. The uncertainty we face can be addressed more effectively if we collaborate and share ideas. We should not despair if these reflect different visions. As Greg Anderson points out in *Freeing Trade in North America*, one of the major obstacles to integration is the existence of competing visions of what integration should be.[58] A larger debate on these visions of North America would be useful and provide clarity on the overall approach to integration on the continent.[59]

As the North American leaders gather for the 2022 North American Leaders Summit, it is incumbent upon the Biden administration to take the lead in repairing the damage Trump did to the United States' relationship with its neighbors. The United States should kickstart a dialogue on how to better prepare the region for future crises. Part of this dialogue should include a strategy for how and when we should collaborate on a trilateral basis, with a clear statement of our shared goals and interests. But Canada and Mexico have issues of their own that will impact future engagement with the United States. Distrust has grown as a result of U.S. negotiating tactics and policy changes that put diplomatic efforts in a constant scramble. Mexico faces its own unique challenge, as President López Obrador threatens to unravel policies that have helped Mexico's economy grow, including attempts to scale back energy reforms and Mexican institutions.[60]

The North American landscape is as challenging as ever. But this does not mean that it is impossible to navigate. To restart a cooperative relationship, the United States must first lead by example, and avoid turning inwards and casting aside its allies until it suddenly needs their backing. Nationalistic policies must be avoided, including calls for reshoring production. The region has grown through expanding our choices, not limiting them, and it is past time to rediscover this. North America exists. Trade shaped its regional identity, but politics interrupted its growth.

Endnotes

Inu Manak is a Fellow for Trade Policy at the Council on Foreign Relations, and a participating scholar in the Robert A. Pastor Research Initiative, a joint program between American University's Center for Latin American and Latino Studies and

the School of International Service. The author would like to dedicate this chapter to her late mentor, Robert A. Pastor.

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3

Border Management and Control in North America

Chappell Lawson, Jorge Tello, and Jennifer Fox

National borders are the place where some of the most challenging issues in North America present themselves. Lax border controls and administrative incompetence in border agencies cause trouble in their own right, but the most visible problems at the border often have other causes. For instance, dysfunctional immigration policies create a labor market magnet for undocumented labor that in turn leads to illegal border crossings, and poorly crafted drug enforcement regimes contribute to smuggling, which border agencies are expected to interdict. Border management thus sometimes involves compensating for policy errors elsewhere.

This chapter discusses border security arrangements among the three signatories to the U.S.-Mexico-Canada Agreement, or USMCA (known in Canada as CUSMX and in Mexico as T-MEC). It begins by reviewing the value of cooperation in managing shared borders and policing common external boundaries. The more that Canada, Mexico, and the United States can keep "bad things" (i.e., contraband) and "bad people" (e.g., terrorists) out of the region, and ensure that immigration within the region occurs through lawful channels, the more easily and cheaply legitimate travelers and shipments can move through North America. As a result, the three North American countries share an interest in preserving the progress that they have made on border security and management.

In many cases, doing so involves preventing national controversies from disrupting mutually beneficial bilateral relationships at the border itself, such as cooperation at the ports of entry or information-sharing about risky travelers and shipments. All three countries would also benefit from further improvements in border management. Specific opportunities fall under two rubrics: (a) more efficient and effective operations at the borders and (b) solving policy problems away from the physical frontier in order to prevent problems at the border itself.

The Importance of Border Security

Secure borders are a public good, and sound management of shared borders is mutually beneficial for all three countries of North America. After all, ports of entry cannot operate unless both sides wish them to do so, and security at the ports of entry is easily frustrated without cooperation along the border between the ports of entry. When it comes to "security" in a geostrategic sense – an issue addressed in other chapters of this volume – the Canada–U.S. relationship is very different from the Mexico–U.S. relationship; lessons from one dyad may not apply to the other. But when it comes to securing legitimate commerce and travel within North America, the goals of the three countries are congruent, and desirable border management policies apply equally at both land borders.

The development of established, institutionalized mechanisms for border cooperation among the three North American partners can help to prevent trade disruptions should an adverse event occur. For instance, the collaborative approaches that have developed since the terrorist attacks of September 11, 2001, mean that similar incidents would not require a country to seal its land borders with other USMCA members, as the United States effectively did after 9/11. Just as reliable border security arrangements permit deeper economic integration, so can breakdowns (or perceived breakdowns) in border security cause much larger problems in the trinational relationship.[1]

Terrorism is, by now, an old problem. But challenges related to border security arise continuously: surges in undocumented migration, threats to cross-border critical infrastructure, the handling of dangerous incidents at ports of entry, the continuing adaptation of transnational criminal organizations, and as experienced recently, the inadequately coordinated responses to reopening cross-border trade and travel in the context of contagious disease. Any of these issues could strain bilateral relationships in North America if the institutional framework of collaborative border management is not firmly established.

Finally, it is important to emphasize that a shared commitment to managing the external borders of the continent also brings benefits. As one prominent report noted:

> Any weakness in controlling access to North America from abroad reduces the security of the continent as a whole and exacerbates the pres-

> sure to intensify controls on intracontinental movement and traffic, which increases the transaction costs associated with trade and travel within North America.[2]

Therefore, collaboration to prevent undesirable people or shipments into *any* North American country remains in the national interest of all three countries. Such collaboration hardly needs to take the form of a customs union or Schengen-style zone, as some advocates of the 'North American idea" have suggested in the past[3] – an approach which would raise many other challenges and objections – but it does require a shared effort to prevent the entry into the region of people or things that other countries regard as undesirable.

In some policy areas, creating such an external security perimeter has been effectively addressed. For instance, air travelers entering Canada and Mexico from outside the region are vetted in ways that satisfy U.S. counterterrorism concerns.[4] Without this assurance, U.S. policymakers would undoubtedly insist upon stricter border security within the continent. In other spheres, however, the three countries have not developed a workable solution. One salient example concerns undocumented immigration from Central America across Mexico's southern border and ultimately into the United States, which is driven both by conflicting U.S. asylum policies and by a lack of Mexican security capacity at its southern border. Although there has been a great deal of cooperation between Mexico and the United States on this problem, as well as investment in Mexico's southern border security infrastructure, the fact that Mexico remains a major transit country continues to create problems at the U.S.-Mexico border.

Preserving Progress to Date

Over the last two decades, the three countries of North America have made remarkable progress in border security. A vetted shipper program – the Customs-Trade Partnership Against Terrorism, or C-TPAT – was created and then expanded to encompass most cargo across the land borders.[5] Trusted traveler programs such as SENTRI, NEXUS, and Global Entry, and FAST were created or (in the case of SENTRI, a pre-9/11 program) improved, simplifying border-crossing security procedures for prescreened commercial and personal travelers.[6] Most importantly, all three countries have embraced the notion of collaborative border management, also known as "Twenty-First Century Borders."[7] In this approach, countries use border authorities to secure flows of goods and people through their territories, rather than to defend a specific legal line.[8] The reality of flows in North America is that "bad things" leaving one country will inevitably return to it in some way. Each country can learn more about “safe” shipments and vehicles from its neighbors, thus ensuring that they do not have to expend law enforcement resources on things known to be unproblematic. For this reason, North American countries must care as much about what goes out of their country as what goes in—a significant paradigmatic departure from conventional thinking about borders during the 20th century.

This conceptual shift has led to formal acknowledgement of the symbiotic, bidirectional flow of contraband across the U.S.–Mexico border, in which guns and bulk cash flow south while drugs flow north, and trafficking organizations depend on both sorts of flows to operate. Tangible manifestations of collaborative border management include mirrored patrols in certain areas between the ports of entry designed to target criminal organizations operating across the U.S.–Mexico border, joint patrols (such as the maritime Shiprider program in the Great Lakes region), expanded information-sharing (from data on license plate readers to more sophisticated information on criminal organizations), joint investigations, single-entry processing (in which an exit from one country is counted automatically as an entry into the other country, or vice versa), and joint planning for ports of entry.

There are, of course, real differences in priority between the three countries on certain issues of border management. The most salient example is undocumented immigration from Mexico to the United States: such illegal flows are hugely important to the United States but of less direct interest to Mexico. However, recognition of economic interdependencies means that such flows are of considerable *indirect* interest to Mexico, because they risk thickening the border and thus increasing transaction costs for legitimate trade and travel.

An equally serious problem is the fact that national politics occasionally disrupt collaboration on border management and other security issues. During the renegotiation of the North American Free Trade Agreement (NAFTA) in 2017–18, for instance, progress on border cooperation between the United States and Mexico was subordinated to negotiation of economic issues and stalled. This outcome was understandable but lamentable. One of the ways that North American countries have made progress over the past 20 years is by encouraging cooperation at an operational level along the border and insulating such efforts from national-level politics. Although it is not always possible to sequester conversations about border security from larger issues such as trade and immigration, it is vital for all parties to decouple border security policies from other issues wherever possible and consider them on their own merits. In particular, North American countries should strive to prevent national politics from interfering with quotidian working relationships at the border, which are crucial to ensuring the smooth flow of legitimate commerce and travel. The Port Security Committees (on the Mexico–U.S. border) and an analogous arrangement (Port Committees) on the Canada–U.S. border are two key examples. North American countries should thus try to resolve border issues, including local law enforcement and port-of-entry operations, at the border wherever possible, rather than allowing them to become political footballs. For instance, the discovery of a tunnel used by smugglers between the states of Sonora and Arizona should be regarded as a natural part of everyday law enforcement operations, rather than an occasion for questioning binational efforts to address transnational crime. The shooting of a Mexican who threw rocks at a Border Patrol agent should become an occasion for discussions about the process by which law enforcement agents on one side of the border can secure help from counterparts on the other side during an incident and about the value of mirrored patrols in the areas between the ports of entry, rather than for official demarches by the Ministry of Foreign Affairs.

One common way to reduce the politicization of incidents is to have in place mechanisms to address them. For instance, the governance of transnational waterways by organizations like the International Boundary and Water Commission on the southwest border and the Great Lakes Commission for the Great Lakes and the Saint Lawrence River tend to depoliticize incidents and focus discussion on how to achieve operationally what both sides have agreed they wish to achieve. For issues of border management, this approach should be adopted wherever possible.

Improving Border Management

Although all three countries have rhetorically embraced collaborative border management at the highest levels of government, the agenda remains incomplete. In some cases, there is still the danger of antiquated thinking—for instance, the fear that harmonization of standards for products compromises "sovereignty" (e.g., in Canada), the misperception that investments in the border security capacity of partner countries is a "gift" rather than the most efficient way to enhance everyone's security (as with U.S. assistance to Mexico), or the sense that security operations constitute efforts to please another party (as with Mexican assistance in interdicting unlawful migration into the United States). Such thinking can prevent otherwise easy "win-wins" for the region as a whole. Continual restatement of the value of collaborative border management is thus essential to preserving and sustaining progress.

In other cases, the opportunities concern implementation. To facilitate and streamline cross-border commerce, all three countries should build on their existing trusted shipper programs. These programs—voluntary arrangements by which shippers agree to secure their own supply chains (facilities, conveyances, etc.) in exchange for expedited processing and priority in business resumption—have grown and improved over the years, but they should be further enhanced in several ways. Verification and inspection for vetted trader programs like the Customs-Trade Partnership Against Terrorism (C-TPAT) should be conducted jointly (as is already happening in Canada), and Canada's Partners in Protection (PIP) program and C-TPAT need to be truly harmonized; in other words, a company that belongs to PIP should be automatically recognized as being C-TPAT approved in the United States and vice versa.[9] Membership in Authorized Economic Operator programs should likewise be mutually recognized in all three countries. For commercial drivers, the three governments should consider introducing mandatory radio-frequency identification (RFID)-equipped border crossing cards. RFID signals would allow customs authorities to link to driver, truck, trailer, and shipment information, providing more advanced notification of entries—a crucial improvement in land border operations.[10] Similarly, all three countries should run jointly developed targeting algorithms on cargo data, in order to detect potential dangerous or illegal shipments or conveyances.

Along with commercial travel, noncommercial travel should receive equal scrutiny, particularly as it pertains to issues of terrorism. To this end, trusted traveler programs should be expanded. The three countries should also investigate the potential for "known traveler" digital identity programs that allow individuals to share information with authorities on a one-time basis as they pass through ports of entry, thereby allowing law enforcement personnel to focus on higher-risk individuals. Such programs would reach a segment of people (including visitors from outside North America) who cannot access existing trusted traveler programs or who simply do not wish to surrender their personally identifiable information to the government on a permanent basis. Primary inspection at ports of entry should be eliminated, at least for nationals from other North American countries. Travelers should be referred to secondary screening based on a combination of targeting and the judgments of officers on the scene, as well as a reasonable number of random checks designed to maintain a baseline deterrence against smuggling. North American countries also should continue intelligence collaboration on counterterrorism, including asylum claimants or refugees in Canada and joint screening of air travelers arriving into the continent from abroad. Where appropriate, officials from the third country might participate in such joint operations as observers, in order to glean information for analogous operations in their home country. Furthermore, the three countries should collaborate more comprehensively to prevent the movement of known or suspected members of transnational criminal organizations into and through the region, including the development of "watch lists" analogous to those used to screen known or suspected terrorists.

Collaborative border management, of course, extends to the planning and construction of ports of entry, as well as to their regular operation. All new authorized crossing points in North America should be constructed as a single binational port of entry that straddles the frontier, staffed by cross-deputized officers. Where cross-deputation is impossible for whatever reason, such as the configuration of existing ports, all processing should be single-entry/exit, so that an entry into one country is automatically counted as an exit from the other. Communications should be interoperable, so that security personnel at and between the ports of entry can communicate securely with their counterparts on the other side of the border. Representatives of the neighboring country should be informed ahead of time about procurement of equipment that might affect the interoperability of communications.

In addition, joint or fully parallel patrols should operate in the areas between the ports of entry. On the southwest land border between the ports of entry, Mexico should develop vetted units that can mirror the operations of U.S. Border Patrol in major smuggling corridors. In some cases, representatives of the third country might participate as observers in mirrored operations conducted by the other two countries for training purposes. Such cooperation would not require novel governance structures, nor would it involve the creation of any kind of binational or trinational frontier force.

Major investigations of cross-border smuggling and trafficking should likewise be joint, and operations should be coordinated to achieve maximum disruption of criminal organizations. The three countries should also consider jointly endorsing "disruption" as a theory of action against certain types of transnational crime (rather than the conventional law enforcement model of investigate-arrest-indict-prosecute-incarcerate), where traditional approaches are known to have a weak deterrent effect.[11] In some cases, such as human trafficking investigations, binational task forces could include a representative of the third country (presumably as an observer) as a way of sharing best practices and training law enforcement personnel.

Planning for major natural disasters that span the border, as well as for public health crises that involve border communities, should be done jointly. When planning is "dual-binational." representatives of the third country might attend planning sessions as observers. Likewise, the three countries should develop a joint plan to protect transnational critical infrastructure in North America, such as pipelines, from all hazards, from cyberattacks to extreme weather events.[12] Again, binational planning might incorporate official observation by representatives from the third-partner country.

In some cases, achieving these goals will require capacity-building in Mexico. To the extent that investments in Mexico offer a greater security rate of return than investments within the United States (or Canada), partner countries should be prepared to provide assistance. Efforts to secure Mexico's southern border and funding for vetted patrols along its northern border are two clear examples of potential win-wins. With respect to Mexico's southern border, funding should be directed to the Mexican government for physical infrastructure at and around ports of entry, as well as to the Guatemalan government to pay for a computer-assisted entry-exit system and professionalization of its customs agency. This effort should be coupled with collaboration between Mexico and the United States in adjudicating asylum claims by Central American migrants before they reach the interior of Mexico.

Solving Problems Away from the Border

No matter how effective and efficient border operations become, North American countries will inevitably confront instances where ill-conceived national policies cause unsolvable problems at the border. For instance, the challenge of undocumented immigration into the United States from (or through) Mexico is fundamentally a product of inadequate employer sanctions against hiring undocumented workers in the United States, the absence of a properly structured guest worker program, and ambiguous asylum policies. Attempting to address the perverse consequences of these failings by reinforcing physical security at the border is inefficient, ineffective, and sometimes inhumane. The same is true for the traffic in illegal drugs, which governments could address most effectively through policies that discourage demand,[13] but which (given the economics of the illegal drug trade) can be addressed only inefficiently and incompletely at the border. The optimal border security arrangements in North America, therefore, include policies that prevent problems which are most apparent at the physical border but have their origins elsewhere. In particular, closer attention to immigration reform and the flows of illegal drugs and weapons would meaningfully contribute to border security in North America.

Conclusion

In an era of global travel networks and just-in-time manufacturing, governments need to be able to facilitate beneficial commerce. At the same time, governments need to work together to interdict illegal flows, using the wide-ranging authorities they have at the border to do so. All of these activities will be much more efficient and effective if done in collaboration between countries on both sides of a physical border, rather than done by one unilaterally or by both in an uncoordinated way. This is particularly true when the goal is to dismantle transnational criminal organizations that operate more or less seamlessly on both sides of a border and engage in bidirectional smuggling.

One serious obstacle to deepening security cooperation is ignorance of the state of play at the physical borders, including of the mutual benefits that already have been obtained from close collaboration. Most people in Canada, Mexico, and the United States will not cross either of the two land borders in North America themselves. Very few will learn much about the intricate pattern of cooperation that makes borders in the region run smoothly much of the time and brings material benefits to citizens of all three countries. They must therefore rely primarily on politicians and the mass media. Unfortunately, political discourse about neighboring countries can be tendentious, and media coverage can provide a distorted picture of the situation on the ground. In particular, lack of awareness about the actual situation at the border creates opportunities for demagogic misrepresentation of any one adverse incident and tends to blow operation-level mishaps into an international kerfuffle. These incidents and mishaps can then be used to justify nasty rhetoric about friendly neighbors, whose cooperation is essential for security in the region. Such rhetorical challenges must be countered vigorously. Indeed, further deepening of collaborative border management in North America and continuous public support for such collaboration by all three governments will be critical to future cooperation. It is incumbent on all those familiar with border security—elected and appointed officials, business executives, policy experts, members of civic groups, community leaders, journalists, and the like—to reiterate the importance and value of collaboration in North America.

Endnotes

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1. Security arrangements are actually "dual-binational" rather than trinational (a term that implies a robust Canada–Mexico partnership and presumes that institutions apply equally to all three dyads). However, because the same principles of border management apply in both of the main dyads, the terms "trinational" and "continental" appear in this chapter.

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4. Seth M. M. Stodder, “Rethinking Borders: Securing the Flows of Lawful Travel and Commerce in the Twenty-First Century,” in Chappell Lawson, Alan Bersin, and Juliette Kayyem, eds., *Beyond 9/11: Homeland Security for the Twenty-First Century*, MIT Press, 2020.

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4

The Outlook for North American Energy Integration

Duncan Wood and Diego Marroquín Bitar

The prospects for an energy-abundant North America are bright. To put this in perspective, in 2018, the United States surpassed Saudi Arabia as the world's largest producer of oil, and the U.S. dependency on imported oil has been significantly diminished through combination of higher production and greater fuel efficiency standards. Canada has enormous reserves which have yet to be exploited, as does Mexico, predominantly in the Gulf. A similar story can be told for renewable energy. The region holds enormous potential for the development of wind, solar, hydroelectric, and geothermal power generation. Canada exports enormous quantities of hydroelectric power to the United States, while all three countries have invested huge sums in the development of solar and wind power in recent decades. The region also has impressive potential for the extraction of critical minerals needed for the energy transition, such as lithium and rare earth elements.

From an obsession with energy security, the region's conversation has transformed into one of energy abundance. This newfound wealth is commonly referred to as one of the bedrocks for North American competitiveness both for the present and in the future. But serious obstacles stand in the way of the development of this potential. Price volatility, environmental, social, and governance (ESG) concerns holding back new resource development, NIMBYism slowing down infrastructure development, and the reemergence of resource nationalism in Mexico impede the achievement of the region's true energy potential.

In the face of that complicated outlook, this chapter argues that the best path forward is for the governments and the private sectors of all three countries to collaborate on the development of a strategic vision for North American energy, with a focus placed on seven main areas:

1. Effective policy coordination
2. Data collaboration
3. Modernization of infrastructure to meet the region's energy needs
4. Addressing the human capital crunch in the energy sector
5. Regulatory and standards cooperation
6. Acceleration towards renewables, including energy storage
7. Technological cooperation

This agenda, as modest as it may seem, still faces serious challenges at the time of writing from a Mexican government that has turned sharply inwards. Citing "energy sovereignty," Mexican President Andrés Manuel López Obrador (known as AMLO) eschews engagement with his North American counterparts on energy policy issues, especially when it comes to green energy generation. Nonetheless, given the current global context and the enormous potential of increased energy cooperation, the time is right to begin thinking about the next chapter of Mexican energy policy and the countless opportunities of crafting a more harmonious approach to the challenges of securing North American energy abundance.

Context: From Energy Security to Energy Abundance

Oil

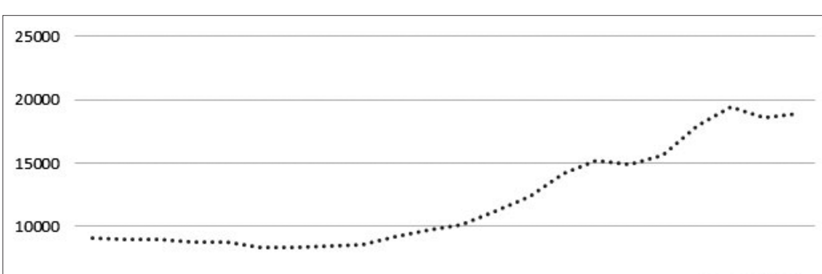
For long-term analysts of the North American energy scene, the United States' current energy prowess is remarkable. During the 1970s, 80s and 90s, the United States became heavily dependent on imported oil from Latin America, the Middle East, and Canada. In addition, it imported massive volumes of natural gas from its northern neighbor and invested heavily in Liquified Natural Gas (LNG) imports from around the world. Despite having led the development of the oil industry in the late 19th century, the United States declined steadily from a peak production of around 9 million barrels per day (bpd) in the early 1970s to roughly 5 million bpd in 2008. Meanwhile, imports soared to more than 11 million bpd.

In the last ten years, in contrast, the United States has seen its oil production skyrocket to 12.2 million bpd in 2019, making it the world's top producer of both oil and natural gas. In 2019, U.S. combined oil and gas production increased 11%. the outlook for renewable energy is bright as well, with total consumption of renewables increasing by 88 percent since 2000; these sources now roughly match the share of U.S. energy consumption derived from coal.[1]

Behind the United States' fifteen-year resurgence in oil and gas production is the application of new technologies and techniques. These new approaches have enabled the extraction of oil from unconventional fields, facilitating the production of shale gas and "tight" oil. According to the Institute for Energy Research, the use of hydraulic fracturing and horizontal drilling has allowed the United States to ramp up production to the point where, in November 2019, oil production hit a peak of almost 13 million bpd. At that point, the country effectively attained energy independence for the first time in sixty-two years by producing and exporting more energy than what was consumed in the country.[2] Although production has slipped due to the impact of COVID-19, the United States is now on course to become a net oil exporter in the not-too-distant future—particularly if the rise of electric vehicles (EVs) continues to reduce U.S. demand for gasoline.

Canada's oil production story is similarly remarkable. As recently as the 1990s, Canada was producing only 1.7 million bpd, but just before the onset of the COVID-19 pandemic, national crude oil production had nearly reached 5 million bpd. The driver of this exponential growth was the Albertan oil sands, the largest deposit of crude oil on the planet. In 2018, Canada became the world's fourth-largest petroleum and other liquids producer with almost all of its oil exports being destined for the U.S. market. The Canadian Association of Petroleum Producers (CAPP) forecasts that Canadian crude oil production will grow to 6.7 mbd by 2030, projecting higher

Figure 1 North American Oil Production (crude and other liquids, millions bpd)



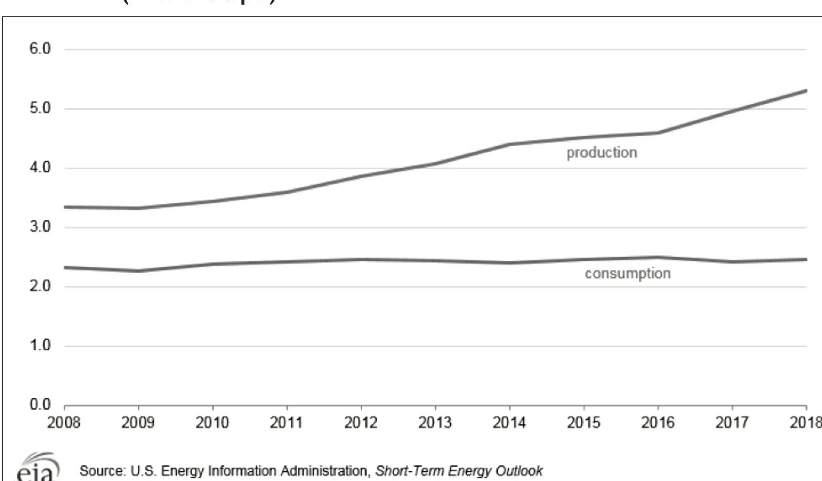
output from the oil sands. The oil sands are an unconventional hydrocarbons resource because the oil occurs as bitumen mixed with sand, water and clay. The oil industry has applied capital, technological innovation, and infrastructure investment to make the oil sands profitable, creating a massive source of energy for Canada and the United States.[3]

Mexico's recent trajectory is less positive. After the discovery of the Cantarell mega field in the late 1970s, Mexico emerged as a major oil producer. Mexican production peaked at 3.4 million bpd in 2003. Since then, Mexico's oil production has steadily declined. In an attempt to halt that fall, the Mexican congress approved a constitutional reform in December 2013 to open the hydrocarbons sector to private and foreign investment for the first time since its nationalization in 1938. In addition, Mexico's state oil firm, Pemex, was allowed to partner with private sector and foreign firms for the first time in its existence.

The 2013 reform sparked enormous interest from the oil industry worldwide. Following the implementation of secondary legislation and several rounds of oil auctions, the Mexican government signed more than one hundred contracts for exploration and production, catalyzing some $160 billion of committed investments. The fruits of those investments and collaborations will emerge over the coming years.

However, in December 2018, the newly inaugurated Mexican President Andrés Manuel López Obrador (AMLO) moved to discard the historic reform, declaring a moratorium on new rounds of bidding for oil and gas.

Figure 2 Canadian Liquid Fuels, Prodution & Consumption (millions bpd)



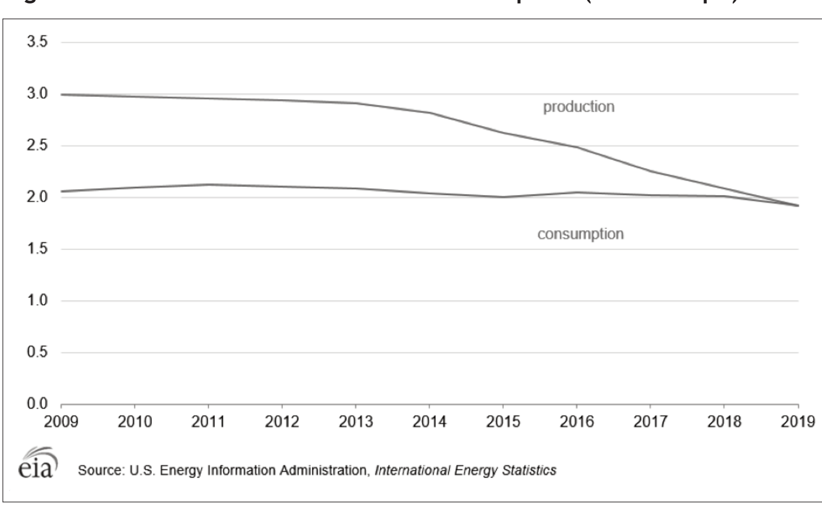
Instead, AMLO has shifted the focus of Mexican energy policy exclusively to Pemex. Calling for "energy sovereignty," AMLO's government has directed substantial investments into the creation of new refining capacities, with less attention to other areas of energy development. Despite the injection of billions of dollars of new capital into the state oil company, Mexican crude oil production has continued to fall. By 2022, Pemex was only producing 1.67 million bpd—half its previous peak.

Unless these trends are reversed, Mexico's oil production would deteriorate to the point where the country would have to import oil to satisfy national demand. Ironically, investments in increasing national refining capacity—made in the name of energy sovereignty— may ultimately mean that Mexico must import foreign oil to fill its refineries. What's more, Pemex has continued to lose money, despite soaring global oil prices that followed the Russian invasion of Ukraine and the company's more favorable tax treatment.

In less than twenty years, Mexico has gone from being an important oil exporter to being a net importer. Instead of meeting AMLO's goal of refining Mexican oil in Mexico—ending the need to export crude to the U.S for refining—the failure to follow through on the opportunities presented by the 2013 reforms will haunt Mexico's energy sector for decades.

Despite the challenges facing Mexico's oil industry, North America's regional outlook for oil production remains positive. The impact of the shale revolution, combined with the ongoing development of the oil sands, means that Canada and the United States will provide massive quantities

Figure 3 Mexico's Oil Production vs Consumption (millions bpd)



of oil to the regional and, increasingly, the global economies. Even Mexico's situation is not beyond redemption. In April 2022, AMLO sought to repeal the 2013 constitutional reform, but his efforts failed to overcome opposition in the Mexican Congress. That has left the path open for a future administration to reinitiate oil auctions and renew attempts to attract private capital to the sector.

Gas

Twenty years ago, the North American region faced serious shortages of natural gas, forcing the United States to import expensive LNG from as far away as Peru. Expensive LNG increased electricity prices in the United States; in turn, this weakened the competitiveness of U.S. industry. Imports from Canada were essential in keeping the costs of gas down, but given its limited gas production, Mexico was unable to provide much support. Instead, Mexican policies emphasized oil in its exploration and production (E&P) efforts. The natural gas landscape was transformed by the U.S. shale revolution; previously inaccessible natural gas trapped became available to developers, often as a byproduct of oil production. Increased natural gas production put a halt to the construction of new LNG plants in the United States, and it has even permitted the export of U.S. gas in liquified form – something that was unthinkable fifteen years ago.

In this same period, Mexico started importing natural gas from the United States through cross-border pipelines that were constructed in the second decade of the 21st century. These pipelines have brought cheap U.S. natural gas to Mexican industry and power plants, lowering energy costs dramatically and boosting Mexican industrial competitiveness. The benefits of U.S. shale gas production for Mexican industry offer a wonderful example of how energy integration can serve as a rising tide that lifts all of North America's boats.

Today, gas imports from the United States are essential to the Mexican economy. This remains the case especially because Pemex has failed to increase indigenous gas production to meet rapidly rising demand. For decades, Mexico's national oil company has neglected natural gas development, including when it is a byproduct of oil production. In fact, Pemex has discarded huge amounts of gas associated with oil production in the form of "flaring," a wasteful and environmentally damaging practice of burning gas in the process of oil extraction. Recent reports suggest that despite falling oil production, the quantity of flared gas has risen by two-thirds from 2018 to 2021, shooting from 3.9 billion to 6.5 billion cubic meters per year.[4] This increase was so severe that Mexico's regulator, the Comisión Nacional de Hidrocárburos (CNH), intervened and launched an investigation into the matter.

Figure 4 Mexico Natural Gas Production vs Consumption (trillion cubic feet)

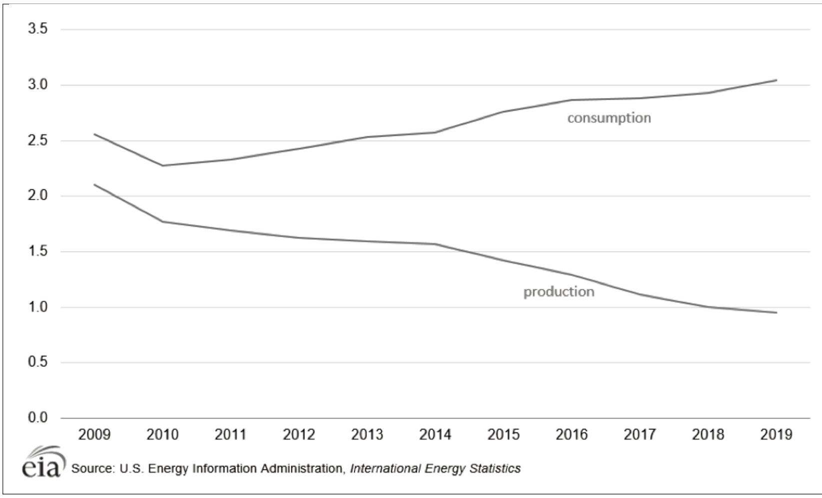
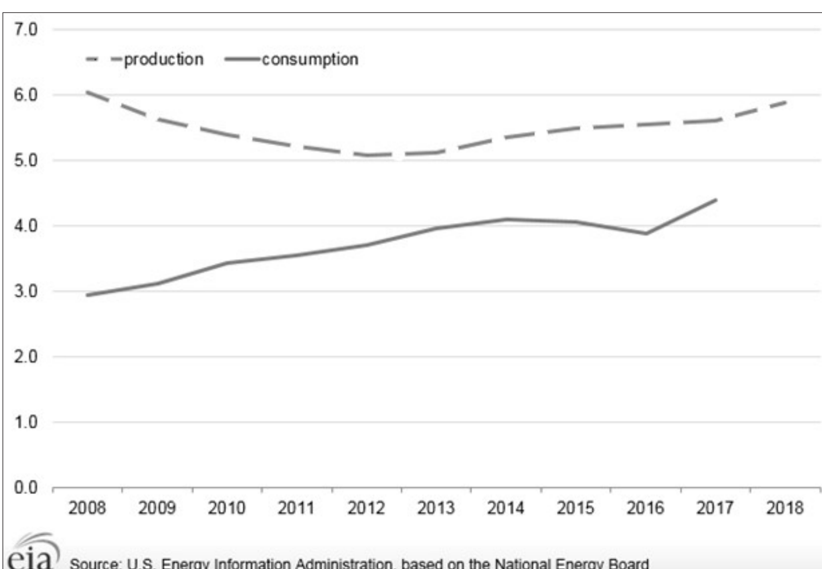


Figure 5 Canada's Dry Natural Gas Production & Consumption (trillion cubic feet)



Natural gas has been an essential variable not only in raising the competitiveness of the North American economies, but also in facilitating the transition to cleaner energy. As more and more solar and wind capacity is installed throughout the region (see below), natural gas provides a reliable and cheap backup to offset the intermittent nature of many renewables.

The Energy Transition

North America has the clear potential to be a renewable energy superpower. From Canada's impressive hydroelectric resources to U.S. and Mexican wind, solar, geothermal, and tidal power potential, a clean energy future is a viable option for the North American partners. In recent years, the United States has seen a flood of capital into solar and wind power. Energy production from wind has doubled from 2015 to 2021 (1777 trillion Btus to 3331 trillion). The generation from solar has more than tripled in the same period (426 trillion Btus to over 1500 trillion). Total renewable U.S. power generation has risen from 9768 trillion Btus in 2015 to 12319 trillion in 2021, reaching 12% of total energy production and around 20% of total electricity generation.[5] Total consumption of renewable energy in the United States has almost doubled since 2000, and in April 2019, renewable energy in the United States surpassed coal as a source of electricity generation for the first time.[6] That year, renewables provided 23% of total electricity generation versus 20% for coal.

Canada has an even more impressive renewables picture, with 59% of electricity generation coming from hydroelectric sources, and a further 8% from other renewables, bringing renewable energy generation to around 18% of all primary energy production.[7] This allows Canada to export significant amounts of renewable electricity to the U.S. market.

The divergences in oil and gas production across the North American partners are mirrored in energy transition and the development of renewables. The 2013 energy reform provided important economic signals to move Mexico toward a green energy transition, including ambitious targets to generate 35% of the country's power from clean sources by 2024. By 2021, however, still only 26.7% of Mexican electricity came from renewables. It seems almost impossible for the country to reach the goal set out in 2013.

That said, Mexico is well-positioned to expand its renewable power generation in the coming years. The 2022 *Mexico Clean Energy Report* by the U.S. Department of Energy and the National Renewable Energy Laboratory (NREL),[8] emphasized the country's huge potential to produce more renewable energy, while lamenting the decreased focus on green energy. The current Mexican administration's reduced investment in renewable energy has curtailed short- and medium-term generation. However, with a growing demand for electricity and significant potential untapped renewable energy resources, the country's long-term prospects are excellent.

Energy storage is another area with impressive potential for the renewables sector throughout North America. Linking wind and solar energy generation with hydroelectric dams allows for the practice of simple pump storage; as a result, electricity generated in one part of the system can be stored in another. This arrangement is evident in the Midcontinent Independent Systems Operator (MISO), which brings together fifteen U.S. states and the Canadian province of Manitoba. This system expanded available energy storage from 500MW in February 2019 to 15,000MW in September 2021. A large part of this storage takes place in the hydroelectric facilities in Manitoba, but MISO is also moving towards a battery storage model to complement pump storage.

As that suggests, new developments in battery technology will also be central to North America's green energy transition. A revolution in battery technology revolution is driving a concerted effort in North America to bring new supplies of critical minerals such as lithium, cobalt, nickel, manganese, and rare earth elements (REEs) online. The Biden administration's decision to set a target that electric vehicles (EV) will account for 50% of U.S. sales by 2030,[9] alongside General Motors' announcement that it will move to a 100% EV fleet by 2035, have sparked a frantic search for critical mineral supplies. Other companies are following a similar approach, with Volkswagen aiming at 55% EV sales by 2030. In the United States, there is a surge of private sector interest in developing both lithium and REE deposits. In March 2022, the Biden administration invoked the Defense Production Act (DPA) to announce that it "would fund feasibility studies and productivity modernizations."[10]After the Russian invasion of Ukraine, the administration revisited the DPA and authorized $500 million in incentives for the critical minerals industry.[11] These moves have "essentially securitized the critical minerals dilemma"[12] in the United States; the signing of the Minerals Security Partnership with Canada, and European and Asian allies in June 2022 further underscores the determination of the U.S. government to secure access to critical minerals.[13]

Canada's dynamic mining industry is also mobilizing resources, alongside significant investments from the Canadian government. In April 2022, the government of Prime Minister Justin Trudeau announced Cdn$3.8 billion in the federal budget "to incentivize more mining of critical minerals through investments in infrastructure, tax credits for exploration, and funding to help attract the downstream industries that turn those minerals into products such as electric vehicles and battery cells."[14]

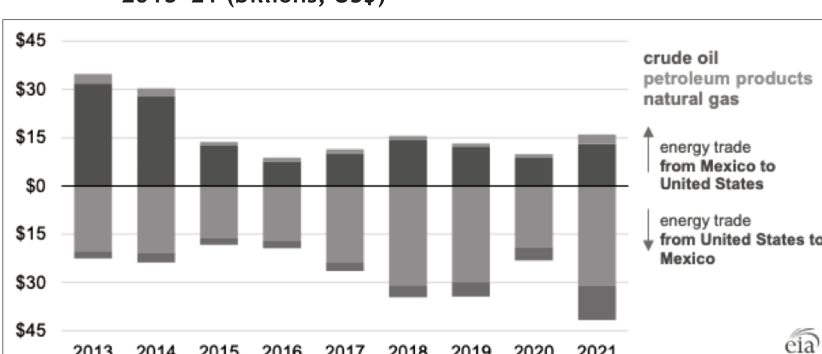
Once again, Mexico has great potential but made a slow start. Despite a proud mining heritage, a highly developed modern mining industry, and substantial reserves of lithium and graphite, the current government has adopted a resource nationalism approach, passing a law that nationalizes national lithium deposits. This move, when combined with other policies that antagonize foreign and private investors, significantly reduces the prospects for critical minerals development in Mexico.

The North American Energy Trade

North American trade in energy has long been an important part of the regional economic picture, especially in the U.S.–Canada and U.S.–Mexico relationships. As significant sources of energy imports, Canada and Mexico helped alleviate U.S. energy dependence on less friendly countries. In the case of Canada, that trend continues today. In 2018, the value of Canada's energy exports to the United States accounted for $84 billion, or 26%, of the value of all Canadian exports to its southern neighbor.[15] By 2021, that total had risen to $102 billion, just under one-sixth of total exports.[16]

The story for Mexico is more complicated, but points to a similar interdependence. As noted above, Mexico traditionally has been a major exporter of crude oil to the United States. However, the declines of the past twenty years, combined with rising U.S. production and gas exports, have dramatically altered the relationship. Since 2015, U.S. exports of light crude, natural gas, and refined products have vastly outpaced Mexican crude exports to the United States. By 2021, after the pandemic-induced declines of 2020, energy trade between the United States and Mexico reached a nine-year high, and energy accounted for 15% of all U.S. exports to Mexico, totaling US$42 billion.

Figure 6 Value of Selected Energy Trade Between Mexico & the U.S. 2013–21 (billions, US$)



Source: EIA, https://www.eia.gov/todayinenergy/detail.php?id=52319t.

Initial Moves Towards Integration Through Policy Coordination

The highly interdependent regional energy relationship, combined with the enormous potential for future energy development in North America, bodes well for the future. The conjuncture of several factors, including the opening of the Mexican energy sector, rapid technological advances, and shifts in consumption patterns, make the case for regional cooperation ever more compelling. Recognizing this, in February 2014, the leaders of the three nations met in Toluca, Mexico, at the North American Leaders Summit (NALS) and devised a range of measures to enhance regional competitiveness, including actions to promote North American leadership in the energy sector. By December of the same year, a North American Energy Ministers Meeting convened to define three key areas for trilateral cooperation: energy data collaboration, the construction of resilient physical infrastructure, and the establishment of sustainable best practices. This meeting built on several, scattered efforts to move beyond both the traditionally closed nature of the Mexican energy sector and the U.S.-Canadian tendency to manage energy relations bilaterally. For example, the North American Energy Working Group (NAEWG) was created in 2001 under the auspices of the Security and Prosperity Partnership (SPP); the group was comprised of energy experts from the three countries and coordinated by the three Energy Ministries. The NAEWG gradually ventured into regional regulatory cooperation and the exchange of energy market data and technology. Building on these dialogues, the North American energy ministers met trilaterally in 2007. The initial effort of the NAEWG was waylaid by changes in the U.S. government, but the 2014 Toluca leaders' summit reaffirmed the essential interests of all three nations in furthering energy cooperation.

In large part, the renewal of the North American conversation in 2014 was driven by a shift in the region's energy paradigm from scarcity to abundance. This new effort to work together was encouraged also by Mexico's energy reform. With oil production projected to increase still further, and with fuel efficiency standards and energy efficiency efforts holding consumption steady at the regional level, policymakers became enthusiastic about the prospects of North America becoming a net exporter of energy. In this context, the North American energy ministers meeting of 2014 helped put energy integration and competitiveness back on the region's list of top priorities.

The creation of the North American Cooperation on Energy Information database (NACEI) in 2015 marked a significant step forward in these efforts. NACEI is a data-sharing initiative that represents an effort to understand and anticipate the region's energy future. NACEI helped map energy flows, storage facilities, border-crossing transmission lines, and power plants in North America, but was last given an update in 2017. Both NACEI and the 2020 North American Renewable Integration Study (NARIS) by the National Renewable Energy Laboratory (NREL) represent an attempt to map out opportunities for energy integration and the resurgence of a highly encouraging regional energy perspective.[17] If properly channeled, these initiatives can provide the basis for a more institutionalized, evidence-based, and environmentally conscious approach to trilateral energy relations in the future.

Paradigm Change: An Opportunity to Relaunch the Energy Dialogue

Despite the current differences in policy approach between Mexico, on the one hand, and Canada and the United States on the other, the region has a unique opportunity to rekindle its energy dialogue and put forward a vision based on shared economic prosperity and environmental performance. Energy abundance, market openness, and data availability are necessary, but not sufficient, conditions to shift gears in the trilateral energy conversation. Although North America has a strong foundation, it first needs to overcome a series of challenges to take advantage of the three countries' bright energy future.

The entry into force of the U.S.-Mexico-Canada Agreement (USMCA) in 2020 represents a unique opportunity to reinvigorate the conversation about an integrated North American energy system. The new trade agreement builds upon its predecessor and contains provisions that encourage both the public and private sectors to find ways to make their economies more resilient against global shocks and competitive vis-à-vis other commercial powers, including in the energy sector. According to former U.S. Ambassador to Mexico Anthony Earl Wayne, the USMCA should be seen as a strategic vehicle with the potential to create a more efficient and collaborative North American energy outlook.[18] More than simply using USMCA's launch to attract new investment, enforce standards, and lower barriers to trade, policymakers and business leaders on both sides of the Río Grande should take advantage of the agreement to build long-term cooperation mechanisms to help the region efficiently deal with its shared problems and gradually consolidate a common energy market. To fully unleash North America's energy potential, seven main areas require special attention.

1. Effective Policy Coordination

The demise of the Security and Prosperity Partnership (SPP) in 2008 and with it, the end of the NAEWG, represented a huge opportunity cost for the region. It dissolved a mechanism that had allowed Canada, Mexico, and the United States to jointly explore approaches to handle North America's present and future energy needs. Paradoxically, the NAEWG was extinguished as the region's energy industry was being revitalized. Without a shared platform to study the region's transformation, the governments have been unable to produce a coordinated response to the new energy paradigm. Returning to the aims set out in the energy ministers meeting of 2014, USMCA creates an exceptional opportunity to make close communication and coordination of energy markets the new normal for the region.

On the one hand, ministerial-level leadership is needed to move from ideas to action. Energy ministers should institutionalize their meetings and commit to repeating them annually. Sustained cabinet-level attention is a must if the three governments are to implement effective strategies of continental coordination and collaboration. To add continuity to this process, the ministers should then dedicate "*sherpas*" from each country to carry the trilateral agenda forward during the year.

On the other hand, the process of energy policy coordination would benefit from the recreation of something akin to the NAEWG. With the developments in Mexico, as well as the tide of optimism over energy production in the United States and Canada, there is an appetite in the three countries for an expert group drawn from business, academia and think tanks, to accompany the region's *sherpas*. This group would help restart the conversation over a common set of principles that would make North America's energy systems more compatible and underscore the benefits of effective regional policy coordination.

2. Data Collaboration

Enhancing data-sharing was one of the most important achievements of recent regional energy collaboration, but there it needs urgent updates and renewed funding. While it is easy to predict that energy trade between the North American partners will increase, it would be useful to identify which areas of the region are likely to see higher flows of molecules and electrons moving back and forth across our borders. Increasingly detailed studies can ensure that regional energy needs are satisfied, and overall efficiency is maximized. Unfortunately, NACEI stopped working in 2017; the region only stands to win if the research dimension of the energy integration process is rebuilt and granted additional funding. Both industry and policymakers ought to recognize the huge benefits of sharing and systematizing up-to-the-minute data of energy flows in North America.

A NACEI 2.0 could be, in essence, an Energy Information Agency (EIA) for North America. Indeed, a standard feature of the most effective international institutions is their capacity for producing reliable information that can be used by all members. It must include the critical minerals that are essential for the energy transition, while retaining a focus on cross-border energy. This process should include not only the private sector and academia, but also sub-national governments. The process must have clear aims and be developed with a high degree of transparency.

3. Modernization of Infrastructure to Meet the Region's Energy Needs

The abundance of energy resources does not necessarily beget increases in North America's competitiveness as an economic bloc. Rising energy production in North America means that the resources and electricity generated will have to move across borders to satisfy regional demand or find ports from where it can be exported to other parts of the globe. The option of exporting to Asia, where the most impressive growth in demand has occurred in recent years, should be seriously considered by policy planners. To meet this demand, the surge in regional production must be accompanied by new infrastructure investments.

In addition to the challenge of getting crude oil to tidal waters, exporting petroleum or refined products from North America will also require port infrastructure investments. At present, there is infrastructure in place to allow for massive imports of crude into the United States. Adjusting to an export scenario should not be a major problem, but the logistics will need to be addressed. For Mexico, renewed production may necessitate looking for new markets in Europe and China, if the United States and Canada cannot absorb additional crude oil.

On the gas front, the three governments also need to consider the potential for exporting LNG. This acquired a new geopolitical significance with Russia's 2014 annexation of Crimea and its recurring threats of interrupting natural gas supplies to Europe. The recent Russian invasion of Ukraine emphasizes the importance of this issue to an even greater extent. Some existing LNG regasification plants may be converted to liquefaction plants for export but this may not suffice. Instead, planning LNG export capacity on a regional basis would allow for optimal site location and help to eliminate duplication of efforts.

Lastly, for electricity markets, the potential to develop both traditional and renewable electricity sources will depend on major investments in electricity transmission. Cross-border transmission lines have been a topic of discussion between Mexico and the United States since at least 2010, but little progress has been made on a bilateral basis. In the case of Canada and the United States, there is enormous potential for cross-border trade but the two countries are now using the full capacity of their existing transmission infrastructure. The problems posed by permitting, siting issues, and NIMBY-ism will continue to plague the process of building new transmission capacity. However, establishing common guidelines and compatible standards for the planning and building processes would be welcome in the region.

4. Addressing the Human Capital Crunch in the Energy Sector

The energy sector is one of the most innovative and dynamic of the economy, which in recent years has shown an impressive capacity to adapt to the tectonic changes of the industry and to completely revolutionize both its mode of production and level of performance. Technological change has been a central element in this revolution but spending on technology without concurrent investments in human capital would result in a workforce inadequately trained for technological advances.

To effectively address these challenges, the region's younger generations need to be persuaded to pursue educational career paths that focus on STEM (science, technology, engineering, and mathematics) subjects. To achieve this, the involvement of both public and private actors will be essential, and both governments and firms should consider partnering with academic institutions and civil society organizations to ensure a more comprehensive implementation of their programs. Incentives must be evaluated for the medium- and long-term and should focus on more than simply monetary compensation. Thus, the North American partners should look to existing mechanisms such as university exchanges, internship programs, and industry associations to develop a joint approach to the skills gap in the sector.

5. Regulatory and Standards Cooperation

Another area that can provide immediate benefits both in terms of industrial safety for the private sector and environmental protection for the general population is a regulatory dialogue between agencies from the three nations. There are several reasons to encourage this dialogue. First, in the case of trans-border infrastructure such as pipelines or transmission infrastructure, it makes no sense for standards to differ. For example, a pipeline that crosses the U.S.-Mexico border will, by necessity, be the same gauge and should meet identical safety standards on both sides of the border.

A second argument has to do with "social license" issues that involve securing community approval before breaking ground on major energy projects. Similar standards for safety, environmental protection, and the establishment of accepted industry best practices would not eliminate public antagonism to novel energy projects, but they provide an opportunity for learning between regulators. Canada's Ministry of Natural Resources' successful experience in negotiating with First Nations communities and involving them in energy projects is being studied by the United States and provides one example of how governments and industry can benefit from shared experiences.

Third, there are many areas in the region where shared resources require compatible regulations. Faced with potential growth in E&P activities in the Mexican deep waters of the Gulf of Mexico, the erosion of regulatory capacity and autonomy during the AMLO administration has raised concerns about the quality of Mexico's regulatory standards. At the same time, the United States has imposed a new regime in which offshore operators in the Gulf must have a Safety and Environmental Management System (SEMS) in place. To avoid a potential tragedy of the commons, Mexico's Energy, Safety, and Environment Agency (ASEA, formerly ANSIPA) should adopt standards that are compatible with those of the SEMS. Furthermore, agencies from all three states must continue to engage in a conversation over regulations to ensure that the highest safety and environmental standards are maintained without overburdening the industry.

On the question of emissions, current environmental and market realities should push the three governments to work together on a common approach to emissions to avoid any unnecessary market distortion at the regional level. In these areas, the regulatory conversation should focus on ensuring compatibility between standards, metrics, and rules so that both public and private entities in the energy sector can operate seamlessly across borders while high environmental standards are also respected.

6. Acceleration Towards Renewables

One of the main lessons of the COVID-19 pandemic is the importance of clean air to improve respiratory health. Not being able to breathe freely has immense economic and human costs, especially in the context of a pandemic, where increases in particle exposure are associated with higher death rates from COVID-19.[19] There is much work required to improve air quality in North America, but the "new normal" has made clear that the benefits of reducing air pollution through clean energy generation far outweigh the costs, compared to investing more money in dirty energy sources like coal and fuel oil that increase air pollution.

Air pollution has become a pressing global challenge, and North America can lead the way if more clean energy projects are developed to help preserve air quality. The governments of Canada, Mexico, and the United States have a commitment to their citizens; in addition, on a regional level, USMCA's Chapter 24 creates commercial obligation that require the countries maintain new air quality standards. Mexico undeniably has to make up ground on this matter, but it is not necessarily moving in the right direction. In 2010, the signing of the Cancún Accords made Mexico a visible champion of global climate institutions. Now, however, AMLO's decision to prioritize the state electrical utility, CFE, over renewables, is putting billions of dollars in clean-energy investment at risk, with implications for the country's air-quality levels.

In the future, the North American economies need to increase the number of energy-market participants within a framework of clear rules and increased competition.

North American power generation should advance through the creation of an integrated electricity market. By employing more reliable, resilient, and clean networks and storage facilities, a transformation of North America's energy system can contribute to a reduction in pollution and emissions in the region.

7. Technological Cooperation

The experience of the past twenty years in the North American energy industry has highlighted the importance of technological innovation in advancing both the traditional and renewable energy agendas. From Canada's impressive progress in optimizing its oil sands, to the shale and tight oil revolution in the United States and the new mining and battery technologies that are powering the energy transition, innovation has driven the conversion of natural resources into energy and wealth. As the three countries necessarily move toward a post-hydrocarbon energy future, they will still need to capitalize on existing oil and gas reserves. This will involve applying technological innovations to conventional and unconventional reserves. At the same time, sharing renewable energy generation and storage technologies, and know-how will facilitate the achievement of climate mitigation goals.

Policy Proposals

Create an Energy Business Council for North America

As North America begins to appreciate the significance of a new era of energy abundance, the time is right for increased collaboration. The common challenge of improving infrastructure to allow energy to get to market, both within the region and globally, should drive the three governments toward closer collaboration. The creation of a unified energy marketplace in North America will help improve energy supply and drive economic competitiveness.

As a first step, governments and regulators should develop a regional planning mechanism that allows them to interact more regularly and to exchange information: the NAEWG demonstrated that such coordination is possible and productive. Another example is the U.S.–Mexico Energy Business Council. Comprised of private sector representatives from both countries, the Council facilitates the exchange of information, shares industry best practices, and provides recommendations on ways to strengthen the bilateral energy relationship. The three governments should follow and build upon these examples to create new regional mechanisms that can drive the collaborative process forward.

The creation of an Energy Business Council for North America can build on existing bilateral cooperation mechanisms, like the aforementioned U.S.-Mexico Council and the 2014 U.S. Department of Energy (DOE) and Natural Resources Canada (NRCan) Memorandum of Understanding. In doing so, this new council could help drive and support a renewed energy dialogue in the context of USMCA's new energy chapter. Receiving feedback from a revamped NACEI, an Energy Business Council for North America would put together key energy stakeholders from the private sector, government, and academia to 1) highlight the importance of the trilateral energy relationship; 2) share priorities for the sector, and; 3) identify opportunities for collaboration in areas of mutual interest like energy transmission lines and the creation of a resilient and environmentally conscious energy market.

Include Energy in the North American Competitiveness Committee Created Under USMCA

With USMCA's entry into force in 2020, North America secured a 21st-century framework to deal with deepening trade flows across its borders. Coupled with a renewed interest in the creation of a unified energy marketplace, Canada, Mexico, and the United States have an unparalleled opportunity to improve supply, lower prices, and boost economic competitiveness in the region.

Chapter 26 under USMCA created the North American Committee on Competitiveness, through which government representatives and non-government stakeholders can identify projects and policies that can make the region more productive and efficient in dealing with shared problems. Including energy integration in the Committee's remit will incentivize regulators in the three countries to generate synergies to tap into the region's energy potential. Energy integration still requires plenty of work, but policymakers from the three states ought to use the Committee as a platform to relaunch the energy debate in North America and commit to meeting every year. A North America Energy Summit that brings together energy ministers and thought- and business leaders, in parallel to a meeting of the Committee, would facilitate such a process.

Initiate a North American Energy Supply Chain Dialogue

First the COVID-19 pandemic, and then the Russian invasion of Ukraine, have forced policy and industry decision-makers alike to focus on the importance of supply chains. Although it is impossible to identify and prepare for all potential disruptions of the supply chain, an ongoing dialogue that provides an early warning system for risks, as well as a rapid response mechanism for boosting energy production and sharing resources, would be a welcome complement to the efforts of individual governments and firms. More robust coordination is needed to assess and allocate the availability of rigs, tankers, energy storage, pipeline capacity, and human resources, as well as to track available electricity transmission and distribution capacity. More efficient allocation can help optimize the flow of energy to North America's consumers and productive economy. The need to bring critical mineral supplies to market is vitally important and urgent. A North American mining and critical minerals platform has been proposed as part of the solution to the dilemmas of the energy transition; a parallel approach to battery technology would also be most welcome.[20]

Conclusions

Energy abundance can become a motor for progress in North America, with the potential to drive competitiveness and prosperity long into the future. Going forward, and to fully unleash the region's potential, it is crucial that policymakers, private enterprises, and think tanks start building—and rebuilding—the institutions that make energy integration viable between the three countries. Rekindling the energy dialogue so that it goes beyond sporadic exchanges to become a sustained and forward-looking conversation will require commitment and resources from all USMCA partners.

The impending reality of the energy transition presents North America with many challenges but also some incredible opportunities. Critical minerals, energy storage, battery technology, cross-border transmission and pipelines, and of course the strategic application of financial capital, must become shared goals among the governments of Canada, Mexico and the United States if they are to move adroitly toward a decarbonized regional economy.

While most attention has thus far focused on North America's energy riches, it is data availability, infrastructure, technology, and human capital that will play a central role in making energy abundance a reality and shape the economic future of the region. Collaboration on the agenda items articulated above will be essential to convert that abundance into tangible benefits for North America's economies and people.

Endnotes

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5

Making the Environment a Priority in North America? Evidence from the USMCA

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After years of relative stagnation, the scenario for environmental cooperation in North America has undergone notable shifts. First, the renegotiation of the North American Free Trade Agreement (NAFTA), from 2018 to 2020, brought about challenges and opportunities for environmental cooperation. The revised U.S.-Mexico-Canada Agreement (USMCA) created additional mechanisms for policy coordination, including the USMCA Environment Committee, which held its inaugural meeting in June 2021. However, not all the changes resulting from the renegotiation are straightforward. Second, the return of the North American Leaders Summit in November 2021 put North American environmental cooperation—especially regarding climate change—back on the high-level agenda. Finally, shifts at the global level and greater public concern about climate and extreme-weather events, have broadened the political coalition for regional cooperation. At the 2022 NALS and beyond, the task for Canada, Mexico, and the United States is to advance beyond the promise of these early changes and meet the urgent demand for action on climate and the environment.

The first change for North American environmental cooperation was an institutional realignment, which will be the primary focus of this chapter. Whereas NAFTA discussed environmental issues only in a side agreement, the updated USMCA includes an integrated environmental chapter, Chapter 24. In addition, Canada, Mexico, and the United States adopted an Agreement on Environmental Cooperation (ECA) in 2018. The ECA superseded the NAFTA side agreement (officially the North American Agreement on Environmental Cooperation or NAAEC). The ECA took effect when the

USMCA entered into force on July 1, 2020.[1] The ECA formalizes cross-border environmental protection and conservation efforts in the region. The USMCA mentions previously overlooked environmental issues; it was on this basis that the U.S. government has characterized it as the "most advanced, most comprehensive, highest-standard chapter on the Environment of any trade agreement."[2]

Do these changes add up to deeper and broader environmental protection? In our view, the USMCA makes a small positive contribution to environmental protection and offers a handful of innovations. Largely, though, the USMCA replicates environmental provisions of existing agreements, such as the Trans-Pacific Partnership (TPP). Concerningly, however, the USMCA and ECA failed to address explicitly the most pressing environmental issue of our time: climate change. Since President Joe Biden moved into the White House, North America's leaders have indicated this will be a priority; however, there are limited institutional means of regional, climate-related cooperation in North America. Instead, the dominant frameworks focus on global negotiations and national actions.

The chapter proceeds as follows. First, it lays out the environmental provisions of NAFTA and its side agreement and illustrates the evolution of the parties' domestic environmental performance.[3] Second, it details the USMCA's strengths and innovations in relation to enforcement of wildlife trafficking, marine litter, and food waste. Third, it discusses two provisions beyond Chapter 24 that will affect the North American environment: the Investor–State Dispute Settlement (ISDS) mechanism and the energy proportionality clause. Then, the chapter considers how North American leaders may strengthen the region's environmental governance framework by outlining missed opportunities, particularly regarding climate change. Finally, it presents recommendations related to revitalizing current governmental institutions' scope and responsibilities and deepening ties in the electrification of transport to benefit the people and environment of North America.

NAFTA and the NAAEC

During the NAFTA negotiations, U.S. environmental groups argued that the agreement's trade and investment reforms would further weaken the Mexican environmental infrastructure in exchange for industrial growth. The result, critics feared, would be a race to the bottom: Mexico's lax environmental policies would spur trading partners to lower standards and regulations to remain competitive.[4] In response, then Democratic presidential candidate Bill Clinton pledged not to enact NAFTA without supplemental environmental rules—underscoring an issue that had been marginal for U.S. negotiators during the George H.W. Bush administration.

By introducing environmental issues into economic negotiations, NAFTA became a notable early example of how governments' approaches to environmental issues were expanding beyond their borders. NAFTA was considered "one of the most environmentally conscious" trade agreements that had been agreed up to that moment.[5] Although it did not include an environmental chapter, it explicitly addressed the environment in its preamble and a host of chapters and articles. Notably, NAFTA legitimized the use of trade measures to enforce environmental agreements (Chapter 1), authorized parties to choose their desired levels of environmental protections (Chapter 9), and legitimized domestic environmental regulations and phytosanitary measures (Chapter 7B).

NAFTA did not uniformly favor higher environmental standards in practice, however. Most notably, the investor–state dispute mechanisms in Chapter 11 (Articles 1102, 1103, 1105, 1106) granted American, Canadian, and Mexican foreign investors protection from the host state to ensure national and most favored nation (MFN) treatment, minimum international standards, and performance requirements prohibitions. It allowed investors to initiate a dispute settlement process against the host nation.[6] Chapter 11 provisions were drafted in anticipation of a potential deregulation of environmental and sanitary standards in Mexico in an effort to attract more investment. In practice, though, the provisions stalled the enactment of more ambitious regulations across the three partners.

The process of NAFTA's ratification had two additional institutional consequences. First, a side agreement between the U.S. and Mexico governments created the bi-national North American Development Bank (NADB) to address legislators' concerns regarding the U.S.–Mexico border region. The bank "provides loans and grants to public and private entities for environmental and infrastructure projects" on both sides of the border. Water supply, wastewater treatment, and municipal solid waste disposal related projects were the focal points of the bank's activities at the start. Over the years, NADB has expanded its jurisdiction and financed projects related to air quality and backed the development of wind farms for electricity generation.

Second, the environmental side agreement created an intergovernmental organization committed to safeguarding the environment without sacrificing economic prosperity.[7] This organization was intended to advance three operational goals embedded in the NAAEC: to foster cooperation to improve environmental protection, to guarantee the correct implementation of environmental standards and regulations, and to mediate disputes.[8] To that end, the side agreement created the Commission for Environmental Cooperation (CEC), comprised by three entities:

The Council of Ministers: a governing body composed by the ministers of environment from Canada and Mexico and the Environmental Protection Agency (EPA) Administrator from the United States.

The Secretariat: a body that provides technical, administrative, and operational support to the Council and implements activities.

The Joint Public Advisory Committee (JPAC): the core mechanism for public participation and stakeholder engagement and for advising the Council.

The NAAEC established a trilateral approach to environmental governance and cooperation, but it did not emerge from a deep trilateral commitment to mitigate the environmental impacts of commerce.[9] Rather, the side agreement was the result of a political compromise to facilitate the passage of NAFTA in the U.S. Congress, after U.S. environmental interest groups successfully lobbied President George H.W. Bush, Clinton, and legislators. Clinton's strategy included the negotiation of separate labor and environmental side agreements, to assuage opponents and ensure the ratification of the agreement.[10]

The Side Agreement in Action

How did the side agreement perform? Although there is no data to evaluate the environmental conditions or performance at a North American level, evaluations of domestic performance do not suggest substantial positive effects from the side agreement.[11] The 2020 Environmental Protection Index (EPI) ranks the United States in 31st place, Canada in 38th, and Mexico in 41st in a list of 180 nations. As Table 1 shows, from 2010 to 2020, the performance scores have remained primarily unchanged, particularly in the United States. Mexico, which started from a lower baseline, did improve its performance considerably.

Results are similar in a comparison between the 2018 scores and a baseline—the first year for which data became available per country (in the 1960s for the three countries). Considering this baseline, Canada has decreased its overall performance from 73.1 to 72.28, as Table 2 shows, whereas Mexico increased its performance by 7.5 points and the U.S. by half a point. Canada's protection of ecosystems (55.29) was the component that affected most significantly the worsening of its overall performance score.

Table 1 Environmental Performance Index Rank and Score for 2020 and Change from 2010

Country	EPI Global Rank	EPI Score	10-year change
Canada	38	57.3	+4.1
Mexico	41	55.9	+10.3
USA	31	60.3	+1.7

Source: YCELP, 2020a.

Table 2 Environmental Performance Index Scores and Sub-component Scores, 2018 and Baseline Years

Country	EPI Score 2018	EPI Score Baseline	Health 2018	Health Baseline	Ecosystem 2018	Ecosystem Baseline
Canada	72.18	73.1	97.51	97.8	55.29	56.63
Mexico	59.69	52.26	66.04	58.86	55.46	47.85
USA	71.19	70.7	93.91	92.6	56.04	56.1

Source: Socioeconomic Data and Applications Center (SEDAC), 2018.

Although the side agreement put the onus on the national level, it did charge the commission with instigating regional environmental protection. The Commission aimed to undertake initiatives, projects, and reports centered around three strategic priorities: climate change mitigation and adaptation; green growth; and sustainable communities and ecosystems.[12] The side agreement charged the CEC with collecting and archiving environmental data from the three countries to streamline regional cooperation and boost public engagement, which it did by building an online portal with databases, projects, and publications.[13] Yet, the portal's reliance on the voluntary sharing of data to inform its reporting raised concerns regarding the real-time availability and accuracy of such data to inform policy recommendations.

The Commission also established the Citizen Submission Process. For the first time ever, citizens of the three countries had the right to present a submission to the Commission's Secretariat alleging an entity's failure to comply with U.S., Canadian, and Mexican environmental laws. It was intended as a model for accountability and governance through the promotion of transparency and public participation in the enforcement of environmental laws. The Commission could receive and, to some degree, investigate complaints from individuals and firms, but it did not have the mandate to hold trading partners accountable for ventures that undermined environmental protections.

Evaluations of the CEC's institutional procedures, particularly the citizen petition procedure, are mixed. From 1995 to 2011, the mechanism attracted few submissions in the United States; while it attracted more submissions directed at Canadian and Mexican enforcement, interest in the procedure declined after 2011. This may result in part from the slowness of the process: factual records were issued on average 4.5 years after the initial submission. In addition, a perception of unfairness clouds the process, which grants governments greater rights than petitioners. However, evidence suggests that the citizen petition procedure was somewhat effective in decreasing non-compliance with domestic legislation. While the process did not yield legally binding decisions of incompliance, it did strengthen activists' domestic ties and transnational coalitions, bolstered data and findings available to further validate environmental concerns and pressured the three governments to justify inaction.[14]

Ultimately, though, the side agreement did not create a clear, North American environmental agenda. The NAAEC only required that enforcement provisions to mitigate environmental violations be available; environmental enforcement was therefore limited to a country's existing laws. The CEC's powers were poorly defined, and its objectives were broad and vague. From the start, the CEC lacked teeth: it could not sanction governments for non-enforcement, nor could it fine companies that repeatedly violated environmental standards.[15] The CEC continues to be a valuable portal that conducts and publishes research relating to the North American environment, but its policy recommendations rarely amount to actionable policy solutions. Nor did the side agreement do much to improve environmental conditions along the U.S.–Mexico border.[16] The Clinton administration did not allocate resources where they were urgently needed—for example, to provide an increase in funding to border communities—and Canada and Mexico preferred a non-confrontational approach and agreed to the provisions.[17] For these reasons, it was crucial "to make its work more focused, relevant and outcome oriented."[18]

Despite its flaws, the inclusion of the environmental side agreement in NAFTA was a novel trilateral approach to protect North America's environment. Though often disjointed and bureaucracy-ridden, and hobbled by its lack of teeth, the CEC provided groundwork through its collection of data and research publications. Its citizen submission process strengthened transnational connections. These valuable, if limited, assets can inform an environmental agenda that recognizes shared responsibilities. The preservation of the CEC in the USMCA, coupled with key innovations, grants the three countries a new opportunity to collectively reimagine government's performance and enforcement of protections.

The Strengths of USMCA's Chapter 24

The USMCA's Chapter 24 retained 72% of NAFTA's environmental obligations; furthermore, it upgraded North America's environmental dimension by incorporating provisions within the agreement's main body.[19] In doing so, the chapter strengthens previous environmental governance rules and introduces additional issue-specific provisions.

Most of the provisions in Chapter 24 were drawn from other international agreements.[20] Negotiators replicated provisions from the then-recently negotiated Chapter 20 of the moribund Trans-Pacific Partnership (TPP). Politically, this was intended to minimize the U.S. Congressional Democrats' objections by expanding coverage of environmental issues beyond that in other free trade agreements. The USMCA requires each party to maintain environmental impact assessment processes for the protection of marine habitats from vessel pollution and overfishing; to protect the ozone layer, flora, and fauna; to reach improvements in air quality, prevention of biodiversity loss, and control of invasive alien species; and to promote sustainable forest management. Because the TPP was reborn—without the United States—as the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), the similarity between the USMCA and the TPP contributes to consistency across trade agreements. However, the reliance on TPP's Chapter 20 also limited creativity to advance environmental protection.

Chapter 24 of the USMCA compels Canada, Mexico, and the United States to enforce their domestic environmental laws and to promote greater accountability, public participation, and transparency. The chapter introduces a domestic enforcement standard that enjoins the three countries not to weaken domestic environmental laws for commercial reasons. The new, high-level Environment Committee is charged with providing information to the CEC on the implementation of environmental commitments and streamlining data collection and reporting.[21] The agreement requires that all decisions and reports are available to the public, unless the Committee decides otherwise.[22] This is a notable improvement for transparency. By contrast, under NAFTA, reports were not accessible unless two-thirds of the Council voted to make them publicly available.

Indeed, in the inaugural meeting of the Environment Committee, the partners underscored the importance of public information, participation, and public awareness of environmental issues, holding the first public session to share information and hear from the public interested in the implementation of Chapter 24. The aim of the meeting was to report on the progress and challenges of implementation, and the countries presented results individually and then jointly via the CEC's Secretariat. Canada reported the amendments to the Canadian Environmental Protection Act to ban single-use plastics. The U.S. informed about the creation of an interagency committee that coordinates a strategic approach to fulfilling its environmental commitments. Mexico highlighted the ratification of the regional Escazú Agreement,[23] which reinforces its commitment under the USMCA, as well as the development of a national action plan for a sustainable ocean economy. The three countries reported increased efforts to combat illegal wildlife trade and preserve the ecosystems and biodiversity. The next meeting will take place in July of 2023 in Mexico.[24]

Furthermore, the chapter makes the parties' compliance regarding multilateral environmental agreements (MEAs) subject to Environment

Consultations (Article 24.29) or Dispute Settlement (Article 24.32), so long as the complaining party and the party in violation are signatories to the relevant MEA. For state-to-state disputes the USMCA adopts a "ladder" practice,[25] whereby consultations are the first step if parties disagree on the interpretation or implementation of Chapter 24. The issue moves up to the Environment Committee if consultations do not solve the dispute. If necessary, the issue climbs up one more rung to ministerial consultations, and the last resource is the USMCA's general dispute settlement regime. This is the only and explicit mention of utilizing the dispute resolution mechanism as a tool to resolve disagreements on environmental matters.[26] The inclusion of a consultation chain of command provides transparency throughout the process to resolve the claim prior to reaching dispute resolution. This feature expands on the earlier arbitral process, which existed on paper but was never convened, under the NAAEC.

Innovations

The USMCA boasts three provisions never before included in a free trade agreement: increased enforcement of wildlife trafficking (Article 24.22), an obligation to take measures to prevent and reduce marine litter (Article 24.12), and a trade regime related to food waste (ECA, Article 10), discussed below.

Enforcement of Wildlife Trafficking. The USMCA establishes that parties shall treat transnational trafficking of protected wildlife "as a serious crime," carrying a punishment of at least four years of incarceration (Article 24.22).[27] The inclusion of this provision in the chapter is linked to the 2013 resolution by the United Nations (UN) Economic and Social Council (ECOSOC) to prevent and respond to the illicit trafficking of protected wildlife.[28]

Marine Litter. The USMCA is the first trade deal to establish that its signatories must "take measures to prevent and reduce" marine plastic pollution (Article 24.12). However, the agreement does not mention explicit measures, much less how they would be funded. While the provision draws from the United Nations Environment Program (UNEP) reporting and recommendations,[29] the direct antecedent was Canada's endorsement of the Ocean Plastics Charter in the 2018 G7 Summit (notably, the United States had abstained).[30] The USMCA's broad language regarding marine litter may serve as a catalyst for North America to come together to find innovative solutions to address the issue.

Food Waste. The ECA's Article 10.2 establishes that the Work Program "may include" cooperative activities "promoting sustainable production and consumption, including reducing food loss and food waste." The provision follows a report by the CEC that evidences an annual food loss per capita in Canada and the U.S. of 396 kg and 415 kg, respectively.[31] Reducing food waste reduces emissions from methane, a greenhouse gas (GHG), therefore adding to the fight against climate change. According to the Intergovernmental Panel on Climate Change (IPCC), this sector caused between 8% and 10% of global emissions from 2010 to 2016.[32]

Other notable improvements in the USMCA's Chapter 24 include:

- A Citizen Submission Process that should be considerably faster; under NAFTA, the procedure took an average of seven years.[33]
- A revision of the CEC's mission, mandating that it defines a "Work Program" establishing areas of cooperation between the parties.
- The maintenance of the Joint Public Advisory Committee (JPAC), which is noteworthy given its past mild yet firm recommendations to reaffirm the parties' commitments and support the continuance of the citizen complaint procedures.[34]
- A consideration of the relevance of the environment for indigenous populations, acknowledging their constitutional rights, and pointing out the importance of consulting with them on efforts to enhance environmental protection issues.
- A pioneering provision on gender that mandates the Secretariat "to develop recommendations on how best to consider gender and diversity effects and opportunities in the implementation of the Work Program" (ECA's Article 10.4).
- The centrality of fisheries subsidies, drawn from the TPP, to address the massive problem of illegal, unreported, and unregulated (IUU) fishing,[35] providing a model for the WTO and responding to national security concerns.[36]

Beyond Chapter 24

Provisions on energy and investment are as significant for environmental governance as Chapter 24's rules establishing environmental provisions.[37] This section discusses issues throughout the USMCA that will directly impact environmental issues.

Investor–State Dispute Settlement

The investor–state dispute settlement (ISDS) is an arbitration mechanism that allows companies and private investors to pursue claims against a host state when it allegedly breaches a standard in the agreement. The ISDS mechanism is a means of settling legal disputes between foreign investors and host nations, which in turn encourages foreign investment by signaling the existence of a predictable and impartial system of arbitration.

NAFTA's Chapter 11 provided protection for signatory-country investors in other signatory countries. Notably, it did not require that investors exhaust domestic court system remedies before bringing the arbitration forward (Article 1121). ISDS procedures have raised suspicions about advancing business' interests over the partner states' health and environmental regulations. The last decades saw much public and academic criticism regarding the way that this system was used under NAFTA to sue governments and challenge domestic environmental or resource management regulations to favor investors invoking the national treatment standard (Article 1102) and minimum standard of treatment obligation (Article 1105).[38]

NAFTA ISDS cases show the risks of prioritizing investor protections at the expense of environmental governance, which included legitimate domestic attempts to enforce regulations. Examples include the curtailment of climate action in Alberta and disregard for environmental impact assessments and ecosystem's protection in several Canadian provinces and in Mexico. Chapter 11 disincentivized state enhancement of regulations, given the desire to avoid litigation and potential losses. Conversely, it created incentives for investors to obtain high payouts from ISDS arbitration.[39] In this sense, NAFTA gave the parties an avenue to escape environmental policies by offshoring production to countries with weaker standards.

USMCA's Chapter 14 on Investment curtailed the ISDS so that the three parties will only be able to bring claims arising out of unfair trade practices. While Canadian and Mexican investors will rely on their rights under the CPTPP (Chapter 9), Annex 14-D lays out a limited ISDS that applies to the U.S. and Mexico, whereby investors from both countries can claim cases of direct expropriation or for violation of national treatment or most favored nation obligations. To follow this course of action, investors must have attempted to resolve the issue via domestic court or administrative proceedings first. Annex 14-D limits the scope of ISDS between both countries to five economic sectors:

1. Oil and natural gas
2. The supply of power generation
3. The supply of telecommunications
4. The supply of transportation services
5. The ownership or management of roads, railways, bridges, or canals

Investors are not required to exhaust domestic options as a first step in these five economic sectors, a result of pressure from U.S. and multinational energy companies who want the option to resort to the ISDS in Mexico's recently liberalized energy sector. This concern was salient during the negotiations given business skepticism after the election of Mexican President Andrés Manuel López Obrador. As president, López Obrador has advanced attempts to alter his predecessors' opening of these sectors.

ISDS was a particular target for Canada, which had been looking to reform or withdraw from Chapter 11 of NAFTA. Canada has been subject to more claims under NAFTA than the U.S. or Mexico, losing eight cases, whereas the U.S. has never lost one.[40] Canada had an especially negative experience with NAFTA's ISDS: since 1994, Canada has been a defendant in over 40 ISDS appeals by foreign companies claiming that Canadian policies violated their rights. About 60% of the appeals challenged environmental regulations or resource management policies.[41] Among the disputes that have been challenged under NAFTA's ISDS procedures are regulations phasing out coal-based electricity generation, banning radioactive waste disposal at sea, and preventing the export of toxic waste.[42] Not surprisingly, Canada did not join Annex 14-D. Instead, Annex 14-E eliminated ISDS between the U.S. and Canada three years after the USMCA's entry into force.

Once fully in force, Chapter 14 of the USMCA will prevent U.S. investors in Canada (and Canadian investors in the United States) from initiating a direct arbitration proceeding against the host state that may challenge the protection and improvement of environmental standards.[43] The added level of transparency and openness from government on regulatory issues is a plus as environmental groups or citizens may use this opportunity to better advocate and change regulations that harm the environment. Yet, it also gives ample space for investors to argue that regulations are burdensome and impact trade negatively.[44] July 2026, the USMCA's first review period, may provide a glimpse into how advocacy and private-sector groups' leverage of the chapter's contradictory measures affect environmental governance in the region.

Missed Opportunities of Chapter 24 and Recommendations Moving Forward

Despite these positive features, the USMCA commits cardinal sins of omission when it comes to environmental protection. Most importantly, the USMCA entirely neglects climate change. During the past twenty-five years, the scientific consensus has become unequivocal regarding the progression of climate change, its man-made origins, and the urgency of addressing it. The treaty could have set a standard on reducing emissions in trade agreements, as the original NAFTA broke ground in introducing environmental standards. For example, it could have required the parties to adhere to the Paris Agreement and report implementation, set increasingly ambitious commitments, establish mechanisms to finance adaptation, or hold corporations accountable for their greenhouse gas emissions.

However, negotiators did not rise to the task of recognizing the escalation of climate change's impact on trade, or of trade's impact on climate change. The turn to protectionism in the United States during the Trump administration, and the former U.S. president's denial of climate change, loomed large over the renegotiation. As anticipated, Chapter 24 does not mention the United Nations Framework Convention on Climate Change, the Paris Agreement, or any commitment related to emission reductions.[45] While it is true that the USMCA mentions more MEAs than NAFTA, that is a low bar. The USMCA mentions fewer MEAs than other post-2007 U.S. Preferential Trade Agreements.[46] Specifically, it fails to include MEAs that the U.S. government agreed to incorporate in free trade agreements in the May 10, 2007, Bipartisan Agreement on Trade Policy.[47] The USMCA does not mention fossil fuel subsidies, which delay the transition to a low-carbon economy, nor does it discuss the fossil fuel production cuts necessary to meet climate goals.[48]

That said, there was one important change from NAFTA that may have benefits for climate-change cooperation. The USMCA eliminated NAFTA's "energy proportionality clause" (Article 605), which had applied to the United States and Canada. The provision had significant environmental implications: it required Canada to export to the U.S. the same proportion of domestic energy production every year based on a three-year average. The clause meant that Canada could not reduce U.S. access to Canadian oil, natural gas, coal, and electricity without a corresponding reduction in its own access. On the other, if Canadians reduced their reliance on fossil fuels and companies increased the proportion of energy exported, then the obligation to keep producing fossil-based energy would grow.

Canadian total crude oil exports have grown steadily during the post-NAFTA decades. As the production of oil and natural gas is Canada's largest and most emission-intensive economic activity, the elimination of the provision in the USMCA removes an obstacle in the fight against climate change. Potentially, this adjustment could contribute to achieving Canada's commitments under the Paris Agreement. This erstwhile proportionality clause would "likely hinder, postpone, or even prevent […] phasing out the production of oil and natural gas and the transition to a low-carbon future."[49] For the time being, there has been little change on Canada's part, but the end of the clause removes one possible obstacle.

In other areas, the USMCA's Chapter 24 highlights the importance of trade and investment in environmental goods and services, such as "clean technologies" and promotes the use of carbon storage. However, this is all in a non-binding section; the agreement failed to set any concrete measure to incentivize investment in greening the regional economy. It overlooks important concepts and objectives in the fight against climate change, such as the energy transition, low or zero carbon economies and technologies, and adaptation to protect vulnerable communities.[50] These are all areas in which North American leaders should urgently expand trilateral mechanisms to address shared environmental problems.

The ECA and Chapter 24 set out an array of activities for cooperation and added mechanisms absent from the NAAEC. Yet, the inclusion of such activities in the USMCA mostly reflected existing practices. It does not make implementation binding. The CEC has the potential to focus on consequential outcomes, but it lost its ability to produce unsolicited reports. If the past is any guide, the CEC will likely remain underfunded, which casts doubt on whether additions to the USMCA text will revitalize environmental cooperation in practice.[51] The budget for the CEC has yet to be decided, as it is the job of the Council, but it is likely to be lower than it was under NAFTA.

While Chapter 24's pioneering provisions attracted substantial attention, these innovations are vague. They do not provide guidelines for specific, measurable commitments or explicit prohibitions.[52] The provisions on wildlife trafficking and marine pollution at least include the term "shall," which implies some degree of commitment. In contrast, the reduction of food waste is particularly weak, saying only that it is an area where the parties "may" consider cooperation. Finally, the USMCA does not acknowledge the precautionary principle. In the European Union (EU), this principle allows the EU or its member states to act against a risk before this risk has been scientifically proven.[53] The principle first appeared in the 1992 Rio Declaration signed by the USMCA parties except the U.S., which did not sign on appealing to the need of a "science-based approach."[54]

Concerning procedural issues, the fact that environmental disputes are subject to the settlement mechanism is in theory a major step forward because it makes environmental provisions enforceable via trade sanctions. However, this mechanism has not worked well for trade disputes, as it has allowed the parties to delay considerably the proceedings by failing to appoint rosters of panelists.[55] Meanwhile, the caveat about sovereignty in Chapter 24 is stronger than in the NAAEC, as it includes the right to exercise discretion in enforcement, priority-setting, and resource-allocation, among others (Article 24.3). The chapter leaves to the discretion of each party the form and extent of protection, and the commitment to enforce environmental laws only applies if they do not discourage trade or investment. For example, regarding corporate social responsibility and responsible business conduct, the USMCA does not commit parties beyond encouraging enterprises "to adopt and implement voluntary best practices" (Article 24.13). Similarly, whereas the USMCA encourages parties to implement specific MEAs, it does not require them to ratify or implement agreements.

Given that the parties have the capacity to use Chapter 24 as a framework to accommodate larger-scale initiatives that strengthen environmental cooperation in the region, in what follows we identify two areas with untapped and promising potential, institutional coordination and the electrification of transport.

Institutional Leverage

The scope of work and mechanisms utilized by two institutions — the North American Development Bank (NABD) and the International Joint Commission (IJC) — may facilitate the implementation of the USMCA's environment chapter.

The IJC is a bilateral institution established to manage the shared lake and river systems and was charged with approving projects that affect water flows between Canada and the United States.[56] It oversees projects that might adjust natural water levels, disturb wildlife, and affect drinking water intake and hydroelectric power generation. However, given its position as an oversight body, there are no investments associated with the Commission, which only steps in to resolve disputes when one party claims that a project causes environmental damage. Both governments may consider enhancing the IJC's faculties as well as committing economic and human resources to provide it with an actionable set of mandates beyond supervision.

On the other hand, the United States and Mexico have demonstrated their commitment to increase the capital of the NADB in the last five years. According to the Congressional Research Service (CRS), former U.S. president Barack Obama and Mexican president Enrique Peña Nieto agreed to double the NADB's capital base, from $3 to $6 billion dollars in 2015.[57] Following the long, tense negotiations between the U.S. Congressional leadership and the Trump administration to schedule a ratification vote, the USMCA implementation bill (H.R. 5430) that was signed into law on January 29, 2020, partially increased the bank's capital.[58]

Given their structures, the IJC and the NADB could serve a basis for expanding dual-bilateral approaches to address and fund cross-border environmental projects. The governance structure and funding mechanisms of both institutions may inform how Canada, Mexico, and the United States create an environmental cooperation task force with a focus on identifying and funding infrastructure projects that address broader, regional environmental issues.

Potential for Electrification

As low-carbon technologies and consumer preferences continue to develop, the North American economy will increasingly rely on low- or zero-carbon electricity to fuel cars, power industrial processes, and heat homes and businesses. The USMCA provides a timely avenue to face this challenge, given that electrification could considerably increase electricity demand and amplify the already significant need for modern and reliable transmission and distribution infrastructure.

This should be a considerable opportunity: North America has the potential to lead the energy transition. While it does not include climate provisions, the USMCA's language does allow for ambition on clean energy, nor does it prevent further cooperation on the electrification of different systems. Such potential could be developed if forward-thinking leaders incentivized transitions that linked energy security and reliability to a green recovery from the global pandemic. The spike in energy prices resulting from the isolation of Russia following its invasion of Ukraine—with lasting strategic consequences—should provide yet another impetus to shifting the energy matrix.

In each of the three USMCA signatory nations, transportation constitutes a major source of GHG emissions, airborne pollutants, and the toxification of groundwaters. The USMCA provides a framework for reducing those harms while expanding industry and generating jobs, given that it explicitly seeks to "[…] encourage future production of new energy and autonomous vehicles," a key component of which will be the development of "advanced batteries." The ways and means to enable this are not specified.

The treaty allows for duty-free imports of plug-in electric vehicles (PEVs) so long as a percentage of the parts of those automobiles are produced within the three signatory nations. By 2023, that requirement will reach 75%, which will remain the minimum percentage going forward. While the inclusion of advanced batteries in the USMCA (for electric, hybrid, and conventional cars) indicates that the Trump administration intended to incentivize domestic production, the transition implies a long process that is also contingent on international factors. Competition with China, which intends to dominate the advanced battery industry may partially spur regional production capacity. For the moment, though, North America is lagging. Any strategy must include investments in research and development, new capacity, and production of and demand for PEVs.[59]

We suggest that the three USMCA partners urgently develop a trinational strategy to speed the development of efficient and affordable advanced batteries and PEVs. Although the issue was mentioned in the 2021 NALS, it deserves greater attention. To drive this process forward, the 2022 NALS should empanel a trilateral, expert-led panel to develop a regional strategy for advanced batteries and PEVs. This should be complemented by the immediate, prior formation of an ad-hoc, multi-stakeholder committee to inform the commission's deliberations, provide reliable background information, and suggest agenda items.

Following a change of U.S. presidential administration, the 2021 NALS deliverables presented a more optimistic scenario for environmental cooperation that which had characterized the USMCA talks. The call to action for the CEC to "preserve the knowledge and practices of indigenous and local communities" is of importance,[60] although there is no mention of a trilateral strategy that establishes cooperation mechanisms with said communities. The 2022 CEC Council Session and JPAC Public Forum in July generate a framework that defines how indigenous and local communities' perspectives will be reconciled to enhance environmental cooperation and sustainable development.

The forthcoming years—especially in the context of the uncertain economic recovery amidst the COVID-19 pandemic and energy-price spikes related to the Russia-Ukraine war—will be crucial to define whether investments are directed not only to the electrification of transportation but to forward-looking infrastructure so that the grid is able to support the transition to low-carbon economies in North America. The automotive sector has always been a driver of North American integration. To support a future-oriented automotive industry, electric utilities and grid planners must be part of the continental dialogue. They will face the greatest challenges of how to manage grid impacts, especially peak charging demand, as well as how to efficiently set up charging locations. To be met, these challenges require decisive and visionary leadership from the three governments.

Conclusion

The inclusion of an environment chapter in the United States-Mexico-Canada Agreement further solidifies the linkage of trade and the environment in North America. Further, subjecting trading partners to the same dispute settlement mechanism to resolve failures to enforce environmental laws is a new, revolutionary characteristic of twenty-first-century trade agreements.

This chapter listed Chapter 24's merits, such as the provisions on marine litter prevention, wildlife protection, and food waste management, which in turn reflect growing international attention to this specific set of issues. However, the greatest environmental strengths of the USMCA are outside Chapter 24: phasing out the investor–state dispute settlement mechanisms and eliminating altogether the U.S.–Canada energy proportionality clause. The change in the ISDS mechanism may alter trade and investment relations in a way that results in greater environmental protection and stronger environmental governance in North America, while the elimination of the proportionality clause may incentivize and speed up a process of decarbonization in the Canadian energy sector. In contrast, regulatory disputes and an increased government investment in fossil fuel energy sources in Mexico curtails expectations about decarbonizing the energy sector.

However, the USMCA also has notable shortcomings in environmental protection. These include the absence of climate change, the weakness of enforcement mechanisms, the non-binding nature of many commitments, and the weak links with MEAs. Because of the politically fraught trade diplomacy, negotiators missed the opportunity to explicitly address climate change, as well as serious concerns like fossil fuel subsidies. Given the unlikelihood of reopening the agreement, it will fall on North American leaders to address these outside the USMCA's immediate framework.

Finally, we made two recommendations that should be on the agenda for NALS 2022. First, the leaders should strengthen, coordinate, and increase funding for existing institutions such as the NADB, the IJC, and the CEC. Second, there is an urgent opportunity for North America to pursue the electrification of transport. The region's economic future, notably of its crucial automotive and electric sectors, depends on it. Shaping a collaborative vision for advanced batteries, power grids, and electric vehicles must be a central avenue of cooperation to speed up a low-emission future and lessen dependence on fossil fuels. This will require both expertise and visionary leadership in the three countries to devise and execute forward-looking policies and make timely investments. The consummation of a sustainably prosperous North American region in the next decade rests on the creation of a nimble, regional approach that mitigates environmental challenges and maximizes opportunities presented by continent-wide free trade.

Endnotes

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3. The term "Parties" refers to the three signatories of the North American free trade agreement: The United States, Canada, and Mexico.

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22. USTR Environment Chapter Provision 24.26.

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6

Emergency Management in North America

Juliette Kayyem, Daniel Jean, and Luis Felipe Puente Espinosa

In North America, disasters and emergencies have no national boundaries. When the United States closed its airspace on September 11, 2001, more than 200 U.S.-destined aircraft carrying tens of thousands of passengers were rerouted to Canadian airfields. In 2003, a massive blackout struck the eastern United States and the Canadian province of Ontario, affecting more than 50 million North Americans. Each year, the flooding of the Red River in North Dakota—floods which are expected to worsen due to climate change—overflows into Canada. Since 1959, firefighters from Naco, Arizona, have regularly crossed into Mexico to tackle fires breaking out south of the U.S. border.

As these examples demonstrate, and as the COVID-19 pandemic certainly proves, Mexico, the United States, and Canada not only share common borders but also a vulnerability to disasters and emergencies. In the wake of COVID-19, North American leaders have pointed to the need to improve joint responses to pandemics; however, they have dedicated inadequate attention to the need for better regional emergency management more broadly. To be prepared for the increasing frequency and scale of catastrophic disasters—when the rapid flow of assistance is required to save lives and reduce suffering—these three countries must effectively plan for and coordinate cross-border responses. There are numerous security trends that suggest the ever-greater importance of building these capacities among the three countries. Nonetheless, no comprehensive emergency management compact for North America exists. Certainly, there are various "parallel" bilateral agreements—between the U.S. and Canada and the U.S. and

Mexico—but there is an absence of a holistic, trilateral approach. This chapter reviews the main challenges to effective emergency management that result from this gap and outlines a proposal for a comprehensive North American Emergency Management Compact.

The Challenges to Emergency Management Across North America

The number of understandings and agreements among the governments of Canada, Mexico and the United States on emergency management has grown during the past two decades. As a result, there are a variety of bilateral agreements, memoranda of understanding, and initiatives in place. Additionally, there is one trilateral agreement, in support of cross-border preparedness and response within North America.

However, North America continues to face evolving challenges to comprehensive emergency management. As climate change, technology, global health, and the nature and scale of emergencies change, so does the need for improved coordination among the U.S., Mexico, and Canada. However, building regional cooperation is complicated by the distinct federal systems that operate in each country. In addition, national, regional, and private corporations tend to play different roles across the many relevant North American jurisdictions. Although each actor and agreement makes an important contribution, the disparate structure of North American emergency management too often is less than the sum of its parts. To meet mounting shared challenges, North America must progress beyond its longstanding approach, which relies primarily on sharing information, to more systemic operational cooperation.

In the following sections, the chapter will give an overview of how emergencies and emergency management are changing; it will acknowledge the importance of multilevel responses; and it will make a case for a multifaceted North American emergency compact to address all hazards. This compact should facilitate the cooperation of diverse actors and integrate the best elements of existing bilateral and public-private agreements. The growing scale of environmental and human-made risks on our continent demands trilateral coordination to share experiences, training, and technologies, all in the service of delivering more effective emergency responses.

Evolving Trends in Emergencies

Current climate and human development trends are generating greater challenges for emergency management across North America. The likelihood that disasters would span both the U.S.–Mexico and U.S.–Canada borders is growing. The likelihood that resources will need to be shared, managed and coordinated in response is also growing. Notably, natural disasters are evolving: wildfires are growing in frequency and intensity, advancing across borders, destroying forests, homes, and croplands; hurricanes increase in strength and travel trajectory, reaching farther north and leaving greater destruction in their wake; volcanoes have increased in activity; lengthy droughts persist; and environmental migration is a growing reality.[1] Additionally, we must respond to the likely potential for more pandemics on a global and/or continental scale and human-made disasters, whether terrorist in origin or stemming from the cross-border movement of dangerous substances.

The COVID-19 pandemic cast the need for coordinated responses into relief. The pandemic deeply affected the global environment, and the three core North American countries coordinated to address the threat while also protecting their respective national interests. With the goal of containing the further spread of coronavirus, in late March 2020, the U.S. reached agreements with both Canada and Mexico to limit all "non-essential travel" across borders. Working closely and collaboratively, the Department of Homeland Security joined with its counterparts in Mexico and Canada to formulate a North American approach to limit the spread of the virus by restricting temporarily inbound land border crossings of people while permitting a continued unfettered movement of cargo and goods. These restrictions were reviewed (and renewed) monthly and remained in effect until late 2021.

The rapidly intensifying effects of climate change, the increased globalization and potential spread of infectious disease outbreaks, and the rise in both the threat and impact of disruption to technology or infrastructure pose an expanded risk across North America on a continental basis. Although bilateral agreements for emergency planning and response may have sufficed in the past, the United States, Canada, and Mexico must now recognize that the changing paradigm of emergencies necessitates trilateral cooperation. The unique and evolving nature of emergency management therefore opens the door to greater trilateral cooperation among countries that heretofore have typically preferred bilateral arrangements.

Acknowledging the Necessity for Both Federal and Local Management

Disasters are always local. Therefore, the first necessity for a North American compact is to create trilateral cooperation that complements subnational and local efforts at emergency preparation and management. Indeed, disaster reduction and risk management depend on coordination mechanisms across all sectors and levels. In general, disaster risk factors have local and specific characteristics which must be understood to determine the required actions to reduce disaster risk that may have national, regional, or global reach. Accordingly, one of the main challenges for cooperation across the region is advancing collaboration with and among institutions at the local level in disaster risk management and emergency response. It is crucial to continue incorporating participation from local institutions in disaster risk management and emergency response across the three nations.

Regional cooperation between U.S. states and Canadian provinces, for example, enables faster and more targeted responses. One instance of this is how local communities have expressed concern regarding the federal Canada-U.S. framework to facilitate the movement of goods and people across the border during and following an emergency. Non-government observers note that some of the systemic barriers that exist between various levels of domestic government can hinder national cooperation, further exacerbated in a bilateral context. Conversely, states and provinces/territories, beyond the issue of guarding their jurisdictions, value the practical benefits that have emerged from regional agreements. Furthermore, they are concerned that broadening governance from regional to federal levels could affect the action-oriented nature of the regional agreements.

This highlights some of the inherent tensions and relative values between federal, regional, and non-governmental emergency management approaches. Each provides certain benefits and challenges, and a successful North American Emergency Management Compact therefore will capitalize on strengthening and integrating each, rather than emphasizing agreement at only one level of government or exclusively within one sector.

Moving from Information-Sharing to Systemic Operational Cooperation

The second goal for the compact is to advance beyond current frameworks of information-sharing to more systemic and operation cooperation. To date, there has been a substantial focus, with eminently positive results, on intelligence sharing across U.S. borders, north and south, to ensure situational awareness in emergency situations. This focus has been accompanied by significant bilateral agreements for operational response sharing, though those could be strengthened.

Ideally, the U.S., Mexico, and Canada should have strategic aims translated into practical mechanisms. Those would include common tools and assets and shared plans and response protocols that can address several key common risk areas. Additionally, it is essential to define and establish trilaterally-approved measures and guidelines for risk analysis. It is important to compile a regional Risk Atlas, especially to monitor the hydro-meteorological phenomena that can affect any of the three countries. These practical mechanisms would compose the core of systemic cooperation that goes beyond the current agreements for information-sharing in North America.

The three governments must develop more agile international cooperation protocols for the entry and exit of rescue, assistance, and health teams, while also facilitating access to supplies for humanitarian aid. Regional cooperation would be strengthened by certification mechanisms for first responders from any of the three countries, allowing expedited handling of migration, fiscal, insurance, and diplomatic formalities. Additionally, advance certification would grant aid teams, when activated, prior permission to act under the laws of the other countries, enabling a far more efficient response. Furthermore, this would reinforce the prevention and self-protection culture in all sectors, raising awareness of a joint North American responsibility on the part of government officials, the private sector, mass media, and the public alike across the three countries. The Red Cross could help integrate the efforts to facilitate border entry and exit procedures.

Beyond Bilateral Agreements: A Proposal for a Comprehensive North America Emergency Management Compact

The United States, Mexico, and Canada has each implemented legislative frameworks to manage emergencies domestically. They have also developed bilateral agreements to address specific cross-border emergencies. There is one trilateral agreement on influenza pandemics in response to H1N1, which was cited as a model for greater pandemic preparedness during the 2021 North American Leaders Summit.[2] The individual, national frameworks and other agreements outlined below set the groundwork for further cooperation, but they must be strengthened and expanded to prepare for the risks of future emergencies. We propose that the U.S., Mexico, and Canada carefully review existing emergency management approaches and strengthen bilateral and non-federal (regional and private) cooperation to better address the emerging trends and local impacts of emergencies. Additionally, we suggest an assessment of the necessary components required for a more comprehensive trilateral approach that encompasses the management of emerging trends, national-federal resources, and authorities in emergencies. Together, stronger bilateral federal agreements, additional formalized cooperation at the non-federal levels, and a more strategic trilateral approach will form the essential components of a more effective North America Emergency Management Compact.

Baseline National Frameworks for Emergency/Disaster Management

Following is a brief overview of the emergency/disaster management frameworks established by each of the three countries. National frameworks, along with the bilateral agreements described below, demonstrate that the U.S., Mexico, and Canada acknowledge and have acted upon the need for a strategic, planned response to North American emergencies. These arrangements represent a platform upon which further integration of efforts into a more structured and comprehensive North American Emergency Management Compact can take place, in response to growing needs.

In the United States, the prevailing legislative framework for disaster management is the 1988 Robert T. Stafford Disaster Relief and Emergency Assistance Act. The Stafford Act recognizes the importance of cross-border emergency preparedness between states and neighboring countries. The U.S. Foreign Assistance Act also authorizes FEMA to provide emergency management services and commodities to friendly countries in the event of a disaster.[3]

In Mexico, the prevailing legislation for disaster management stems from the 1986 National System for Civil Protection (SINAPROC), established after the devastating 1985 earthquake in Mexico City. The original focus of SINAPROC was Mexico's planning, response, and recovery capacity. It has since expanded to include a comprehensive disaster risk management system that spans risk identification, prevention, reduction, financing, and post-disaster reconstruction. Under SINAPROC, Mexico also established the Fund for Natural Disasters (FONDEN) in 1996, which served as both the federal government's financial protection strategy against natural disasters and as a vehicle for rapid reconstruction of infrastructure after a natural disaster.[4] The presidential administration of Andrés Manuel López Obrador bestowed emergency response duties on the National Guard in 2021.[5]

In Canada, the original disaster management framework was established by the 2007 Emergency Management Framework for Canada. The Emergency Management Framework outlines prevention and mitigation, preparedness, response, and recovery components, as well as the principles, governance, and instruments of emergency management. It provides a common approach for federal, provincial, and territorial (FPT) stakeholders regarding emergency management. Canada has continued to revise and improve this original Emergency Management Act.[6]

Step 1: Enhancing Bilateral Cooperation

The three countries have several bilateral agreements in place to share resources and provide aid in response to emergencies or disasters. There are several recent examples of good collaboration between sub-sets of the three countries. The coordination of Mexico's and Canada's forest firefighters in putting down the great fires in Ontario in July 2018 is a successful emergency management example. In response to three aid requests by the Canadian Interagency Forest Fire Center (CIFFC), Mexico sent 310 firefighters of the National Forestry Commission of Mexico to help extinguish forest fires in Canada.[7] This represents the largest international mobilization of firefighters in Mexican history, though it has been repeated in recent years.

In the case of cooperation with the United States, there are additional recent examples. In 2017, Mexico offered aid to the government of the state of Texas after Harvey, a category four hurricane, hit the state in August. Reciprocally, Mexico received aid from the United States Agency for International Development (USAID), the Office of Foreign Disaster Assistance (OFDA) and the United States Northern Command (NORTHCOM) after the earthquake in Mexico on September 19, 2017, in the form of aid brigades and donations. In October of that same year—and despite still dealing with its own reconstruction in several states following the earthquake—the Mexican government worked jointly with parts of the Federal Emergency Management Agency (FEMA) to provide aid after Hurricane Maria struck Puerto Rico. In that vein, Mexico sent a brigade of specialists to support efforts to restore the electricity on the Caribbean island.

These successes demonstrate the effectiveness of strategic bilateral agreements. A critical element of any prospective North American Emergency Management Compact is to build on the existing bilateral approaches by strengthening existing accords that work and expanding in areas where additional coordination on emergency/disaster response is needed. Below is an overview of some of the bilateral agreements between the U.S. and Canada and between the U.S. and Mexico, followed by recommendations for areas that require additional coverage.

U.S.–Canada. The U.S.–Canadian border is the longest international boundary between two countries anywhere in the world. Approximately 75% of Canada's population (and 12% of the U.S. population) lives within 100 miles of the border. Approximately 400,000 people cross the border every day for business, pleasure, or to maintain family ties. This border, often referred to as the world's longest undefended border, has significantly hardened post-September 11, 2001, creating challenges for cross-border disaster assistance.

The concept of mutual aid between Canada and the United States developed organically over time, responding to increased needs. However, it evolved more formally in the late 1940s and early 1950s when the United States was concerned about a possible nuclear attack from the Soviet Union. In 1950, through Executive Order (EO) 10, 186, President Truman established the Federal Civil Defense Administration, encouraging the

Agency to negotiate agreements or compacts for mutual aid across state lines including with provinces or similar subdivisions of a foreign country. EO 10, 186 is recognized as a turning point in the relationship between the U.S. federal government and states in emergency preparedness. It also incentivized governmental units beneath the federal level to enter into foreign mutual aid agreements with counterpart jurisdictions.

Under the heading of "civil defense" or "civil emergency planning," Canada and the United States have continued to expand their cooperation on a broad range of topics. The two governments began formal collaboration in these areas with the signing of a 1986 agreement on Cooperation in Comprehensive Civil Emergency Planning and Management. Of even greater importance was its successor accord, the 2008 Agreement between the Government of Canada and the Government of the United States of America on Emergency Management Cooperation. Applicable bilateral agreements are compiled in the Compendium of U.S.–Canada Emergency Management Assistance Mechanisms ("U.S.–Canada Compendium"), itself a product of a working group established by the 2008 Canada–U.S. Agreement. Of the more than thirty documents included in the U.S.–Canada Compendium, over 75% were only established after 2006 (that is, in the post-9/11 and post-Katrina era). Their subject matter ranges from emergency management assistance, wildfire preparedness and response, critical infrastructure, search and rescue, cyber security, and more.[8]

According to research conducted by the American Red Cross, U.S. and Canadian stakeholders highlighted the three bilateral frameworks as instrumental to cross-border disaster assistance (Table 1). These three regional and three bilateral compacts or agreements provide a framework that allows frequent movements of emergency personnel and equipment (regular firefighting crews, forest fire fighting personnel and equipment, ambulances, medical personnel etc.) between border communities and beyond. Two of the three existing bilateral agreements focus on facilitating cooperation in managing and moving personnel and equipment during emergencies. The 1982 Canada–U.S. Reciprocal Forest Fighting Arrangement and Operational Plan (updated in 2017) is crucial in supporting the well-regarded history of cooperation in firefighting between the Canadian Interagency Forest Fire Centre (CIFCC) and the U.S. National Interagency Coordination Center (NICC). The other is the Framework for the Movement of Goods and People referenced above, a welcomed bilateral federal mutual aid accord designed to support pre-existing arrangements between states and local communities north and south of the border.

In developing a North American Emergency Management Compact, the U.S. and Canada should continue regular reviews of existing bilateral agreements to determine whether to update them in response to changing trends and needs around emergencies and disasters. Simultaneously, they

Table 1 U.S.–Canada Bilateral Frameworks

Agreement	Synopsis
1982 Canada/United States Reciprocal Forest Fire Fighting Arrangement and Operational Plan (Updated 2017)	This arrangement facilitates cooperation between the Canadian Interagency Forest Fire Centre (CIFFC) and the US National Interagency Coordination Center (NICC) related to equipment, personnel, and aircraft as "needed across the international boundary."
2008 Agreement between the Government of Canada and the Government of the United States of America on Emergency Management Cooperation	This milestone agreement between the two countries structures nearly daily, on-going cooperation between the respective governments related to mutual interests in emergency management.
2009 Canada–United States Framework for the Movement of Goods and People Across the Border During and Following an Emergency (and Maritime Annex) and Plan for the Movement of People and Goods During and Following an Emergency (Canada, Revised 2014)	The Framework comes into effect if there is a "significant border disruption" as a result of "(a) An attack or threat of attack to the United States or Canada by terrorists; (b) A natural or manmade incident, including a pandemic or other health incident, that impacts large numbers of citizens and/or affects Critical Infrastructure and Key Resources of national interest to one or both countries; or (c) Federal, State, Local, Provincial, Territorial or U.S. Tribal Governments request national-level assistance through existing procedures"

should identify opportunities to integrate agreements whenever possible to reduce redundancies and enhance the capability for multi-faceted response. This is especially critical as evolving emergencies and disasters now have more widespread effects.

U.S.–Mexico. The Mexican–U.S. border region is defined as 100 kilometers north and south of the international boundary. As of June 2020, within this zone there are approximately 12 million people—a population that is expected to double by 2025. The lawful flows between the two countries are massive in the USMCA post-NAFTA era. The United States is the primary source of foreign direct investment in Mexico. Merchandise trade between the U.S. and Mexico is colloquially valued at "one million dollars a minute." (U.S.–Canada trade is even slightly more substantial.) There are approximately one million legal border crossings daily, making the Mexican–U.S. border one of the most traveled borders worldwide.

The U.S. and Mexico are also significantly affected by the increase in occurrence, severity, and duration of natural disasters.[9] As these trends manifest themselves, authorities are more and more constrained in their capacity to respond and more and more reliant on other levels of government, including cross-border jurisdictions. As the 2016 forest fires in Fort McMurray, Alberta, and the 2017 sequence of hurricanes that hit the southern United States demonstrated, even a well-resourced federal capacity may be strained when hit by multiple events in a short time frame. The need for international cooperation and the ability to exchange surge capacity when required has been dramatically impacted by these multiple simultaneous disaster events that continue to grow in frequency and severity.

While not as extensive in number or as deep in legal obligation as the bilateral arrangements between Canada and the United States, there are several emergency management related frameworks in place between Mexico and the United States. These exist primarily within the environmental, industrial, and public health sectors. Most are limited to information exchanges focusing on preparedness, information sharing during events having a simultaneous impact upon both countries and technical/scientific cooperation.

According to research conducted by the American Red Cross, U.S. and Mexican stakeholders highlighted the following bilateral frameworks as important to cross-border disaster assistance (Table 2).

The most important achievements through the 2011 agreement on emergency management cooperation are undoubtedly those related to the collaboration with the United States Northern Command (NORTHCOM), the Federal Emergency Management Agency (FEMA), the United States Geological Survey (USGS), and the Environmental Protection Agency with its counterpart agencies in Civil Protection across the Government of Mexico. Accordingly, discussions and cooperation with United States authorities have been strengthened in matters of training courses, creation of cross-border protocols, equipment to emergency corps from different entities, and analysis of experiences and lessons learned following emergencies. The "Border 2020" program represents the continuity of the binational effort between Mexico and the United States aiming to address challenges in the environment and public health in the border region. Furthermore, the search and rescue corps in Mexico, the U.S., and Canada have shown determination not only to help the victim population in emergencies, but also to share their knowledge and experience for prevention and response across all regions in the three countries.

The primary area for growth in bilateral cooperation between the U.S. and Mexico—as bilaterally between Canada and the United States—is moving beyond predominantly sharing information to more systemic operational cooperation. The majority of the bilateral agreements focus on exchanging knowledge during an emergency and lessons learned after emergencies. However, they incorporate less of the concrete plans and protocols necessary for comprehensive coordination during an emergency. The

Table 2 U.S.–Mexico Bilateral Frameworks

Agreement	Synopsis
1983 Agreement on Cooperation for the Protection and Improvement of the Environment in the Border Area (La Paz Agreement)	While heavily oriented toward environmental protection protocols covering the border area, this agreement also contains provisions related to joint contingency planning and emergency response following a pollution-based disaster in the identified zone. One of La Paz's more recent implementation mechanisms, Border 2020, strongly emphasizes local border community cooperation following a hazardous substance release.
1999 Wildfire Protection Agreement Between the Department of Agriculture and the Department of the Interior of the United States of America and the Secretariat of Environment Natural Resources and Fisheries of the United Mexican States for the Common Border (updated in 2003).	This agreement creates explicit commitments around cross-border assistance during wildfire events. The agreement enables wildfire protection resources originating in the territory of one country to cross the border to suppress wildfires up to 10 miles on each side of the United States-Mexican border.
2011 Agreement between the Government of the United States of America and the Government of the United States of Mexico on Emergency Management Cooperation in Cases of Natural Disasters and Accidents.	This pact focuses primarily on establishing channels of communication through a binational, high-level Working Group to address issues in this sector. Cooperation mechanisms set out in matters of analysis, prevention, attention, and risk mitigation.

U.S. and Mexico, at both the federal and non-federal levels, must improve their bilateral cooperation to include formalized systemic cooperation that encompasses the strategies and obligations for a coordinated response to emergencies and disasters.

Step 2: Strengthen Non-Federal and Non-Governmental Coordination

As noted above, there are benefits to cooperation beyond the federal level. This can include both regional and local efforts as well as non-governmental cooperation, both discussed below. Regional cooperation provides a rapid and streamlined process among states, provinces, and other non-federal levels of government. Implementation of emergency/disaster response typically occurs at state and local levels, therefore ensuring regional agreements for cooperation are in place to enable more effective emergency management overall. Non-governmental coordination among private entities has proven to be successful in the past (detailed further below) and is an important element of efficient emergency management. Especially in response to the changing nature of emergencies, non-governmental organizations are an increasingly necessary component of emergency management. If, for example, infrastructure is damaged due to natural disaster or a cyberattack, private utility companies or service providers are required to help mitigate and resolve the issue. The successes of non-federal coordination that are highlighted below emphasize the need for stronger regional and non-governmental coordination as a key element of a North American Emergency Management Compact.

The presence of three sub-national agreements between Canada and the U.S. that cover the three main regions of the border (i.e., Atlantic Northeast, Great Lakes and Pacific Northwest), has brought some systemic governance to mutual assistance between neighboring states and provinces/territories. They are closely aligned with the existing Governors–Premiers Conferences/Associations (i.e., the Conference of New England Governors and Eastern Canadian Premiers, the Great Lakes and St. Lawrence Governors and Premiers Conference, and the Western Premiers and the Western Governors' Association), offering an opportunity to enhance political leadership on mutual interest issues. While their proximity, history of cooperation, and established trust are assets, the regional focus and associated jurisdiction has also at times limited their ability to act because cross-border control authority is federal. While mutual aid in emergency situations has historically benefited from border facilitation, Quebec firefighters experienced a delay at the U.S. border while a fire was raging in 2007 at the Anchorage Inn Restaurant. This was a historical landmark in Rouses Point, New York, a town with limited firefighting capability.[10] This was a case study, among others, that contributed to the 2009 adoption of a Canada–U.S. Framework, facilitating the movement of goods and people across the border during and following an emergency.

Additionally, there are three sub-national agreements between U.S. states and Canadian provinces that provide mutual assistance in emergency and disaster management (Table 3). While these compacts are at the provincial-state level, federal authorities still control border crossings.

In addition to international agreements, there are also local agreements between adjoining jurisdictions in Mexico and the United States to address local needs. Fire suppression resources are available to respond to neighboring jurisdictions as a result. During severe forest fires, the United States has stepped in to assist Mexico with equipment, such as specialized resources for infrared photography and photo interpretation. Regarding regional crisis

Table 3 U.S.–Canadian Subnational Agreements

Agreement	Synopsis
1996 Pacific Northwest Emergency Management Arrangement	MOU between British Columbia and the Yukon plus Alaska, Idaho, Oregon, and Washington.
2000 International Emergency Management Assistance Compact	MOU between New Brunswick, Newfoundland and Labrador, Nova Scotia, Prince Edward Island Island and Quebec plus Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.
2013 Northern Emergency Management Assistance Compact	MOU between Alberta, Manitoba, Ontario and Saskatchewan plus Illinois, Indiana, Ohio, Michigan, Minnesota, Montana, New York, North Dakota, Pennsylvania, and Wisconsin.

management collaboration, California and Mexico unveiled the California Mexico Memorandum of Understanding (MOU) in 2014. This MOU serves to enhance cooperation on a variety of subjects such as public health and climate change.[11] Working together with Mexican and U.S. federal partners, Cal OES created the Wildfire Workgroup to further the goals of preparing and coordinating efforts for wildfire emergencies along the California-Mexico border region.

Furthermore, the draft Border 2020 Program is the most recently updated environmental program implemented under the 1983 La Paz Agreement. This draft draws on the current Border 2012 Environmental Program and has been updated to reflect current events within the last eight years. The newest version will emphasize regional, bottom-up approaches for decision making, priority setting, and project implementation to address environmental and public health problems in the border region (GNEB 2010).

Such mutual aid and sub-national efforts have also incorporated the private sector. The degree of integration of the power grid and the importance of Canada as an electricity supplier to the U.S. has also led to what is probably the most mature and systemic mutual aid cooperation. This takes place between private entities and allows Canadian utility company crews to restore power after storms in the United States and vice versa. What originated as individual arrangements or punctual contacts between companies during natural disasters evolved in 2007 with the creation of the Northeast Mutual Assistance Group (NEMAG). NEMAG is a group of New England and Canadian electric utilities that, during emergencies, combine their efforts to facilitate the sharing of crews among their members. NEMAG now serves as the regional coordinator for resource allocation among electric utilities in the northeast region during power restoration following storms. It is now common to see Canadian utilities companies restoring power across New England after storms. In September 2017, the U.S. capacity was taxed following a succession of hurricanes. Drawing on NEMAG's ability to respond, hydro workers from several eastern Canadian provinces worked for numerous weeks in Florida and Georgia to restore power after Hurricane Irma. This was similar to how their New England colleagues had assisted Quebec utility companies following the unprecedented Ice Storm that struck Quebec and Eastern Ontario in 1998. In fact, many Canadian power companies now maintain retired employees trained and certified to serve as surge capacity, a major preparedness asset to disasters both in Canada and as mutual aid to the U.S.

During the 2003 North Eastern Blackout, tree branches that had initially entered in contact with power lines led to a series of cascading computer control failures which affected key economic and public safety sectors. Following this event, the two countries felt the need to cooperate further in prevention and resilience of the power grid. In a commitment that emerged from the March 2016, "U.S.–Canada Joint Statement on Climate, Energy, and Arctic Leadership" issued by U.S. President Barack Obama and Canadian Prime Minister Justin Trudeau, the two countries pledged to enhance efforts to "develop a joint U.S.–Canadian strategy for strengthening the security and resilience of the North American electricity grid [and to] work together to strengthen the security and resilience of the electric grid, including against the growing threat from cyber-attacks and climate change impacts". The three high-level goals of this strategy are:

1. Protect Today's Electric Grid and Enhance Preparedness
2. Manage Contingencies and Enhance Response and Recovery Efforts
3. Build a More Secure and Resilient Future Electric Grid.

Systemic efforts in prevention to protect the grid are also well served by organizations like the North American Electric Reliability Corporation (NERC), a non-profit international regulatory authority whose mission is to assure the effective and efficient reduction of risks to the reliability and security of the grid. NERC is the electric reliability organization (ERO) for North America (Canada, USA and the northern portion of Baja California, Mexico), a jurisdiction serving over 334 million people.

The 1982 Canada/U.S. Reciprocal Forest Firefighting Arrangement and Operation Plan, updated in 2017, is another framework that recognizes and supports the cooperation developed between nongovernmental entities. Namely, the Canadian Forest Fire Centre (CIFFC) and the U.S. National Interagency Coordination Center (NICC) facilitate the movement of personnel, equipment, and aircraft as required. There is a long tradition of mutual aid in fighting forest fires between Canada and the U.S. with crews moving both ways in response to needs and capacity to respond. In recent years, with raging forest fires often striking both Canada and the U.S., Mexican firefighters have also become a welcomed surge capacity.

Step 3: Develop a Comprehensive Trilateral Approach

The effort to create a comprehensive trilateral agreement should be based on this extensive work to date in both the emergency management space and more generally based on other North American agreements. In other words, the countries know how to do this. While geographical proximity makes "Canada and the U.S." and "Mexico and the U.S." more natural partners in immediate emergency responses, the growing bilateral political relationship between Mexico and Canada has accompanied further economic integration under NAFTA (now USMCA).

This was instrumental in the support that Canada brought to Mexico during what is now known as the pandemic H1N1/09 virus. In mid-April 2009, through surveillance, health authorities worldwide realized that an H1N1 influenza virus had the potential to become a pandemic. This new virus detected in humans that spread quickly around the world initially hit Mexico. The Public Health Agency of Canada and its renowned National Microbiology Laboratory in Winnipeg extended capacity to test specimens in Mexico. In addition to providing capacity, it allowed Canada to be the first country to characterize the entire genomic sequence of the pandemic H1N1 influenza virus. This made significant contribution to international scientific understanding of this novel strain and the development of a vaccine that prevented further propagation.

The H1N1 case study illustrates the mutual interest to work together bilaterally in preventing, monitoring, and responding to pandemics and other public health concerns. Enhancing cooperation on public health makes sense given the importance of tourism flows between the two countries. Mexico hosts about 2 million Canadian visitors on a yearly basis, the second largest source of visitors after the United States. Canada welcomes about 400,000 Mexican visitors per year, the fifth source of visitors (tied with Germany). Officials tell us that the daily tactical cooperation on communicable diseases has made substantial progress in recent years, allowing frequent contacts on individual cases of concern (e.g., measles, T.B. etc.) to prevent contamination.

Regarding broader emergency cooperation, Canada and Mexico also signed a MOU on establishing a public safety dialogue in the context of their bilateral Joint Action Plan 2014–2016. This MOU is relatively recent and broad in scope. Given geographical realities, the areas where the two countries might wish to focus their dialogue under this MOU may be forest firefighting, public health/communicable diseases, and seismic risks. Recent history has already shown the benefits regarding fighting forest fires.

Learning from the H1N1 experience, Canada, Mexico, and the U.S., following a commitment made at the North American Leaders Summit (NALS) held in Guadalajara in 2009, adopted the 2012 North American Plan for Animal and Pandemic Influenza. This expanded upon the existing 2007 North American Plan for Avian Flu and Pandemic Influenza. The 2012 Canada, Mexico, and U.S. North American Plan for Animal and Pandemic Influenza is the only trilateral agreement on emergency management adopted in the aftermath of the H1N1 pandemic, allowing better preparedness and management of large-scale influenza outbreaks (human or animal) that impact the continent. Our understanding is that Mexico works very actively with Canada and the U.S. on international U.N./World Health Organization (WHO) sponsored initiatives and International Health Regulations. Despite the lessons learned from the 2009 H1N1 pandemic and the 2012 trilateral plan referenced above, there has been no recent trilateral exercises to prepare for a pandemic.

Since March of 2020, the global spread of the COVID-19 outbreak had a profound impact on health systems and millions of people across the world. The response was varied in North America with lack of adequate testing and contact tracing for the virus in both the United States and Mexico. Canada has managed to contain the spread more effectively but has also been hit hard by the pandemic. Despite U.S. agreements with its North American partners to limit all non-essential travel across borders, Canada seems to be the only one of the three nations that has enforced strict border regulations.

The COVID-19 pandemic has further emphasized the need for trilateral collaboration in response to emerging disasters. According to research conducted by the Wilson Center, there was a lack of coordination regarding the supply chain of crucial Personal Protection Equipment (PPE). In their publication *Pandemics and Beyond: The Potential for U.S.-Mexico Cooperation in Public Health,* authors Duncan Wood and Andrew I. Rudman conclude that "a critical problem thus far has been the lack of key medical supplies such as masks and testing kits for medical services, as well as hand sanitizer, disinfectant wipes, and thermometers for the general public. A coordinated manufacturing response among the North American neighbors would greatly facilitate the supply chain across the region." This was not always the case, especially early in the pandemic. For example, in April 2020, against the advice of the manufacturer, the Trump Administration tried to stop exports of masks made by 3M to Canada and Latin America—even though key material for these masks actually came from Canada. The world's continued struggle with COVID-19, which will not abate until a critical mass of the world is vaccinated, is a reminder that cooperation, not isolation, is key to preventing the spread of diseases in our interdependent and open world. Such cooperation should be part of the "regional DNA" in North America. Pandemics historically occur every 30-35 years on average, but public health experts emphasize that frequency is accelerating. We must be prepared for the inevitable next global health emergency.

On the non-governmental front, the Canadian, U.S., and Mexican entities of the Red Cross are concerned about the increased occurrence, duration, and severity of disasters and entered into a trilateral agreement. The agreement is very practical and includes protocols to guide responses during emergencies and yearly exchanges of personnel with the aim to facilitate cooperation when disasters strike. Collaboration on humanitarian aid, particularly with Canada, has been strengthened in the last six years. The United States, Mexico, Canada, and the Red Cross have held a greater number of meetings on this matter, especially strengthening the aid for wildfire emergencies. In this context, Mexico is willing to continue advancing cooperation with the United States and Canada in disaster risk management to ensure better practices that benefit all North Americans.

Although there are essential conditions for efficient emergency cooperation, it is important to formalize a trilateral cooperation agreement that builds on the existing areas of cooperation between U.S.–Mexico, U.S.–Canada, and Canada–Mexico and can address all hazards. The coordination of the Red Cross across all three countries and the North American Plan for Animal and Pandemic Influenza, which will likely require significant review and revision with lessons learned from COVID-19, set the stage for a more comprehensive trilateral agreement. Such an agreement requires not only information-sharing, but also systemic cooperation including certifications for quick personnel support across borders. Additionally, it should include plans and protocols for streamlined collaboration to tackle the increasingly widespread and intense emergencies of today and tomorrow. A stronger trilateral agreement is a necessary component of a well-rounded and effective North American Emergency Management Compact.

Conclusion: A Multi-Faceted North American Emergency Management Compact

The very nature of a shared continent between the U.S., Mexico, and Canada, as well as emerging climate and other emergency trends, necessitate trilateral coordination to share experiences, training, and technologies. In examining the need for a North American compact, we have analyzed the needs that justify such an initiative and reviewed the existing bilateral and trilateral cooperation experiences between the three governments. It was also helpful to observe non-government bilateral and trilateral cooperation experiences such as forest fires fighting, the electric grid, and a trilateral agreement adopted by the Red Cross. Recent experiences and comments by both government and non-government actors have highlighted how proximity influences the need and justification for mutual assistance in emergency management. This explains why mutual aid initially developed organically between border communities and regions, hence the regional compacts in place. Furthermore, it demonstrates the need and maturity level of the required cooperation may vary between Northern United States and Canada and the Southern United States and Mexico. However, in dealing with issues that may be more hemispheric like a pandemic surveillance and emergency response, a solid trilateral and exercised plan makes more sense.

We know that disasters have no borders. The effects of climate change are evident and global. Hence, it is important to continue strengthening trilateral cooperation mechanisms, to generate more agile protocols for disaster response, and to avoid the increasing construction of risks in our countries. In this context, in venturing toward a trilateral compact, the three countries would benefit if the instrument left room for bilateral specificity (Canada–U.S. and U.S.–Mexico) and devoted trilateral attention in areas where the risks are more common to the three, such as the integrated power grid, forest fires, seismic risks, and pandemics and other communicable diseases.

The ultimate goal of a North American Trilateral Compact is to strengthen and consolidate cooperation in the North American Region on Disaster Risk Management. The U.S., Canada, and Mexico have the opportunity to serve as a global reference point of collaborative resilience in the face of natural disasters and demographic growth. All of this has the ultimate goal of preventing disasters and saving lives in the face of growing and changing risks.

Endnotes

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SECTION 2

Agendas for a Regional Future

7

Successful Workforce Development Is Vital for a Competitive and Prosperous North America

Earl Anthony Wayne and
Sergio M. Alcocer

The North American workforce suffers from alarming skills gaps and mismatches. If left unaddressed, these labor market deficits could undermine North American economic competitiveness and sow the seeds for greater social dislocation.

Long before the pandemic and the "great resignation," employers in North America often struggled to identify employees who possess the skills needed. Conversely, employees often found it difficult to acquire the education and training they needed to access job opportunities. These mismatches impede companies and sectors in Canada, Mexico, and the United States from realizing the potential inherent in the powerful production and commerce networks that their countries have been building since the early 1990s. During the recovery from the pandemic, including the so-called "great resignation," skills gaps and shortages, mostly in digital skills, have reemerged as a central challenge for the region. If the region is to cope with accelerating technological changes, adapt to shifting demographics, and create buffers against unexpected shocks, North American leaders should formulate and invest in a *North America workforce development agenda*.

The North American workplace was changing well before the pandemic. Technology-driven shifts, dubbed "Industry 4.0" or the "Fourth Industrial Revolution," are eliminating, redefining, and creating new classes of jobs across the continent. All three countries, and much of the world, have been forced to reconsider the "future of work." Over the longer term, technological transformations are likely to contribute to the creation of more and better jobs; however, during difficult transitions across many industries, companies, individuals, and governments need to prepare for the shocks that accompany "creative destruction." By joining forces, North Americans can make more and better jobs a reality and ameliorate the disruptive effects of change.[1]

Although technological change already posed significant challenges for the workforce, the COVID-19 pandemic accelerated, exacerbated, and reshaped the ways in which both production and business are conducted. Technological shifts and pandemic-related changes have catalyzed a "double disruption" for workers globally, in the words of the World Economic Forum (WEF).[2] The pandemic forced businesses to reevaluate the role of technology in their workplaces, manage workers remotely, and rapidly expand internet commerce.[3] Relatedly, the pandemic opened serious discussions about the resilience, robustness, and reliability of supply chains across North America and worldwide.[4] Although the North American labor market recovered from the shocks of 2020 – though Mexico continues to suffer high rates of informality – employment returned in different forms and with some significant shifts in job sectors.[5] These transformations have thrown into relief myriad gaps in workforce preparation and added to fears that many jobs will remain unfilled.[6]

To better address these gaps, the United States, Canada, and Mexico need to increase and better target investment in the development, adjustment, and training of their workforces. Too often, the changes and challenges of North America's labor forces have not been approached coherently, either nationally, sectorally or across the North American marketplace. However, given the close connections of the regional economies, workforce needs are interdependent. If North America is to augment its regional competitiveness, it needs a strategy to develop and deploy a 21st century workforce. Much as the Biden administration framed its economic response to the COVID-19 pandemic as a "Build Back Better" approach, a "Build North America Back Better" perspective on workforce development would provide a foundation for future cooperation and prosperity among all three countries.

A North American workforce development agenda, therefore, should focus on four areas: (1) work-based learning; (2) innovative use of transparent credentials; (3) labor market data collection and transparency; and (4) creating collaborative mechanisms to help prepare for changes ahead.[7]

The implementation of this agenda depends on multistakeholder involvement, driven by collaboration among national and subnational governments, businesses, academia and education providers, unions, and nongovernmental organizations (NGOs). The three governments should lead the way, identifying successful partnerships and programs underway across the continent, and looking to expand them. This collaboration might start by responding to the needs of sectors of particular regional importance, such as the automotive sector and emerging “green” energy production. By cooperating on workforce development, North America will strengthen the depth and resilience of shared value chains; bolster the region’s ability to compete in a global marketplace, including against powerhouses like China; and improve conditions for the continent’s workers.

Workforce Development in North America: The Picture Today

North America boasts one of the world’s strongest trading and production networks. The United States, Canada, and Mexico combine for a population of nearly 500 million people and a gross domestic product (GDP) of some US$24 trillion. This includes the world’s largest, tenth-largest, and fifteenth-largest economies, respectively.[8] The United States is the largest trading partner of Mexico and Canada, and those two countries are the United States’ largest export markets. More than 50% of the trade within North America is in intermediate goods, reflecting the fact that the three countries build so much together.[9] Since the early 1990s, trade within North America has grown by a factor of four; mutual investment is massive.

Workforce development challenges have significant consequences for workers, companies, and social stability across the region, too. Even before the COVID-19 pandemic, the forces of technological change and global competition were reshaping North America. North American industry was making or planning investments in innovations that surely will reshape employment, from warehouse automation to delivery robots.[10] These changes will affect many high-employment sectors, suggesting needs for reskilling and upskilling large portions of the labor market, even those workers of mature age. Specific areas of interest will be discussed in greater detail below.

Mind the (Skills) Gap

As noted above, the three North American economies face alarming skills gaps and mismatches. Employers are having an ever-harder time filling positions, with nearly two-thirds of Canadian and Mexican employers reporting difficulties, according to the Manpower Group’s 2021 Talent Shortage Survey.[11] Skills gaps and mismatches are an important reason why. North American employers reported a lack of applicants, the lack of adequate or sufficient technical (“hard”) skills, insufficient human/social (“soft”) skills, and inadequate experience as the main reasons for their difficulty filling positions. These skills gaps and mismatches keep workers from attaining better jobs and harm companies' competitiveness and industrial performance. Together, this is a serious drag on the regional economy.

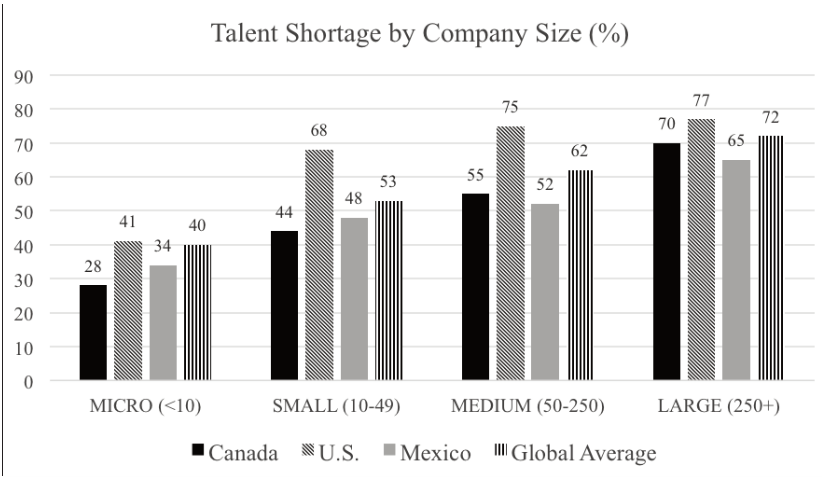
Worse, mismatches are only likely to grow as change in employment accelerates. This is due in part to the increasing pace of automation, which is erasing old categories of work while creating new types of jobs.[12] The Organization for Economic Cooperation and Development (OECD) estimates that 14% of jobs across its member countries could disappear as a result of automation in the next 15 to 20 years, and another 32% are likely to change radically.[13] Core employment skills will change, increasing the demand for both "reskilling" (training for those displaced from jobs) and "upskilling" (training employees whose jobs are evolving).[14] Digital literacy and foundational digital skills will be increasingly important: by 2030 an estimated 77% of jobs in the United States will require the use of technology.[15]

Automation has been changing the nature of work for a long time. But the pandemic has upped the pace. In a study of eight countries in 2021, McKinsey analysts found that the pandemic would increase the number of workers that likely need to switch occupations by 2030.[16] The most affected include low-wage occupations, workers without a college degree, women, ethnic minorities, and younger workers. The impacts of the pandemic were concentrated in areas of the economy where people work in close proximity to each other: a) leisure and travel; b) retail and hospitality; c) computer-based work; and d) indoor production and warehousing. Meanwhile, labor demand is expected to increase further in other sectors: medical care, home support, personal care, transportation of goods, and outdoor production and maintenance As a result, a skilled workforce is needed more than ever.[17] Changes need to focus on the groups mentioned above to close skill and employment gaps; to do so, workers will also need to learn, or at best, improve "soft" and flexible skills to adapt to continuing changes. The pandemic also taught that emotional intelligence and ability to manage uncertainty and stress are needed.

Notably, these challenges and talent shortages are prevalent for all three North American countries, and they affect businesses of all sizes to varying degrees (Figure 1). The figures suggest that in all three countries—much like the global average—larger companies face more difficulty filling jobs. Of course, these companies are often the most regionally and globally integrated enterprises in North America.

In later sections of the chapter, we will explore solutions for these labor-market shortages and mismatches. But it is worth noting that a mix of strategies will be needed, precisely because the challenges regarding employment and skills are so diverse. For example, the OECD estimates

Figure 1 Talent Shortage by Company Size



Source: Manpower Group, 2019 Talent Shortage Survey.

that 10.2% of U.S. workers are in occupations with high risk of automation and are therefore in need of "moderate training." An additional 2.3% are in need of "important training" to avoid the risk of losing their jobs because of automation.[18] Likewise, about 8.5% of Canadian workers are in need of "moderate training" and 3.2% need "important training."[19] The OECD does not provide similar data for Mexico, but finds that the country ranks at the bottom 20% on most indicators of skills development.[20] Automation will hit sectors very differently: a Brookings study of automation risks in the United States suggests that while professional services and education have more limited potential for employment replacement by automation, nearly three-quarters of employee tasks in accommodation and food services and nearly 60% in manufacturing, transportation and warehousing could face automation.[21]

How to adapt? As new technological advances are expected to modify classes of jobs for which workers are being trained today, it will be essential to develop this culture of learning and innovation throughout a worker's life. Both "hard," or technical, skills and "soft" or human and social skills will be crucial to prepare workers for the future of work in "Industry 4.0."[22] Developing a workforce culture of learning and innovation is essential for success.[23] The World Economic Forum, for example, highlights "soft" skills that can be applied and adapted in a changing economy as the top skills. These include analytical thinking, active learning, creativity, problem-solving, leadership, and emotional intelligence alongside more technical, technological skills.[24] So, too, is incorporating a greater understanding of technology into workforce skill requirements.[25] Businesses are recognizing some emerging workforce needs and building them into their planning: 74% of companies surveyed by the WEF reported that talent availability will be the primary factor in determining the locations for new investments.[26] To win those investments, then, North America needs to make workforce development a priority.

That suggests just how important skills development will be for the development of the North American economy. Responding to skills gaps and preparing workers for technological change demands concerted action by North American governments, the private sector, and educational institutions. Although leading companies in the United States, Canada, and Mexico are adopting new technologies at comparable rates, public-private-academic collaborative efforts on training and workforce development still fall short.[27] Workforce resiliency should be a measure of its ability to adapt under varying and uncertain economic conditions. The United States, Canada, and Mexico will need agile and resilient workforces with public and private educational and training systems that better support current workers and prepare students for careers of the future. If no steps are taken in this direction, North America will undoubtedly face the social and political repercussions of displacement and unemployment.

Job Displacement: Trade and Technology

In recent years, U.S. political discourse has featured frequent argument that trade agreements—in particular, trade within North America—cause job losses. In specific cases, it is sometimes pointed out that trade has caused jobs to move between countries, as well as within the United States. The shift away from manufacturing employment goes beyond North America, in fact: across the OECD's membership, employment in the manufacturing sector declined by 20% over the past two decades; in contrast, services jobs grew by 27%.[28] Though trade is often a political target, serious studies suggest that productivity improvements and new technology, as well as trade from China, have been much greater drivers of these manufacturing job losses.[29] A Ball State University study in 2017 found that more than 87% of manufacturing job losses from 2000 to 2010 could be attributed to productivity improvements rather than increased trade and globalization.[30]

Whatever the causes, there is no doubt that too many workers and communities have been left behind in recent years. Programs instituted to help, such as the U.S. Trade Adjustment Assistance, have not produced the desired results.[31] More job displacement is likely just over the horizon, with negative effects on unemployment concentrated in the same areas of the United States that suffered job losses in the first decade of this century. The pandemic appears to have added to these risks; a study of European economies suggests overlaps between pandemic-related job losses and the sectors most at risk of automation.[32] Similar trends are likely to hold in North America, as the three economies struggle to emerge from the downturn sparked by the global pandemic.[33] Previous levels of assistance have been inadequate, and unless actions are taken in "at-risk" regions and sectors to mitigate the likely job displacement, the effects on U.S. society will be dire.[34]

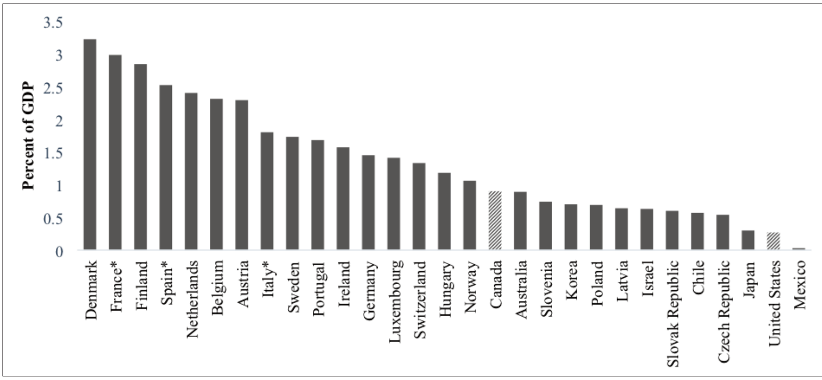
These changes are likely to be equally intense in Mexico, with two-thirds of Mexican workers employed in sectors with high risks of automation, according to a 2018 report from Mexico's central bank.[35] Using the probabilities of automation for different types of occupations calculated for the United States, the Banco de México classified the risk of automation for different occupations in Mexico and developed three risk categories: (1) high risk, with a probability greater than 66%; (2) medium risk, with probability between 33% and 66%; and (3) low risk, with probability less than 33%. The sectors most likely to see jobs replaced by automation include the agricultural sector, hospitality and food services, construction, manufacturing, and financial services. Moreover, these occupations correspond to where employees often have lower levels of schooling, thus limiting their ability to adapt to the risks of automation. Other studies estimate that Mexico could lose some 2.7 million manufacturing jobs by 2030.[36] There is a strong geographic element, too, with the highest risk of automation concentrated in the Mexican states with the highest rates of economic and social inequality, including Chiapas, Guerrero, Oaxaca, Puebla, and Yucatán.[37] Except Yucatán, all other states have historically been a source of migrants to the U.S.

The risks are clear, and Mexican analysts have called for greater investment, to adapt best practices implemented in other countries, and to improve middle and higher education.[38] So far, however, these calls have not been reflected in Mexican government spending.[39]

Insufficient Workforce Development Budgets

Indeed, insufficient funding of workforce development is a region-wide concern. According to the OECD, North American countries trail other developed countries in such investment (Figure 2). Even though U.S. investment in skills already lagged most developed economies, the U.S. Congress has cut funds for job training grants by 40% since 2001.[40] Similarly, the three countries give middling to poor showings in estimates of

Figure 2 Total Public Expenditure on Labor Market Programs as a Percentage of Gross Domestic Product (GDP), 2016



Source: OECD Stats, 2019, http://stats.oecd.org//Index.aspx?QueryId=8540.

Note: *Only 2015 data available. The information in this graph is based on OECD measures of total public spending on labor market programs include training, employment incentives, sheltered and supported employment and rehabilitation, direct job creation, start-up incentives, out-of-work income, maintenance and support, and early retirement.

automation readiness. Out of 25 countries assessed, the Economist Intelligence Unit ranks Canada 5th, the United States 9th, and Mexico 23rd.[41] The best-ranked countries provide significant support for technology innovation and strategies to address the workforce effects of automation. But there are few policies in place today to addresses the challenges of artificial intelligence and robotics-based automation. Such policies should include educational aspects that incorporate multiple stakeholders, and which explicitly address the impact of automation and the need for vocational training and lifelong learning.

Although the rankings indicate the need for improvement in all three North American economies, they make clear that much deeper change is warranted in Mexico. Mexico's challenges mostly involve the development and support of a culture of innovation and improvements to its labor market. Regarding fomenting a culture of innovation, Mexico's research and innovation environment, infrastructure, and ethics and safety policies urgently need to be improved. In the labor market space, vocational training and linkages between educational institutions and economic sectors should be expanded. In contrast, according to this study, Canada needs to fine-tune policies to finance and support innovation, to facilitate workplace transitions, and to increase options for developing technical skills. The United States faces its largest challenges in the realm of education (early childhood, STEM [science, technology, engineering, mathematics], teacher training and curricular innovation), vocational training, and university transition to workplace in labor market. Policies must address education gaps among U.S. workers, particularly digital skills training.[42] Advocacy groups are focusing on "digital literacy," noting that nearly one in three workers lack foundational skills in this area.[43]

Box 1 National Workforce Development Agenda in Canada

Canada's direct investments in workforce development include scholarships and fellowships, research grants, wage subsidies, entrepreneurial support programs, and training benefits for mid-career workers. Examples of programs to incentivize private sector investments in people, skills development, and new jobs include the Innovation "Superclusters" Initiatives, a Strategic Investment Fund, and the Industrial Technology Benefits Policy.

Canada explicitly recognizes in its policies the need for collaboration and communication among stakeholders from all sectors to address workforce challenges. In 2018, the Canadian government created six Economic Strategy Tables, composed of industry CEOs, to investigate growth challenges within their sectors.[44] The Future Skills Centre, Council and Office, launched in 2019, is a multistakeholder undertaking to identify emerging skill demands; develop, test, and evaluate new approaches to skills development; and share results and best practices. The 2019 Canadian federal budget announced the creation of the Canada Training Benefit, which will help mid-career workers access upskilling opportunities, secure income support during training, and offer job protection while on training leave.[45] Canadian workforce development specialists highlight the need to measure and examine results.[46]

Canada's federal budget for fiscal year 2020/2021 provided CA$922 million to help employers train workers and address local labor market needs through Workforce Development Agreements. Additionally, it offers nearly CA$2.5 billion through Labor Market Development Agreements to support employers with employment insurance-funded skills training and other supports to help workers prepare for and find quality jobs. Lastly, it strives to support access to skilled trades by providing grants to nearly 73,100 Canadians through the Apprenticeship Grants Program.[47] The authors have not seen evaluations for the programs' effectiveness but note the impressive amount of funds being invested.

Box 2 National Workforce Development Agenda in Mexico

In 2019, the president of Mexico and the secretary of labor and social welfare launched one of the largest apprenticeship/mentoring programs in the world, called "Youth Building the Future" (Jóvenes Construyendo Futuro).[48] The program's objective is to increase productivity levels and economic growth by increasing job and training opportunities for 2.3 million young Mexicans aged 18 to 29 who are neither studying nor employed.[49] This mentorship program aims to train young people for up to one year with relevant work skills and link them to the private, not-for-profit, and public sectors. This initiative gives priority to applicants who live in marginalized areas, with high rates of violence and with a predominantly indigenous population.[50] Young people who join this program receive a monthly stipend of 3,600 Mexican pesos (around US$180) and health insurance during their participation in the program. At the end of the training/mentorship year, young people will receive a certificate that describes the training received and the skills developed during the mentorship program, and then will be incorporated into the labor market. National Employment Service will monitor the program.[51]

Experts stress the need to see results, including the measured skills and competencies obtained, the development of recognized certificates, and the onward employment record. They also are concerned about the budget cuts being proposed for the program. Moreover, two limitations of this program must be noted. First, Mexicans Against Corruption (Mexicanos Contra la Corrupción), an independent nongovernmental organization, as well as others, have identified potential "irregularities" in the enrollment patterns of the program.[52] Second, the program is not aimed at preparing young workers for jobs of the future, but rather for the standard jobs of today. The authors have not yet seen an evaluation of the program's effectiveness.

Box 3 National Workforce Development Agenda in the United States During the Trump and Biden Administrations

Workforce development has been an announced priority for both the current and previous U.S. presidential administration. President Donald Trump's administration established in July 2018 the President's National Council for the American Worker.[53] The scope of the Council's mandate encompassed key issues regarding skills, competencies and training.[54] The Council's working groups provided recommendations in September 2019, including informing workers and students of training initiatives and calling for increasing data transparency.[55] The Trump Administration asked companies throughout the country to sign a "Pledge to America's Workers." Over 450 companies and associations committed to create some 16 million new education and training opportunities over the next five years.[56] The U.S. Administration said it aimed to facilitate the creation of at least 6.5 million training opportunities for American workers from high-school age to near-retirement, although the results are not clear.

In March 2021, President Biden proposed workforce investments as part of his American Jobs Plan, including a combined $48 billion in American workforce development infrastructure and worker protection. Biden's proposals include scaling up work-based learning programs with a focus on building a diverse workforce, through opportunities like registered apprenticeships, pre-apprenticeship programs and other labor-management training programs. The proposals discuss pathways for diverse workers to access training and career opportunities. The proposals also call for new investments in middle and high schools to connect underrepresented students to STEM and in-demand sectors. They also include significant investment in community college partnerships to deliver jobs training programs based on in-demand skills.[57] As of mid-2022, some new training opportunities are flowing from the US infrastructure law but much of the agenda remains to be turned into law.[58]

A Proposal for Workforce Development in North America

With those challenges and needs in mind, we offer a proposal for workforce development in the context of the North American regional economy. A regional approach makes sense because North America's economies share workforce challenges – even if these challenges look a bit different in each country. A collaborative approach is necessary especially due to the commercial and economic integration of the three economies.[59] Massive cross-border production chains and trade networks have positioned the region as one of the most competitive in the world, helping it build products together.[60] Conversely, skills gaps and mismatches in one part of the region harm economic and industrial performance elsewhere, curtailing the region's competitiveness. The proposal is also based on the long-standing relationships among Mexican, Canadian and U.S. universities and community colleges built over decades.

So far, the three countries have implemented different strategies for developing their workforces (see Boxes 1 to 3). In addition, a great deal of activity related to workforce development occurs at the subnational and local levels. Success stories exist across North America—training for a Siemens plant in Charlotte, NC., multi-stakeholder cooperation in Querétaro's aeronautics hub, and a multifaceted "phased action plan" in British Columbia are just some of the good-news stories. Nevertheless, it is notable that the very strategies that have been identified as critical, including vocational training and transition to workplace, have not yet been granted prominent roles in national and regional policy efforts.

Simply implementing these kinds of programs is not enough, however. The three North American countries must also work to ensure that the public and stakeholders are aware of the programs' existence and comprehend the benefits that participation creates for students, workers, and industry. They also need to build in careful examination of results.[61] To do so, the United States, Mexico, and Canada should establish mechanisms to implement trilateral innovation strategies aimed at improving workforce development and formalize pathways to exchange lessons learned. Subnational, national, and regional policies need to be synchronized, with the cooperation of government, private sector, and educators at all levels. In the following section, we will highlight the need to develop regional/sectoral strategies—but importantly, these should build from successful local examples. We discuss these in relation to four priority issues: apprenticeships, credentials, data collection, and best practices.

Priorities for Action

The USMCA, especially its Committee on Competitiveness, offer new mechanisms to start building workforce-development cooperation. Although the USMCA negotiations did not address workforce development directly, the chapter on labor (chapter 23) specifically calls for sharing of best practices and developing cooperative activities, including on apprenticeships.[62] The competitiveness chapter (chapter 26) outlines the parties' shared interest in strengthening regional economic growth and calls for the establishment of a Committee on Competitiveness, which could encompass the multisector, multistakeholder dialogue on workforce development.[63] Through these avenues, all three USMCA countries can address the issues surrounding the future of work and of North America's competitiveness. North America would benefit greatly from a public-private-academic process where governments (at all levels), the private sector, unions, educational institutions, and others could explore best practices on workforce development. Several developments underscore this promise, notably the first meeting of the Competitiveness Committee agreed in December 2021, which agreed to pursue workforce issues, and the US-Mexico High Level Economic Dialogue launched in September 2021.[64]

Issue 1. Expand Apprenticeships, Work-Based Learning and Technical Education

Work-based learning (WBL) or work-integrated learning programs encompass a wide range of models. Apprenticeships are a well-known example. The mix of academic instruction and on-the-job learning equips individuals with relevant capabilities to meet the demands of the labor market and provides businesses with the trained employees they need. These types of learning programs have positive impacts on the economy, facilitating the transition from school to the labor market, fostering productivity and higher wages, and encouraging workers to seek further education.[65] WBL also helps to fulfill the mission of educational institutions by being close to and relevant for improved quality of life and enhanced opportunities in their communities.

WBL approaches such as apprenticeship programs can address skills gaps by immediately placing workers in unfilled jobs, and the companies offering the apprenticeships can adjust the training to fit evolving needs.[66] WBL also provides a career path by offering workers paying jobs, certifications, and marketable skills.[67] However, apprenticeships and other WBL initiatives will need to evolve with the pace of technological change and workplace needs. The OECD recommends that its member countries move away from front-loaded education systems to a model where skills are continuously updated to match changing demand.[68] Each year of postsecondary education that a worker receives leads to an increase in per capita income of 4 to 7%.[69] Despite the benefits of WBL programs, negative stereotypes persist regarding vocational education and manufacturing careers.[70] Improving public appreciation of the importance of technical and technological education appears to be an important agenda item for the new Committee on Competitiveness.

Great needs remain. That is especially true given that significant numbers of employees—as high as a quarter of Canadian, Mexican, and U.S. workers—could need a year or more of additional skills training.[71] And workers want such upskilling, polling suggests.[72] While many companies have not yet accepted the value proposition of mid-career on-the-job training,[73] this may be changing in today's dynamic post-pandemic labor market. Surveys suggest that many employers are expanding reskilling and upskilling opportunities.[74] This should help them internally deploy many workers likely to be displaced by technological automation and augmentation (Figure 15).[75] However, small and mid-sized businesses often find the cost of upskilling and reskilling programs to be prohibitive. Industry or sector partnerships with existing workforce stakeholders, especially government, can help smaller organizations to reap more benefits from training programs.[76] But access to public funds for the efforts seems limited, with only 21% of businesses reporting use of public funds to support their reskilling and upskilling efforts.[77] Public funding, conditioned to businesses performance improvements, could be a solution.

Bridging this gap is crucial for long-term North American competitiveness. The federal governments of Canada, Mexico, and the United States should agree to create shared standards for the following:

1. *Define apprenticeships and other major types of work-based learning (WBL), as well as minimum criteria and quality standards.*[78] Agreement should leave flexibility to adapt to national, regional, and local demands, while incorporating economic and technological changes and providing common professional skills attributes.

2. *Agree on broad guidelines assigning roles and responsibilities to governments, industry, and intermediaries regarding the development, implementation, and funding of apprenticeships and other WBL.*

3. *Create a trinational career and technical education and apprenticeship task force to identify best practices to promote apprenticeships and other WBL programs.*

4. *Agree on elements of a marketing strategy to increase public awareness of the advantages of WBL and change negative public misperceptions of such programs.*

5. *Build trinational spaces to foster ongoing dialogue between regional stakeholders to share best practices on WBL and training, and to strengthen public-private partnerships.* These spaces should include creating industry-academia dialogue platforms within and across countries that become part of the workforce ecosystem. Such platforms should also be implemented at the local and subnational level.

6. *Agree among the three countries on ways to incentivize and support companies, including small and mid-sized enterprises, to develop training and learning programs for reskilling and upskilling their workforces.* Such programs should emphasize training and learning about exponential technologies, such as Internet of Things, artificial intelligence, blockchain, intelligent transportation systems technologies, self-learning systems, and sensors. Best practices in government programs and practices should be identified and include goals for incorporating disadvantaged populations.

Issue 2. Address the Recognition, Portability, and Transparency of Credentials

Professional credentials provide a clear sense of what skills a worker has, facilitating labor market mobility, reducing selection costs for firms, and leading to higher wages and quality of workers. Despite those possible benefits, the current, fragmented system for credentials across North America forms a barrier for workers of many skills levels.[79] This is a major challenge across national borders, where various nontransferable credentials leave skilled and well-educated individuals underemployed.[80] Higher education and employment services are disjointed across the continent and too often are disconnected from employer and industry needs.

Given the range of governmental jurisdictions and different regional and sectorial demands, addressing credentials is a complex task. The Mexican National Competencies Framework and the Canadian Red Seal Program are examples of national efforts to improve coordination and bring transparency.[81] Although several efforts have been made to develop such a system in the United States, none has been widely accepted. Adding to those national-level challenges, differences in education and training systems across the region make it difficult to compare qualifications and assess skills of workers holding credentials from another North American country. Making credentials comparable, transferable, stackable, and more transparent would support North American competitiveness and help to overcome skills gaps and mismatches. More efforts to address these are already under way.[82] Part of this task is getting employers to recognize education and experience from neighboring countries. The Pan-Canadian Framework for the Assessment and Recognition of Foreign Qualifications, for example, seeks to improve assessment and recognition of foreign qualifications so people can effectively use their skills in the Canadian labor market.[83] These types of changes are needed as education is transformed to encourage people to continuously update skills during their working lives.[84] The authors recommend the three North American countries work to build agreement on the following:

1. *Develop a common language about credentials and competencies to facilitate understanding, quality, transferability, recognition, and the ability to stack or accumulate them.* High-quality credentials should be industry-defined and competency-based to ensure they meet the needs of the labor market, are accepted, and used widely, and are comparable regionally.

2. *Develop or strengthen national competency frameworks and align them to the trinational common language of credentials and competencies.* This process should involve revising and updating frameworks periodically

to meet evolving labor market needs, as well as promoting the use of competency frameworks in hiring processes. These frameworks must take account of ongoing innovations such as micro-credentials and digital badges.[85]

3. *Develop guidelines to assess and validate informal learning and professional experience*, and to identify skills associated to such experience. Share and emulate best practices.

Issue 3. Improve Labor Market Data Collection and Transparency

One of the biggest challenges is that neither public authorities nor the private sector and academia collect and share data on credentials, skills, workforce trends and training effectiveness. Improved data collection can allow people to make better-informed career decisions and can bring valuable transparency to the labor market.[86] The speed of change in the economy increasingly requires the development of real-time labor market information platforms, databases of in-demand skills and regular evaluation of skills programs.[87]

To advance this transparency, regional leaders should create a North American Workforce Observatory (NAWO) as a tool for continued review and evaluation of the needs (quantitative and qualitative) of the North American workforce. NAWO would aid public policy makers, industry, and education institutions in making decisions about labor development, reskilling, and training. It also would provide relevant information for students and workers in the region. The three governments have already taken some steps in the direction. The U.S. Department of Labor's O*Net compiles training and development opportunities. The Canadian Education and Labour Market Longitudinal Platform facilitates transitions into the workforce, while the Labour Market Information Council strives to provide timely, reliable, and accessible employment information. Mexico's new "Portal del Empleo" features job information, training, and counseling.[88]

Deepened cooperation on data collection related to skills, jobs, education, and training across the continent and to strategic sectors could bring substantial benefits. The following elements should be agreed upon trilaterally through a collaborative process:

1. *Develop norms to collect real-time labor market data and information in a consistent and homogeneous way so it is comparable across countries and across the region as well as easily accessible.* The data collected could include a list of in-demand skills and competencies, longitudinal data to measure performance, and the return on investment of education and training programs and credentials, perhaps including information that addresses the development of hard (technical) and soft (employability) skills.

2. *Establish a North American Workforce Observatory (NAWO)* aimed at developing a trinational online platform (linked to national platforms) to serve as a hub for real-time labor market data in the three countries, and for best practices from the public and private sectors.

3. *Develop guidelines to make the trinational NAWO platform and data tools openly available to stakeholders*, while allowing space for the development of private sector initiatives.

4. *Develop guidelines for metrics to evaluate workforce development programs and propose improvements*.

Issue 4. Identify Best Practices to Approach/Prepare for "The Fourth Industrial Revolution"

The already rapid pace of change in the economy is likely to increase further; the result will be a complex process of massive job creation, destruction, and transformation of workplaces and work/lifestyles that has been dubbed Industry 4.0 or the "Fourth Industrial Revolution."[89] The pandemic has added new lessons and additional use of technology as reflected in more remote work and job shifts to new sectors.

Broadly speaking, new technology can allow businesses and individuals to achieve higher levels of productivity, creativity, and economic growth, but it can also displace many workers and spark serious economic and social disruption. According to two studies of recent recessions, employers shed less-skilled workers and replaced them with technology and higher-skilled workers.[90] This trend posed society-wide public policy problems for governments faced with higher unemployment and for businesses seeking workers with the skills needed. The pandemic brought similar and new challenges, including more use of technology in production and in supply chains, more use of the internet for commerce, more cross-border data flows to help manage business, more management of different processes from afar, more provision of services via internet, and more need for new skills among workers.

The good news is that businesses have strong incentives to develop models that fully integrate new technology with investment in human capital.[91] Companies that successfully integrate technology and human capital could increase profits by 38% and employment by 10%, on the average, by 2022, analysis by Accenture suggests. Despite that, relatively few CEOs plan to invest in training programs to retool workers.[92] Specialists stress that quality training fosters higher productivity and loyalty, reducing turnover.[93] To assure potential gains, employers should invest more in agile job training programs.

These needs also underscore the vital importance of partnerships with educational institutions. Private, public, and academic sector leadership is needed to develop models of how to adapt to the pace of change. Without those adaptations, all three countries will face serious problems.[94] Such models need to include developing a 21st-century educational system to keep up with the demands of the labor market, a particular weakness for Mexico.[95] If Mexico is to establish an education-research-innovation-creativity system,[96] the policies and strategies in the Mexican Ministry of Public Education and the Mexican National Council for Science and Technology must be better aligned.[97] Across the region, much more emphasis is needed on providing educators with relevant training, tools, and skills to adapt their teaching and learning methods.

Coming out of the pandemic, equity, recovery and resilience must be priorities for governments, especially because lower-skilled workers and traditionally disadvantaged workers may well face even greater barriers. Workforce development needs to be better incorporated into economic and industrial policies going forward with better public-private-academic collaboration. Positive lessons from the pandemic should be built upon: distance work could be expanded across the continent when suitable; distance education/training should be continued and expanded. These successful models should be identified as “best practices” and scaled up.[98]

The authors suggest trilateral initiatives in the following areas:

1. Identify successful examples of private and public collaboration, including showing how companies have been incentivized to invest in worker reskilling and upskilling, to provide mid-career training and learning opportunities, and to develop agile programs to ease transitions and improve the quality of work transformations.

2. Agree on approaches and strategies to encourage companies to collaborate with educational institutions, trade unions, sub-federal governments, and others to better align curricula with the evolving labor market needs, better connect graduates to the labor market, and foster the modernization of educational spaces. The North American Workforce Observatory could provide relevant information and trend analysis to support this work.

   a. *Work to strengthen STEM education* as a strategic tool for creating a strong basis of skills for the development of strategic technical workforce skills.
   b. *Emphasize training and learning about exponential technologies*, deemed critical for improving North American competitiveness.
   c. *Recognize the social value of businesses that generate entry-level jobs* at scale and at multiple points along the skill curve, as well as of educational institutions that develop flexible, well-targeted curriculums.
   d. *Foster curricula flexibility by allowing students to design their own studies based on their own expectations*. Modernized curricula should also enable students to attain intermedi-

ate skill/competence certificates during college and university studies. Such intermediate certificates could be aligned with apprenticeship programs.

e. *Develop gender-oriented programs aimed at incorporating more women into the workforce as well as programs aimed at incorporating other traditionally underrepresented sectors of the population.*

3. Build trinational spaces to share best practices on “Industry 4.0” and lessons from the pandemic; on partnerships that link the priorities of business, academic, and government actors. Look for ways to maintain and expand models of remote or distance work that can work well across the continent and its value chains.

4. Identify best practices for small and mid-sized enterprises to keep up with technological changes and talent creation.

5. Establish trilateral research and innovation projects in strategic economic areas through grants and scholarships. Invest in evaluation to assess ongoing programs, future trends and prepare for future skills needs.[99]

a. *Align competing frameworks* to help foster regional development, including across borders, through cluster-based innovation initiatives and connect them with the education sector to strengthen the chain of value.

b. *Establish trilateral mechanisms to support the development and implementation of new technologies* to increase trading opportunities and improve workforce competitiveness. Similarly, create trilateral collaboration that can identify, highlight and share emerging skills needs.

Implementing the North American Agenda

The North American Workforce Development Agenda should be a collaborative effort that includes North American governments, private sector, educational institutions, unions, and nongovernmental organizations. The agenda should provide mechanisms to convene both federal and subnational governments to collaborate and innovate on best practices. Many of the successes and innovative approaches are being forged at local levels, and this culture of creativity needs to be encouraged across North America and is essential for workforce programs to succeed.[100] Even as President Joe Biden prioritizes “building back better” at home, working collaboratively with the United States’ immediate neighbors and largest economic partners will help assure prosperity and global competitiveness.

To guide future progress, the three national governments should establish an overarching senior level trilateral taskforce with substantial private sector and academic participation. The taskforce would name public/private/academic and federal/sub-federal working groups to develop specific proposals in the four areas described above and ensure that programs are effectively communicated to the public to reach intended participants. As the process develops, specialized working groups might be formed, for example, on digital skills training or use of community and technical colleges. The three governments should also identify promising programs and models that should be scaled up early as priority best practices.

The trinational task force and working groups should be connected to the ongoing work of USMCA's competitiveness committee. They also should operate as part of a broader competitiveness agenda for North America established at the 2021 North American Leaders' Summit.[101]

The bottom line is that North America's workers and businesses will benefit greatly from pursuing an active dialogue and enhanced cooperation on workforce development to improve the economic, social, and political well-being of the United States, Mexico, and Canada.

North American Workforce Development Agenda 2.0

Elements that should be agreed among the three countries in a public-private multistakeholder process

Issue 1. Investing in Apprenticeships and Other Work-based Learning and Education

1. Define apprenticeships and other major types of work-based learning (WBL), as well as minimum criteria and quality standards.
2. Agree on broad guidelines assigning roles and responsibilities to governments, industry, and intermediaries regarding the development, implementation, and funding of apprenticeships and other WBL.
3. Create a trinational Career and Technical Education (CTE) and apprenticeship taskforce to identify best practices in strategies to promote apprenticeships and other WBL programs.
4. Agree on elements of a marketing strategy to increase public awareness of the advantages of WBL in order to change negative public misperceptions of such programs.
5. Build spaces to foster ongoing dialogue between regional stakeholders in order to share best practices on WBL and training, and to strengthen public-private partnerships.
6. Agree among the three countries on ways to incentivize and support companies, including small and mid-sized enterprises, to develop training and learning programs for reskilling and upskilling their workforces.

Issue 2. Addressing Credentials and Related Issues

1. Develop a common language about credentials and competencies to facilitate understanding, quality, transferability, and recognition.
2. Develop or strengthen national competency frameworks and align them to a shared trinational common language regarding credentials and competencies.

3. Develop guidelines to assess and validate informal learning and professional experience, and to identify skills associated to such experience. Share and emulate best practices across the continent.

Issue 3. Improving Labor Market Data Collection and Transparency

1. Develop norms to collect real-time labor market data and information in a consistent and homogeneous way so it is comparable across countries and across the region as well as easily accessible.
2. Establish a North American Workforce Observatory (NAWO) aimed at developing a trinational online platform (linked to national platforms) to serve as a hub for real-time labor market data in the three countries, and for best practices from the public and private sectors.
3. Develop guidelines to make the trinational NAWO platform and data tools openly available to stakeholders, while allowing space for the development of private sector initiatives.

Issue 4. Learning Best Practices for "The Fourth Industrial Revolution" and the Future of Work

1. Identify successful examples of private and public collaboration, with emphasis on highlighting promising steps and tools to incentivize companies to invest in worker reskilling and upskilling, to provide mid-career training and learning opportunities, and to develop agile training and learning programs to ease the transition and improve the quality of work transformations.
2. Agree on approaches and strategies to encourage companies to collaborate with educational institutions, trade unions, and other interested parties to better align curricula with the evolving labor market needs, better connect graduates to the labor market, foster the modernization of educational spaces, and promote larger participation of women and other underrepresented populations in the workforce.
3. Build trinational spaces to share best practices from pandemic work experiences, the implementation of Industry 4.0 and existing partnerships to better link the priorities of business, academic, and government actors.
4. Identify best practices for small and mid-sized enterprises to keep up with technological changes and talent creation.
5. Establish trilateral research and innovation projects in strategic economic areas through grants and scholarships. Invest in evaluation to assess future trends and prepare for future skills needs.

Endnotes

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8

Higher Education Collaboration in North America: A Review of the Past and a Potential Agenda for the Future

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When the North American Free Trade Agreement (NAFTA) came to fruition in the early 1990s, there were high hopes and expectations for what this emerging economic bloc could achieve. However, NAFTA's heavy focus on trade created little institutional space for regional harmonization and cooperation on issues like higher education. Today, the agenda for North American cooperation remains heavily economic, as the negotiations and outcome of the U.S.-Mexico-Canada Agreement (USMCA) demonstrated. However, to ensure that North America remains economically competitive—and to improve the wellbeing of the region's inhabitants—expanding the regional agenda beyond trade is crucial. In that light, one item noted at the 2021 North American Leaders Summit was precisely the need for a renewed focus on educational exchange, research collaboration, and broad-based partnerships. The 2022 NALS provides an opportunity to chart a roadmap for making higher education a key element of North America's competitiveness as a high-skilled and high-value economy.

To do so, we should reflect on the challenges and successes of higher educational cooperation in North America during the past three decades. In this paper, "higher education" is meant to also include research and innovation activities developed in higher education institutions. Although NAFTA was not the vehicle for further cooperation on higher education, colleges and universities across Canada, Mexico, and the United States did embrace the opportunity and enthusiastically engaged in conversations that prompted trilateral collaboration. In the decades since NAFTA, the importance of higher education and basic research for regional trade and competitiveness has grown increasingly clear. We argue, therefore, that higher education needs to take on a more prominent role as an area of regional cooperation and as a driver for future North American integration. There is an urgent need to offer international experiences, develop shared regional experience, and enhance regional educational, research and innovation capacities.

To help explain why higher education merits this attention, the chapter first outlines the emergence of collaboration among higher education institutions after NAFTA, as well as key developments during the last three decades. We then survey the current environment and highlight key needs and opportunities for growth. The development of regional collaboration in higher education has been uneven, with scarce high-level attention in recent years; however, past and current collaborations show the potential for greater benefits. Finally, we suggest recommendations for how collaboration can be enhanced through the leadership of universities, the expansion of student exchange, through national and regional policymakers, and via engagement with the private sectors.

The First Twenty Years of Educational Collaboration, 1993–2013

To understand the historical foundations of trilateral educational cooperation in North America, it is important to look at the early statements and programs that formed the basis of cross-country engagement. These declarations established arenas for collaboration and triggered key programs and initiatives involving all three countries.[1] These initiatives were largely aspirational; yet understanding the problems and limitations they have faced helps us plan a path forward for North American cooperation in higher education.

The Foundational Statements

In September 1992, a group of educators met at the Wingspread Center in Racine, Wisconsin, to discuss higher education collaboration in North America. The conversations held at this conference resulted in the development of the Wingspread Statement on trilateral cooperation in higher education. The main objectives of the statement were to develop a North American dimension in higher education, with a focus on collaboration and information exchange. These discussions emphasized greater mobility of students, academics, and related professionals. They also sought improved relationships among higher education institutions, government, business, and other organizations that have a stake in the quality of higher education. Notably, current and emerging information management and transmission technologies were highlighted as a means of supporting the objectives of the Wingspread Statement.

The Wingspread discussions spurred two immediate actions. First, North American higher education institutions made efforts to develop an inventory of existing resources and partnerships that could provide a basis for expanding trilateral cooperation in higher education. Participants in these efforts included the Institute of International Education (IIE) in the United States, the Asociación Nacional de Universidades e Instituciones de Educación Superior (ANUIES) in Mexico, and the Association of Universities and Colleges of Canada (AUCC). In addition, an eighteen-member Trilateral Task Force on North American higher education institutions was developed, with six representatives from each country.

A year later, education leaders convened at the Vancouver Symposium in September 1993. The resulting Vancouver Communiqué summarized the existing linkages between universities in North America and made recommendations to coordinate and enhance trilateral cooperation. The communiqué also recommended the expansion of North American studies programs at universities. Reports catalyzed by these meetings gave an initial picture of collaboration in North America. Connections among North American universities were uneven across the region, more often bilateral in nature, and generally the product of individual university actions instead of government or private-sector sponsorship. By 1993, the North American cooperation was as follows:

- In the United States, 109 institutions (3.2%) had linkages with Canadian institutions and 182 (5.3%) with Mexican institutions. Only 56 had links with both Canada and Mexico. Also, most U.S. students participating in exchanges with Canada (67%) and Mexico (90%) were in programs sponsored by their home campus, rather than by the government, nonprofits, or private businesses.
- In Mexico, more than a third of ANUIES member institutions surveyed had linkages with the United States (193) and Canada (22).
- In Canada, close to 40% of AUCC member institutions showed linkages with the United States (68) and Mexico (33).

The Wingspread Statement and the Vancouver Communiqué led to initiatives that promoted collaboration across North America. The Vancouver Symposium recommended creating and expanding programs to enable faculty and administrators from all three countries to meet and develop trilateral higher education collaborative activities, including trilateral exchange, research, and training for students. The communiqué pointed to a need for a trilateral mechanism to examine the mobility, portability, and certification of skills across national borders. These early meetings led to pivotal efforts involving student mobility, including the Regional Academic Mobility Program (RAMP) and the Program on North American Mobility in Higher

Education (NAMHE). Multifaceted institutional cooperation also emerged through the Consortium for North American Higher Education Collaboration (CONAHEC).

In the ensuing years, the North American context underwent important changes with booming economic ties, on the one hand, and heightened attention to security following the 9/11 attacks, on the other. The nature of the region's economic growth highlighted the need for well-educated professionals who could thrive in an integrated regional and global economy. In the higher education sector, collaboration had been lightly institutionalized, with CONAHEC playing an important role in shaping a collaboration agenda. In October 2002, educators meeting at the eighth CONAHEC Conference produced the Calgary Recommendations for North American Higher Education Collaboration. Those at the event saw a need for higher education to take a more aggressive role in offering opportunities to students to gain international experience and expertise, particularly in the North American context. Accordingly, the Calgary Recommendations included a proposal to create a permanent North American trilateral commission to provide sustaining infrastructure, strategic direction, and funding for initiatives that would foster North American higher education collaboration.

Recognizing growing regional economic needs, the recommendations also highlighted educational and professional mobility and recommended a trinational course and program equivalencies, promotion of language acquisition among North American students, and standardization of occupational certifications for quality assurance. Reflecting on the changes in the global security landscape following the September 11th attacks, the conference noted that North American institutions would need to review regional immigration regulations and assess how these regulations might affect student and professional mobility. All of these foundational statements called for adequate financial support to develop electronic databases and clearinghouses to facilitate future knowledge-sharing activities. Although the North American context has continued to evolve, the spirit of these initial recommendations remains relevant for rethinking the role of higher educational collaboration in the region.

Some Key Initiatives

As noted, the Wingspread, Vancouver, and Calgary meetings spurred several major initiatives to promote educational collaboration across North America that shaped the higher educational environment in ensuing years. These focused largely on student mobility and institutional collaboration, driven by the universities themselves.

For student mobility, the major (and perhaps the most long-lasting) initiative involving trilateral collaboration was the North American Mobility in Higher Education Program, referred to as NAMHE in the United States and Canada or PROMESAN (Programa para la Movilidad en la Educación Superior en América del Norte) for Mexico.[2] Administered by the Fund for the Improvement of Postsecondary Education in the United States, Human Resources Development Canada, and the Secretariat of Public Education in Mexico, the program provided grants for up to ten trilateral projects per year. All proposals required at least two partner institutions from each country, creating a common baseline of a consortium of six institutions promoting some form of student mobility. From 1995 to 2004, the program supported 78 consortia involving a total of 512 institutions (176 from the United States, 173 from Canada, and 170 from Mexico). The majority of the consortia focused on business and economics (20.8%), social science and public policy (19.5%), and environmental science (19.5%). During that period, the consortia involved the mobility of over 1,150 students from the three countries, with more than half of those from Mexico.

Another early initiative involved the Regional Academic Mobility Program.[3] Administered by the IIE, the focus of RAMP was to encourage student mobility between NAFTA countries. According to an IIE report, during the first 10 years of the program participants included 17 Canadian, 14 Mexican, and 7 U.S. institutions.

In terms of institutional collaboration, the most lasting initiative has been the Consortium for North American Higher Education Collaboration. CONAHEC was founded in 1994 with the support of the Western Interstate Commission on Higher Education,[4] with the goal of promoting cooperation among institutions from the NAFTA region. CONAHEC has been an essential force in strengthening the trilateral relationship and has held nineteen conferences, including the inaugural one in in Baja California, Mexico. Six of the conferences have been hosted by U.S. institutions, five by Canadian institutions, and seven by Mexican institutions, with one conference cohosted by the United States and Mexico (San Diego and Tijuana). The current membership involves more than sixty institutions from Mexico, thirty from the United States, and ten from Canada. With varying degrees of success, CONAHEC has kept on the agenda the main points proposed by the Wingspread Statement and the Vancouver Communiqué, while at the same time incorporating other important themes as necessary. However, it has not been a consistent site for building trilateral agreements that involve government and private-sector partners.

A Snapshot of Progress and Limitations

While there was undoubtedly progress in higher education collaboration between the pre-NAFTA period and the NAFTA years, the results during the first 20 years were mixed at best. Mobility did increase, particularly for students; all three countries showed greater enthusiasm for institutional cooperation; and colleges and universities considered ways to formalize and provide a more solid structure to internationalization efforts in the region. A positive, if unintended, outcome of this period was that the pursuit of trilateral collaboration in practice expanded bilateral partnerships involving the United States and Canada, Mexico and Canada, and the United States and Mexico.

As NAFTA moved into its third decade, it became clear that numerous issues were still affecting collaboration among higher education institutions. Among these were cultural differences, financial asymmetries, language obstacles, and academic asymmetries.[5] Indeed, just as there are differences across the three countries, there are also differences within each of the countries across states, from north to south and from east to west, and from the major urban areas to rural ones. All of these differences have made it even more difficult to overcome inertia in order to further integration.

The results achieved during the initial period were a tribute to the efforts by the governments of Canada, the United States, and Mexico in terms of grants, as well as individual institutions willing to invest in this new arena for international cooperation. However, as the financial support of one or more of the North American governments dissipated or disappeared, so did the intensity of, and outside interest in, trilateral initiatives. As a result, the more ambitious vision of a North American common space for higher education, as attempted in the European Union, has seen little progress. North American student mobility and, to a lesser degree, collaboration in research and innovation, increased dramatically in the past three decades. Although proposed several times, like during NALS 2014, there has been no overarching project on the scale of the EU's Erasmus or Horizon 2020 to support the trilateral relationship. Distance education (later referred to as online education) gained greater acceptance, but these efforts were mostly ad hoc and had no formal regional dimension.

Two reasons stand out. First, cooperation has been limited by the existence of diverging systems and administrative approaches. Each of the three countries operates its respective education system differently. Mexico's SEP is the main authority of a highly centralized system, whereas in the United States and Canada, states, provinces, and the institutions themselves operate independently. Likewise, cooperation in terms of educational quality assurance has been limited and progress sporadic. For the most part, provincial-based agencies in Canada, regional accrediting agencies in the United States, and the Federal Ministry of Education in Mexico have operated separately in pursuit of their own agendas. A handful of institutions from Canada and Mexico sought and achieved institutional accreditation in the United States, but there has not been an overarching framework.

Numerous conversations regarding regional recognition of professional credentials and the expansion of professional mobility have produced few visible results. Professional mobility has been a marked source of frustration, particularly on the Mexican side, as U.S. states have failed to implement mutual recognition of credentials.

Second, there has been inadequate cooperation between higher education and other stakeholders. Successful regional collaboration—including moving beyond the different approaches mentioned above—requires champions in government and the private sector. Leadership from the top could catalyze the types of changes needed to facilitate educational cooperation. An approach involving only governments or only individual universities will not be successful. Despite their investment in the regional economy and workforce, involvement on the part of business and industry has been limited mostly to a few trilateral grants aimed at making internship placements. More extensive higher education collaboration requires the development of industry-government-academic partnerships. Such partnerships would provide balance and increase the coalition that identifies an interest in advancing educational cooperation.

The Next Ten Years of Educational Collaboration, 2014 and Beyond

NAFTA continued to provide the benefits of an integrated economic region, but the same level of integration was less evident for higher education collaboration in North America. Attention to educational cooperation among colleges and universities in North America has often been bilateral. Often, it has been connected to broader initiatives to enhance student exchange, where there have been notable increases. There have also been important developments in institutional collaboration, though trilateral frameworks have not been predominant.

Developments in Student Mobility

The increase in collaboration in North American higher education has often focused on the expansion of bilateral student mobility. While these efforts are significant, the level of educational exchange and collaboration lags that seen in other regions, such as the European Union. Student mobility in North America has generally increased, though these trends have been uneven. Increases in Mexican mobility to Canada and the United States have been most dramatic, whereas changes in Canadian and U.S. students going elsewhere in North America have been less changed (see Figure 1).

Beyond the numbers, there is an alternative way of looking at the status of student mobility: the percentage of students from North America

Figure 1 North American Student Mobility

North American Student Mobility			
Mobility	**1995**	**2013**	**2017**
Students from Mexico to the United States	9003[1]	14199[6]	16835[6]
Students from Mexico to Canada	167[2]	5370[3]	6920[5]
Students from Canada to the United States	22747[1]	27357[6]	27065[6]
Students from Canada to Mexico	170[2]	226[4]	226[8]
Students from the United States to Mexico	4715[1]	3730[4]	5736[7]
Students from the United States to Canada	573[1]	12065[3]	11350[6]
Total Student Mobility	**37375**	**58931**	**68132**

Reference: **1.** 1996 Open Doors Report On International Education Exchange by IIE. **2.** North American Mobility in Higher Education. 2002. Evaluation Report 1995-1997. **3.** A World of Learning. 2014. Canadian Bureau for International Education. **4.** Maldonado, A. (2017) Patlani: Encuesta mexicana de movilidad internacional estudiantil. ANUIES. **5.** International Students in Canada. 2018. Canadian Bureau for International Education. **6.** https://www.iie.org/Research-and-Insights/Project-Atlas/Explore-Data. **7.** https://www.iie.org/Research-and-Insights/Open-Doors/Data/US-Study-Abroad/Destinations. **8.** http://data.uis.unesco.org/Index.aspx?queryid=172#.

going to each of the partner countries (United States and Mexico to Canada; Canada and Mexico to the United States; and Canada and the United States to Mexico) relative to the total number of foreign students. Indeed, a recent review points out that of 370,893 foreign students in Canada, 4.6% were from North America (United States and Mexico); of 1,078,822 foreign students in the United States, 4.1% were from North America (Canada and Mexico); and of 20,322 foreign students in Mexico, 22.1% were from North America (United States and Canada).[6]

As the traditional way of measuring mobility has focused primarily on fee-paying, year- or semester-long students, it is highly likely that mobility across North America is underrepresented. Shorter term, more flexible arrangements between institutions are mostly overlooked, yet are more highly valued and promoted by developing countries such as Mexico. For example, mobility in the United States (according to the IIE) counts if a student is registered for one or more semesters. Mexican students may be less willing or able to study abroad for one semester, instead preferring to spend a summer in the United States to focus on English language or technical skills. As such, the IIE does not account for this short-term mobility, which likely has affected statistics on higher education mobility. Better accounting for and understanding of this trend should be a priority.

Looking at the source countries for international students in North America suggests an opportunity for further collaboration. According to data from 2018, as Table 1 shows, Mexico does not rank in the top five countries sending students to study abroad in Canada or in the United States. Canada makes it into the top five countries sending students to study in the United States, at fifth place with 26,973 students. For Canada, the United States ranks as the country sending the fifth-most students to study abroad, totaling 12,915 students. In the case of Mexico, only the United States ranks within the top five countries sending students abroad. The United States comes in first place for the country sending students abroad with 4,213 students going to Mexico. The COVID pandemic further affected student mobility. For international students in the United States, an overall 15% reduction was recorded between 2020 and 2021; Canadian and Mexican students decreased 3.3 and 9.5% in the same period.[7]

One way to present the importance for increasing student mobility is by relating it to the volume of exports and imports. For example, although trade with Mexico represents about 11% of total U.S. trade, Mexican students account for only 1.4% of all international students in the United States. U.S. trade with Canada is only a bit higher than with Mexico, but Canadian students double the number of Mexican students in the United States. In contrast, 35% of all international students in the United States come from China, even though U.S. trade with China is less than that with Mexico.

Some of this increase has been the result of concerted national and bilateral efforts to expand student mobility. Under the banner of 100,000 Strong for the Americas, the United States launched an initiative intended to promote collaboration with Latin America in general, and Mexico in particular. Supported by the U.S. government, in partnership with international foundations, companies, and a select group of collaborating countries, this

Table 1 Top Five Sources of International Students

United States		Canada		Mexico	
China	350,734	China	132,345	United States	4,213
India	186,264	India	76,530	Colombia	2,805
South Korea	58,660	South Korea	21,345	France	1,864
Saudi Arabia	61,287	France	20,790	Germany	1,282
Canada	26,973	United States	12,915	Spain	1,231

Source: IIE Center for Academic Mobility Research and Impact, *A World on the Move: Trends in Global Student Mobility,* March 2018.

effort has to date launched 27 competitions and awarded 211 grants involving 385 institutions across 25 countries.[8] The top five countries in terms of awards are Mexico, Colombia, Brazil, Argentina, and Peru. The focus has been primarily on student mobility but with an increasingly targeted approach. Compared to NAFTA-related efforts, this initiative has been very successful in attracting private sector support, with commitments from corporations and foundations such as Exxon Mobil, Santander, Coca-Cola, MetLife, Sempra Energy, Televisa, and Chevron.

The U.S.–Mexico Bilateral Forum on Higher Education, Innovation, and Research (or FOBESII) was created in 2014 to "expand opportunities for educational exchanges, scientific research partnerships, and cross-border innovation to help both countries develop a 21st-century workforce for mutual economic prosperity and sustainable social development." For the first time, FOBESII visibly involved the U.S. and Mexican presidents—Barack Obama and Enrique Peña Nieto at the time—in higher education cooperation. FOBESII has four key pillars: academic mobility, language acquisition, workforce development, and joint research and innovation. Notably, 100,000 Strong and FOBESII are not parallel initiatives; instead, FOBESII is the strategic framework developed by Mexico and the United States to encompass education, research, and innovation. Presidential involvement in FOBESII underscored the importance of executive branch support for higher education initiatives in explaining the initiative's greater successes.[9]

Within the framework of FOBESII, Mexico developed its own Proyecta 100,000 to reinforce bilateral collaboration with the United States. As the counterpart of the American 100,000 Strong strategy, Proyecta 100,000 sought to have 100,000 Mexicans involved in some form of educational mobility to the United States. It also set a goal of attracting 50,000 individuals from the United States to Mexico. On paper, Proyecta 100,000 was even more ambitious than 100,000 Strong, which aimed to send a total of 100,000 U.S. students elsewhere in the Americas, including Mexico. By contrast, Proyecta 100,000 aspired to send 100,000 Mexican students to the United States at one time. Financial constraints on the Mexican government made it impossible to achieve this goal, however, and so the program moderated its aims to increasing the number of Mexican students in the United States by the end of President Peña Nieto's term. In conjunction with this effort, Mexico also launched Proyecta 10,000, specifically intended for collaboration with Canada.

Institutional Collaboration

Some progress also emerged in arenas beyond student mobility, including institutional collaborations (with more than 100 memorandums of understanding), the presence of U.S. institutions in Mexico (through representation offices or setting up full-fledged campuses), and several cross-border research initiatives. The latter included the Mission Foods Texas-Mexico Center and the Cali Baja Center for Resilient Materials and Systems, just to mention few examples.

In concept and spirit, the European Union's expansive collaborations in higher education suggests the possibilities for institutional collaboration, in particular with initiatives such as Erasmus Plus and Horizon 2020.[10] Since the 1990s, more than 10 million students, faculty, and administrators have taken part in Erasmus-funded mobility, overwhelmingly within the European Union but also with the rest of the world. In 2018 alone, the budget was €2.8 billion. In the most recent fiscal year for Horizon 2020, which focuses on research and development, there were appropriations for €1.4 billion to support initiatives around four themes: (1) connecting economic and environmental gains; (2) digitizing and transforming European industry and services; (3) building a low-carbon, climate-resilient future; and (4) boosting the effectiveness of the Security Union.

North America itself provides models for cooperation, albeit at a smaller scale. The University of Texas System and Mexico's National Council of Science and Technology (CONACYT) established ConTex in 2016. This joint initiative supported efforts to enhance academic and research collaborations between Texas and Mexico, to expand cross-border partnerships, and to share knowledge of common interest to both countries.[11] ConTex's programs included grants, graduate fellowships, and postdoctoral scholarships. Its grants can reach $100,000 over 12 months for binational, collaborative research teams of the University of Texas System and Mexico-based researchers. Projects should contribute to the economic development and welfare of Mexico and Texas. Up to 30 graduate fellowships per year—covering tuition and fees, a monthly stipend, and health insurance for up to five years—are provided for Mexicans to pursue doctoral studies at a University of Texas institution. In addition, postdoctoral scholars seeking to pursue research at Mexican or University of Texas System institutions receive an annual salary and health insurance for up to a 12-month period.

There have also been other efforts over the past few years intended to promote trilateral or multilateral collaboration achieved under FOBESII. A specific case in point is the Association of Public Land Grant Universities (APLU), which boasts more than 200 member institutions from the United States, 8 from Canada, and 5 from Mexico. Another example is the Inter-American Organization for Higher Education (IOHE), involving more than 350 members, encompassing more than 50 from Mexico, over 20 from Canada, and less than 10 from the United States. Since 2010, IOHE has been organizing the Conference of the Americas on International Education. Similarly, in Tijuana, Mexico, in June 2017, ANUIES convened a roundtable to revisit collaboration across North America. For the occasion, ANUIES brought in the American Council on Education (ACE), APLU, the American Association of Community Colleges, and the American Association of State Colleges and Universities (AASCU) from the United States. In the case of Canada, representation included AUCC/Universities Canada, CREPUQ, and CICAN.

Although the focus has been almost exclusively on U.S.–Mexico collaboration, it is worth mentioning the systematic effort by Universia and Santander Universidades to promote collaboration and leadership development by supporting the presence of university presidents from Mexico and their interaction with counterparts from the United States at key conferences by marquee higher education organizations such as ACE, the Council of Independent Colleges, and the Council for the Advancement and Support of Education.

Moving Forward

In July 2020, NAFTA was replaced with the United States-Mexico-Canada Agreement (USMCA), opening a new phase for regional cooperation. While the new agreement was, like its predecessor, primarily economic in nature, the launch of USMCA is a clear opportunity. In addition, the return of the North American Leaders Summit suggests the three countries' desire to build upon what has been achieved in North America over the past three decades and to chart a common vision for a path forward. Indeed, the summit suggested a need for "Exploring opportunities with the private sector and universities to ensure our people are equipped with education and training for a 21st-century workforce."[12] Much as when NAFTA was launched in the 1990s, higher education once again faces the challenge of having to align with the priorities and contribute to the economic performance of all three countries, as a bloc and individually. Getting high-level support is crucial. Indeed, if North American higher educational collaboration is to break from its path of limited progress, the sector—in collaboration with stakeholders outside universities—must convince North America's leaders that developing the region's educational potential matters just as much as integrating its supply chains.

In this new phase, institutions should reinvigorate key partnerships within the region and explore richer collaborations beyond student mobility. Future efforts should focus on knowledge generation, grand challenges for research and development (global and pertinent to North America), trilateral investment in basic and applied research, hemisphere-focused growth of knowledge economies, regional economic development, workforce development, and efforts to address inequity by advancing educational equity.

Some of this can be accomplished through inter-institutional partnerships, but true progress will require the involvement of "backbone" organizations such as Universities Canada, U15, ANUIES, AAU, ACE, APLU and CONAHEC. Together, these organizations constitute a powerful collection of more than 1,700 higher education research institutions. Working together, they are capable of further advancing bilateral and trilateral collaborations within North America. Building on FOBESII's vision, involved universities anticipate founding a competitiveness council to focus on talent and workforce development. The focus on competitiveness and workforce development will help earn a place for higher education in discussions of USMCA implementation, advancing the development of more multifaceted regional cooperation.

However, to achieve this, higher education institutions across the region must connect their educational provision with what businesses and industries identify as the most relevant skills. There is a clear migration from traditional skills required to be successful in the workplace to "soft skills" that provide more dynamic capacity in future graduates and will enable them to be more flexible and adaptable in responding to multiple settings and circumstances. This change was suggested, for example, in the Future of Jobs Report 2018 by the World Economic Forum.[13] (See the Workforce Development Chapter by Earl Anthony Wayne and Sergio Alcocer for a more in-depth description and analysis of workforce development challenges and North American collaboration to address such challenges.)

The need to further incorporate technology into higher education institutions only continues to grow. If anything, the COVID-19 pandemic has accelerated the timelines both for university adoption of technology and the importance of such technologies to workforce development.

One opportunity provided by the otherwise dreadful pandemic was the enhanced ability to collaborate virtually in both pedagogy and scholarly contexts. Leveraging this opportunity by structuring cooperation via such technologies should be a strategic priority moving forward. Related to these will be an increased need to redesign curricula to be more flexible and aimed at preparing students to be adaptable to future changes, including and beyond the current pandemic. Both these features—technological and pedagogical—create opportunities that North America's higher educational leaders should not miss.

A Common Agenda for the Future of Higher Education in North America

Based on an analysis of priorities and issues from a comparative perspective, a common agenda for North America would involve the development of well-rounded graduates, equipped with the skills required by business and industry, and capable of performing within their own country as well as in any of the other two countries pertaining to the region. As a renowned education expert recently suggested, North American higher educational cooperation has a compelling vision: to create globally minded and internationally able but locally engaged citizens.[14]

We are at a favorable moment for expanding regional cooperation in support of this vision. But achieving the goals envisioned since the Wingspread and Vancouver conclaves, and reiterated in the context of the NALS, will require going beyond universities. It requires the involvement of regional and federal governments and cooperation with the private sector. Governments have been willing to support initiatives related to North American higher education cooperation for sustained periods, although changes in leadership have often led to shifting priorities and funding streams. A select number of business and industry conglomerates have underwritten collaborative efforts. Recognizing some of these "wins" and acknowledging some of the limitations or shortfalls, as well as emerging themes, provide a good foundation upon which to discuss the future direction of North American higher education collaboration. To build these relationships, advocates in all three nations need to engage with government leaders and make the case for a hemispheric approach to higher education.

The North America Higher Education Agenda 2.0 might include the following points:

1. Involve heads of state and relevant ministries from all three governments. High-level involvement is essential if North American higher education is to address its unique challenges and help provide the future workforce for globally competitive economic region. Intentional work with individual government leaders will be needed to ensure that higher education collaboration is a core priority for the evolution of the USMCA and the focus of the NALS. A specific head of state, for instance, may opt to sponsor an initiative and establish a recurring summit (as in the case of the North American Higher Education Summit) to ensure continued momentum. As has been the case with CONAHEC, such government "hosted" summits should occur annually and involve the creation of an action plan with targets. Such individual support has helped drive initiatives in the EU; for example, the u7+ alliance was created under the patronage of President Emmanuel Macron of France.

An upgrade and expansion of FOBESII with Canada, to be called FOTESII (where the "T" stands for "trilateral"), would include components like workforce development that would tie it to USMCA and the to-be-formed Competitiveness Committee. It would meet at least once a year and be supported by specific committees corresponding to agreed-upon pillars or strategies. The idea of such a mechanism is to coordinate the development and implementation of a higher education vision for North America, including research, development, and innovation. This could be the "space" in which governments can track developments and identify problematic issues. The forum should be a flexible organization in which all initiatives are welcome in order to fulfill the joint expectations and targets, with a scoreboard to keep track of achievements. FOTESII would include the U.S. Department of State, Mexico's Secretaría de Relaciones Exteriores, and Education Canada as lead actors to coordinate actions within the three countries. FOTESII would coordinate the development of a North American Higher Education observatory to report on progress and identify and solve critical roadblocks.

2. Convene an initial North American Higher Education Summit that eventually can become a recurring periodic summit. The ratified USMCA, the return of the NALS, the lasting disruptions caused by the global pandemic to economies, governance, communities, and health systems, and the acceleration of the Fourth Industrial Revolution all provide strong reasons to reevaluate North America's higher educational goals. To catalyze this reassessment, North American leaders should convene a summit focused on how higher education can critically advance its role in providing solutions to societal grand challenges.

To develop this summit, it will be vital to engage key organizations in the conversation of this new era of trilateral collaboration. Participants might include Universities Canada and U15 (Canada); ACE, AASCU, APLU, AAU (United States); ANUIES and FIMPES (Mexico); and CONAHEC. As student mobility is likely to continue to be high on the agenda, other relevant organizations in each country might include IIE, the Canadian Bureau for International Education, NAFSA, the Asociación Mexicana para Educación Internacional, as well as subnational organizations, like the Texas International Education Consortium. The private sector will also be an important partner, not only for funding but also to close the breaches and gaps in talent and workforce development activities.

Key issues for discussion at future summits include diversity and inclusion, innovation and the knowledge economy, collaboration and global competitiveness, quality education, health and well-being, impact, sustainability, shared curricula and student mobility, and workforce development. These are common to virtually all of the collaborative programs led by Universities Canada, U15, ANUIES, AAU, ACE, APLU, and CONAHEC. It makes sense to align these issues, and new ones as they evolve, across the three nations as an ongoing platform.

Student mobility, faculty collaboration, institutional partnerships, and regionally relevant research and development will all be relevant issues for thinking about higher education in "North America 2.0." In addition to traditional mobility—face-to-face and degree-seeking—there should be greater exploration of short-term options that include e-mobility, internationalization at home, internships, and service learning. These should connect with businesses and industries that have a presence across North America. Faculty interaction and exchange should include teaching, research, and scholarship. It should also provide opportunities for skills and career development in relation to technology and digital literacy. Shorter-term, value-added options might include badges and certificates, preferably interchangeable and recognized in the region. Meanwhile, flexibilization of degrees should be explored to allow regional options for double- and triple degrees, combinations of undergraduate and graduate degrees, "degree-plus" options that certificate or badge qualifications. A North American Studies Certificate, for instance, could be delivered online and taken by any undergraduate student wishing to do so in any of the three countries. Options such as the ones mentioned above should embrace and exploit the changes prompted by the COVID-19 pandemic to promote hybrid, online, and other remote ways of interacting. The research and development agenda should involve recurring and emerging cross-border issues such as border and immigration, cybersecurity, health and pandemics, and intellectual property.

3. Create trilateral initiatives that build upon the work of FOBESII, Proyecta 100,000, 100,000 Strong in the Americas, and other initiatives in the North American space. As this chapter has highlighted, important initiatives for North American cooperation already exist in higher education. However, much could be gained by linking and building upon past efforts. New trilateral initiatives could amplify the efforts of Universities Canada, U15, ANUIES, AAU, ACE, APLU and CONAHEC. The leadership of these organizations should organize around the general tenets of North America 2.0. As a starting point for these initiatives, consider the following possible options:

- Create a North American Student Mobility Bank integrated by universities from the three countries. This might be akin to the efforts made by CONAHEC over the past 10 years.
- Set in motion a North American Faculty Fellows Virtual Program. This would identify institutions that have select openings for faculty from North America to teach online courses and match those needs with faculty from across North America who are interested in teaching in a country other than their own.
- Establish a North American Online Sharing Consortium integrated by universities from all three countries. This could be in the spirit of the

effort implemented by the Council of Independent Colleges or the SUNY COIL Initiative.

4. Convene and secure the involvement of senior executives or representatives of Fortune 500 companies with a presence in key clusters across North America. Common to all three nations are multinational companies with common interests in aligning their workforces, knowledge economies, and economic development. Large foundations and not-for-profits also are interested in advancing common interests in North America. To this end, the North American Competitiveness Council called for by USMCA may be a possible liaison for talent development within the private sector. This council might focus on the development of talent across the region with relevant soft and hard skills, practical experiences, and the well-rounded education required to develop more competitive graduates. Seed funding for North American higher education initiatives along these lines may be obtained under a matching scheme between governments and Fortune 500 companies.

5. Promote greater awareness of North American higher education plans and progress by partnering with and systematically communicating through recognized media outlets such as the *Chronicle of Higher Education*, *Inside Higher Education*, and *University World News*. The efforts by Universities Canada, U15, ANUIES, AAU, ACE, APLU and CONAHEC to coordinate around a hemispherical higher education agenda is a strategic opportunity to further align interests. Strategic communication of higher education opportunities and achievements is critical for attaining wide social support for these efforts.

As the past has shown, if the efforts of institutions, governments, and businesses can come together in service of a common goal, a reenergized, more responsive and relevant, highly innovative, and competitive environment will benefit each of the three countries as well as the North American region as a whole. It also would enhance the prospects to promote North America to the rest of the world. Colleges and universities have provided continuity for dialogue and collaboration across all three countries, frequently in a bilateral format and sometimes through trilateral cooperation. North American university students deserve a world where they can travel freely and collaborate to achieve both personal and global goals. Institutions of higher education must embrace the responsibility of educating future global citizens who understand the critical importance of international collaboration and have adopted values of respect, tolerance, and inclusivity. It is time for North America's respective governments, businesses, and industries to engage with and support these goals.

Endnotes

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9

Demographic Dynamics in North America

Agustín Escobar Latapí, Víctor M. García-Guerrero, and Claudia Masferrer

During the next three decades, North America is set to enjoy a window of demographic advantage. Correctly managed, the region's demographic dynamics should facilitate investments in productivity and provide a boon to economic growth. This favorable picture will not last forever, however, so the region's leaders need to act soon to reap these benefits while also preparing for later stages of demographic development.

To different degrees, Mexico, the United States and Canada are experiencing a transition from high, sustained levels of fertility and mortality to lower levels of both. Because the decline in mortality precedes the decline in fertility, as a region, North America will continue to see a period of modest population growth during the next thirty years. This moderate growth creates a more favorable picture for North America,[1] especially compared to rapidly aging Europe and China. North America's economy continues to benefit from the prevalence of the working-age population over the dependent population (children and the elderly). This demographic structure is conducive to economic growth, if population change and migration are managed well. If the region takes advantage of its favorable demographics with investments in economic and productivity growth.

North America should increase its contribution to the global economy. But looking into the future, as the North American population ages and retires, large investments will have to be made in the care economy.

Population Background

The population of North America today stands at almost 480 million, making the region somewhat larger than the European Union (432 million).[2]

As with most features of the region, North America's demographics are characterized by asymmetries. Some 321 million people lived in the United States, 122 million in Mexico, and 36 million in Canada. Today, two in every three people in North America live in the United States—a proportion that has actually declined over time. Between 1960 and 1965, for example, more than three-quarters of North Americans resided in the United States. The population of Mexico eight decades ago was almost the same size as the population in Canada today (37 million), and the United States was ten times larger than Canada (187 million vs. 18 million).[3]

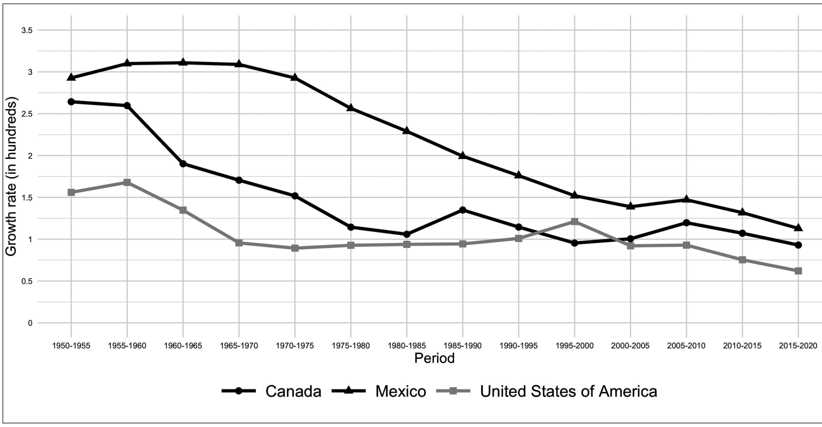
Population growth is determined by an interaction of three basic demographic components: mortality, fertility, and migration. Although rates of population growth in North America have slowed, all three countries continue to see increasing populations. The latest estimates from the United Nations *World Population Prospects* (Figure 1), show that by 2015–2020, both Mexico and Canada had an annual average population growth rate close to 1%,[4] while the United States' population is growing at roughly 0.5% per year. Despite the common shift to slower growth, population change in the three countries occurred at different rates and times. Whereas Canada and Mexico had growth rates of 25% and 30%, respectively, during the 1950–1955 period, the United States grew at a rate of 15%. Mexico's demographic transition started later, as the country's population continued increasing by the same rate until the 1965–1970 period, after rates in Canada and the United States where already declining (Figure 1). In addition to changes in fertility and mortality, mentioned above, migration has played a key role in each country's rate of growth.

To gain a better understanding of the dynamics of population change in North America, each of the three components will need to be examined to provide an overview of the most likely future population scenarios.

Mortality and Life Expectancy

Canada, Mexico, and the United States all saw decreased mortality and increased life expectancy through the twentieth century. Since 1950, Canada has had the lowest levels of mortality in North America (7.5 deaths/1000 people). The U.S. mortality rate approached Canada's in the period 2005–2010. (Life expectancy in the United States is lower than in other high-income countries, mainly because of its social policies.[5]) Meanwhile, Mexico's mortality rate has varied more significantly, shifting from levels much higher than those of Canada and the United States in the 1950s—close to seventeen deaths per thousand people—to levels below those of the other countries in recent years given Mexico's younger population and past decreases in mortality rates.

Figure 1 Growth Rate (in Hundreds), 1950–2020



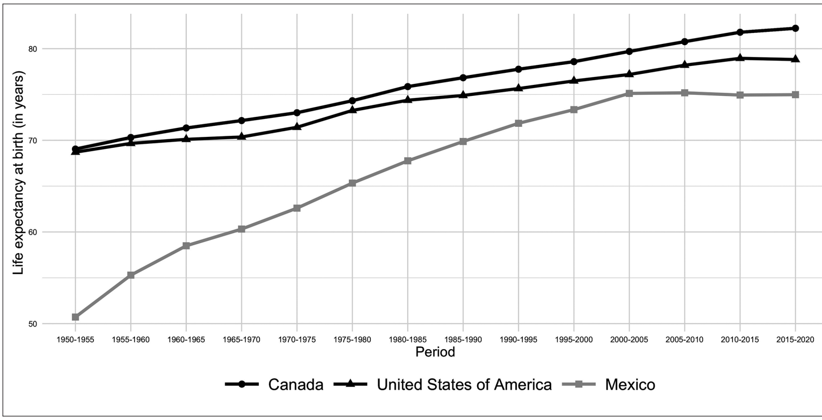
Source: United Nations, *World Population Prospects* (2019).

Note: Average exponential rate of growth of the population over a given period is expressed as a percentage.

Life expectancy tells a similar, and related, story (Figure 2). Early in the post–World War II period, Canada and the United States boasted life expectancies of some twenty years more than Mexico. However, Mexico made rapid and impressive gains by the turn of century as a result of the institutionalization of Mexico's public health services and programs and policies to eradicate infectious/contagious diseases and reduce maternal-infant mortality. As a result, Mexico managed to increase its life expectancy by more than twenty-five years, converging with the levels attained by Canada and the United States. However, this progress has slowed. Since the period 2005–2010, mortality has increased in both Mexico and the United States. These increases are driven by different factors, but both countries have had increased mortality amongst younger groups, leading to stagnant life expectancy. In contrast, Canada continued to increase its life expectancy during the twenty-first century.

According to various studies, the increase in preventable diseases (mainly related to the opioid crisis) has affected the survival of the adult population in the United States.[6] Despite its general progress, Canada has seen similar trends.[7] Recent life tables for Canada show a stagnation in males' life expectancy since 2016, affecting British Columbia and Ontario particularly.[8] In Mexico, two problems have reduced the life expectancy of different populations: an increase in endocrinal diseases has had an impact on the population aged 50 and older, and an increase in homicides resulting from the so-called War on Drugs especially harms those aged 15 to 45 years old.[9]

Figure 2 Life Expectancy at Birth, 1950–2020



Source: United Nations, *World Population Prospects* (2019).

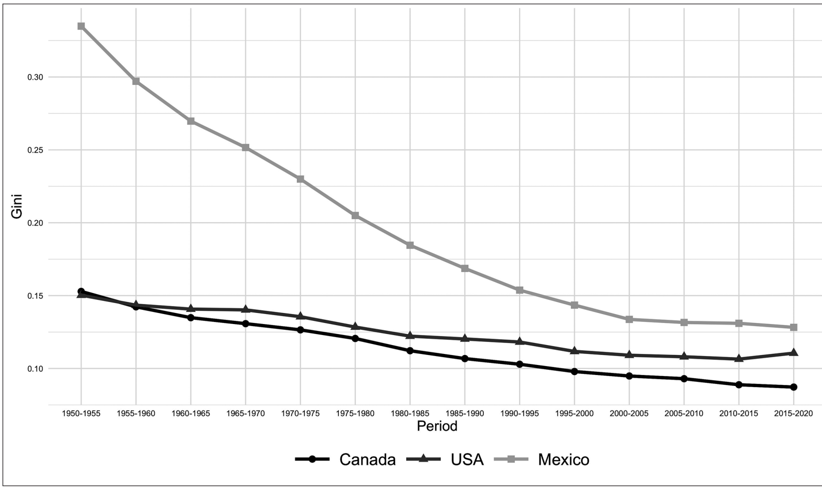
Note: This chart expresses the average years of life expected by a hypothetical cohort of individuals who would be subject throughout their lives to the mortality rates of a given period.

This increased mortality in younger populations suggests a need to analyze disparities in length of life. To do so, we can use the Gini coefficient to measure variations in length of life.[10] The estimation of the Gini coefficient for age at death considers the distribution of life of a person (from birth to death) and the total cumulative deaths of the population.[11] A higher Gini (close to one) means an unequal distribution in which survivorship is concentrated in some age groups. By contrast, a small Gini (close to zero) means a more equal distribution of survivorship in a population, with survivorship equally distributed over age. In demography, the former is known as the *rectangularization* of the survival curve.

Figure 3 shows the evolution of inequality of length of life for Canada, Mexico, and the United States between 1950 and 2020. Canada and the United States had similar Gini coefficients in the 1960s, but in the years that followed their values diverged. The data show an overall decline of inequality for the three countries, with Mexico declining the fastest. In the 2015–2020 period, the Gini coefficient for Mexico reached the level that the other two countries had reached by 1980. Since 1960, inequality in age at death in the United States has been greater than in Canada and has continued to diverge, widening the gap between them.

One notable aspect is the small increase in inequality in the United States for the last period. In other words, variability in age at death in 2015–2020 reversed the trend, likely a result of the increase in mortality

Figure 3 Inequality in Age at Death, 1950–2020



Source: United Nations, *World Population Prospects* (2019).

and decline in life expectancy caused by the abovementioned opioid crisis specifically and U.S. social policies in general.

Regional gains in life expectancy, and falling inequality in mortality rates, are positive indicators for the future of the overall population of North America. However, Mexico's stagnation after 2005 related to the War on Drugs and the United States' and Canada's slower or reversed gains related to the opioid crisis (and possibly also by problems derived from U.S. healthcare costs), call for effective action by all three governments.

Fertility

Fertility decline is a key characteristic of the demographic transition.[12] In recent decades, most countries have seen very high fertility rates fall to levels closer to replacement—around 2.1 children per woman. Following this trend, Latin America and the Caribbean are transitioning toward lower fertility demographics; Mexico's decline has come later than the Latin American average.[13] Globally, fertility decline has been attributed to changes in family behavior, cultural dynamics, and gender roles; the greater incorporation of women in the labor market; and a number of economic factors.[14] In more recent years, the 2008 financial crisis and the subsequent Great Recession appear to have played a role in further reducing fertility in developed countries.[15]

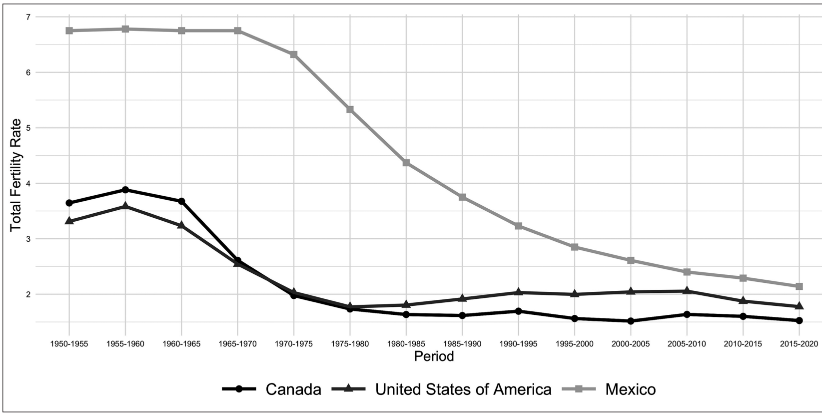
By 2020, the three North American countries will converge on fertility levels below the replacement rate (see Figure 4). Over the past seven decades, Canada, the United States, and Mexico decreased their fertility by 26, 24, and 45 births per every thousand inhabitants, respectively. Mexico's rapid decline was driven by the government's family planning policies, which starting in the 1970s improved access to contraceptives and led to other sexual and reproductive health policies in the 1990s.[16]

Although very high fertility poses challenges for individuals, families, and governments, very low fertility is also problematic for sustainability. Many countries have implemented family-friendly or immigration policies aimed at reversing this trend and increasing fertility and population growth.[17] Canada, where fertility has been below replacement levels since the 1970s, has explicitly aimed at increasing fertility, although fertility behavior, policies, and context differ between provinces.[18] Even as some provinces implemented their own family policies, the Canadian government sought to compensate for low natural population growth with immigration. Although the United States did not develop an explicit immigration policy to compensate for fertility decline, immigration—and especially Mexican immigration—has contributed to maintaining higher fertility.[19] The years of increasing immigration coincided with the observed increase in total fertility rate in the 1980–2010 period (Figure 4). Conversely, high emigration levels, especially in the post-1990 period, reduced Mexico's population growth and reproductive potential.[20]

International Migration

For the past 130 years, migration has played a central role in the construction of all three North American societies.[21] Canada and the United States are among the world's top immigration countries, whereas Mexico traditionally has been an emigration country. These trends have been present since 1950, with several caveats. First, while net migration has been positive for Canada and the United States over these seven decades (see Figure 5, solid lines), the 1990s was the decade with the highest net migration. Between 1995 and 2000, the United States had positive net migration of some 9 million people, a figure that has been declining since then. Second, Mexico's net migration balance was increasingly negative until the period 1995–2000, when it reached a deficit of 2.5 million. After that point, the size of the deficit began declining. Third, the percentage of foreign-born residents living in each country has increased steadily over the period, though there is sharp variation among countries (Figure 5, dashed lines). More than one in every five Canadian residents was born abroad, and one

Figure 4 Total Fertility Rate, 1950–2020



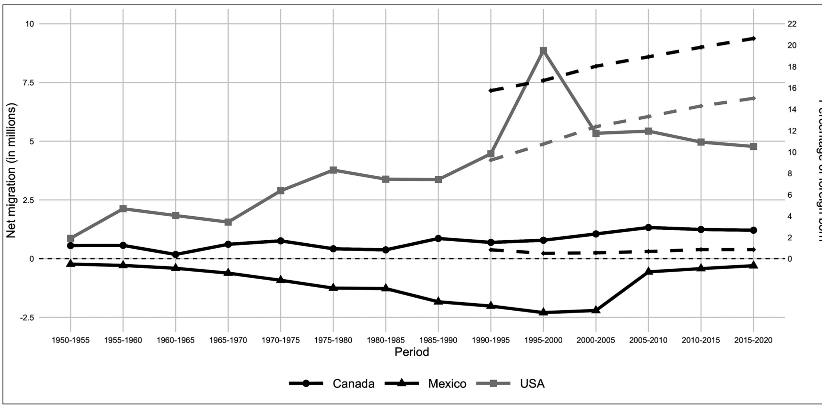
Source: United Nations, *World Population Prospects* (2019).

Note: The total fertility rate is the average number of live births per woman that a hypothetical cohort of women would have at the end of their reproductive period.

in six U.S. residents is an immigrant. In contrast, less than 1% of Mexican residents is foreign-born.

Migration makes not only for regional population growth but shapes other aspects of North America's demographic dynamics. Migration redistributes population between origin and destination countries and tends to slow aging and increase the reproductive potential of receiving countries. For that reason, migration has larger effects in countries with low fertility or declining populations.[22] To understand the demographic impacts of migration on population aging, one must examine the age structure of the arriving immigrant population.[23] Studies suggest that immigration has sustained population growth and modified the age structure of the United States and Canada, as well as Europe.[24] This finding is particularly important for Canada, which has the lowest fertility in North America and has seen the steepest fertility decline since 1960. Canadian immigration policy has explicitly recognized this trend as a concern; since the 1980s, Canada has admitted an annual number of new immigrants as permanent residents equivalent to 1% of the population.[25] The effect of international migration in the aging process of less-developed countries has not been the focus of much attention until recently, because the impacts of outmigration have been studied less than the impact of immigration in developed countries.[26] A recent study for North and Central America shows that future migration may slow the aging process in Canada and the United States, have a small effect in Mexico, and accelerate it in El Salvador.[27]

Figure 5 Net Migration in Millions (Solid Lines), 1950–2020, and Percentage of Foreign Born (Dashed Lines), 1990–2020



Source: United Nations, *World Population Prospects* (2019).

Note: Net migration (the number of immigrants minus the number of emigrants) is expressed in millions.

Migration has lasting and consequential impacts on regional demography and economies. Labor scarcity has caused increasing difficulties for the U.S. farm economy.[28] One reason for this labor scarcity, oddly enough, is the imbalance in population dynamics caused by previous emigration from Mexico to the United States, often for farm work. For instance, Agustín Escobar Latapí's analysis showed how substantial emigration from Mexico's traditional migrant-sending regions in the rural center-west of the country dented the age pyramid in rural Mexico as many young workers left the country.[29] This rural labor emigration accelerated the demographic transition in rural Mexico, which in turn helps explain why Mexico–U.S. migration slowed after 2008. The labor provided by migrant populations has often been treated as an inexhaustible resource—but that is no longer the case.

For a century, Mexico has supplied the U.S. agricultural economy with laborers. Indeed, Mexican workers account for almost all of the rural workforce in Mexico, more than 80% of the farm workforce in the United States, and a little under half of the farm workforce in Canada.[30] During some periods, Mexican agricultural workers mostly returned to Mexico, where they parented a new generation of Mexican citizens. At other times, however, many migrant Mexican workers left U.S. agriculture for other economic sectors, including service industries, construction, and manufacturing. As they did so, they settled in U.S. cities and contributed to the expansion of the Mexican-American population. As a result, there is now labor scarcity in U.S. *and Mexican* agriculture.[31] Agricultural employers in all three countries increasingly rely on each other to mobilize Mexican workers when growing and picking seasons complement each other. However, Mexico's waged agricultural employment is rising faster than its overall labor force, in line with Mexico's rapidly growing agricultural exports. Higher wages and more secure pathways for legal immigration and employment may not entirely solve the problem of labor scarcity, but both trends have helped legalize labor mobility and improve incomes in rural Mexico, thus reducing rural poverty levels.

Even an available and willing migrant labor force requires a sustainable immigration policy if it is to fill the North American economy's demand for workers. Although no North American country has a formal regional immigration policy, the United States and Canada operate significant *de facto* regional policies, centered on two major current initiatives. First, both countries have temporary worker programs—the H-2A and H-2B nonimmigrant worker visas in the United States, and the Seasonal Agricultural Worker Program and Temporary Foreign Worker Program in Canada. These focus on mostly on "unskilled" Mexican workers in farm and nonfarm jobs. Second, NAFTA (North American Free Trade Agreement) included a section on migration, intended to provide visa-free travel for selected professionals from all three countries. This section continues to operate under USMCA (United States–Mexico–Canada Agreement). Although there have been recurring conversations about closer cooperation in migration, progress has often been blocked by unfavorable U.S. politics. To take advantage of the region's demographic window, however, this should change. Improved regional cooperation in terms of labor migration can only benefit employers and employees alike.

Age Structure and Dependency Ratios

The combination of the three main demographic variables can be seen in a population's age structure.[32] Immigration plays a key role in moderating the demographic dynamics of fertility and mortality. In this context, Figure 6 shows the evolution of three broad age-groups in Canada, Mexico, and the United States China from 1950 to 2020—children and teenagers (aged 14 and younger), the working-age population (aged 15 to 64) and the retirement population (aged 65 and older)—as well as a projection under two migration scenarios (zero migration and constant net migration rates). In a zero-migration scenario, Canada and the United States would experience clear declines in projected population, particularly for the working-age population. However, a zero-migration scenario does not appear to affect the population in Mexico, given recent patterns of zero migration in the country.

Dependency rates are crucial for the future of an economy because economic growth largely depends on labor force growth and, inversely, on the burden placed on workers by non-workers. Economic stress and future poverty levels also depend on the scope and scale of pension and retirement schemes on one hand, and childcare and basic education on the other. A society's emphasis on one or the other should depend on the phase of its demographic transition. Early on, childcare and basic education are key to a healthy, growing society; during later phases of the transition, pensions, retirement homes, or other provisions become crucial for the wellbeing of the elderly and the population as a whole.

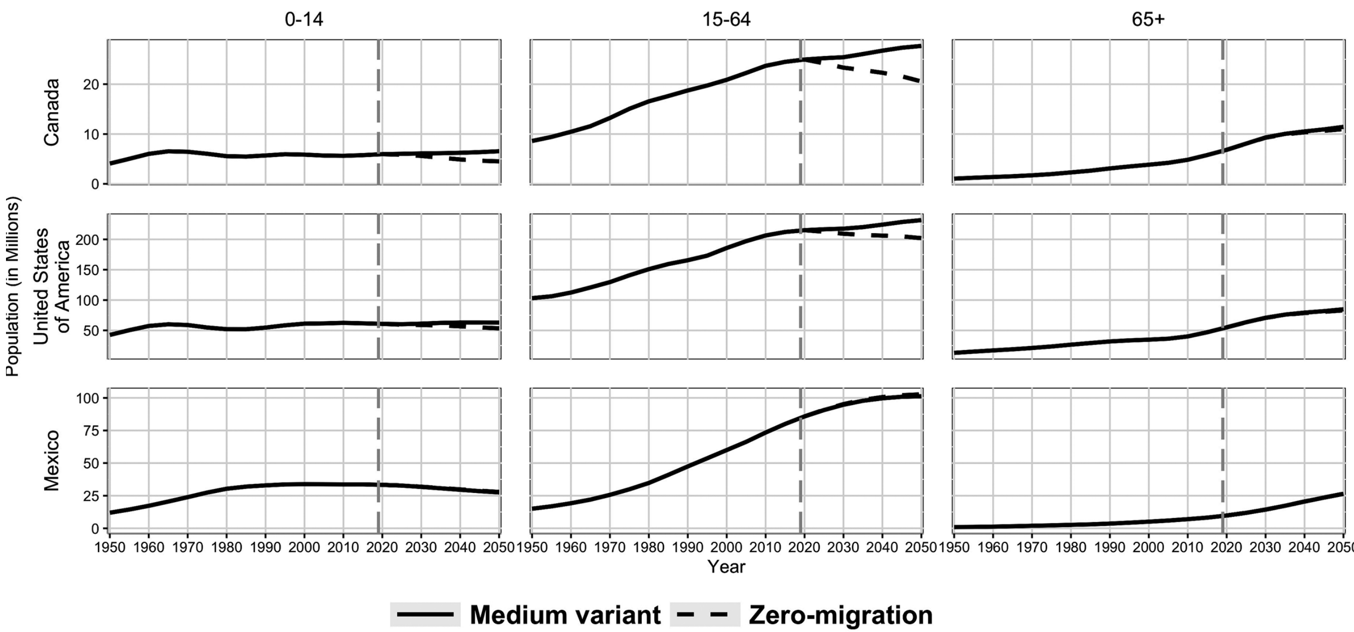
Canada and the United States have mostly stable child dependency ratios, at levels slightly above those of China and Europe. This slightly higher child dependency ratio is a positive projection for the future, because it anticipates a higher level of labor force and population growth in the United States and Canada than in China and Europe. In Mexico, on the contrary, child dependency ratios have fallen rapidly and will continue to fall for the foreseeable future, albeit not to an extent that is troublesome for future economic needs. Both trends point to a future in which the economically active part of the population remains dominant in North America.

The elderly dependency ratios, by contrast, pose a starkly different scenario. Old-age dependency ratios are a key demographic parameter affecting social security programs.[33] These ratios have been growing and will continue to grow for the foreseeable future as all three populations age. For Canada, old age dependency is increasing moderately. Its development depends crucially on Canada's immigration policies; a flow of foreign workers will be needed to maintain a dependency rate below 0.5 in the future. Old age dependency rates are slightly lower in the United States, where immigration plays a smaller (albeit positive) role. For both countries, however, trends point at a more gradual increase in this dependency ratio than in Europe or China. In Mexico, these ratios are still much lower than in the other two countries—aging is still at an early phase—but are poised to double in the next 30 years. For all three countries, aging population structures will present a growing challenge for policy and social security schemes.

Since 2008, Mexico has received a net inflow of Mexican returnees and U.S.-born immigrants.[34] A large majority of the U.S.-born population living in Mexico—half a million individuals—are U.S.-born minors who are living with at least one Mexican parent and may be dual citizens.[35] If they receive sufficient education, they will make substantial contributions to economic growth in both countries.[36] However, returnees and U.S.-born immigrants also face real challenges integrating into Mexican educational institutions, the labor market, and society in general.[37]

Most of these returnees are of working age. However, an important group consists of older, undocumented workers who spent long periods in the United

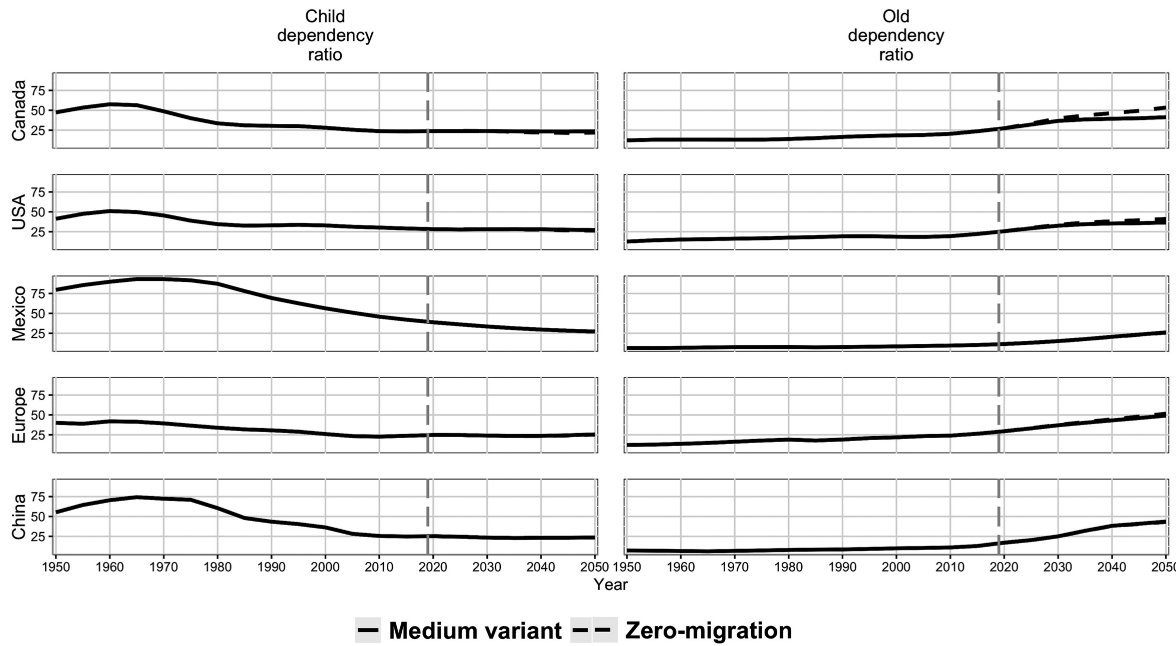
Figure 6 Past and Projected Population for Three Age Groups Under Two Migration Scenarios



Source: United Nations, *World Population Prospects* (2019).

Note: The two prospective migration scenarios compare the medium- and zero-migration variants, assuming medium fertility and normal mortality. The medium-variant projection assumes future levels of net migration will be constant until the period 2045–2050. The baseline considers country-specific policies regarding future international migration and takes into account recent fluctuations in migration stocks, as well as refugee and temporary labor flows.

Figure 7 Past and Projected Child and Old Age Dependency Ratios (in Hundreds) under Two Migration Scenarios, 1950–2050



Source: United Nations, *World Population Prospects* (2019).

Note: The child dependency ratio is the ratio of the population under age 15 to those of working age (15–64); old age dependency is the ratio of the population aged 65 and over to those of working age. They are expressed as number of dependents per 100 persons of working age. The two prospective migration scenarios compare medium- and zero-migration variants. Both projections assume medium fertility and normal mortality. The medium-variant projection assumes future levels of net migration will be constant until the period 2045–2050. The baseline considers country-specific policies regarding future international migration and takes into account recent fluctuations in migration stocks, as well as refugee and temporary labor flows.

States. The aging of Mexico's population is compounded by the return to the countryside of older migrants who spent their working years in Mexican urban areas or the United States. Since 1995, the elderly (age 60 and older) have been the fastest-growing group in rural areas.[38] Mexico's low social security affiliation rates, and the large number of returning Mexicans who were undocumented workers in United States and therefore were excluded from the U.S. social security system, have already begun to strain the limited support systems available in Mexican rural society. Families must provide for their elderly, with little assistance from the older individual's savings or pensions. Government non-contributive pensions help, but they are below the cost of a basic goods basket, and their fiscal cost will only increase in the future.[39]

In general, Mexico will need to take steps to prepare for population aging, and those policies must take regional migration patterns into account. Fewer than 50% of Mexican workers contribute to a retirement savings plan. According to Mexican government sources, only 40% of men and 23% of women are eligible for a contributive pension.[40] This low contribution density results from the large informal sector; the precarious nature of formal employment; and the movement of workers between covered and non-covered jobs. These factors prevent workers from securing the length of time (or the total amount) needed to qualify for contributive pensions. As a result, only 28% of Mexico's population age 65 and older reports receiving a contributive pension. Most of Mexico's elderly population relies on limited non-contributive pensions. Mexico City's government started a non-contributive pension scheme for the population age 70 and older in 2001. Starting in 2004, a federal cash transfer program became available nationwide, and soon it became universal. Between 1.5 and 1.65 million senior citizens used to receive these payments. By 2016, 80% of women and 83% of men at least age 65 received pensions from a non-contributive scheme. Starting in 2019, the amount paid to each person rose from about US$28 to US$67 per month. Still, the standard of living for many older Mexicans worsens significantly after their retirement.[41]

A similar problem looms for workers in the United States. Retirement savings have much wider coverage than in Mexico, but most U.S. workers fear they will lack sufficient income to live comfortably after they retire.[42] Retirement readiness in the United States has been affected by volatile stock market prices (in which retirement savings and pension schemes are invested); falling real interest rates (for savings in banks and other deposit institutions), and lack of development of the Social Security system.[43] Because the U.S. Social Security system now pays out a smaller share of a person's active work income, the burden on individual retirement savings to last for the duration of a retiree's life expectancy has become unsustainable.

Although initially similar, Canadian and U.S. retirement policies diverged after 1998. Current differences include the age of benefit eligibility, the age of leaving employment, and the effect of part-time employment on social security income.[44] Canadian policies have been more liberal over the past two decades. The retirement age has been maintained and individuals may receive a social security pension while working. As a result, Canadians leave the labor market later than Americans, but often claim a pension while switching to part-time employment.[45] In Canada, the employment rate of individuals age 55 or older increased for both men and women: between 1997 and 2010, it rose from 30.5% to almost 40% for men and from 15.8% to 28.6% for women.[46] Later retirement is not necessarily the result of less generous and defined pensions; it may also be influenced by better health among older individuals.[47]

Educational Attainment in North America

Educational attainment is essential to a knowledge economy, and both are indispensable to reaffirm North America as a geopolitical player at the forefront of progress in the world economy. In this respect, both Canada and the United States have undergone a transition in which most of their populations have either a postsecondary (after ninth grade) or a university education.[48] Figure 8 shows historical distributions of the levels of education in all three countries for the years 1950, 1970, 1990, 2000, and 2010, generated by the Wittgenstein Centre for Demography and Global Human Capital. Although the United States and Canada have different educational systems, 63% of the total population in both countries had some amount of postsecondary education by 2015. Although Canada long slightly lagged the United States in postsecondary educational attainment, this is projected to change by 2050, with 74% of Canadians, compared to a projected 72% in the United States, having completed postsecondary education. Canada's advantage in higher education is even greater. Canada has surpassed the United States since 1950, and in 2015, 47% of the Canadian population had at least university studies, versus 26% of U.S. population in the same year. This is projected to increase by 2050 to 55% of the Canadian population and 36% of the U.S. population.[49] As it relates to migration, Canadian immigration policy is explicit concerning the importance of attracting skilled and highly educated immigrants. The United States has likewise counted on highly educated immigrants to maintain and enlarge its skilled and scientific community, and to continue to be a global leader in technological development.

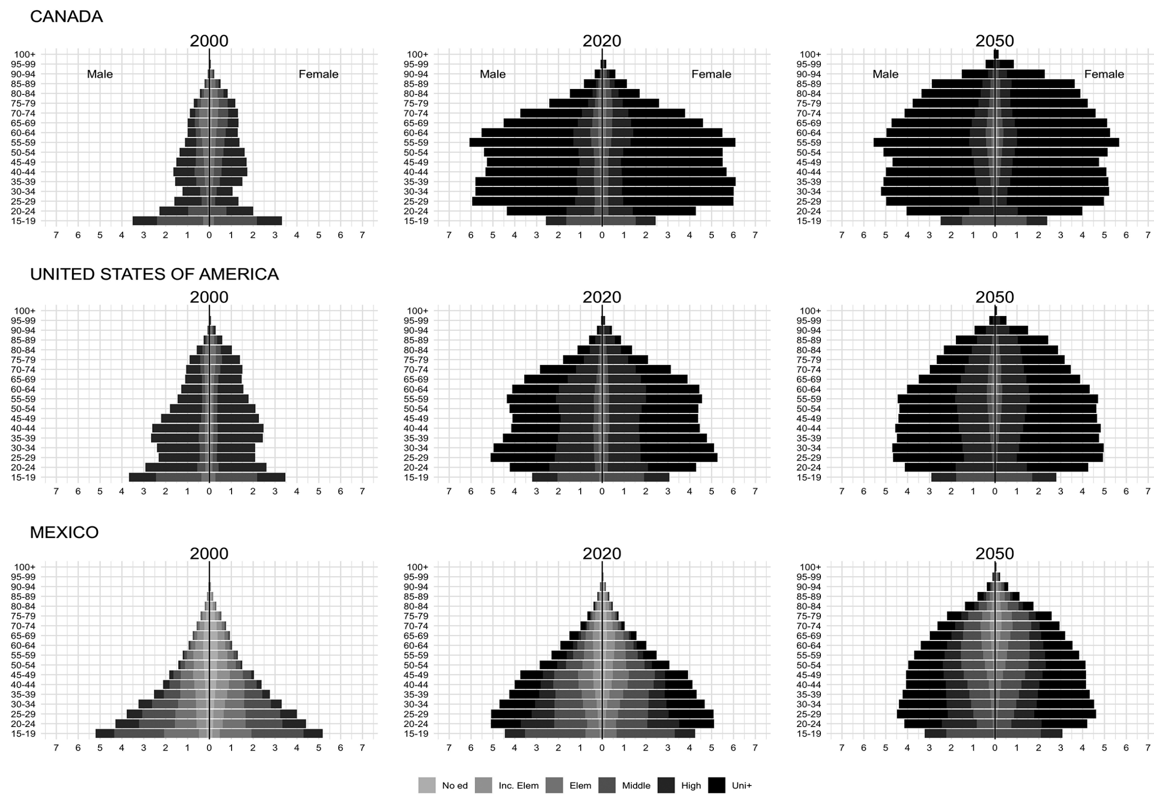
Mexico has more recently undergone an educational transition in which the vast majority of its population has completed primary or secondary education. Starting in 1997, primary and secondary enrollment was propelled by specific conditional cash transfer programs and other actions.[50] However, the population educated beyond the secondary level remains only 10% of the population. University enrollment accelerated during the first decade after NAFTA took effect in 1994. From 1990 and until 2005, total university enrollment expanded from 1 million to 2.45 million.[51] Still, Mexico is among the four countries in the OECD (Organisation for Economic Co-operation and Development) with the lowest population percentage attaining a university education—23.4% of the adults aged 25 to 34.[52] The percentage of Mexican adults with postsecondary education is projected to remain comparatively small. According to Wittgenstein's projections, the educational attainment of the Mexican population is expected to increase, while remaining significantly lower than its two trading partners in North America.

Conclusion

North America is one of the world's mega-economies, together with China and Europe. In terms of its demographic dynamics, it is better positioned than either Europe or China for a period of sustained economic growth. The three countries of the region are converging in their main demographic indicators, though with some country-level differences. These country-level differences are largely complementary; managed correctly, they provide a regional economic advantage. North America's population dynamics can help maintain the region as a global leader, with patterns of regional migration as a key component of demographic dynamics and regional economic sustainability.

The data examined in this chapter inform a number of predictions and recommendations for future regional dynamics. Mexico should continue to accelerate its educational transition; Canada must continue to rely on immigration to avoid a rapid rise in dependency rates; and the United States will need to compensate for its fertility decline with immigration if it is to maintain a robust working-age population. North America's relatively favorable demographics need to be managed with national and regional policies that allow the growing elderly population to maintain a reasonable standard of living without diminishing the wellbeing of the working-age population. At a national level, each country must update its pension and retirement schemes to cope with the realities of an aging population. Moreover, the aging populations of all three countries will require care and health services that their differing welfare and social security systems may not be fully equipped to handle. Although educational attainment is expected to increase across North America, this growth alone will not necessarily enable Canada, Mexico, or the United States to play a global leading role in knowledge-led social change. All three countries must prepare to meet the challenges posed by this change.

Figure 8 Past and Projected Educational Distributions, Canada, Mexico, and the United States



Source: Wittgenstein Centre for Demography and Global Human Capital, "Wittgenstein Centre Human Capital Data Explorer," 2018, http://dataexplorer.wittgensteincentre.org/wcde-v2/.

Endnotes

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age these funds properly to ensure a steady income in retirement, may not have home equity as a fallback to retirement savings, or may need to withdraw from their retirement accounts to meet short-term needs. Further, longer life expectancies have led to the risk of outliving retirement funds, and problems with the Social Security apparatus have reduced its ability to support an accepted share of retirees' incomes. The Center for Retirement Research at Boston College states that roughly half of working-age households are at risk of being unable to maintain their pre-retirement level of living, owing to decreased life expectancy, declining income replacement rates from Social Security, the move away from defined benefit to defined contribution retirement plans, increased out-of-pocket health costs for retirees, and the substantial decline in real interest rates since 1983.

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10

Toward a North American Anti-Corruption Regime

Eric Miller and
Alfonso López de la Osa Escribano

Corruptio optimi pessima (Corruption of the best is the worst)
Traditional Latin Phrase

If you have a garden and you want to see things flourish, you have to tend to it.
George Shultz, U.S. Secretary of State (1982–1989)

The key question posed by those who study the political and economic development of nations is why some countries thrive and some struggle. Over the past twenty years, one of the key responses emphasizes the quality of governance and institutions. Most famously, Daron Acemoglu and James Robinson argue that countries have either "extractive" or "inclusive" economic and political institutions.[1] More colloquially, we can point to corruption as a hallmark of extractive institutions, which tend to undermine growth and weaken public trust. Corruption can take institutions that appear inclusive and make them extractive in practice, especially when governance is not undergirded by broad transparency and accountability. Inclusive institutions and good governance, by contrast, prioritize the public interest and common good; they operate under principles of efficiency and efficacy. In effective democracies, institutions must be at the service of citizens, hold public figures accountable, and provide effective rule of law.

How does this relate to North America? Traditionally, issues of corruption and governance received little attention in international agreements. Many states continue to invoke sovereignty as a shield against external scrutiny of governance practices. However, given the effects on investment and growth, combatting corruption is an inherent concern for regional economies. As a result, corruption's place on the global economic agenda has increased steadily since the North American Free Trade Agreement (NAFTA) took effect in 1994. In the negotiations that led to the subsequent U.S.-Canada-Mexico Agreement (USMCA), anticorruption was not only on the region's shared agenda, but became an integral part of the agreement in Chapter 27. There, Canada, Mexico, and the United States reaffirmed support for various international anticorruption agreements and expressed shared resolve "to prevent and combat bribery and corruption in international trade and investment," while leaving decisions on investigation and enforcement to national and subnational authorities.[2]

The inclusion in the USMCA should not end the conversation about anticorruption in North America—it should move it to another level. North America's leaders often emphasize shared democratic values as a cornerstone of regional cooperation. Democracy implies greater participation in the political process and, consequently, should include the development of more inclusive institutions. Unfortunately, though, recent backsliding on corruption in some parts of North America demonstrates that democracies are not exempt from such problems of governance. These developments also underscore that neither democracy nor good governance can be taken for granted. As the region's leaders gather for the North American Leaders Summit, regional approaches to improving anticorruption and good governance merit their attention.

Clearly regional approaches will have their limits and should be complementary: meaningful national policy efforts must be at the core of any effective anti-corruption initiative. Rule of law must be respected and enforced at the domestic level. Yet, we argue that there is a role of supportive regional measures, as suggested by USMCA Chapter 27. That chapter builds on a key trend: over the past decade there has been growing internationalization of anti-corruption initiatives. Countries are sharing case information and findings to a greater degree than in the past. Still, there is room to go further. Countries—and regions—must be vigilant in working to ensure that corruption does not undermine the credibility and functionality of their institutions. Even seemingly inclusive institutions can have pernicious, extractive consequences when corruption spreads.

Fighting corruption is a tough and unending business. This chapter explores the complex linkage between national and international processes in the anti-corruption space. It first outlines the origins and evolution of the present focus on anti-corruption in each North American country, including efforts at the international level—most notably the U.S. Foreign Corrupt Practices Act. Mexico's anticorruption regime remains, in many ways, a work in progress. Canada has made significant changes to its anti-corruption regime over the past decade. The chapter then looks at how enhanced cooperation has emerged internationally, especially via the OECD, and in North America. Finally, the conclusions offer concrete suggestions of how North American cooperation could aid the fight against corruption across the continent.

National Anti-Corruption Regimes in North America

Corruption has existed for as long as there have been public institutions, and measures to combat it appear in the Code of Hammurabi (1754 BC). Corruption can take many forms, from bribery and nepotism to electoral fraud and theft of public resources. A common definition of corruption is that of Transparency International: *the abuse of entrusted power for private gain*. Curtailing that abuse is central to providing strong rule of law to ensure that laws will be applied and legitimately enforced. As such, rule of law provides certainty and stability in the relationship private citizens have with the public authority.

Although Canada, Mexico, and the United States each has in place national anti-corruption laws, developed in a democratic context, they have struggled with their own corruption challenges. Each country has seen its score decline in the Transparency International's Corruption Perceptions Index (CPI), which measures corruption based on paid bribes, over the 2015 to 2021 period. Although the index is far from perfect—measuring corruption is notoriously difficult—Canada is now tied for 13th "cleanest" country in the world, the United States is 27th, and Mexico 124th.[3] Amidst these unfavorable trends, a key question for regional policymakers is, could greater cooperation among the countries of North America make a positive difference? The question is especially pertinent in Mexico, which has struggled on this front, and where corruption is a major electoral issue. We now turn to these national regimes and their international dimensions.

The United States' Anti-Corruption Regime

In the United States, a realization of the dangers of corruption goes back to the founding of the country. In a sense, the foundational anticorruption measures are present in Article 1, Section 9 of the Constitution—commonly known as the Emoluments Clause—and Article 2, Section 4, which declares "bribery" to be an impeachable offense. In Federalist Paper #22, Alexander Hamilton is very clear-eyed about the challenge. He stated that

> one of the weak sides of republics, among their numerous advantages, is that they afford too easy an inlet to foreign corruption…(P)ersons elevated from

> the mass of the community, by the suffrages of their fellow-citizens, to stations of great pre-eminence and power, may find compensations for betraying their trust.[4]

The United States passed its first formal anti-corruption measure in 1789, which required the removal of "bribed" customs officers from their posts and making payors liable. The subsequent 1872 "mail fraud" statute and its extension in 1952 to cover "wire fraud" have been essential tools in many criminal and corruption cases. Statutes conceived as tools to fight organized crime, broadly defined, have proven useful in pursuing public officials accused of corruption, as well.[5] Fighting corruption has often been a byproduct of anti-crime legislation rather than an explicit end in itself. A key exception to that trend is the 1977 Foreign Corrupt Practices Act, which is discussed in greater detail below.

The United States began building an operational infrastructure to pursue public corruption in the 1970s. From its creation in 1976, the Public Integrity Section (PIN) of the Department of Justice has been respected and effective, carrying out thousands of prosecutions of federal, state, and local officials. In addressing corruption, U.S. prosecutors have considerable power. However, unchecked power of prosecutors, like the unchecked power of politicians, often produces bad results. At times, ambitious prosecutors have pursued high-profile cases with an eye on their own career-advancement. One cautionary tale is the case of former Alaska Senator Ted Stevens. Stevens was one of the most senior U.S. senators when initially convicted of violating federal ethics laws in 2008. That conviction came just eight days before he was up for re-election—a bid that he lost. But in April 2009, the conviction was essentially vacated, with Judge Emmet Sullivan delivering a stinging rebuke to Justice Department prosecutors, accusing them of failing to hand over key exculpatory evidence and knowingly presenting false evidence to the jury.[6] The PIN has since been much more careful.

A key innovation in the U.S. anti-corruption system—and one it has encouraged other countries to adopt as well—has been the use of "deferred prosecution agreements" (DPAs). In the 1990s, U.S. prosecutors began using DPAs in cases of corporate, white-collar crime. The proposition is that firms that engaged in corruption or malfeasance should be restructured and monitored rather than convicted and perhaps destroyed. This avoids harming employees who, the reasoning goes, bear no blame for bad practices and should not suffer for the corruption of a few. The use of DPAs gained favor after the collapse of accounting firm Arthur Anderson following the Enron scandal in the early 2000s. Between 2015 and 2017, U.S. prosecutors reportedly reached more than 150 DPAs with corporate defendants globally, including many accused under the Foreign Corrupt Practices

Act. While some critics see DPAs as upholding the idea of "too big to jail," the Justice Department argues that it represents an important middle ground between convicting and declining to prosecute.[7] In turn, DPAs have gained a role in anti-corruption toolboxes internationally, including in the United Kingdom and Canada.

However, perhaps the most important tool in the United States' international anticorruption toolkit is the Foreign Corrupt Practices Act (FCPA), which we examine now in greater detail. The FCPA emerged in the reformist period of the 1970s, passed into law in 1977. The act made bribing a foreign public official as a way of "greasing the wheels" a criminal offense. Specifically, the FCPA made it:

> illegal to give, pay, promise, offer, or authorize the payment of anything of value, either directly or indirectly through a third party, to an official of a government or its representative to obtain or retain business, or to secure an unfair advantage.[8]

The act considers a wide scope of benefits to be bribes: covering travel and lodging not related to business; hiring a government relative (equivalent to nepotism in the public sector); extravagant gifts; making a charitable contribution as a quid pro quo, benefiting a foreign official; a recommendation from a government official of a third party; and when a third party is not experienced to the field, engages in suspicious activities, or gets paid unusually high commissions, among others.

The Securities Exchange Commission (SEC) is in charge of bringing civil enforcement actions, and the Department of Justice (DOJ) is in charge of criminal prosecutions. As a result, the FCPA has been shaped by the DOJ and SEC perspectives, rather than through legal decisions or interpretations.[9] The DOJ and SEC issue guidance jointly[10] related to, among other things, cooperation and voluntary disclosure of corrupt practices. The FCPA is designed to address actions abroad, and U.S. authorities have taken a broad view of its extra-territorial application: even if funds pass through an account in the United States or emails are sent through U.S. servers, the connection is considered sufficient to bring individuals to U.S. court jurisdiction under the FCPA. In many anti-bribery cases, other countries have cooperated with the U.S.[11] In addition, the FCPA covers U.S. citizens in the country or abroad, foreign subsidiaries of U.S. entities, U.S. parent companies, and foreign entities traded on U.S. stock exchanges. In addition to the anti-bribery provisions, the FCPA specific requirements related to accounting and internal controls, requiring reports to the Securities and Exchange Commission from all companies having a business entity organized in the United States, as well as from U.S. citizens and permanent residents.

The idea that corrupt behavior abroad could be sanctioned at home was ground-breaking. Since the first conviction, in 1978, the FCPA substantially changed the way American companies did business abroad. The level of bribery emanating from U.S. companies declined significantly. Many would respond to requests for "facilitation payments" by citing the FCPA. In other ways, though, expanding the campaign against corruption was a slower process. The U.S. successfully pushed for the inclusion of bribery in the 1976 OECD Guidelines on Multinational Enterprises,[12] but it would take about fifteen more years to initiate a serious international discussion about prohibiting bribery of foreign public officials. Many saw bribery as a normal cost of doing international business. In fact, in countries such as Germany, bribes paid abroad were tax-deductible until the second half of the 1990s.[13]

Today, however, international law enforcement cooperation is common. Signs of what was to come began in 1989. The OECD initiated a comparative review of member countries' national legislation on bribery of foreign public officials. The G7 also created the Financial Action Taskforce, which, in time, served as an operational instrument to pursue corruption cases. In 1993, Transparency International was founded and swiftly became an influential force in the fight against corruption.[14] Under pressure from the FCPA, the U.S. business community began to press for an international regime that would outlaw payment of bribes during the late 1980s and early 1990s. Restricted from paying bribes, U.S. companies found themselves "out of the game" on many international procurement contracts. Rather than pushing to roll back the FCPA, the U.S. business pushed for disciplines on everyone else. The Clinton Administration heeded their call and began a coherent push for an international convention through the OECD. These efforts would pay off.

Mexico's Anti-Corruption Regime

Societies and habits of governance tend to change relatively slowly—but change they can. Mexico's formal anti-corruption system is only about five years old. Yet, considering where the country was on issues of corruption even at the time of NAFTA's signing, its very existence is a sign of tangible progress. Indeed, recent reforms have been adopted in Mexico related to anti-corruption; fighting corruption has become a key electoral issue, reflected in the resonance of political promises from Andrés Manuel López Obrador.

Corruption systems have long roots. From 1929 to 2000, Mexico was a one-party state. The ruling Institutional Revolutionary Party (PRI) penetrated deeply into social, economic, and labor organizations throughout the country. The old PRI stayed in power principally through clientelism, which included the collection and distribution of "rents" throughout the system.

This was a classic example of Acemoglu and Robinson's "extractive" institutional model. During the oil boom of the mid-1970s, the sheer scale of corruption expanded. As oil riches and oil-backed loans flowed through the PRI-administered governmental infrastructure, citizens' expectations about what their government was to deliver changed radically. President Jose Lopez Portillo (1976–1982) asserted that a key task of the Mexican government was to "administer the abundance." When oil prices fell and the economy crashed in 1982, the old statist model became completely discredited. So began the long process of ending state control over the economy and society and a gradual modernization of Mexico's institutional framework. Frustration with corruption was a frequent complaint. The North American Free Trade Agreement (NAFTA), which entered into force in 1994, was an important accelerator to the modernization of the economy and the political system. In 2000, Vincente Fox of the National Action Party (PAN) was elected president, ending the old PRI's reign.

NAFTA imposed many disciplines that changed the business and governance processes in Mexico. For example, it imposed standards and rules for how customs administration would work. It specified how intellectual property would be treated. It also included an investor–state dispute settlement regime that foreign companies could turn to in the event they felt they were treated unfairly. In addition, there was growing pressure from new foreign investors to keep corruption within bounds. The post-2000 era in Mexico brought new scrutiny from an active civil society, including that corruption be curtailed. Old processes and ways of doing things nonetheless die hard. New challenges also emerged in the first decade of the new millennium, especially with respect to the shocking increases in violence associated with the drug war. Drug money and the violence have added grave challenges in the fight against corruption in Mexico.

Nevertheless, with the public growing frustrated with insecurity and corruption, the government of Enrique Peña Nieto, the first president of PRI elected in the democratic era, pushed forward a package of anti-corruption reforms. Shortly after coming to office in December 2012, Peña Nieto began pursuing his "Pacto por México," which included the creation of a "National Anti-Corruption System" (SNA).[15] After some hard bargaining, substantial civil society engagement, changes to fourteen constitutional articles and five general laws, and the drafting of two new laws, the SNA was approved in 2015.[16] In 2016, the SNA disclosure rules were tweaked, and the enabling regulations were drafted. The System came into force throughout Mexico in July 2017.[17] As Viridiana Rios wrote: "No one doubts that the approved (SNA) is a much more solid institution to identify, prosecute and sanction corruption acts than anything the country had before."[18]

In the SNA legislation, the Mexican legislature legally defined corruption. *Serious* offenses include any form of bribery, embezzlement, misuse of public resources, misuse of information, collusion, abuse of official authority, improper influence, and concealment of conflicts of interest. *Non-serious* administrative offenses include the failure to comply with certain responsibilities of public officials (*e.g.*, cooperating with judicial and administrative proceedings, reporting misconduct, etc.). Companies can be held liable (as private offenses) for the actions of persons acting on their behalf or being their legal representatives when these persons are involved in serious offenses, or their actions are seeking to obtain undue benefits for the company. The serious administrative offenses private persons can commit include bribery, illegal participation in administrative proceedings, improper use of relationships and power, misuse of information, wrongful use of public resources, and wrongful recruitment of ex-public agents.

The new legislation seeks to sanction companies, persons and public officials participating in acts of corruption. These fines can be up to US$6,220,000. As Luis Alberto de la Peña and Fernando Villaseñor state,[19] companies can mitigate sanctions and penalties if they put in place an "Integrity Policy," by which procedures are created to prevent and report acts of corruption. Such policies can reduce companies' liability if the relevant authority determines adequate steps are taken to fight corruption and ensure compliance. Distinct sanctions may be directed at individuals or at companies. Fines for companies can be up to twice the amount obtained as a benefit, reaching from approximately US$4,100 to US$6,220,000 for tangible benefits. Associated sanctions can be the inability to participate in any public bidding or procurement, leases, services, or projects between 3 months and 10 years; suspension from activities between 3 months and 3 years; legal declaration of the dissolution of the company; and compensation to the government for the damages caused. Sanctions for persons can be up to twice the amount obtained with the benefit; in addition to fines, they may include lost eligibility to participate in public bidding and procurement. However, sanctions may be reduced between 50% and 70% for people who inform the authority about the illegal conduct before the authority notifies the person about a case against him or her. The statute of limitation for serious administrative offense is seven years since the date of the action or omission happened, or the misconduct ceased to occur.

The SNA is also broadly responsible for designing and implementing policies for combatting corruption. It has mechanisms that focus on ensuring transparency, carrying out oversight (including investigations), and prosecution of offenders. Operationally, the SNA does three things:

1. It sets up a system of checks and balances across the government. In other words, allegations of corruption in one branch can be addressed by other branches of government.

2. It establishes a coordinating committee of key entities involved in the fight against corruption. Crucially, it includes a representative of the Citizen Participation Committee—a key civil society organization—as chair. The remaining members include: the head of the Ministry of Public Administration (SFP); the head of the Superior Audit of the Federation (ASF); the head of the Special Prosecutor's Office for Combating Corruption; a representative of the federal judiciary council; the president of the National Institute of Transparency, Access to Information and Protection of Personal Data (INAI); and the president of the Federal Court of Administrative Justice.

3. It creates an integrated institutional intelligence network on corruption.[20]

Since becoming operational, the system has grown stronger—even as Mexican leaders, including Peña Nieto himself, were scarred by corruption allegations. Notably, in September 2019, the Transparency International Global Corruption Barometer for Latin America found that 61% of Mexicans felt its government was doing a "good job" in combatting corruption. This was up from 24% in the 2017 survey.[21] Nevertheless, the system remains a work in progress. A variety of states still have to implement specific reform measures required by the SNA. The Citizen Participation Committee has also raised concerns with the government headed by President Andrés Manuel López Obrador, which came to office in December 2018. Specifically, in August 2019, the Committee sent a letter to the president demanding the appointment of eighteen new anti-corruption magistrates that are required by the SNA.[22] In February 2022, opposition parties in Mexico expressed their concerns that the president might weaken or displace the SNA.[23] Citizen pressure will continue to be essential to keep Mexico's progress in tackling corruption on track.

Canada's Anti-Corruption Regime

Canada has a reputation of low levels of corruption and strong governance institutions. Nevertheless, Canada has had its own struggles with corruption both domestically and internationally, which have led to the development of mechanisms and processes for addressing such challenges.

The 1990s was a period of ferment on the anti-corruption front. Governance standards in provinces such as Nova Scotia were tightened as governments across the board sought to balance budgets and be responsive to a restive public's frustration with patronage and corruption. In 1999, the Parliament of Canada passed the Corruption of Foreign Public Officials Act (CFPOA), thereby implementing the OECD Anti-Bribery Convention.[24] The prohibition on giving benefit to a foreign public official in exchange for an advantage on a given matter was broadly applied to Canadian citizens, permanent residents, as well as companies deemed to be operating under the laws of Canada. The CFPOA was a counterpart to the provisions embedded in Sections 119–121 of the Criminal Code outlawing the corruption of domestic public officials, fraud, and the like.[25]

Concern about corruption in Canada moved higher up the policy agenda after 2000 thanks to several scandals. Of particular note was the Sponsorship Scandal, which involved misuse of federal government funds in Quebec. It arguably hastened the departure of Jean Chretien as Prime Minister in 2003 and contributed substantially to the defeat of his successor, Paul Martin.

Yet, 2011 was arguably the year that set Canada on its contemporary course with respect to anti-corruption. In March of that year, Canada was shamed by the Organization for Economic Cooperation and Development (OECD) for its relatively weak framework and limited enforcement actions in combatting foreign corruption. In essence, the CFPOA was passed into law, but Canada had done nothing with it over the previous twelve years.[26] The stinging criticism generated high-profile press coverage in Canada and a determination to change. In October of that year, the Government of Quebec appointed the "Charbonneau Commission," which uncovered significant governance lapses and corruption in the contracting of public works in the province. This generated non-stop press coverage which further reinforced the urgency of addressing Canada's corruption problem.[27]

Since that time, tolerance for corruption in Canada and for improper dealings by Canadian firms abroad has steadily diminished. The CFPOA, as passed in 1999, barred bribery of foreign public officials when the act occurs wholly or partially in Canada. Amendments to CFPOA adopted in 2013 imposed a "nationality jurisdiction," which empowered the Government of Canada to charge Canadian entities and individuals with bribery, regardless of whether the actual illicit payment was made in Canada. It also included "books and records offenses," which criminalized the falsification of accounts for the purpose of making or hiding bribes. After 2011, Canada also invested resources and began actively prosecuting companies and individuals for violations of the CFPOA.

A persistent criticism of the CFPOA was that it did not bar "facilitation payments." Facilitation payments are fees paid, typically to low-level officials, to expedite the performance of routine government actions to which the recipient is legally entitled, such as obtaining permits and processing government documents. However, many viewed this as a bribery loophole. On October 31, 2017, the Government of Canada amended the CFPOA to explicitly bar facilitation payments.

While Canada worked to tighten its framework for corruption abroad, it also was making steps to tighten its public procurement framework at home. In 2012, Public Works and Government Services Canada introduced the “Integrity Framework” in an effort to ensure that it would only be dealing with ethical suppliers. While the initial iteration was welcome, amendments in 2014 set off significant concerns among the business community.

Specifically, the 2014 amendments said, in essence, that if a company were convicted of corruption anywhere in the world that they would be barred from doing business with the Government of Canada for ten years. While the idea may have sounded good, it failed to take into account the realities of how multinationals are structured. Many of these firms operate in different jurisdictions through separate local companies that are organized and structured under the national laws of the country. The head of Canadian operations would have no real systematic way of knowing if the local company or an executive in an Asian or African country was convicted of corruption. One prominent European company told the author at the time that there were roughly 20,000 separately constituted business units under its corporate banner. A separate concern had to do with whether a conviction met anything like the standards of evidence and due process used in Canada. It is very common for some countries to allege corruption during political battles as a way of trying to bury a company or an individual, regardless of whether any malfeasance took place.

One fascinating dynamic that greatly concerned the companies likely to run afoul of these amendments was the growing trend toward mutual recognition of debarment. At the time, Canada was concurrently working arrangements with several European countries to the effect that debarment in one country would automatically lead to debarment in the others. If companies ended up on the Canadian debarment list for actions that did not take place in Canada or involve Canadians, the consequences would now be substantially amplified.

Facing significant political pressure and the prospect of losing reliable suppliers over bribery acts that took place in jurisdictions as diverse as Russia, Nigeria, and Colombia—and which had no relation to Canada—the government began to consider changes. The process took a year, but mutually agreeable refinements were announced in July 2015.

The other major evolution in the Canadian anti-corruption regime was the adoption in 2018 of what is essentially a Deferred Prosecution mechanism—or what is called a “Remediation Agreement.” As with U.S. DPAs, Remediation Agreements allow companies charged with malfeasance to seek a monitored, carefully overseen restructuring in lieu of prosecution. Efforts toward a Remediation Framework began in earnest at least four years before. The controversy over the Integrity Framework pushed analysts to question where else Canada’s anti-corruption framework needed strengthening. In 2015, an influential group convened by the Institute for Research on Public Policy recommended adoption of a DPA type framework for Canada.[28] It included Anita Anand, a University of Toronto academic who was elected to Parliament in 2019 and appointed Minister of Public Works and Procurement.

In its final form, the Canadian Remediation process is closer to the United Kingdom's than the United States' process. Prosecutors in Canadian Remediation negotiations would have less discretion than in the United States. Similar to the UK, any Agreement is required to undergo judicial review to determine that 1) it is "in the public interest"; and 2) the "terms of the agreement are fair, reasonable and proportionate" before it is allowed to proceed.[29] The Canadian regime is also unique with respect to the extent to which it prioritizes and allows for compensation to be paid to victims of the malfeasance in question. In fact, "help(ing) repair harm done to victims or to the community, including through reparations and restitution" is a key condition of the legislation. As Anthony Cole and Paul Lalonde explain:

> "victims" (as defined) must generally be notified prior to a Remediation Agreement being presented to a court for approval, and the court is required to consider any victim impact statement presented in connection with the approval hearing, as well as to consider whether appropriate provision has been made for "reparations" to victims within the Remediation Agreement. In this regard, it is worth noting that the definition of "victim" under the Criminal Code is very broad, and includes any individual or organization "against whom an offence has been committed…and has suffered or is alleged to have suffered…property damage or economic loss."[30]

While Canada adopted the Remediation Framework in 2018, it has yet to be used. In addition to corporate governance and anti-corruption experts, the infrastructure firm SNC Lavalin was an important advocate for a Canadian DPA-type regime. SNC had engaged in bribery and other acts of corruption in the first decade of the 2000s for which they had been charged. From 2012 onwards, the company went through a radical restructuring, replacing most of its management team and all of its board. The company also negotiated a monitoring regime with the World Bank. Yet, the wheels of justice turn slowly.

By 2018, the company was facing the prospect of a trial for acts that, in many cases, took place more than a decade before. If SNC lost, the company faced the real prospect of bankruptcy, break up, or being sold off. Consequently, they launched a full court press in pursuit of a Remediation Agreement. In early 2019, the press reported that a Remediation Agreement was not negotiated because the Justice Minister and the Director of Public Prosecutions said no. This was despite lobbying from the company and requests from the Prime Minister's Office. The SNC Lavalin question became a big political issue for the Trudeau Government that persisted until the October 2019 federal election.

The highly political nature of the SNC Lavalin affair seems to have made the government shy about using the Remediation Agreement framework. As Jennifer Quaid of the University of Ottawa points out, the Canadian Government has yet to implement detailed regulations to make parts of the system work. There also are key areas that need to be clarified in the prosecutors "Deskbook" on how the "public interest" requirements are to be interpreted.[31] Time will tell the extent to which the federal government returns to the Remediation process for handling difficult future issues. As noted below, perhaps a regional approach could be helpful.

A North American Anti-Corruption System? Global and Regional Agreements

As noted above, there has been a gradual—but important—growth in international attention to anticorruption. Pressured by the FCPA, U.S. businesses have often advocated anti-bribery agreements at an international level; they have increasingly gained allies elsewhere. As a result, Canada, Mexico, and the United States have joined multiple international anticorruption agreements.

The most important early step came in 1994, when ministers from OECD member states agreed to negotiate an anti-bribery convention. In 1997, 29 OECD Members and 5 non-members signed the *Convention on Combating Bribery of Foreign Public Officials in International Business Transactions*.[32] It entered into force in 1999. Because the Anti-Bribery Convention imposes binding legal obligations on its members, it is a rarity in the OECD landscape.[33] In addition to the agreement, there is an elaborate administrative and monitoring infrastructure. To date, 37 OECD countries and seven non-OECD countries have adopted the Convention. Crucially for North America, the U.S., Canada, and Mexico are all among the signatories.

Mexico, Canada, and the United States also are members of the *Inter-American Convention Against Corruption*, which pre-dated the OECD Anti-Bribery Convention. While the corruption question had been discussed at Inter-American meetings in 1992 and 1993, it was the Summit of the Americas meeting of Heads of State and Government in Miami in December 1994 that put the hemisphere on the pathway to a Convention. After extensive discussions and analysis supported by the Organization of American States, the countries of the hemisphere signed the Convention in Caracas in March 1996. Virtually all active OAS members have ratified the agreement.

Additionally, on October 14, 2016, the International Standards Organization (ISO) adopted a new norm, ISO 37001, as a global standard to implement an anti-bribery management system. It is designed to prevent, detect, and mitigate bribery. ISO norms tend to create global standards as proof of quality and control of a specific product or field that meets ISO standards. An entity of accreditation, or accredited third party, needs to confirm that an organization's anti-bribery systems meet those standards. Companies can receive certification in best practices for the monitoring of anti-corruption practices.[34]

Together, the OECD, inter-American, and ISO agreements put their signatories on a pathway of "thinking globally and acting locally" (or at least nationally) in the fight against corruption. In developing shared agendas, one must recognize that Canada, the United States, and Mexico face different challenges and institutional cultures on the anti-corruption front, as highlighted above.

- **Mexico** faces the most challenging corruption fight, as Transparency International suggests. It is still trying to make a new anti-corruption system work effectively. More broadly, Mexico must continue to shift from old, extractive institutions to an inclusive model of institutional development.
- **The United States** has the oldest anti-corruption regime, with established processes and mechanisms within its public institutions, an active anti-corruption bar, and a network of advocacy groups. However, the U.S. system's tendency to "legalize" the resolution of many issues can lead to problems. Prosecutors are granted extraordinary—and often unchecked—power in pursuing cases and seeking "plea deals." This does not always lead to balanced, credible outcomes.
- **Canada** applies its founding creed of "peace, order and good government" to the anti-corruption question. It often prioritizes informal mechanisms for addressing corruption and other bad practices. This arguably helps to keep the faith of the citizenry in the system. It also does not empower prosecutors to the same degree as the United States, wanting to ensure that the system is seen as "fair."

Despite some of the difference in approach, the three countries of North America have important, highly similar foundations for anti-corruption cooperation. In addition to each being an adherent to the OECD and Inter-American anti-corruption regimes, they also are signatories to the United Nations Convention Against Corruption and publicly support the G20 and APEC anti-corruption principles and regimes. This set the stage for the place of corruption in the USMCA.

Anticorruption in the "New NAFTA"

On July 1, 2020, Mexico, the United States and Canada saw the entry into force of the "new North American Free Trade Agreement," known as

USMCA in the United States, CUSMA in Canada and T-MEC in Mexico. Chapter 27 of the agreement focused on anti-corruption. Much of the chapter reiterates the core substance of the OECD, Inter-American, and UN anti-corruption conventions. Of particular importance is that Article 27.8 states that the three countries may have access to the USMCA dispute settlement system on anti-corruption matters if a party implements a particular measure that is inconsistent with the commitments in this chapter or fails to properly carry out an obligation under this Chapter to the extent that they affect trade and investment. The ramifications of this possible recourse will be clear only if one of the countries decides to pursue a dispute at the regional level.

Article 27.9 of the Chapter focuses on anti-corruption cooperation. In doing so, it carefully sets forth several notional principles and pathways rather than specific commitments. First, the Parties "recognize the importance of cooperation, coordination, and exchange of information between their respective anti-corruption law enforcement agencies." Second, the Parties "shall endeavor to strengthen cooperation and coordination among their respective anti-corruption law enforcement agencies." Third, "the Parties' anti-corruption law enforcement agencies shall consider undertaking technical cooperation activities, including training programs."[35]

Conclusions: The Next Agenda

Canada, Mexico, and the United States each has its own national experiences and legal frameworks for responding to corruption. However, they have also joined the trend toward internationalizing the issue through several regional and global agreements. Most recently, they have put anticorruption squarely on the North American agenda through USMCA Chapter 27. Given their shared participation, and the invocation of these same agreements in the USMCA, the question is: What more can the three countries of North America do at a region-wide level?

With virtually no supranational institutions, the nations of North America would have to directly consent to any sort of cross-border anticorruption activities. With that in mind, there are several pathways of potential coordination:

1. Regular reviews of national anticorruption regimes: The three countries could periodically agree—perhaps every two years—to review the content and application of each other's anti-corruption regimes. Such reviews are applied in other policy areas. For example, in 2018, Canada conducted a review of Mexico's regulatory system on behalf of the OECD Regulatory Policy Committee and with the full consent of Mexico. This work yielded useful recommendations that provided a political foundation for policy refinements. A similar concept could be applied in the anti-corruption area, producing two types of reports: (1) the formal report; and (2) discrete recommendations for the recipient government, including areas where technical assistance and cooperation could be useful.

2. Agreement on common debarment lists: As noted above, one of the growing trends is for countries to share and mutually recognize debarment decisions. A logical step would be for Canada, the U.S., and Mexico not only to share information about ongoing corruption investigations but also to agree, barring extraordinary circumstances, that a debarment for the purposes of government procurement in one country will mean a North America-wide debarment.

3. Coordination in deferred prosecution negotiations: The U.S. has used Deferred Prosecution Agreements for some time. Canada has had a bumpy start with its Remediation regime, but it is still law. Mexico should consider adopting a DPA regime of its own. There are inevitably going to be cases where companies seeking DPAs will be implicated in more than one North American country. In order to ensure that everyone's concerns are addressed and the companies do not face conflicting demands, the three countries should explore mechanisms that would essentially allow for a North America-wide master DPA applicable in all three countries.

4. Anticorruption dialogue with Mexico's government and private sector: While the Corruption Perceptions Index is not fully scientific, the gap in scores between Mexico and the other two nations of North America does indicate a problem. While Mexicans will ultimately have to make the fight against corruption work, Canada and the United States have an interest in helping Mexico to improve on this front. In the near term, the United States and Canada should seek a dialogue structured in the spirit of respect and collaboration to discuss where the challenges of corruption are in Mexico and how technical assistance and coordinated action could improve the situation. This dialogue mechanism should be available to any of the countries in response to cases where the scope or intensity of corruption is felt to have region-wide implications. The spotlight is on Mexico today, but it could be on another country tomorrow. The important matter is for the countries to agree on a mechanism for constructive dialogue on extraordinary issues, including the challenge of corruption.

No matter which country it is, anti-corruption measures are complicated and politically sensitive to apply. Yet, the overwhelming evidence suggests ensuring good, clean governance is necessary for both democracy and broadly-held economic prosperity to flourish. The North American model of economic integration is built around trade rules and ad hoc political coordination. It is time to develop a regional anticorruption regime along the same model. By strengthening and complementing national efforts to foster more inclusive institutions, such a regime would have regionwide benefits for democracy, economic growth and prosperity, and social inclusion.

Endnotes

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11

Cybersecurity and Critical Infrastructure Resilience in North America

Luisa Parraguez-Kobek, Paul Stockton, and Gaétan Houle

> *The terror of 9/11 and the failure of the three governments to build on the NAFTA foundation allowed old problems to fester and new problems to multiply. The fears that accompanied these problems made it hard to see that each crisis was connected, and that a solution would only become possible with a deeper level of cooperation.*
>
> Robert A. Pastor,
> *The North American Idea: A Vision of a Continental Future*

Cyber threats to North Americans and to the region's critical infrastructure continue to multiply. Technological advances and our ever-growing connections to digital platforms make the region's societies and economies more vulnerable to a proliferation of malicious actors. These threats include misuse of private information, ransomware attacks, and malicious activities and transactions connected to cryptocurrencies.[1] Combined, the private and public sectors have been spending billions to defend against these threats; the North American cybersecurity market was estimated at US$51.6 billion in 2018 and is projected to reach US$82.5 billion by 2023.[2]

As cyber risks have increased, so too has the depth of integration across the continent. These connections amplify the stakes for regional cooperation. With so many nodes of connection across the region, each vulnerable to cyber risks in its own ways, cooperation to protect regional systems is vital. In many manufacturing sectors, Mexico, Canada, and the United States now form a single regional platform for production. Parts and materials now travel back and forth across the borders within North America during the manufacturing process. Industry in each country depends heavily on regular, on-time shipments of supplies from the others. A disruption at any node in the system, whether caused by a cyberattack or another reason, can paralyze a production network. The energy systems powering regional production are also deeply intertwined. In 2020, Canada and Mexico were the number-one and number-two sources of oil imports for the United States, with 52% and 11%, respectively.[3] The United States and Canada have a fully integrated electric grid. Mexico is less integrated with the North American grid, but it has strong economic and environmental incentives to add connections in the coming decades. Migration, tourism, and trade throughout North America generate financial flows to send money to family members, pay for travel costs, and buy imported parts and materials. The USMCA recognized the opportunities that these regional connections offer by creating a framework for digital trade (Chapter 19) that was absent in NAFTA. But when it comes to preparing for and responding to threats, interests are aligned and threats are shared, yet joint strategies are lacking. For the most part, each country does the best it can to protect itself against a constant flow of intrusions.

However, despite the borderless nature of cyberspace and the interconnected nature of much regional infrastructure, cooperation at a North American level has been slow to emerge. The private sector, too, has sought to keep pace with rapidly evolving threats. There is a window of opportunity to develop "perimeter security" for North American cyberspace. Although the 2021 North American Leaders Summit called for a trilateral meeting of experts, much more needs to be done. This chapter seeks to identify shared challenges and opportunities, focusing on three areas where the opportunities for North American collaboration are greatest: protecting critical infrastructure, securing financial transactions, and improving public-private and regional cooperation to identify and mitigate cyberattacks.

Shared Threats, Individual Responses

In North America, reactions to growing cyber threats have focused on individual governments. Individually, the United States, Canada, and Mexico have all taken steps to identify critical cyber assets and prioritize cybersecurity. In each country, substantial progress and innovation in cybersecurity is already underway.

The U.S. Department of Homeland Security has identified 16 critical infrastructure sectors related to cybersecurity.[4] In March 2022, the U.S. Congress passed laws on incident reporting and protection for critical infrastructure. In Canada, the Department of Public Safety has outlined 10 sectors with vital cyber assets in health, food, finance, water, information and transportation.[5] Mexico does not yet have a list of critical cyber infrastructure, but several important national strategies mention cybersecurity as a global concept.[6] Companies operating across North America have also taken significant steps to improve cybersecurity and, in some cases, to improve cooperation with one another and with all three governments.

However, no single actor has full awareness of, or all the required tools to deal with, cyber threats. North America faces shared threats, especially to its critical infrastructure and financial sectors, as well as shared opportunities, such as public-private partnerships to make a more resilient cyber landscape. As a result, it is tremendously important to create spaces and systems for the sharing of real-time information regarding the threat landscape and best practices in cybersecurity. Mechanisms for cooperation are needed among private sector actors, between businesses and government, and among governments. As proposed later in this chapter, the creation of a platform for the exchange of information among public and private actors across the North American continent would scale up the benefits of cooperation greatly. Sharing best practices on a trilateral basis gives each country a chance to strengthen cybersecurity at home and across the continent.

This following section reviews the approach each of the three North American governments has taken in facing cyber threats to financial transactions and critical infrastructure and identifies ways in which some of those approaches create opportunities for trilateral cooperation to strengthen continental security in this new and evolving realm.

Cyber Policy Background: United States

In 2018, former U.S. Director of National Intelligence Dan Coats warned that "the digital infrastructure that serves this country is literally under attack."[7] Since that warning, China, Russia, and other nations have intensified their efforts to implant advanced persistent threats in the systems that control essential public health and safety, economic, and national security infrastructure. The 2021 *Annual Threat Assessment of the US Intelligence Community* notes that "China can launch cyber attacks that, at a minimum, can cause localized, temporary disruptions to critical infrastructure within the United States."[8] Russia continues to target the industrial control systems critical to infrastructure operations "in the United States and in allied and partner countries, as compromising such infrastructure improves—and in some cases can demonstrate—its ability to damage infrastructure during a crisis."[9]

Through these campaigns, potential adversaries can maintain a covert presence on infrastructure networks, install secret malware to disrupt grid operations, and conduct other malicious activities to attack critical system components.[10] *The National Counterintelligence Strategy of the United States of America, 2020–2022*, highlights both the severity of these cyber threats and the imperative to partner with Mexico, Canada, and other nations to counter them:

> Disruption of U.S. critical infrastructure could undermine our nation's security, economy, public health and safety in a variety of ways. For example, adversaries seeking to cause societal disruption in the United States could attack the electrical grid causing a large-scale power outage that affects many aspects of daily life. Additionally, foreign adversaries could disrupt the U.S. economy by interfering with the ability of individuals and businesses to conduct financial transactions. We must work with our allies and partners to identify and mitigate foreign intelligence threats to critical infrastructure upon which our collective national and economic security depends.[11]

To frame the need for North American collaboration more bluntly: adversaries are *preparing the battlefield* to create massive blackouts and other interruptions of critical services in the United States. Similar threats to Canadian and Mexican critical infrastructure and the interconnected nature of some infrastructure systems—the electric power grid in particular—make these cyber threats a truly trilateral issue.[12]

Although the utilities sector has extensive experience managing outages caused by natural disasters, adversary-induced disruptions present far more complex challenges. Unlike disruptions caused by natural hazards, adversaries can implant malware in infrastructure networks, enabling attacks and disrupting restoration efforts. They also can map utilities' cyber systems, focusing their attacks on the most operationally critical assets to create widespread failures. As such, in addition to the traditional incident response roles and resources necessary in response to severe weather, infrastructure owners and operators, their government partners, and other stakeholders will need the resources to sustain and restore infrastructure in a contested environment.

Electric utilities and other energy sector companies are strengthening their coordination with federal and state governments to meet these challenges. As this chapter will discuss, equivalent improvements are underway in the financial services sector and other sectors critical to the U.S. economy. However, cyber threats to these critical systems are growing rapidly as well. Accelerated measures to strengthen the cyber resilience of U.S. infrastructure and deepen collaboration between the United States and its neighbors will be vital for years to come.

Cyber Policy Background: Canada

Canada has taken increasing steps in the last few years to develop and fund a strategy to protect critical infrastructure and respond to cyber threats. Because digital technologies are central to innovation and economic growth, cybersecurity is critical to Canada's competitiveness, economic stability, and long-term prosperity. But it also brings risks; cybercrime in Canada causes more than CA$3 billion in economic losses each year.[13] Recognizing this, Canada's National Cyber Security Strategy was first promulgated in 2010 and updated in 2018.[14] The revised strategy established three goals: (1) secure and resilient Canadian systems, (2) an innovative and adaptive cyber ecosystem; and (3) effective leadership and collaboration.

Of the ten critical infrastructure sectors established by the Government of Canada, the two most important are the energy sector (which includes electric utilities, nuclear energy, and oil and gas) and the financial sector. As these critical infrastructures focus on securing their networks, safeguarding citizens' personal information, and building resilience against malicious actors, limited resources and an increasingly sophisticated threat environment pose challenges. To manage competing priorities, Canadian critical infrastructure organizations must collaborate to tackle cyber threats and address security risks.

The Canadian government followed its updated National Cyber Security Strategy with cybersecurity funding totaling close to CA$1 billion for the 2018 and 2019 federal budgets. The strategy is designed to be adaptable, accounting for the continuously changing cyber landscape. The 2019 budget included CA$145 million to help to protect Canada's critical cyber systems, including in the finance, telecommunications, energy, and transport sectors. It also provided CA$80 million over four years to support three or more Canadian cybersecurity networks across Canada that are affiliated with postsecondary institutions.

To support these goals, Canada created the Canadian Centre for Cyber Security.[15] The center offers a unified approach to cybersecurity that builds on Canada's cybersecurity expertise and centralizes cyber innovation and collaboration in the country, providing a place for private and public sector partners to work side-by-side to solve Canada's most complex cyber issues. The center also launched the Learning and Innovation Hub, a trusted source of learning activities and programs for cyber security and communications security professionals working within the Government of Canada or Canadian business partners.[16] The Learning and Innovation Hub provides services, guidance, and advice on cybersecurity training and education to industry, academia, and other levels of government.

Despite this progress, Canadian public and private-sector organizations must urgently address the country's shortfall of cybersecurity expertise. Demand for cybersecurity talent in Canada, already in short supply, is increasing by 7% annually.[17] Despite its evident importance, cybersecurity is rarely prioritized at the board level in private companies. IT or cybersecurity executives are underrepresented as board members even at companies operating critical infrastructure in the energy and information and communications technology sectors. In board meetings, less than one hour per year is typically spent discussing cybersecurity matters, unless a breach has occurred. Consequently, cybersecurity programs are often underfunded, and chief information security officers have difficulty recruiting cybersecurity talent. Board members know cyber threats exist, and yet they do not sufficiently explore potential risks and solutions. Addressing this problem will require building on the current strategy to develop greater cooperation among government, business, and education providers.

Cyber Policy Background: Mexico

Despite (and in some cases because of) its technological progress, Mexico faces significant cybersecurity challenges. The introduction and expansion of digital technologies into the production processes of various economic sectors, including manufacturing, has become apparent in the country's expanding economic performance. In particular, technological expansion and the growth of Industry 4.0 contributed to the growth of the Mexican automotive and telecommunication sectors; currently, Mexico produces 80% of Latin America's high-tech exports.[18] Although Mexico as a whole is not yet the target of devastating cybersecurity threats from external actors, cyberattacks on Mexican institutions and individuals have at times jeopardized financial sector functions.[19] As a result, the federal government created institutions and legal frameworks to protect the economy and its citizens.

Mexico's 2005 National Security Law (Ley de Seguridad Nacional) regulates the organization and coordination of national security, including its critical infrastructure and institutional resiliency in the event of a cyberdisaster.[20] Though this law has not been updated since President Vicente Fox's term (2000–2006), it nevertheless identifies key threats to the nation, including foreign intervention in domestic issues, attacks on military and police bases, and attacks on public services. That said, even though the government recognizes the cybersecurity threat, there is no specialized center that deals with the national protection of Mexico's critical infrastructure. The Mexican government implemented new protocols following numerous incidents with private banks, but the information that has become public varies depending on the sensitivity of the situation and the actors involved. Similarly, the 2017 Personal Data Protection Law (Ley General de Protección de Datos Personales en Posesión de Sujetos Obligados) has been critical in establishing rules concerning the management of sensitive information in the private sector, especially banks.[21] The Mexican government has an excellent legal framework on cybersecurity in comparison to other Latin American countries, but there are concerns regarding the lack of implementation, as there is no central structure to oversee data protection issues.

In recent years, the Mexican government has implemented several initiatives to increase and improve cybersecurity. Mexico's Computer Incident Response Team (CERT-MX) is one example. The Scientific Division of the Federal Police of Mexico is responsible for investigating national cybercrimes and is the host institution of CERT-MX. CERT-MX is a member of the global Forum for Incident Response and Security Teams and it has a collaboration protocol with other government agencies. CERT-MX is also responsible for protecting critical national infrastructure. A Specialized Information Security Committee was tasked with developing a National Strategy for Information Security. Mexican government agencies adhere to the Administrative Manual of General Management of Information, Communications and Cyber Security Technologies on international standards such as ISO 27001, ITIL and Cobit.

In 2019, the Mexican National Intelligence Center hosted an official meeting where representatives of the U.S. Federal Bureau of Investigation and the U.S. Department of Justice agreed with the Mexican government on a program to coordinate information exchange efforts concerning cybersecurity, including best practices in financial, telecommunications, and health for both countries.[22] Mexico is the country in Latin America with the second-most cyberattacks. Internet access is growing: 57.4% of Mexico's population use the Internet and most financial institutions offer online banking applications.[23] The COVID-19 pandemic has driven Mexico to leapfrog into the digital financial services as millions of lending, exchange, payments, and banking transactions are carried out through mobile devices and digital platforms.[24] Geolocation was also brought into the process in March 2021 for additional user security. Although private sector partnerships may be occurring in different economic sectors, little has leaked out to the public.

Mexico is still working on the fundamentals of cybersecurity and defense. As such, a large push is required to generate the political willpower to actually back macro-cybersecurity projects with sufficient funding. Technological advances and interconnectivity are not going to stop anytime soon; therefore, Mexican cybersecurity must evolve quickly and to the best of its abilities.

Defining a North American Cyber-Agenda

Trilateral cooperation is required to bring together the three North American countries. All three of these countries are already interdependent in infrastructure and supply chains. Cyberattacks could seriously compromise the well-being of the region, especially via the financial and energy sectors. Cyber is also emerging as a core area of global economic and security rivalries: China has a strategy to set the global standards in cyberspace, and North America cannot step aside. Critical infrastructure security breaches and cyberattacks may come from many adversaries as well as criminal actors. We first review the threats to critical infrastructure, focusing on energy and finance, before discussing the need for regional cooperation in cybersecurity more broadly.

Current State of Critical Infrastructure Security

The critical infrastructure supporting North American economies, national security, and public health and safety is increasingly integrated across national boundaries.[25] This integration entails both risks and opportunities for each country. Adversary attacks on lifeline systems in one nation may cause disruptions, either directly or indirectly, in the others. Yet, the connectivity between these systems also provides unique opportunities to strengthen the security and emergency-preparedness of all three nations.

The energy sector exemplifies this growing integration. Canada, the United States, and Mexico "in many ways comprise one large, integrated market for energy commodities," including oil, natural gas, petroleum products, and electricity.[26] The U.S. and Canadian power grids are closely integrated, and Mexico is considering expanding its participation in the North American grid. This deepening energy integration offers compelling economic benefits for all three nations. Progress towards such integration differs by commodity and country. Electric infrastructure integration between Canada and the United States serves as "a global model of highly functional, cross-border electricity coordination."[27] U.S. and Canadian grids are connected by more than three dozen major transmission lines, ranging from the Pacific Northwest to New England. The resulting power flows have created a deeply integrated network of north-south electric infrastructure and synchronized cross-border operations. Additionally, the two countries are pursuing further connectivity with several new cross-border transmission lines currently in various phases of development—though some projects face permitting and other challenges.

The connectivity of North American infrastructure also creates risks of cross-border failures, as exemplified by the 2003 blackout, which started in Ohio and resulted in power outages for millions of customers in the U.S. and Canada.[44] Interconnections between U.S. and Canadian power systems have only increased since then. U.S. and Canadian officials warn that given this growing connectivity, "Isolated or complex events with cascading effects that can take place in either country can have major consequences for both the United States' and Canada's electric grids and adversely affect national security, economic, and public health and safety."[45] As Mexico and the United States develop more synchronous ties between utilities on both sides of the border, they will face similar risks.

The U.S. and Canadian governments developed the Joint United States–Canada Electric Grid Security and Resilience Strategy in December 2016 to strengthen the security and resilience of the U.S. and Canadian electric grid from all adversarial threats and natural hazards. The strategy provides a policy framework for further improving integration and building coordination and information-sharing mechanisms. It calls for collaboration to protect system assets and critical functions in both nations so that the North American grid can "withstand and recover rapidly from disruptions," and emphasizes the need for collaboration to manage contingences and enhance response and recovery efforts.

The integration of electric infrastructure between the United States and Mexico is much less mature. Even though the two countries have engaged in the electricity trade since 1905, there are few transmission connections between them. Indeed, the only synchronous connections exist at the border between Mexico and the state of California. Limited electricity trade also occurs across asynchronous interconnections between the Electric Reliability Council of Texas (ERCOT) and Mexican utilities. This case provides a key example of the benefits of integration: these interconnections are primarily used to supplement constrained electricity supplies and maintain reliability in emergencies. Nevertheless, the February 2021 blackouts that started in Texas and spread across the border into northern Mexico demonstrated the risks and potential benefits of electric grid integration between the United States and Mexico. Mexican president Andrés Manuel López Obrador was quick to blame the power shortage on grid interconnection and promote the benefits of Mexican energy independence.[28] However, Texas is susceptible to blackouts in the first place because its own grid is not connected to other major grids in the United States.[29] Greater grid integration would protect Texas and northern Mexico from future disruptive events.

Bilateral coordination to deepen integration between the United States and Mexico, as well as trilateral coordination that includes Canada, is underway. In 2017, former Secretaries of Energy Ernest Moniz (United States) and Pedro Joaquin Coldwell (Mexico) agreed to nonbinding pledges to increase this connectivity to strengthen reliability on both sides of the border. Later that year, NERC signed a Memorandum of Understanding (MOU) with the Mexico Comisión Reguladora de Energía (CRE) and the Centro Nacional de Control de Energía (CENACE) to formalize collaboration on several regulatory, technical, and operational challenges, including critical infrastructure protection. The MOU does not propose integrating regulatory schemes, but does recognize "the benefits of mutual collaboration to enhance reliability of electric power systems in Mexico and the United States of America."[30] Moreover, the U.S. Department of Energy's Quadrennial Energy Review specifically recommends increasing

U.S.–Mexico bilateral cooperation on electric reliability as the latter expands its domestic and international electricity transmission systems, in addition to broader North American efforts.[31]

Although electric utilities and their government partners have taken major strides since the 2003 Ohio blackout to mitigate the risks of cross-border outages, this progress must accelerate. As energy sector integration across North America is deepening, potential adversaries are strengthening their abilities to attack that infrastructure, transforming the interconnected structure of the grid from a bulwark of reliability into a critical vulnerability. Developing a shared trilateral understanding of emerging threats is a prerequisite for adopting new, collaborative approaches to improve continental grid resilience.

Cyberattacks and Risks to Critical Infrastructure

The electricity subsector plays a unique role in enabling critical infrastructure sectors. Adversaries recognize the foundational importance of grid-provided power for societal continuity and will target electric infrastructure accordingly. Cyberattacks on the grid in Ukraine that caused widespread blackouts in 2015 and 2016 demonstrate potential threats to utilities in North America. In 2015, attackers hijacked the grid's operating systems to disconnect critical substations, creating brief but widespread outages. Attackers were also able to "brick" operating system components and communications devices, making these devices functionally useless.[23] The 2016 cyberattack displayed more sophistication. After mapping the grid's operating systems, attackers used the system's internal control system (ICS) protocols to open circuit breakers, creating blackouts.[24] The malware was unusually difficult to detect, and included a wiper module that could "brick" grid control system components on a large scale.[25] Attackers also had the ability to deny or corrupt situational awareness data, making the grid extremely prone to cascading failures.[26] These cyberattacks moved cyberwarfare against electric systems from theory to limited (but unprecedented) practice.

Potential adversaries have conducted "test drives" of additional ways to attack the grid and other critical infrastructure. The ongoing Dragonfly campaign, conducted by cyberattackers within the Russian government, enables them to use utility vendors and other trusted third parties to conduct attacks on targeted systems.[27] Triton malware, in use since at least September 2017, poses another threat, enabling adversaries to corrupt safety systems that monitor and protect the performance of key system components, creating new pathways for adversaries to sabotage and incorrectly operate critical infrastructure.[28] The XENOTIME hacking group responsible for these attacks continues to target U.S. electric and oil and natural gas networks, and is considered the "most dangerous threat to ICS" owing to their proven ability to carry out destructive attacks.[29]

Yet these attacks do not reflect the true scale and severity of the cyber threat confronting the North American grid. Russia, China, North Korea, and other potential adversaries have powerful incentives to hold their most destructive cyberweapons in reserve; doing so helps hobble efforts at building protections against such weapons. Recent studies by the Department of Energy, other government departments, and cyber experts in both academia and the private sector highlight a range of potential cyber threats which these adversaries might use:

• *Supply chain corruption*. Infrastructure owners and operators often find it difficult to ensure the integrity of their supply chain.[30] As such, adversaries could disrupt the grid by corrupting widely used grid components, exploiting those common vulnerabilities to cause massive breakdowns.[31] Software, firmware, hardware, or network services are all vulnerable to supply chain compromise, potentially enabling adversaries to inject destructive malware or gain access to sensitive components and data in utility systems. This issue is particularly concerning for industry-standard grid components used by many utilities across the United States, creating the potential for threat actors to trigger widespread failures.

• *Attacks on electric grids*. Adversaries can cause outages using a variety of techniques. Protective relays that isolate faults to protect equipment and stem cascading power failures are prime targets. These relays were once electromechanical; now, much of the grid relies on microprocessor-based relays that are vulnerable to cyberattacks.[32] Adversaries can also use communication controls designed decades ago without any considerations for cybersecurity, to embed the protocol language into the malware to cause "cascading failures and . . . serious damage to equipment."[33] A new threat vector has emerged in part as a result of grid modernization. A drastic change in load could lead to instability and power swings, causing outages and equipment damage. For example, if adversaries gain access to large numbers of these smart meters, they could cause "a widespread blackout by switching smart meters on and off repeatedly."[34]

• *Distributed Denial of Service (DDoS) attacks*. Adversaries could also target critical infrastructure components with DDoS attacks to exacerbate the effects of a cyberattack and amplify restoration challenges. The proliferation of the Internet of Things (IoT) has expanded network connectivity to traditionally offline objects and devices, many of which are insufficiently secured. Adversaries have demonstrated their ability to compromise many of these new IoT devices and harness them in a botnet to overwhelm Internet-connected targets with web traffic.[35] As such, networked system control components may be vulnerable to DDoS attacks, and botnets pose a direct threat to grid instability. An adversary could also use a DDoS attack to disable key components in other critical infrastructure sectors, including communications systems vital to power restoration, as part of a larger cyber campaign against the grid.

• *Data wiping*. Adversaries will likely attempt to debilitate electric utilities by using data wiper modules to destroy large amounts of data or brick targeted systems.[36] Historically, wiper module attacks have been limited to wiping computers themselves, without targeting system networks. The 2012 attack on Saudi Aramco, for example, wiped 30,000 Windows-based computers but did not affect industrial control systems.[37] More recent attacks, however, have included wiper modules that target control systems and networks. Future attacks may infect and effectively brick thousands of control system components. Disabling supervisory control and data acquisition (SCADA) systems adds risk and complicates grid operations, but will not interrupt power flows without some external form of disruption.[38] Moreover, because electric utility providers anticipate threats to SCADA systems, they have made plans to cope with the loss of SCADA functionality and have upgraded manual grid operation capabilities in the event of control systems degradation or failure.[39] Still, advanced adversaries could deploy wiper modules to compound and exacerbate the effects of a more complex cyberattack, delaying electric restoration by forcing infrastructure operators to manually operate portions of the grid.

• *Ransomware*. Ransomware attacks are a concerning threat to critical infrastructure information systems. Much like data-wiping malware, ransomware renders computers inoperable. Ransomware infects a computer system and restricts users' access to or encrypts the computer's content.[40] This malware often exploits network vulnerabilities and moves laterally, infecting as many endpoints as possible.[41] Once infected, the only way to restore functionality is to pay a ransom for each individual machine to the attacker or the actor launching the attack on their behalf. Otherwise, all infected endpoints must be replaced. Although recent attacks (including WannaCry and Petya/NotPetya) have been expansive, they did not present a particularly disruptive threat to the electric grid. However, more advanced ransomware attacks have the potential to infect—and potentially act as a method to intentionally mis-operate—industrial control systems. In a mock attack at the Georgia Institute of Technology, researchers were able to gain access and then send commands to programmable logic controllers in a simulated water plant. The researchers warned that these tactics are the "next logical step" for ransomware attacks.[42] Such an advanced form of ransomware attack has yet to occur, or at least be acknowledged publicly. However, as adversaries continue to improve their offensive capabilities, the use of ransomware to disrupt utility operations and restoration efforts present a growing threat.

• *Artificial Intelligence.* Over the longer term, adversaries may use AI to assist their attacks, making real-time defense against them much more difficult. AI may enable adversaries to design sophisticated and comprehensive cyberattacks against the electric grid by automating labor-intensive functions currently performed by high-skilled cyber personnel, thus lowering the human effort required to map U.S. utility infrastructure and control systems. Once attacks are under way, adversaries may also be able to use AI to help detect and maneuver around U.S. defensive measures—and do so at a “machine-speed” that overwhelms human decision-making.[43] China in particular has declared its intention to become the world leader in AI and is committed to applying its expertise to “leapfrog” U.S. defense capabilities.[44] Russia is also ramping up its AI research and development efforts. U.S. power companies and their government partners will need to respond accordingly, accelerating the implementation of grid protection measures to prevent AI-enabled attacks.

Taken together, these threat vectors pose a growing challenge for protecting the North American electrical grid, as well as the flow of natural gas on which power generation depends, from continent-scale attacks. Adversaries will likely use supply chain corruption, AI, and other means of attack create and exploit common grid system failures and vulnerabilities across North America. The United States, Mexico, and Canada must defend against these advanced cyber threats in a coordinated approach that accounts for deepening energy sector integration across the continent.

The NERC and Collaboration in Critical Infrastructure

Mandatory reliability standards between utility companies and public sector collaboration form the basis of continental cooperation to ensure electric grid resiliency throughout North America. The United States and Canada have especially strong mandatory reliability standards between their utilities to help reduce the risks of outages across the two countries. The North American Electric Reliability Council (NERC) began issuing standards applicable to both Canadian and U.S. utilities in the aftermath of the 2003 blackout.[79] These shared standards help power companies in both countries maintain the reliability of their systems and will help them prevent instabilities from spreading during grid security emergencies. Currently, NERC reliability standards are mandatory and enforceable in the provinces of Alberta, British Columbia, Manitoba, New Brunswick, Nova Scotia, and Ontario, and are in the process of being adopted in Quebec.[80] Although NERC’s jurisdiction does not include most of Mexico, NERC reliability standards are enforceable in interconnected jurisdictions of Baja California Norte.[81] Moreover, grid cooperation between the United States and Mexico has been deepening. The 2017 MOU between NERC, Mexico's federal energy regulator, and the independent system operator for Mexico's grid can and should lead to a similarly effective regulatory scheme as between the United States and Canada, and full electricity subsector coordination across North America.

NERC's role and structure as the Electric Reliability Organization for North America provides an additional bulwark for trinational grid resilience. Three of NERC's regional entities include power companies that extend across U.S. northern and southern borders: the Northeast Power Coordinating Council, the Midwest Reliability Organization, and the Western Electricity Coordinating Council. These entities help monitor and enforce compliance with reliability standards across borders, reinforcing NERC's integrated approach to risk reduction.[82]

In the face of rapidly intensifying threats, utilities and government partners also need to be able to share critical information. The NERC's Electricity Information Sharing and Analysis Center (E-ISAC) serves as an information-sharing conduit both within the North American electric industry and between the electric industry and relevant government stakeholders for cyber and physical security threats. The E-ISAC facilitates communication of important or actionable information and strives to determine and maintain "ground truth" during rapidly evolving security events. The E-ISAC also plays an essential role in cross-sector coordination, focusing on key interdependencies between electric and other sectors, such as natural gas, water, and other critical infrastructure.[83]

Grid security coordination is expanding across the public sector as well. As the Department of Energy's Quadrennial Energy Review notes, "coordination of grid security efforts can lead to a more proactive approach to addressing emerging threats across North America," and the countries have "much to gain from collaborative planning, strategy, and cooperation" regarding the power sector.[84] Capitalizing on these opportunities, the U.S. Department of Energy is collaborating with Canadian and Mexican government agencies to improve trilateral coordination concerning grid security and resilience. The department's analysis also emphasizes that changes in the electricity subsector, along with growing integration of the U.S. and Mexican power systems, provides both an opportunity for significant mutual benefit and a substantial need for "technology, policy and regulatory solutions to reliability and security challenges."[85]

Together with the grid defense measures taken by utility providers beyond those required by NERC standards, these ongoing initiatives provide a strong basis for progress. Yet amid intensifying cyber threats and deepening energy infrastructure integration across the continent, government agencies and utility providers in Canada, Mexico, and the United States should consider adopting further mechanisms for, and methods of, collaboration.

Strengthening the Cyber Resilience of the Financial Services Sector and Other Critical Infrastructure

Potential adversaries have an array of targets beyond the energy sector to hold at risk of disruption in future crises. The financial services sector is especially significant in this regard because of its foundational importance to the economies of Mexico, Canada, and the United States. Some recent attacks on the financial system, including those perpetrated by Russia and North Korea, were simply efforts to steal money.[32] Others, including Iran's DDoS attacks against nearly 50 major financial institutions between 2011 and 2012, sought to achieve broader systemic effects, likely as a response to U.S. attacks on Iranian systems.[33] U.S. officials also found malware reportedly developed by Russia's Federal Security Service (the successor to the KGB) on Nasdaq servers in 2010.[34] The U.S. Department of the Treasury has warned that future attacks could create much more disruptive effects, and in January 2020 called for banks and financial markets to provide additional details about the cybersecurity risks they face.[35]

Already, however, the Treasury Department and analysts such as Jason Healey have identified specific "channels" by which cyber events could create a financial crisis. Cyberattacks that corrupt or deny access to financial data could create of loss of confidence in the system and incur other far-reaching effects.[36] Cyberattacks on critical sector hubs and functions could also inflict systemic disruption. For example, the Federal Reserve Bank of New York has identified the wholesale payment network as constituting a "natural candidate for a malicious attacker intent on inflicting the largest possible damage to the financial system and the broader economy." In addition to disrupting critical functions, the bank emphasizes that such attacks could also trigger panic-based runs on banks and spillovers into the financial sector as a whole.[37]

Significant efforts to meet these challenges are underway. The Financial Systemic Risk Analysis & Resilience Center is addressing the systemic dangers posed by current and emerging cyber threats to the U.S. financial system.[38] Financial institutions, the Treasury Department, and academic researchers have been developing options to help defend financial systems.[39] The Hamilton exercise series conducted by the financial services sector and the Treasury Department represents additional progress for strengthening industry–government coordination against cyberattacks.[40] Going forward, U.S. sector leaders and their government partners should consider additional ways to collaborate with their counterparts in Mexico and Canada (and globally) to bolster financial sector resilience on a continent-wide basis.

The Canadian Cyber Threat Exchange and Collaboration in the Financial Sector

Cybersecurity success or failure hinges on the ability of individuals, government, and industry to share information. Information-sharing challenges are not new. Successful information-sharing requires trust, a solid policy framework, and commitment from all parties to solve specific cybersecurity problems.

Today, neither the private nor public sectors have a complete picture of Canada's cybersecurity posture or a consolidated view of cyber threats that impact the nation. To facilitate cyber threat information-sharing and threat awareness across critical infrastructure sectors, the Canadian Cyber Threat Exchange (CCTX) was created in 2013. The CCTX acts as a hub where Canadian businesses and government agencies can share timely cyber threat information. It also provides cyber threat analysis and risk mitigation recommendations. Working closely with Canadian government and law enforcement agencies, the CCTX consolidates the cyber threats to Canada's private sector and serves as a point of contact for cyber information-sharing organizations in other countries. Its cross-sectoral approach engages companies of all sizes—as well as their supply chain partners and suppliers, vendors, and customers—to advance the cyber resiliency of all elements of the economy. Although the CCTX is still in its infancy, the quality and value of its services will increase proportionally with its membership. Ultimately, the CCTX could serve as a model for other countries, including the United States and Mexico, to follow; an extension of the CCTX framework would allow further information-sharing between the countries' threat exchange centers.

Another example of an initiative to bring together private-public partnerships is the CyberPeace Institute (CPI), an international nongovernmental organization that seeks accountability in cyberspace and provides assistance to victims of attacks by increasing their digital resilience and capacity to respond and recover. The CPI launched an initiative to deal with healthcare hacks and stop cyber operations against medical facilities during the COVID-19 pandemic.[41] Going forward, participation in these and similar cyber threat information-sharing networks and collaboration forums will enhance resilience and mitigate evolving cyber threats, both to individual organizations and collectively.[57]

Conclusion

The emergence of cybersecurity issues as a major security concern in the first decades of the 21st century has left many countries and sectors vulnerable. Canada, Mexico, and the United States all need to take steps to protect the privacy, finances, and safety of their own citizens. In many instances, collaboration between the three countries may be the most effective way to do this. This is especially true in sectors such as energy and supply chain protection, where the integrated nature of North America makes collaboration a necessity. However, the North American community currently lacks the mechanisms to facilitate such international collaboration between their private and public sectors. To further improve cybersecurity in the region, the United States, Mexico, and Canada should develop a North American network for private-public cooperation and information exchange. As a model, it is helpful to consider the example of Canada's CCTX.

As previously stated about Canada, neither the North American public nor the private sector has a complete understanding of the cyber threats the continent faces. Businesses must consider how threats to government-run utilities can impact their business models. The 2021 SolarWinds hack, in which hackers gained access to at least nine government agencies and nearly 100 private organizations across the continent, is evidence of the danger that software vulnerabilities can cause both the private and the public sector.[42] Furthermore, no one country can be aware of threats it faces without eyes on the other two. Supply chain disruption in Mexico could impact production of medical or military equipment in Canada or the United States, and damage to electrical or water infrastructure in the United States could impact either one of its neighbors. As a result, there is a need to reach beyond the scope of the CCTX and present a united front against cybercrime.

The development of a CCTX-style North American network to combat cybersecurity challenges is a solution distinctly North American in character. A network that serves to enable cooperation and information exchange will address the blind spots that each country has in the other and allow best practices to spread across the continent, in turn making each country more resilient. In addition, the existence of such an institution will be a resource for governments and organizations that will inevitably face cybersecurity concerns in the future. However, the network avoids the added bureaucracy of more formal institutional solutions, reflecting a North American culture of pragmatism. Rather than relying on European-style political institutions, a North American cybersecurity network could give participants the advantage of communicating across national boundaries while maintaining the freedom to find solutions for themselves.

Using the CCTX as a model, Canada, Mexico, and the United States should build an adaptable organization that unites the private and public sectors around cyber defense. Cyberspace is now a vital component across social, political, environmental, and economic sectors. To build a stronger future across each sector in North America, protecting cyberspace will have to be a priority.

Endnotes

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SECTION 3

North America in the World

12

North America in Global Value Chains

Karina Fernandez-Stark and Penny Bamber

Introduction

Over the past three decades, global value chains (GVCs) have become an integral part of the global economy, facilitated by improvements in transportation, digitalization and widespread liberalization of trade and investment. Today, most industries are organized in GVCs, and they account for an important share of global commerce and employment. GVCs have fragmented these sectors, with activities spanning multiple countries and firms around the world. North America and its leading firms have played a prominent role in the evolution of these global structures. Although the region continues to occupy high-value stages in the chain, that predominant position vis-à-vis external competitors risks being eroded. If North American policymakers want to retain and bolster the region's global economic leadership, bold action is needed.

The current conjuncture represents a window of opportunity for just that sort of leadership. Over the past five years, major trade disruptions have upset GVCs' finely tuned, just-in-time global supply operations. Rising geopolitical tensions, the COVID-19 pandemic, and longer-standing climate change and labor issues, are fundamentally reshaping the environment for firms' global sourcing decisions. The convergence of these disruptive trends has created persistent uncertainty that is forcing companies to rethink their supply chains for the long term. Past GVC priorities of cost and efficiency are being replaced by resiliency, risk mitigation and sustainability. Globally, the race is on as governments seek to benefit from these shifts by adjusting their policy landscape. While these disruptions have been tremendously costly, they also present an opportunity for North American policymakers to reverse the deterioration of the region's advantages in supply chains. One potent option, for reasons we explain below, is to strengthen the low- and medium-value stages of regional value chains through enhanced regional coordination with Central and South America.

To date, GVCs have been dominated by the North American trading bloc comprised of Canada, Mexico and the United States, underpinned today by the U.S.-Mexico-Canada Agreement (USMCA). Under the USMCA and its predecessor, the North American Free Trade Agreement (NAFTA),the region has been the world's largest regional trade agreement for close to three decades, encompassing 28% of global GDP[1], and is a major global exporter and market. North America is home to major lead firms, carries out the highest value activities and exercises power and influence over global standards-setting in virtually every industry. The bloc's success has been built on notable complementarities across its three members. The United States, the world's largest economy, leads these chains by providing high-value services and advanced manufacturing, while Canada and Mexico play key roles as suppliers of raw materials, intermediates and final products.

However, the dynamic rise of other regional groups, particularly in Asia, has exposed shortcomings in North America's long-term GVC competitiveness. The European Union (EU-27) has consistently maintained its leadership in global trade shares, while North America has steadily been losing ground to Asia. In 2009, China surpassed the United States to become the world's largest exporter, by 2021, its exports had already doubled those of the United States. A key challenge for North America is that whereas the EU-27 and Asia can tap into the vast differences of their broader memberships, North America includes just three countries where capabilities are converging. As a result of diminishing regional comparative advantages in production costs, North America has grown more dependent on extra-regional trade—especially with Asia—to generate value in its GVC exports.

The turbulence of the past five years has created an opportunity for North America to influence GVCs reconfiguration to its advantage. A highly promising avenue is increased regionalization within the Americas. Where the EU and Asia have sought to deepen and broaden regional ties with geographic partners, since the mid-2000s, North America instead has decoupled from its neighbors in Central and South America. These regions account for just 4% of U.S. imports, and even less of those of Canada and Mexico. Yet, as a major source of raw materials for GVCs, with a large and growing labor force, and an abundant green energy supply, Central and South American economies offer tremendous benefits as GVC partners for

North America's future. Fostering increased regional engagement could also produce economic, resiliency, sustainability, and security gains.

While it is not possible to fully replace the Asian manufacturing machine, North America must *foster the development of the missing GVC middle* in manufacturing within the Americas region by encouraging the diversification and replication of production operations. Major policy efforts are required in four key areas to ensure this approach can deliver on these promises: multilateral trade agreements, infrastructure investments, capability development and a focus on sustainable production. While the cost of successful regionalization is obviously high, the cost of inaction may be to risk North America's leadership of the global economy. The window for change, nonetheless, will be short-lived. Letting this moment pass by, and maintaining the status quo, will see the region continuing to cede its global economic leadership, along with implications for long-term security. To bolster regional value chains in the Americas, both economic and political leadership are needed. As the largest global market in most industries and home to the greatest share of GVC leading firms, the United States should coordinate regionalization efforts that embrace broader groups within the Americas. While the window of opportunity exists, unless more fundamental policy issues are addressed, it is unlikely global firms will seriously consider the option of relocating sourcing operations to the region in the long term.

Global Value Chains: A Conceptual Framework to Understand Industry Globalization

Global value chains dominate today's international trade. These chains describe the full range of activities that firms and workers perform to bring a product from its conception to end use and beyond. This includes both tangible and intangible value-adding activities such as research and development (R&D), design, production, marketing, distribution, and support to the final consumer. In the context of globalization, value chain activities generally are carried out in inter-firm networks on a global scale.

The globalization of industries has been driven by demand for the most competitive inputs in each segment of the value chain. Industries' quest for efficiency has led to highly dispersed value chains, with different activities carried out in different parts of the world. The fragmentation allowed numerous countries to participate in international trade without having to develop the full range of capabilities across the value chain. Countries specialize in specific functions by leveraging their competitive advantages. Usually developing countries offer low labor costs and raw materials, and focus on lower value operations, such as assembly and production. Meanwhile, developed countries with highly educated talent, focus on their core strengths in R&D, innovation, branding and sales. Global fragmentation has been most pronounced in the textiles and apparel GVC, where major firms based in the United States and Europe, such as Nike and H&M, dominate the highest value stages of the chain, branding and design, while outsourcing basic cutting and sewing activities to low-income countries including Bangladesh and Vietnam.

The size, market share, capabilities and technological prowess of these "lead firms" allow them to dominate global production systems. Because lead firms control knowledge and financial resources, they determine which other firms join the chains,[2] as well as the precise specifications and product standards that must be met to participate.[3] Through these measures, lead firms ensure a consistent supply of products from diverse groups of global providers.[4] Lead firms' decisions about locating their global sourcing operations seek to maximize resources, reduce transportation and logistics costs, and minimize potential disruptions. In the aggregate, these decisions have played a large part in determining how global industries are distributed geographically.

Through that broad geographic distribution of GVCs, firms leverage complementary capabilities across countries, in terms of specialization and cost arbitrage. The value of these complementarities, combined with the costs of connecting them, determine the extent and patterns of value chains—including whether they form at local, regional, or global scales. Yet, these capabilities are not static. Countries may be able to add value to their sectors and improve their competitive position in GVCs. At the same time, as lower-cost locations vie to join value chains, those already participating must develop strategies to sustain their inclusion, such as specializing in higher-value operations or niche sectors that are more insulated from competition (Humphrey & Schmitz, 2002). In other words, countries must *upgrade*.[5] Upgrading refers to "a process of improving the ability of a firm or an economy to move to a more profitable and/or technologically sophisticated capital- and skill-intensive economic niche,"[6] or more simply put, "to move from low- to relatively high-value activities in global production networks."[7] Firms, countries and regions pursue upgrading to increase the benefits (e.g. security, profits, value-added, capabilities) from participating in global production.[8]

North America's Roles in Global Value Chains

Since the advent of NAFTA in 1994, North America has been the world's largest regional trade agreement.[9] As a major global exporter and market, North America is an influential force in most global value chains through its firms' leadership of the highest value activities. The bloc's power has been built on strong complementarities across its three members, with the United States, as the world's largest economy, providing high-value services and advanced manufacturing. Canada and Mexico play key roles as raw materials, intermediates and final product suppliers to the United States. Approximately 75% of each country's exports are destined to the U.S. market (see Table 1). The United States, on the other hand, is more globally oriented, with just 30% of its imports and exports occurring with its regional trading partners.[10] This section briefly examines the roles played by each of the countries from a global value chain perspective.

• **United States:** The United States has significant influence over both what is produced and how it is produced across GVCs, both as the largest importer and home to lead firms in most global industries. Sourcing and investment decisions by U.S. firms have shaped GVCs over the past three decades. Today, the United States' leading roles in GVC include dominance of high-value segments: R&D, advanced manufacturing, and branding. It is also a major market for high-value products. U.S. firms dominate global rankings for R&D and innovation, accounting for 35% of the world's 1,000 leading R&D spenders,[11] including six of the global top ten.[12] These investments contribute directly to technological capabilities and help US firms lead GVCs. While much has been made of the fact that the United States is no longer the largest global exporter, the country has upgraded to focus on advanced manufacturing in sectors including aerospace, integrated circuits, and medical devices. In these categories, the United States dominates the competition. It excels in capital goods exports, leading the world with a 16% market share.[13] The United States is also the largest global exporter of knowledge-based services, including business, professional, technical and financial services.[14]. The country's brands lead global rankings, and are well-respected and widely recognized around the world, from Nike and Ralph Lauren to Ford, Apple, Intel and Boeing.

• **Canada:** Canada fulfills two GVC roles, natural resources provider and niche high-value manufacturer, both of which are strongly linked to trade relations with the United States. Canada's southern neighbor accounts for 75% of its exports and close to 60% of its imports.[15]. As a result of significant natural endowments, half of Canada's exports are in natural resources: fuel and metals and minerals (including copper, iron, aluminum, nickel, zinc ores and their derivatives) account for 37% of Canada's total exports; wood, pulp and paper and agricultural products contribute 6.2% and 5.3%, respectively. Two-thirds (65%) of these natural resources are destined to the United States; Canada accounts for over half of U.S. imports of mineral products. As a high-income country with a relatively small labor force, Canada's strengths in manufacturing are focused on a few advanced GVCs, in which it counts amongst the leading global producers: gas turbines (6th largest exporter), automotive (5th) and aerospace (5th).[16] In advanced manufacturing, there has been a convergence of capabilities with the United States.

• **Mexico:** Like Canada, Mexico's GVC participation revolves primarily around the North America regional bloc, which accounts for 75% of its exports and over half of its imports.[17] The country's original role was as a low-value assembly provider, with large-scale *maquila* operations established along the border with the United States. However, over the years, the country upgraded to become an advanced-manufacturing hub. This transition was in part due to intense competition from China,[18] and later other locations in Asia, such as Bangladesh and Vietnam where labor costs are notably lower. Unable to compete on cost, Mexico bet on industries with higher skill components and regional advantages including firms' intellectual property concerns when moving operations to Asia. As a result, Mexico's export composition has concentrated on transportation, electronics and medical devices; low-value products such as apparel and textiles account for a shrinking share of exports. In 1995, car exports were Mexico's single largest export category, accounting for 16% (US$7.6B), followed by crude oil, apparel and consumer electronics. Today, the country's manufacturing exports comprise of US$130B (27%) of total exports in transportation, including over US$1B in aerospace products; US$32B (7%) in computers; and US$14B (3%) in medical devices. In contrast, apparel and textiles now account for just 1.5% of total exports.[19]

Table 1 Import-Export Share by Origin and Destination, 2019

	Exporter		
Destination	United States	Canada	Mexico
US		73%	75,4%
Canada	16,8%		4,4%
Mexico	15,6%	1,43%	
	Importer		
Origin	United States	Canada	Mexico
US		57.4%	54%
Canada	13.2%		1.4%
Mexico	15.2%	4.7%	

Source: UN Comtrade.

The success of this regional partnership is owed to the complementarities in value chain stages across the three countries. Significant raw materials flowed in from Canada, U.S. lead firms carried out design and branding, and manufactured intermediate components and capital equipment, and Mexico provided lower-cost production. However, as Mexico has left behind its role as the low-cost partner, relative to Asia, within this regional agreement, it reshaped North America's global competitiveness. As a result of Mexico's upgrading, there are no low-value manufacturers within the North American bloc and the region has grown dependent on Asia for that supply.

North America in GVCs: How Does it Measure up to Other Regional Trade Groups?

The dynamic rise of other regional groups has exposed shortcomings in North America's long-term ability to maintain and upgrade its competitiveness in GVCs. Amongst the three largest regional trade blocks globally, North American intra-regional trade is the lowest, trailing far behind the European Union (EU-27) and Asia. A key challenge is the differences in economies of scale and scope of the regions. Unlike North America, the EU-27 and Asia are comprised of multiple countries, with vast differences in capabilities. Less able to tap into regional comparative advantages, North America's dependence on inter-regional trade is growing, especially from Asia. In the context of major disruptions that have (and likely will continue to) unsettled supply chains, this dependence could prove problematic.

Amongst the three largest trading regions globally, the EU boasts the highest intra-regional trade in goods, (that is, the share of its exports that are traded with other countries within the region) reaching about 68%. This is followed by Asia, where 58% of trade is intra-regional. In North America, this falls to 47%.[20] Mexico and Canada account for just 26% of U.S. imports.[21] Focusing on value-added trade reveals similar patterns, with North America again accounting for the lowest share. The EU leads in terms of regional contribution to value-added in imported intermediates—that is value chain inputs, with 68%, Asia follows with 62%; North America only reached 52%.[22] Put more simply, North America relies the most on extra-regional inputs to generate value in its GVC exports.

Part of the challenge lies in differences in economies of scale and scope, in terms of number of countries, multilateral trade agreements, and total labor pools. North America comprises just three countries, through the USMCA agreement, whereas EU includes 27 countries, and the Asian region covers +15.[23] The geographic expansion of trade agreements in Europe and Asia has incorporated countries with differing levels of development.

This allows regional supply chains to leverage extensive complementarities, diverse capabilities, and cost arbitrage. The accession of Hungary, Poland, and other central and eastern European countries to the EU contributed greater differentiation across the bloc. The EU plans to extend regionalization further, by providing market access to other countries in Europe, the Middle East and North Africa through the Pan-Europe-Mediterranean agreement.[24]

Likewise, regional multilateral and plurilateral trade and investment agreements in Asia, such as ASEAN and ASEAN+1, have cut tariffs and permitted greater scale.[25] There are 42 regional trade agreements across Asia Pacific countries.[26] The recent Regional Comprehensive Economic Partnership (2022)[27] is expected to further boost regional gains, with 80% of tariff lines subject to less than 10% tariffs from the first year. RCEP brings together 30.5% of global GDP,[28] and thus will surpass the USMCA as the world's largest trade group. These continued expansions leave North America at a comparative disadvantage; whereas USMCA is home to approximately the same number of workers as the EU-27 (244M compared to 217M in the EU), the RCEP groups some 1.24B workers, providing significant scope for labor and skills arbitrage.[29]

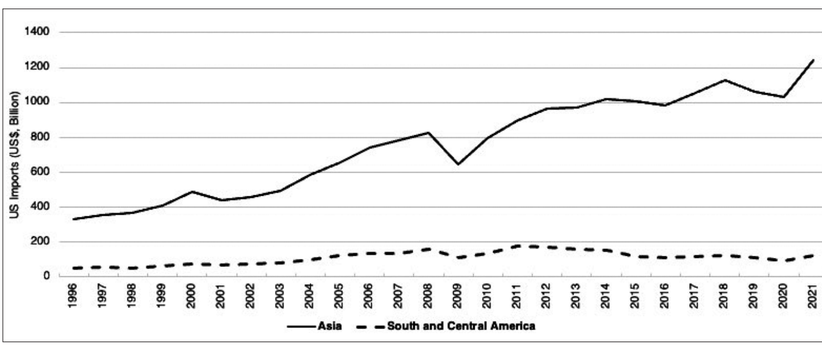
The Americas: Value Chain Integration or Decoupling?

Where the EU and Asia have sought to deepen and broaden regional ties with geographic partners, since the mid-2000s, North American states have largely pursued bilateral trade agreements within the Western Hemisphere. While these have enabled trade with regional partners, in practice, they also limit regionalization of trade in the Americas—especially in the development of regional manufacturing. Imports by the United States from South and Central America have fallen since the peak of 2011 and the region now accounts for just 4% of total U.S. imports (Figure 1). Canada and Mexico reflect similar trade patterns. Despite its proximity and role as a major driver of GVCs, the United States is no longer the primary trading partner for many of its Central and South American neighbors. In contrast to Asia and Europe, the Western Hemisphere has experienced decoupling, not integration.

This decoupling has been accompanied by a turn to Asia across the Americas. North America has seen growing dependence on Asia for its supply chains. Between 2000 and 2021, U.S. share of imports from Asia have almost tripled from US$485B to US$1.24T, led by China, Japan and South Korea.[30] At the same time, South American countries have shifted their trade towards Asia. The transition has been stark. Over the past twenty years, China has replaced the United States as the South America's largest export partner. All but three countries from the region have shifted their primary export destination[31] from the United States in 2000 to China in 2020 (Figure 2). South America has become a critical source of raw materials for Asia's participation in GVCs; it is the largest extra-regional supplier of minerals to Asia, accounting for 31% of its total imports. The largest number of inter-regional trade agreements globally are between Asia and South America.[32]

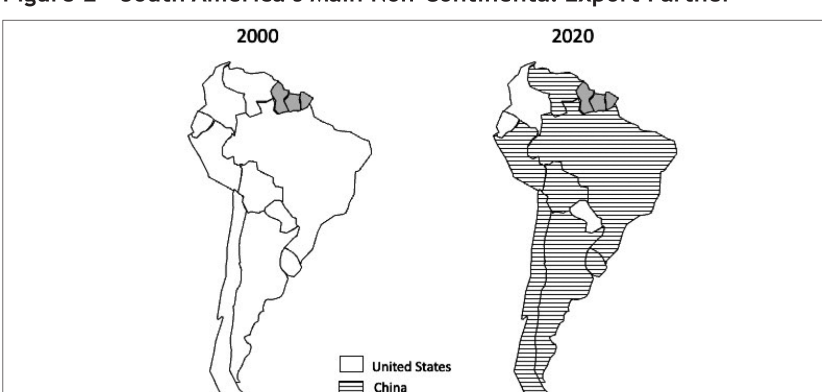
The risks of North American dependence on Asia in GVC trade are rising, abetted by the lack of regionalization efforts within the Americas. Long chains from Asia to North America are vulnerable to massive logistics disruption as illustrated by recent value chain upheaval. This raises both

Figure 1 United States Imports from Asia and Central and South America (1996–2021)



Source: U.S. Census Bureau.

Figure 2 South America's Main Non-Continental Export Partner



Source: Authors based on UN Comtrade.

uncertainty and costs for North American lead firms and threatens their long-term resiliency. At the same time, the lack of North America regional initiatives has strengthened the relationship between South America and Asia. There is growing sentiment in South America that the United States has abandoned its engagement with the region, undermining its growth potential and forcing it to rely more and more on China as its major partner.[33]

Major Trends Disrupting Global Value Chains

Global value chains proliferated between the mid-1990s and the 2010s as lead firms, mostly from the United States and Europe, sought to maximize efficiencies in production, leverage global labor arbitrage, and access new markets around the world. During this expansionist era, GVCs became highly globalized, with Asia taking on a growing role in the world's industries. However, the past five years have brought significant disruptions to this status quo, raising uncertainty and costs associated with global trade. Following five years of continuous disruption to their global operations, companies are seriously reevaluating their established business models. Policy actions by North American leaders can influence the decisions these firms take. This section discusses these trends and their implications for North America.

First, and perhaps most important, is China's changing role in GVCs. Since its accession to the WTO in 2001, the country has moved from being the world factory for a diverse range of low-tech, mid-tech and high-tech consumer goods to the goal of becoming a technological leader in sectors linked to advanced manufacturing: electric vehicles, artificial intelligence, and e-commerce.[34] Importantly, China has fostered its own GVC lead firms, a dense network of suppliers, and diversified its end markets. It sources inputs from every corner of the globe. In doing so, it has become the leader of an integrated Asian regional value chain. By 2019, China (119) was virtually tied with the United States (121) in terms of the number of firms listed amongst the 500 largest multinational firms in the world.[35] China is now the world's leading exporter, and the second-largest importer. With a gross domestic product (GDP) of US$14.7 trillion in 2021, most analysts expect China to overtake the United States as the world's largest economy[36] during the course of the next decade.[37] The rapid upgrading of China led to rising costs in the country, with global firms considering nearby location alternatives in Asia to manage costs while continuing to leverage the efficiency of the Asian supply network. China's rise also brought it into direct competition with the United States for advanced manufacturing and services, leading to rising tensions and the U.S.–China trade war. These tensions have caused global firms to explore alternative production locations.

Second, the COVID-19 pandemic disrupted global logistics and production cycles, causing major shortages of both intermediates and final products around the world. The pandemic upset more than two decades of fine tuning just-in-time global supply operations and demand models. Long wait times at ports, border restrictions and worker shortages disrupted global shipping, leading to delays and a quadrupling of shipping prices over a 12-month period.[38] Under stay-at-home orders and boosted by government stimulus programs, consumers increased their discretionary spending on goods, generating unprecedented demand at a moment when supply chains were most strained. Persistent and unpredictable COVID-19 outbreaks affected every industry. Ongoing disruptions to Vietnam's apparel operations, for example, completely upended the sourcing strategies of major U.S. brands, such as Columbia, Nike and Under Armour, all of which source more than 40% of their production from the country.[39] Firms made minor adjustments to this new reality during 2021, such as holding increased inventory.[40] In 2022, China's extended shutdown of Shanghai, Guangzhou and other major GVC-producing cities again disrupted the supply chain. These issues are driving global firms to reconsider the global distribution of their sourcing and production. Firms are increasingly aware of the need to diversify production beyond single countries and/or regions.

Third, the Ukraine-Russia war is once again testing supply chains, with massive disruptions in industries ranging from iron and steel, to oil and gas and global food supplies. The crisis has impacted everything from energy costs to raw materials and intermediates, as well as trade routes. Cutting energy supplies from Russia, the world's largest supplier of petroleum products, has a broad effect across all GVCs, compounding rising transportation costs in the wake of the pandemic. Specifically, GVCs reliant on metals and fertilizers are heavily exposed to both Russia and Ukraine.[41] As upstream suppliers in several GVCs, Ukraine's temporary exclusion, and Russia's seemingly more permanent one, are disrupting raw material supplies for industries from aerospace (titanium) to automotive industries, to semiconductors (palladium, neon). GVCs with intermediate suppliers in either country were forced to source elsewhere at a higher cost. For example, Mercedes Benz, which sources automotive wire harnesses from Ukraine, had to air freight them from Mexico to keep German car assembly plants in operation.[42] The crisis has combined with the U.S.–China trade war to fully embed geopolitical risk within supply chain decisions, ending an era whereby companies could generally assume that political leaders would not take actions that would fundamentally undermine trade relationships. With this major challenge to the international geopolitical order, companies are more cognizant of the fragility of their globalized production and now seek to construct more resilient supply chains.

These three disruptors have had drastic impacts on supply chains, causing immediate changes to their configurations. These changes, however, are also converging with two issues which have been steadily gaining momentum over the past decade: climate change and the role of labor in GVCs.

1. Climate change has become a new priority in global industries. There is growing momentum around the world to alter production systems to tackle issues such as decarbonization, resource efficiency, and circular economy.[43] Changes are happening at multiple levels, from national and regional policies that condition market access to environmental compliance, to investors favoring green firms. This has significant implications for trade and investment. At the policy level, the EU is at the forefront of integrating circular economy into its trade policies; its 2020 Circular Economy Action Plan, a mainstay of the Green Deal, introduces norms that will require a significant share of the products on the European market from electronics and automotive to textiles, construction and food to be designed to be more durable, energy-and resource efficient, reparable, recyclable, and with preference for recycled materials.[44] Amongst investors, both the world's largest asset manager, BlackRock and the largest global sovereign wealth fund, Norwegian Norges Bank Investment Management, have committed to only investing in companies supporting the sustainable transition. Leading U.S. GVC firms, such as Apple, Ford, and Whirlpool, which sell a considerable share into the EU market, are highly exposed to these changes. Companies adopting Environment, Social and Governance (ESG) principles are seeing a boost to their competitiveness, with cost-savings from efficiency and increased product innovation in anticipation of consumer expectations. Companies that do not adopt climate change mitigation as a core strategy in their GVCs are going to be left behind.

2. The role of labor in GVCs has become a central issue for global firms. GVCs have contributed to poverty reduction around the world, with export-processing zones generating significant employment in developing countries.[45] GVC-related trade generated significant female employment in particular, offering many women their first chance for waged employment.[46] Yet, at the same time, intense global competition has led some GVC suppliers to resort to exploitative labor strategies that include reliance on temporary workers, lowering wages, extending working hours, labor subcontracting and minimizing investments in health and safety. These practices increase the social burden for workers engaged in these value chains.[47] The 2013 tragedy in the Rana Plaza facility in Dhaka, Bangladesh, highlighted the issue and led to multiple global accords to monitor and improve labor conditions within globalized industries. Labor issues are increasingly fundamental to business operations, with mandatory sustainability reporting that includes labor, and both national and international legislation govern-

ing labor conditions. Trade agreements increasingly include labor chapters with dispute resolution mechanisms that increase accountability for workers' rights,[48] an element made more prominent in the USMCA's new rapid-response procedures. The pandemic brought these issues into sharp relief; worker discontent grew and the "great resignation" resounded around the world. The International Labour Organisation (ILO) has called for a "human-centered recovery from COVID-19" that is inclusive, sustainable and resilient. There is growing interest in unionization, particularly in developed economies, where approval of unions is at a decades-long high.[49] Global social discontent shaped by the COVID-19, rising cost of living, and a widening global income gap,[50] is increasing pressure on firms around the world to adopt a new approach to human capital.

Where any one of these challenges alone was unlikely to fundamentally reshape GVCs, the heightened and persistent uncertainty resulting from the convergence of these disruptive trends is forcing companies to rethink their supply chains for the long term. Past GVC priorities of cost and efficiency are being replaced by resiliency, risk mitigation and sustainability.

North America: Shaping the New Global Value Chains Order

The turbulence of recent years offers North America a unique window of opportunity to reconfigure global value chain participation in its favor. As firms evaluate their future sourcing operations, policy makers can shape those decisions by pursuing international trade, investment, and development policies. A highly promising avenue is increased regionalization within the Americas. The upsides of this approach abound, with economic, resiliency, sustainability, and security gains to be made from fostering increased regional engagement. Major policy efforts are required in four key areas to ensure this approach can deliver on these promises: multilateral trade agreements, infrastructure investments, capability development and a focus on sustainable production. While the cost of successful regionalization is obviously high, the cost of inaction may be even higher and risk North America's leadership of the global economy.

What Are the Potential Gains to Be Made from Building Robust Value Chains Across the Americas?

Economic: Complementary competitive advantage in all stages of the GVC. Across countries in the Americas, there are complementary competitive advantages which encompass all stages of GVCs, from critical natural resources to diversity of income levels combining low-cost labor and highly skilled human capital. Most of the population is of working age and the labor force continues to expand in several countries, further supporting value chain expansion.[51] While the EU and Asia have already exploited the trade and labor dividends of working together, in the Americas, these opportunities remain still largely untapped.

Resiliency: Supply chain risk diversification through the addition of new, nearby locations. Central and South America offer geographic proximity to each other and to the United States with relatively short shipping routes. All east and west coast routes between the United States and these regional peers are shorter in time and distance than from Asia. The region also offers extensive potential for regional labor mobility. Diversifying production into Central and South America reduces potential for logistics, climate and geopolitical disruptions, enhancing supply chain resiliency.

Sustainability: Enhanced global positioning as a greener production block. Reduced shipping distances, combined with abundant green energy, will make the Americas a greener production block than the existing North American pact, or Asian competitors. Central and South America have already taken action with respect to greening their energy infrastructure. At 30%, they have the highest share globally of renewables in energy consumption,[52] doubling all other regions in the world except Europe. In 2021, Latin America was found to be the region most concerned about climate change and the most interested in taking positive environmental action.[53]

Security: Stronger security and geopolitical ties with North America's closest neighbors. Generating economic opportunities through stronger commercial ties within Central and South America will enhance the security and stability of the Western Hemisphere. In particular, job creation in the region will help assuage the movement of irregular migration towards North America. In the longer term, there are significant geopolitical benefits to be gained from forging closer economic ties between Central and South America and North America.

What Needs to Be Done?

Enhance GVC manufacturing in the Americas: While it is not possible to fully replace the Asian manufacturing machine,[54] North America must *foster the development of the missing GVC middle in manufacturing within the America*s region by encouraging the diversification and replication of production operations. This is to incentivize regional value chain development, promote intra-regional trade and stabilize relations.

Major policy efforts are required in four key areas to ensure this approach can deliver on its promises: multilateral trade agreements, infrastructure investments, capability development and a focus on sustainable production. Unless these are addressed, it is unlikely global firms will seriously consider the option of relocating sourcing operations to the region in the long term.[55]

1. North America should negotiate cumulation allowances across multilateral trade agreements with Central and South America. Regionalization of trade in the Americas has had a rocky past and current agreements have produced fractured subgroups or bilateral agreements that do not allow the region to leverage its collective strengths. The Free Trade Area of the Americas was negotiated for most of the 1990s and early 2000s before being abandoned, largely due to differences between the United States and Brazil in the agricultural sector.[56] The 2006 U.S.-Central American Free Trade Agreement (CAFTA) was more successful, but with limited impact on North American trade as it only connected the United States with an offshore labor force one third the size of Vietnam's. Within Latin America, regional integration efforts have remained split across two main axes—the Pacific Alliance (PA) and Mercosur. Signed in 2012, the PA aims to deepen regional integration between Chile, Colombia, Mexico and Peru but its lack of a major market has limited its potential. The exponential opportunities– for both North and South America—driven by the rise of Asia provided little incentive to push a better regional trade policy agenda forward, and momentum dissipated on both sides.

However, the current crises and the future of a competitive North American trade bloc justify a renewal of efforts to ensure competitive and sustainable chains in the future. North-south trade agreements will greatly benefit Central and South America as well, providing them access to a high value market.[57] The recently announced *Americas Partnership for Economic Prosperity* is a start, but it lacks the essential element of preferential market access. An initial approach should leverage the pro-trade Western flank of the Americas, linking USMCA, CAFTA and the Pacific Alliance.[58] Collectively accounting for some 88% of the region's exports, and two thirds of its population, there are extensive existing trade agreements across members of these groups as well as with the United States. Establishing adequate cumulation clauses across these subregional groups would allow them to develop productive linkages and provide a first step for broader integration. In a second stage, once PA and CAFTA are integrated into the bloc, new players should be invited, specifically Mercosur. This would pave the way to a broader, and more comprehensive trade agreement of the Americas.

2. North America should invest in upgrading hard and soft trade infrastructure to connect the Americas. Poorly integrated trade infrastructure in Latin America is considered one of the primary barriers to regional integration. There are deficits both in physical infrastructure such as ports and road transportation, and in trade facilitation, with shortcomings in cross-border agency cooperation, single window creation, and information access to logistics processes.[59] There is a persistent infrastructure investment gap—at <3% of GDP in LAC compared to >5% in East and South Asia—due to insufficient public spending, undermining development.[60] Regionalizing supply chains should not mean expanding time and cost associated with trade, but rather its advantages lie in curtailing these. China and East Asia have benefitted from exceptional logistics and infrastructure advances, despite distance from their main markets.[61] Yet it takes twice as long to clear customs, and trade costs[62] in Latin America are higher than in Asia or Europe. Road density is lower than almost everywhere else in the world, except Africa.[63] Furthermore, only four ports from North America and three from South America rank amongst the top 50 most efficient container ports, compared to 21 in Asia.[64] Better infrastructure would connect the upstream suppliers with midstream operations and downstream sales.

3. North America should lead workforce development to create capabilities for regional value chains. Having remained on the upstream margins of GVCs over the past decades, capabilities in midstream operations across the Americas are relatively stagnant, with only a few exceptions in countries close to the North American production systems. At 310M, the labor force in South America is almost twice the size of that of North America (186M) and rivals that of ASEAN (~350M),[65] yet labor force participation, productivity, and skills mismatching are problematic. This suggests a huge potential upside for skills programs. Workforce programs focused on engaging youth and women in GVC manufacturing plants would draw new workers into the labor force without impacting labor costs; while anticipating skills, detecting mismatches and linking the education and training curricula with industry needs would boost productivity.[66]

4. North America should prioritize the development of sustainable production chains in the region. Central and South America's general absence from global manufacturing chains to date can be seen as an advantage for developing greener operations; there are only three countries in the Americas (Costa Rica, Mexico, and the United States) where manufacturing output accounts for more than 50% of exports.[67] With limited legacy plants, factories can be built with cutting-edge global sustainability standards. Essentially, in terms of energy, a major pillar for manufacturing, the region is already a global leader in its transition to renewables, outperforming all other regions. Some countries, including Costa Rica, Uruguay, and Nicaragua have radically shifted towards a fully renewable electrical grid; over the past decade, in these three countries renewables have reached 98%, 97% and 75% of supply respectively, and more are on the path to do so.[68] As a leading global market in GVCs, the United States should provide impetus for this green manufacturing by establishing cleaner production requirements for market access, as the EU has already done with the Green Deal Agenda. Greener GVCs will improve North American competitiveness in future global market, where sustainable products will dominate.

What Is the Cost of Not Doing So?

Potential loss of North American leadership in the global economy and loss of Central and South America as an economic and political partner. North America's increased dependence on Asia in GVCs and its declining imports from South America have led to a triangulation between the Americas and Asia; natural resources flow primarily from the Southern Cone to Asia where they are manufactured and sold to North America. 90% of the products exported from South America to Asia are natural resources, such as minerals, metals, food and wood, while 70% of North American imports from Asia are manufactured products. In the process, Asia has solidified its leadership in global exports and South America has become an essential supplier of raw materials to that region, as the world's factory. Asia, led by China, has strengthened their engagement with South America since 2010. A look at FDI into the region is telling; as of December 2021, 20 out of 24 countries in Latin America and the Caribbean (LAC) had signed onto China's Belt and Road Initiative, and LAC now accounts for 1/5th of Chinese outbound investment.[69] Put more directly, the more North America depends on Asia, the deeper the trade relations between Asia and South America become. Indeed, the most proactive trading bloc in the region and a major global source of raw materials, the Pacific Alliance (Chile, Colombia, Mexico, and Peru) has made deepening its trade relations with the Asia Pacific region its principal focus.

North America is facing the greatest economic turbulence of the past half century; however, this period of uncertainty also offers the region a key opportunity to influence the reconfiguration of GVCs to its advantage. The window for change, nonetheless, will be short-lived. Letting this moment pass by, and maintaining the status quo will see the region continuing to cede its global economic leadership, along with implications for long term security. On the other hand, North America can forge a new path by extending its understanding of regionalism to that of the Americas as a whole. By making investments across the Americas in trade policy, infrastructure, human capital and green production, there are opportunities to foster synergies across the region. To achieve the goal of regional value chains in the Americas, both economic and political leadership are needed. As the largest global market in most industries and home to the greatest share of GVC lead firms, the United States should lead and coordinate these regionalization efforts that embrace broader groups within the Americas. However, unless more fundamental policy issues are addressed, it is unlikely global firms will seriously consider the option of relocating sourcing operations to the region in the long term.

Endnotes

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13

New Trade Policy Objectives: The EU's FTA Goals with the U.S., Mexico, and Canada

Michelle Egan

Since the early 1990s, the European Union and North America have pursued two different paths towards high levels of regional economic integration. Though some hoped in the immediate years after the 1994 North America Free Trade Agreement (NAFTA) that North America would follow a European path of regional cooperation, that has not been the case.[1] Instead, North America has pursued more ad hoc forms of cooperation across many issue areas, while also seeing a boom in intraregional trade and investment linked to tightly integrated North American supply chains.

This divergence in patterns of integration also had profound effects on the relations between the two giant economic markets of the North Atlantic. While the European Union—despite the shock of Brexit—approaches the world economy in a coordinated manner, Canada, Mexico, and the United States have seen large swings in recent years. This inconsistency results, first, from the inconsistent preferences and trade behaviors of the United States; second, from the tremendous effects of Chinese growth; and third, from a process of competitive liberalization in which each North American country pursues its trade policy with minimal consultation. As the smaller economies, dependent on the U.S. market and rocked by changing U.S. whims, Canada and Mexico have sought greater diversification in their economic relationships. This has led them to engage in a deeper trade relationship with the European Union. Doing so is no simple task, however, as Canada and Mexico often find themselves pinned between competing regulatory models and in contention with U.S. strategic trade interests.

NAFTA provided the building block for regional integration among Canada, Mexico, and the United States when it entered into force in 1994, driving unprecedented integration. Regional trade surged from around $330 billion in 1993 to more than $1.23 trillion in 2019, making NAFTA the second-largest trading bloc in the world. NAFTA's market-opening provisions eliminated nearly all tariff and most nontariff barriers on goods and services produced and traded within North America. NAFTA accelerated trade and investment growth between the U.S. and Canada, liberalized the Mexican economy, and opened the U.S. market to increased imports from Mexico and Canada. The three countries also sought further cooperation, including in regulatory coordination, industrial competitiveness, trade facilitation, border environmental management, and security affairs. The three countries remain one another's largest economic partners, especially given their integrated production and supply chains in key sectors.

Yet the advantages of North American economic integration have often been taken for granted. One aspect of that has been minimal North American cooperation in addressing the international position of the integrated market, with little thinking about how to leverage North America's negotiating power with third markets, such as the European Union. Instead of approaching the world economy as a regional trade bloc, Canada, Mexico, and the United States have engaged individually in competitive liberalization with a variety of other trade partners. Hampered by the slow progress in multilateral trade negotiations in the World Trade Organization's Doha Round, all three states increasingly focused on negotiating bilateral and regional free trade agreements. The United States grew concerned that the European Union had gained an advantage by negotiating a host of agreements in the 1990s while the U.S. stood on the sidelines. In response, the United States reversed its traditional aversion to regional trade arrangements and signed a flurry of them with Peru, Colombia, South Korea, and Panama.

The U.S. rush to ink new deals pushed Canada and Mexico, fearful of trade diversion, to enhance their own efforts to advance trade liberalization with various partners.[2] This was also intended to decrease Canadian and Mexican reliance on the United States as an export market. Canada's preferential trade agreements lagged in part due to preoccupation with the U.S.; however, Mexico developed an extensive network of FTAs that simultaneously served to deepen domestic economic modernization and liberalization. With one eye on the potential effects of the proposed Free Trade Agreement of the Americas (FTAA), Mexico and the European Union pursued an association agreement in the late 1990s.[3] The European Union continued dialogues with the United States on regulatory cooperation and improved market access, while paying less attention to Canada.[4]

In recent years, U.S. trade actions have reshaped the context for relations between the European Union and each North American economy.

Canada and Mexico have been caught between shifting U.S. approaches, adopted with little regard for North American integration. Under the Obama Administration, the decision to engage in talks for a Transatlantic (TTIP) and Trans-Pacific Partnership (TPP) agreements forced Mexico and Canada to consider how such arrangements might generate trade diversionary effects for non-participating states.[5] When the United States reversed course and withdrew from the TPP at the outset of the Trump Administration, Canada and Mexico did not follow suit. Instead, both countries signed the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) with Asia-Pacific partners. But Canada and Mexico could not escape the pull of their larger neighbor. When the Trump Administration denigrated multilateral frameworks and touted the benefits of bilateral deals aimed at reducing trade deficits, Canada and Mexico were drawn into Trump's managed trade practices. These actions played out under the guise of a transactional "America First" trade narrative. That protectionism—not unique to the United States, of course—threatened many of the norms and practices that traditionally anchored both North American integration and the global trade system. When Trump leveled threats and tariffs against Canada and Mexico, the two countries agreed to the renegotiation of NAFTA.[6]

As constant shifts in U.S. policy have affected Mexico and Canada,[7] ties with the EU have taken on new importance. The countries must confront U.S. demands while striving for more balanced trade by strengthening their relationships with the European Union. Although the Biden administration's trade policy is perceived as less confrontational in tone than that of its predecessor, all three North American partners now operate in a changed global context. The unilateralism, protectionism and unpredictability of the Trump Administration led other regional blocs to promote their own initiatives across a range of issues.[8] Though Biden overturned some Trump policies—returning to the Paris accord, rejoining the World Health Organization, and supporting the election of the new Director-General of WTO—the priority of putting American workers first, coupled with the absence of renewed Trade Promotion Authority (TPA), suggests continued U.S. reticence on trade agreements. Nor is there any indication of renewal of Trade Promotion Authority (TPA). In other ways, such as the halting elimination of tariffs on steel and aluminum, the Biden administration has continued its predecessor's trade agenda. Continuities have been particularly salient vis-à-vis China's state-led non-market trade regime, but they are also visible with Canada and Mexico.[9] The United States has increased scrutiny of environmental and labor commitments and continued long-standing market access disputes.[10] Tensions remain over U.S. rules of origin requirements in cars, electricity markets in Mexico, agricultural market access in Canada, and solar panels in the United States.

The European Union will continue to engage bilaterally with all three North American partners, even as the deeply integrated North American market creates cross-cutting pressures in Canadian and Mexico economic relations with the European Union. The following section will focus on each country's previous negotiations and agreements with Europe; the integration of new concessions; and the interaction and effects amongst the North American economies. The chapter concludes with suggestions to foster a North American strategy with the European Union.

Bilateral Relations

EU–U.S.

The United States and European Union have long histories of promoting market liberalization globally. First, they drove the reduction of tariffs through successive multilateral GATT rounds; more recently, structural changes in the global economy led to greater focus on non-tariff barriers. The U.S. and EU have long sought to eliminate costly trade barriers and entrenched inconsistencies through transatlantic regulatory cooperation. After limited progress toward a comprehensive agreement at the WTO, the EU and the United States have increasingly addressed regulatory differences bilaterally.[11] Nonetheless, the prospect of a transatlantic, U.S.–EU trade agreement has proven elusive. The economies' different regulatory policies have been the target of ongoing trade disputes, resulting in the United States and EU being the most prolific initiators of complaints in the WTO.[12]

The two sides have held a succession of dialogues to mitigate the adverse trade effects of divergent regulatory measures, but these have yielded marginal results.[13] Initially, the Transatlantic Declaration (TAD) was adopted in November 1990 by the Bush Administration to build bridges after a contentious period in transatlantic relations. It was followed by a more aggressive commercial strategy under the Clinton Administration. Subsequently, the United States shifted to an ambitious New Transatlantic Agenda (NTA) with the EU in late 1995. The NTA launched a set of cooperative exchanges, including convening major U.S. and EU multinational firms in the Transatlantic Business Dialogue (TABD). Throughout the 1990s, the TABD played a key role in identifying s issues of regulatory coordination and coherence, such as behind-the-border barriers to transatlantic trade and investment. Some policymakers envisaged the emergence of common competition rules and standards, and eventually, a Transatlantic Free Trade Area.[14] A more modest outcome took shape, instead, with the launch of the Transatlantic Economic Partnership (TEP) in 1998. The TEP action plan called for the removal of technical barriers to trade and enhanced dialogue between the EU and U.S. regulators. Efforts continued with the High-Level Regulatory Cooperation Forum in 2005, and then the Transatlantic Economic Council in 2007. However, the 2008 financial crisis halted further liberalization efforts; the subsequent downturn and impact on the eurozone led Europe to focus on austerity to achieve fiscal consolidation and structural reform of specific hard-hit economies.

As the crisis eased, China's growing economic clout came to the forefront. As Europe sought paths to sustainable growth to exit the euro crisis, the U.S. "pivot" to Asia became a source of concern, as did China's own efforts to spearhead the Regional Comprehensive Economic Partnership (RCEP). The U.S. "pivot" was perceived in Europe as a concerning shift towards Asian markets. As a result, Europe launched a two-pronged strategy of enhancing its own ties with Asia and insisting on its own economic importance to the United States. After Obama reaffirmed the U.S. commitment to the TPP negotiations in 2009—formally joined by Canada and Mexico in 2012—the European Union proposed an ambitious trade agreement with the United States. There was optimism that the Transatlantic Trade and Investment Partnership (TTIP) would be a driver for jobs and economic growth.[15] Like the Trans-Pacific Partnership, which was designed to tap into the dynamism of East Asia and ensure shared high-quality rules on trade and investment, the TTIP was viewed as a way to promote export-led growth with a limited budgetary impact. The two efforts also sought to achieve progress despite the stagnation of the Doha Round [16]

In July 2013, the U.S. and EU launched the first round of trade negotiations under TTIP. Gains were expected to emerge from reducing non-tariff measures (NTM) in goods rather than from cutting tariffs, which are generally low between the U.S. and EU.[17] Delivering results on NTMs would prove difficult given long experience negotiating regulatory differences. Although earlier initiatives had achieved important agreements on container security, aviation safety, and customs cooperation, TTIP expanded the focus to intellectual property issues, state discriminatory practices, subsidization of state-owned industries, increased transparency about ownership structures, and investment protection in third countries. Talks stalled in 2017 amidst civil society opposition in Europe, especially in Germany, Austria, and Luxembourg. Twelve rounds of negotiations failed to resolve differences in agriculture, government procurement, and business services.[18] Facing the Trump administration's focus on bilateral trade deficits, the European Commission quietly shelved the TTIP, hoping to avoid greater tensions and protests across many European member states.

Trump unleashed a slew of tariffs on allies, including the European Union, using national security provisions to force the Europeans back to the negotiating table. While less intense than the U.S.–China trade war, U.S.–EU trade tensions under the Trump administration caused considerable shifts in Europe's approach. After the imposition of tariffs on cars, steel, and aluminum in 2018, Europe took a more transactional strategy. To avoid an escalating trade war, the European Union initiated discussions with the Trump administration on a modest set of proposals. In contrast, U.S. demands included reducing the bilateral trade deficit and granting market access for U.S. industrial goods and direct investment—but without mention of reciprocal U.S. liberalization.[19] The United States put forward two contentious issues in the always-touchy agricultural realm: sanitary and phytosanitary (SPS) measures and standard-setting. EU practices on food standards have long been a trade irritant with the United States, provoking several formal complaints to the WTO.[20]

Two years of negotiations yielded limited achievements, far short of the hasty joint statement on zero tariffs, zero non-tariff barriers, and even zero industrial subsidies announced at a White House summit.[21] Most European member states viewed agreements with Trump as stopgap measures.[22] The removal of tariffs on steel and aluminum was a key issue at the center of its annual evaluation and reporting on the state of negotiations.[23] But more generally, the European Union could not contain rising U.S. protectionism, let alone generate American engagement regarding reform and modernization of global trade rules. Instead, the European Union emphasized signing trade agreements with other partners: new agreements with Vietnam and Japan in 2019, updates to agreements with Chile and Mexico, and a long-awaited initial agreement with Mercosur in 2020. Negotiations are ongoing with Australia and New Zealand.

U.S. disruption of the WTO also caused headaches for the European Union. U.S. actions to block the WTO's dispute settlement functions threatened the rules-based multilateral system, in which Europe has a considerable stake. Trying to find common ground with the Trump administration on multilateral trade reform proved fruitless, as the United States hampered the WTO appellate body and held up the appointment of a new WTO Director-General. As Lester *et al* (2019) note: "without a properly functioning dispute process, the obligations in a trade agreement may not be worth much."[24] In response, the EU has sought to mobilize support and offer alternatives. The European Union persisted with proposed reforms to modernize the WTO in 2018 and simultaneously sidestepped the United States by brokering a compromise with a group of sixteen other states including China, Canada and Mexico. The European Union has also promoted its new model of dispute settlement in recent FTAs, including similar provisions in the recent agreement with Mexico and the Canada–EU Comprehensive Economic and Trade Agreement (CETA). Defensively, the European Union has opted for some of the same strategies that underpin U.S. trade policy (even if presented in less confrontational terms). The 2020 European trade policy strategy underscores supply-chain resilience and "strategic autonomy," while calling for stronger enforcement of labor and environmental obligations. These elements bear some similarity to new provisions in the US-Mexico-Canada Agreement (USMCA), which replaced NAFTA in 2020.

The Biden administration inherited a raft of challenges. Some areas of tension have seen resolution, namely a long-standing aircraft dispute and 'in principle' a new data-privacy framework that had previously been struck down twice by European courts.[25] In a broader sense, the Europeans welcomed the new administration as an opportunity to reinforce the international system of rules-based trade, while seeking greater cooperation in dealing with China on industrial subsidies, technology transfers, and concerns about the security implications of foreign direct investment.[26]

As in years past, though, regulatory differences are the crux of many U.S.–EU disagreements. Incentives to foster trade liberalization—including mutual economic benefits or promoting domestic structural reform—remain, but the EU's experience under the Trump Administration fostered a stronger emphasis on strategic autonomy in trade policy. This was apparent in the response to the incoming Biden administration's effort to work with Europe on addressing China's economic practices. Rebuffing calls to wait, Europe decided to forge ahead with its Comprehensive Agreement on Investment (CAI) in December 2020. The EU highlighted that the market access provisions in the CAI have some commonalities with the Phase One agreement signed by the Trump Administration (and carried over into the Biden administration). However, the CAI was effectively aborted due to EU–China conflict over human rights-related sanctions and Chinese retaliation, which generated opposition from the European Parliament.

There have been subsequent efforts to foster transatlantic cooperation with the initiation of a Trade and Technology Council (TTC) in November 2021. Aimed at economic issues of geostrategic importance, the U.S.–EU TTC was meant to address strategic engagement on a range of issues including supply chains, export controls, investment screening, and artificial intelligence.[27] The U.S. and EU are coordinating approaches to maintain access and control over key emerging technologies, through a new platform to define new rules and standards. Given asymmetric dependencies that had built up in the deeply intertwined supply chains linking the United States, Europe, and China, the goal is to foster greater transatlantic resilience and tangible deliverables.

From March 2022, however, these efforts have been overshadowed by the invasion of Ukraine in which transatlantic action has focused on Russian sanctions. To that point, the EU's trade policy had taken on a more assertive edge, adding "autonomous" (or unilateral) measures to complement actions at the multilateral and bilateral levels.[28] Efforts to expand its own trade defensive instruments match U.S. concerns about mitigating negative market externalities, whether for climate change or exploitation of workers. EU trade policy's greater focus on unilateral tools of enforcement to address perceived unfair trade and investment distortions mark a shift from its traditional multilateral orientation.

EU–Canada

For Canada, the transatlantic economic relationship has been of secondary concern, due to the Canadian prioritization of bilateral relations with the United States since the mid-1980s. Canada fostered strong ties with the United States through the U.S.–Canada FTA, and then NAFTA; despite a 1976 framework agreement, relations with Europe gradually weakened in favor of the United States. The European Union continued to promote dialogue and cooperation with Canada throughout the 1980s and 1990s, but the United States captures the bulk of Canadian exports and dominates Canadian inward and outward FDI. Yet unlike in Mexico, import levels from the EU began to rise appreciably after NAFTA. By 1999, European exports were almost double the levels recorded in 1993. By contrast, Canadian exports of goods to the EU did not increase significantly. The slower growth in Canadian exports between 1990 and1999 was offset by significant growth in two-way services trade.[29] Canada advocated for a Canada–EU FTA, but there was less interest on the European side given similar trading profiles.[30]

Canada has long been concerned about the prospect of closer trade ties between the European Union and United States.[31] European investors expressed a limited interest in the Canadian market, despite its integration in North America, dwarfed as it is by the United States. Canadian efforts to join U.S.–EU dialogues, mentioned above, have been rebuffed.[32] U.S. businesses excluded Canadian firms from the Transatlantic Business Dialogue, which crafted recommendations for American and European policymakers. Canadian business actively pushed for their own transatlantic forums and roundtables to address regulatory barriers and market access with the EU.

Although Canada did not constitute a priority for Europe, the EU did establish some initiatives that resembled those with the United States. The EU set up a similar Transatlantic Declaration and New Transatlantic Agenda in the 1990s with Canada followed by a Joint EU-Canada Political Declaration and Action Plan in 1996 as well as the signing of sectoral agreements to foster further ties and exchanges.[33] Canada and Europe agreed on an EU-Canada trade initiative aimed at addressing various obstacles to transatlantic trade in 1998. Much of it involved dialogue about regulatory cooperation focused on specific bilateral agreements to foster mutual recognition of their respective regulatory standards. However, despite Canadian efforts, it was with Mexico that the Europeans signed a trade agreement in 1997 to offset the impact of trade diversion from NAFTA.[34]

Ottawa pushed for a deeper relationship with the EU, leading to the trade and investment enhancement agreement of 2002. Quebec also become a critical promoter of overall Canada–EU ties, building on strong trade ties.[35] Initial discussions faltered after three rounds of negotiations, so it was only in 2009 that the two sides released a joint assessment laying out the benefits of a trade and investment agreement.[36] When Canada announced negotiations for a Comprehensive Economic Trade Agreement (CETA) with the European Union, the prospect of an ambitious agreement caught the attention of U.S. business. Several associations lobbied the Obama Administration to negotiate a U.S.–EU agreement, concerned about being the only NAFTA partner without a deal with the European Union.[37]

To maintain momentum, "Canada acquiesced to the EU's demand that Canadian provinces participate directly in discussions, setting an important precedent in the dynamics of Canadian external trade."[38] Still, provinces complained that they were not fully integrated into the negotiations, nor could they assess likely gains and losses from a prospective FTA. The agreement offered near-complete tariff liberalization, covering 99% of manufactured goods and 94% of agricultural goods, on entry into force. Difficulties emerged during the negotiations on beef and pork, cheese and dairy, public procurement, and pharmaceutical drugs. Agricultural negotiations were contentious, regarding both market access and the acceptance of 143 products as geographically distinct. Doing so would require changes in domestic trademark law in Canada.[39] While Canadians gained tariff-free access for cranberries and maple syrup, they conceded on government procurement in the face of EU lobbying for access to Canada's sub-federal procurement process.[40] European firms gained unprecedented access to provincial procurement markets to bid on public contracts and participate in private services markets.

The EU sought patent term extensions for pharmaceutical products and access to the Canadian dairy market, issues long central to U.S. trade goals in Canada. The European Union also sought interprovincial trade cooperation, given provinces' jurisdiction in the areas of procurement and investment, as well as the need to work with the regional supply management systems that regulate agricultural industries.[41] Negotiations in goods and services produced new provisions on air transport, state-owned enterprises, and regulation of digital commerce. Yet non-tariff barriers remained among the most difficult areas to foster reciprocity, as goods must generally meet technical standards and licensing requirements for import. Because the EU saw the deal with Canada as a precursor to a larger transatlantic trading block, the regulatory cooperation chapter looks somewhat less ambitious than the EU's proposals for a similar chapter in the stalled TTIP negotiations. The goal was to create a forum for regulatory cooperation to reduce regulatory differences affecting trade in goods and services and investment. European regulatory policy emphasized the precautionary principle, and the issue of precaution is addressed in a specific manner in relation to environmental protection and health and safety. Yet this principle is subject to intense disagreement with the United States, which did not include such provisions in draft texts of TTIP. Its inclusion in CETA raises questions for Canada about competing proposals for regulatory cooperation within both the USMCA and CETA. One new feature to address regulatory barriers in CETA is the inclusion of provisions for conformity assessment for goods, good manufacturing practices for pharmaceuticals, and common standards for automobiles. These provisions reflect efforts to address the duplicative costs of regulatory barriers and allow for domestic testing and certification of Canadian products for export to Europe.[42] Despite its ambition, CETA includes numerous exceptions, ranging from taxation to cultural industries.[43]

The negotiations resulted in a provisional agreement in July 2016. However, the EU Commission's efforts to pass the agreement with only approval by the European Parliament generated strong pushback from member states. The European Court supported members in its judgement on the EU–Singapore Deal that authority on investment protection and dispute settlement is shared with national and sub-national parliaments. As a result, any mixed trade agreement with shared competences—including CETA—requires approval from approximately thirty-eight national and regional EU member-state parliaments. Eventually, CETA overcame a threat from the Walloon Parliament to refuse statutory approval to the Belgian government. The CETA provisional agreement finally came into effect in 2017, with some exceptions.

The fraying consensus on trade complicated EU efforts to ratify the agreement across all member states; in addition, the much-touted effort to foster a bilateral investment system has not been provisionally applied as the EU fleshes out the legal rules and provisions of the investment court. In Canada, civil society had lobbied against the agreement as early as 2008; in Europe, opposition towards CETA gain forced only with the launch of U.S.–European negotiations in 2013. Part of the continued domestic opposition to CETA revolves around investment provisions in the agreement, which resemble provisions in TTIP negotiations. Since CETA provisionally entered into force, except for the investment chapter, it has been subject to continued legal challenges. The European Court of Justice (CJEU) concluded that CETA was a mixed agreement that required ratification by all member states before it can enter into force (Opinion 1/17), allowing challenges in several member states, notably the Netherlands and Ireland, about specific commitments.

Provincial and territorial governments in Canada also need to implement legislation to bind themselves to CETA provisions related to government procurement.[44] There will be continued discussions on issues ranging from motor-vehicle regulations to professional qualifications and geographical indicators for agricultural products. Given Canada's priority exports, such as beef and pork, there will be a strong focus on mutual recognition of food safety rules. Canada also had to contend with changes in the deal due to British exit from the European Union. To avoid any new tariffs and restrictions, Canada agreed to the Trade Continuity Agreement (TCA) with the United Kingdom. The deal temporarily "rolls over," or replicates, most of CETA's terms, until both sides establish a more permanent agreement. The rollover agreement raised consternation about the lack of parliamentary scrutiny or stakeholder consultation, amidst the rush of the impending Brexit deadline. Negotiations between Canada and the UK were finally launched in March 2022. While this alleviates immediate pressure to conclude a bilateral agreement, there would likely be some changes on the Canadian side to accommodate any revisions to tariff schedules, intellectual property rules or health and safety regulations. A new CETA-type deal with Britain may include many issues that underpin the EU–Canada deal, while adding digital trade and financial services, and non-trade issues such as environmental and gender commitments.

Nonetheless, Canada remains highly dependent on the U.S. market, which accounts for three-quarters of Canadian exports. However, in its efforts to decrease this trade dependence, Canada may find itself caught in cross-pressures as the United States and European Union promote their own rules and standards as global norms. Canada will have to manage different, perhaps competing, FTA commitments. For instance, the USMCA has no provisions for investment arbitration between the United States and Canada, but the CETA does. Canadian officials, according to Goff, are aware of the possibility of conflicting regulations, and pursue their economic policy agenda in discrete, 'parallel' forums.[45]

Canada must balance its own domestic regulatory preferences against the pressures from two of the leading global regulators. Canada faces differences between U.S. preferences for trademark provisions and European preferences for geographical indications on agricultural products, for example. It will need greater consistency between USMCA and CETA rules of origin to avoid needing separate production schemes whenever firms seek preferential treatments. Canada is conscious of the effect of its regulatory choices on market access given the differences in preferred intellectual property systems between the U.S. and EU.[46] For Canada, efforts to promote regulatory cooperation with the European Union raise potential impediments to trade with the United States. As a result, CETA provides for a new, but limited, regulatory cooperation commitment.

As the U.S. extended trade preferences to other countries through new FTAs, Canada sought to secure new markets in Europe through a second-generation trade agreement. In its relations with Europe, Canada must account for the broader North American regional context and oscillating U.S. approaches to trade. To that end, Canada has worked with Europe on efforts to reform the WTO, including overcoming the impasse in the appeals and arbitration system, while also strengthening bilateral trade ties.

EU–Mexico

Mexico has one of the longest institutionalized economic relationships with the European Union. Mexico signed an initial cooperation agreement with the then EEC in 1975, granting most-favored nation status. These ties were further bolstered by the accession of Spain and Portugal to the European Union in 1986, before being reshaped by the impact of NAFTA in 1994.[47] In NAFTA's wake, European firms expressed concerns about the impact of the North American agreement. European trade with Mexico fell by more than 25% between 1993 and 1995 due to the Mexican peso crisis and NAFTA-related trade diversion.[48]

Mexico's primary economic motivation in negotiating NAFTA had been to improve economic conditions to foster investor confidence and attract foreign direct investment. As Mexico launched NAFTA-linked domestic structural reforms, Europe also sought more structured relations with Mexico. This brought the conclusion of a Global Agreement in 1997, which led to nine rounds of negotiations to produce the FTA that came into effect in 2000.[49] The EU–Mexico Free Trade Agreement was the first transatlantic FTA, and it has tripled trade in goods while further liberalizing services and investment in Mexico. By 2017, the EU was a key trade partner, accounting for 8.8% of total Mexican trade, the third largest partner after the United States and China.[50] Bilateral trade in goods was worth €66 billion in 2019, while trade in services added about another €19 billion.[51] Agriculture has achieved parity between the two trade partners, which is important for their respective domestic interests. Investment flows into Mexico have continued, amounting to 37% of total FDI.[52]

In 2013, the European Union and Mexico sought to update and modernize their existing agreement given the need to address changes in technology, digital, and value chains. A new agreement was designed to upgrade mechanisms for investor protection, intellectual property rights, and regulatory cooperation. Notably, the European market had expanded considerably since 2000, with the addition of thirteen new EU members. New negotiations began in May 2016; a preliminary agreement was concluded in April 2018 after nine formal rounds of negotiations. New chapters included trade and sustainable development, small and medium enterprises, trade remedies, technical barriers to trade, and energy and raw materials.[53] The most difficult issues included market access, especially for agricultural products, and investment-protection measures. The European Union agreed to phase out tariffs on 82% of imports by value coming from Mexico, and Mexico agreed to eliminate tariffs on 47% of EU imports. In addition, the European Union pushed for recognition of more than 400 geographically designated agricultural products. This spurred a backlash from Mexican cheesemakers, who launched legal action to block provisions that that would prohibit them from using European names for their cheeses. More than sixty such designations were contested by Mexican businesses and by American exporters with strong ties to the Mexican market. Like Canada, Mexico faces a challenging situation in searching for a compromise between the EU's protection-of-origin systems and its domestic system.

The EU pushed for stronger trade remedies, including an investment court system and further protections on investment. It also sought greater emphasis on trade in services, including financial services and data flows. Discussions on rules of origin posed additional challenges for negotiators. Mexico was keen to preserve its NAFTA-inspired model of rules of origin, which differs substantially from the European approach. Europe also pushed for liberalization of procurement, particularly at the subnational level. The EU succeeded in expanding access to public procurement markets. The agreement commits Mexico to open public procurement at the state level to non-Mexican firms, meaning the Mexican government needed to negotiate with states and municipalities to enable EU firms to tender for contracts before formally submitting the agreement for ratification[54]. With fourteen states willing to liberalize their procurement markets, Mexico agreed to allow European firms to bid on subnational contracts for the first time in any trade agreement.[55]

Mexico's positive responses to the EU emerged from preferences for diversifying its external relations away from dependence on the U.S. economy. This became more urgent with the Trump administration's threats to abandon NAFTA. In addition, transformations in global value chains, debates on investment protections, and emphasis on regulatory cooperation also propelled bilateral discussions. Innovations in other trade agreements necessitated updates to the earlier EU–Mexican agreement. Bilateral relations between the EU and Mexico had benefited from the greater stability created by a more institutionalized framework, including regular dialogues to evaluate the implementation of trade commitments, including tariff schedules, service liberalization, and dispute resolution mechanisms.[56]

Like Canada, Mexico had to adapt to changes within the European Union, especially Brexit. Mexico has been generally negative about the disruptive effects of Brexit and how it affects the modernization of its 2018 agreement with the EU. Mexico entered into a continuity agreement with

Britain to avoid disruptions to trade flows, with a temporary agreement expected to be in place until negotiations started on a new trade agreement. Both sides initially expected to conclude within the next three years, although those talks only launched in May 2022.[57]

Future of North American Relations with the European Union

The dynamics of U.S.–EU relations have changed under the new Biden Administration. This is signified by the re-engagement at the multilateral level through several immediate actions including support for the selection of Ngozi Okonjo-Iweala as the WTO Director-General. WTO members can again turn to substantive trade issues, instead of clashing over institutional paralysis. Opportunities for greater engagement on trade issues are helped by increased public support for trade and trade agreements after the intense polarization of the early Trump years.[58] Despite the broad support for free trade, the U.S. and EU economies have faced increased pressure during the pandemic and its aftershocks to strengthen domestic investment, repatriation of supply chains, and greater attention to issues of trade enforcement. Europe has stressed "resilience" of supply chains in key areas and has strengthened its enforcement mechanisms to protect its internal market, including through investment screening and foreign subsidy control.

Building on steps taken under Trump, the Biden administration has prioritized confronting China as a formidable geopolitical and technological rival. While the United States would traditionally turn to Europe to put pressure on China, the U.S. and EU have opted for separate but parallel bilateral efforts to open Chinese markets through the Phase One and Chinese Agreement on Investment (CAI), as discussed above.[59] The EU moved quickly before the Biden Administration took office, which raised concerns that it would undermine U.S. efforts to form a joint response to China. Both have run into limits in pushing for Chinese domestic reform. China did not meet its commitments to the United States under the Phase One Deal, while Europe faced retaliatory sanctions.[60] With the CAI effectively on hold due to human rights violations,[61] the transatlantic partners have again increased cooperation on defining technical standards and building up global infrastructure to match the Belt and Road Initiative through their Trade and Technology Council (TTC). They may engage on domestic subsidies reform at the WTO, where the U.S., Japan and EU have pressed for bans on various types of state support and industrial subsidies that distort trade.[62] Both the U.S. and EU want to push for more rigorous labor and environment safeguards in trade agreements, along with greater action on climate change, so there is room for closer cooperation. However, the two sides have often favored quite different approaches to doing so; post-Brexit the British position on China and other international rules is something of a wildcard.[63]

As discussed above, Canada finds itself caught between the United States and Europe on a host of trade issues, especially regulatory approaches, and agricultural exports. Though Canada must prioritize its relationship with the United States, it has continued efforts to diversify its economic ties. So far, CETA has not yielded the highly anticipated benefits in terms of market access for agricultural products largely because of regulatory questions. Even though CETA reduces bilateral tariff costs between Canada and the EU, Canadian agricultural exports declined in 2019, in part due to the restrictions on growth hormones and EU certification requirements.[64] While Europe is meeting its export quotas, the same cannot be said for Canadian agricultural exporters. Greater gains for Canada require addressing non-tariff barriers in the crucial food sector; however, CETA did not address such restrictions as sanitary and phytosanitary measures, restrictions on genetically modified organisms (GMO), food labeling requirements, certification, traceability, classifications, security-related measures, geographical indications, and differences in trademark legislation. Even so, U.S. exporters face the prospect of greater competition in both the Canadian and European markets.[65]

Canada's continuity deal with the United Kingdom avoided potential disruptions from Brexit, and in March 2022, the two countries launched negotiations on an FTA. Given its experience with CETA, Canada will likely press the United Kingdom to eliminate some of the non-tariff barriers in agriculture that have prevented its farmers from taking advantage of European market access.[66] Initially, the investor–state dispute settlement mechanism carried over from CETA–implementation is on hold within the European Union—but the future of such a mechanism appears less certain after it was excluded from the USMCA. Even so, Canada and Europe's leadership on an interim measure for resolving trade disputes at the WTO, modelled on the CETA agreement has gained traction with fifteen additional countries including Mexico signing on to the agreement.

Mexico's economic relations with the EU will focus on the implementation of the new trade agreement, reached after four years of negotiation. While negotiations concluded in 2020, the ratification process has stalled. Mexico has been reluctant to split the agreement as the European Commission would like, in order to approve the trade agreement by cutting out national capitals, which must ratify parts of the investment agreement.[67] There has been pushback from the European Parliament about the respect for human rights in Mexico as well as issues related to drug trafficking and migration. The agreement is also marred by recent changes in the Mexican electricity market which has led to European companies considering litigation to protect their local investments.[68] The changes to various contracts and projects have led to a diminished enthusiasm among European investors, who may push for international arbitration given the instability of contracts and concerns about expropriation. Like CETA, once ratified, the new EU–Mexico deal could raise more questions about regulatory coordination among various agreements in North America.[69]

In sum, all three North American partners had embarked on trade negotiations with the European Union with expectations for broad issue coverage and high levels of liberalization. But increased trade frictions during the Trump administration accelerated longstanding Canadian and Mexican trade discussions with Europe while stunting those with the United States. Canada and Mexico negotiated comprehensive FTAs that reflect the changing nature of trade and include issues that appeared in CPTPP and USMCA.[70] Both the Canadian and Mexican agreements have significant, outstanding issues of implementation, however. Many questions relate to standards, rules, and procedures that require coordination to ensure that non-discriminatory principles and regulatory frameworks are in place to reduce barriers to trade in industrial goods while ensuring food safety, animal health and plant health.[71] Achieving this requires mutual trust in the countries' respective regulatory systems, and sustained efforts to achieve reciprocity of rules. Another challenge relates to complex implementation of provisions across jurisdictions; although the federal government has the sole constitutional authority to sign and ratify international treaties, treaty obligations and commitments increasingly fall within sub-federal jurisdiction. Canada addressed this issue through the participation of provinces in the negotiations as *a condition sine qua non from the European Union.* Select provinces also engaged in informal discussions with EU trade delegates. Such a trade strategy was not undertaken in Mexico, nor would it be feasible in the United States, where European preferences to negotiate greater market access in areas that are the regulatory responsibility of American states are taken off the table.

Creating a North American Strategy with the European Union

As this suggests, there has been no North America strategy for engaging Europe, even though North American dynamics have shaped each country's approach. A North American strategy towards the European Union would put the three countries on a par with other regional blocs such as ASEAN and Mercosur, which engage as individual states as well as collectively on trade. Yet this is difficult in North America, given U.S. predominance; meanwhile, the European Union may be less inclined to engage with North America collectively given its recent trade and investment deals with

Canada and Mexico. As federal systems, the three countries could foster intergovernmental engagement at different levels, opting for a regional summit with the EU to discuss shared concerns, such as industrial subsidies, resilience of supply chains, innovation, and rules on foreign direct investment, while still allowing subnational forms of coordination and cooperation. In the short term, the North American-Europe relationship will be shaped by recoveries from COVID-19 pandemic, supply disruptions, and sanctioning of Russia. As always, U.S. politics loom large: it is still not fully clear how deep and lasting the change of approach will be after the fraught four years under Trump as Biden has followed the status quo using national security exemptions as a trade policy tool.

To better engage with Europe, the three North American countries need to develop new ideas and approaches that build on the new USMCA and leverage their integrated market to shape strategic cooperation. Their respective trade policies need to support complementary tools regarding innovation, competition, data flows, investment, sustainability, and labor market outcomes. There are areas where North America could work together with Europe cross-regionally and within multilateral fora.

• **Foreign direct investment**, especially in relation to critical infrastructure and technology transfer. The recent adoption of European legislation to review FDI for security considerations had led to some convergence with CFIUS in the United States through TTC and the Investment Act in Canada. Coordination here may press Mexico to reconsider changes in domestic practices regarding FDI in the energy sector, while also providing leverage to deal with Chinese market distortions and state subsidies. Such coordination would translate to the multilateral level, supporting efforts by the EU, Japan, and United States.[72]

• **Consolidating disparate trade agreements**. A North American strategy toward Europe would create necessary space to discuss differences in rules between the USMCA and the EU–Mexico and EU–Canada agreements. While addressing geographic indicators may be a non-starter given the U.S. position on this issue, there is value in focusing on areas where the three agreements—and longstanding US–EU efforts—highlight needs to address duplicative standards and promote regulatory equivalence. This requires building trust, notably challenging regarding agricultural standards. However, the speed with which vaccines were approved during the pandemic on both sides of the Atlantic should provide a good example of areas where regulatory authorization and approval can be done expeditiously within their respective agencies.

This is not an easy task. Regulatory cooperation has been a goal for more than two decades, as both Europe and the United States see their regulations as global standards. Canada and Mexico are emblematic of countries forced to use both standards to export to these larger markets, leading to duplication and inefficiencies. A North American strategy needs to also account for cross-investment in North America by European firms, as well as global supply chains and distribution networks that link both continents. But both Europe and the United States face the prospect of new competition, if China increases its push to transfer domestic standards, developed for a mass market, into the global arena. This may be most salient for information technology products, artificial intelligence systems, or autonomous vehicles. Without some form of regulatory equivalence, struggles over technology and privacy between the U.S. and EU could generate competition in extending favored models into other countries and offer an opportunity for China to leverage their divisions especially in developing country markets.

• **Curtailing protectionist policy.** The United States has increased its emphasis on "Buy America" provisions, which strain relations with Europe and the United States' closest neighbors. These provisions reflect broader protectionist intents by incentivizing relocation of key sectors to the United States through preferences for domestic bidders. While the United States can waive requirements of the Buy American Act, it can also limit these waivers by using health and security reasons, as proposed for medical supplies and pharmaceutical products. Canadian policymakers have at times proposed a 'Buy North America' alternative. The USMCA does not include a trilateral government procurement commitment, which is a step back from NAFTA. Instead, the USMCA government procurement chapter only applies to procurement between Mexico and the United States. The exclusion of Canada has a limited effect, as it retains a level of market access under the WTO Agreement on Government Procurement. Nonetheless, the effect is to increase further the complexity of procurement rules within North America, as both Mexico and Canada also have procurement commitments with the EU and under CPTPP.[73]

• **Competition and technology.** North American and European positions on competition and technology are converging, creating opportunities. Huawei, the Chinese telecommunications giant, has found itself subject to a litany of U.S. restrictions and faces Canadian restriction on participation in next generation, 5G telecoms networks. The USMCA contains much more robust provisions on competition policy enforcement. Debate is raging across European capitals about the security implications of reliance on Chinese technology, as well as the consideration of European alternatives. There could also be an opportunity in these circumstances to upgrade appropriate competition policy disciplines. Despite disagreements on data privacy, there is a converging concern about the power of large tech companies. The U.S. debate has moved closer to European warnings of tech giants' unrivalled advantages and anti-competitive practices. This may open the door for closer collaboration with Europe to prevent data monopolies as policymakers grapple with how to regulate digital markets. For the moment, the new EU–U.S. Trade and Technology Council has focused on one partner. Together, the North American economies could use recent provisions on digital trade to promote a broader digital trade agreement with Europe, instead working separately on their own rules.

• **Trade enforcement and standards.** The importance of trade enforcement in Europe, especially in terms of labor and environmental standards, coincides with the growing emphasis on these issues in the USMCA as the US has changed enforcement to be more aggressive under the targeted mechanism (RRM) to ensure collective bargaining rights. Europe included similar provisions in its own free trade agreements, taking legal action most recently against South Korea for labor violations. There is an opportunity to focus on trade remedies and enforcement between the North American economies and Europe, with a shared goal of ensuring a level playing field. While the United States pushed for dispute settlement and trade remedies on labor and environmental issues, USMCA scaled back investment protections, although with uneven effects between Canada and Mexico. The USMCA's continuation of a dispute settlement process is welcome, and it coincides with the EU's efforts to reform the multilateral process. However, many of the aspirations in the USMCA are much more limited in terms of legal adjudication.[74]

Conclusion

The three North American partners are operating in a changed global context: growing systemic competition from China's state-dominated economic system, the vulnerability of supply chains during the pandemic, and multilateral dispute settlement disrupted by the United States. Adding to that, the unilateralism, protectionism, and unpredictability of the Trump Administration led the European Union to promote a more assertive trade policy that promotes its own strategic and political goals through legal enforcement and market power. Despite its stated ambitions of fostering "open strategic autonomy," Europe has been divided between those who push for trade policy as a protective instrument and those that see trade policy as necessitating continued openness. Though Europe is a trade power through the strength of its large single market, the pressures from technological change, income inequality, rising populism, and increased protectionism clearly impact its new trade strategy.

For the three North American countries to develop a coherent economic strategy towards Europe, they should consider that Europe is both a regulatory rival in third markets and a strategic ally in seeking to modernize trade rules. Both sides share concerns about the enforcement of rules to ensure a level playing field, the need for strengthening of labor and environmental standards, and reducing trade-distorting subsidies and curtailing unfair trade practices. The end goal is not to promote the European single market as a model. Instead, North America can build on interdependences to maximize their economic partnership in areas that would allow for less friction and more coordination with Europe. Instead, however, the recent U.S. strategy of insulating issues from international adjudication has been at odds with many of its trade partners.

If all three want to leverage their collective strength through a stronger North American partnership, the European Union has experience in negotiating cross-regional trade agreements. In its newly released strategy on multilateralism for the twenty-first century, the European Union seeks closer cooperation with regional groupings such as the African Union, Association of Southeast Asian Nations, and the Community of Latin American and Caribbean States. Yet, Europe does not view North America as a region but looks at each country separately in terms of bilateral deals. Part of the problem is that there has been a lack of coherence in terms of a North American approach; many issues are relegated to dual-bilateral relations between the U.S. and Mexico and the U.S. and Canada. When the three states negotiate with the European Union, bilateral differences lead to a "spaghetti bowl" of trade and regulatory commitments. This creates inefficiencies and may hold back North American integration. Moving forward, more institutionalized coordination is needed to promote a shared vision of North America. This could allow the three countries, finally, to leverage their massive continental market in the way the EU has done for decades.

Endnotes

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7. For example, the tax credit in Build Back Better for electric vehicles built by American union workers generated opposition from Canada and Mexico.

8. CPTPP, RCEP and DEPA being specific examples.

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14

The Future of North America–China Relations

Jorge Guajardo and Natalia Cote-Muñoz

North America's fourth decade will unfold in a rapidly changing geopolitical context, as the Russian invasion of Ukraine and escalating Sino-American tensions make clear. While perhaps more salient today, it must be noted that China's rise has profoundly shaped North America's trajectory over the last twenty years. Despite that, as this chapter shows, the three North American countries—Canada, Mexico, and the United States—have rarely sought a coherent response to China. The reactive and piecemeal policies have limited regional integration.

North America made clear strides toward integration after NAFTA took effect in 1994. Within a few years, however, China's 2001 entry into the World Trade Organization (WTO) challenged that progress. Intra-regional trade as a percentage of North America's total trade fell from a high of 46.4% in 2000 to 39.8% in 2017—lower than at the beginning of NAFTA. Much of the intra-regional trade was instead diverted to China.[1] As China's economic weight grew, much of the North American momentum that had been present in the 1990s and early 2000s was lost. Despite that profound effect, there was no integrated North American response to China's economic impact. The stagnation of intra-North American trade has been felt most intensely by Mexican industry. It is not a coincidence, then, that the Mexican president's comments at the 2021 North American Leaders Summit (NALS) emphasized the impact of China on the North American economy as a reason to strengthen the trilateral partnership.[2]

So far, there has been little to show for such calls. Instead, three distinct bilateral relations with China took shape: Canada as an increasingly interdependent trading partner, Mexico as a direct economic competitor, and the United States both as a strategic competitor but also an increasingly interdependent economy. Politically, each country followed a divergent path in its relations with China, although Canada and Mexico's bilateral relationships with China are affected by the tone and spillover from U.S.–China relations. There is little doubt about the effect, however. As China grew more economically and politically powerful, North America became less relevant as a region. Even as competition has intensified, no unified North American response to China has been articulated. However, as the North American Leaders Summit returns in late 2022, there may be scope for change amidst a context of geopolitical strife.

Starting with the Trump Administration, the United States' more antagonistic position toward China has impacted its North American neighbors, both in their relations with China and with each other. The effects of U.S. antagonism have been coupled with China's increasingly assertive foreign policy, which is largely driven by domestic trends, such as the country's economic slowdown and increased authoritarianism. As U.S.–China relations have soured, Canada has found itself between a rock and hard place. Meanwhile, Mexico has shown an interest in appeasing its northern neighbor on some issues, while at times irritating the United States with its ambiguous positions on Ukraine. Mexico has struggled to formulate a broader and more strategic foreign policy in response to a changing global picture, complex domestic pressures, and U.S. political oscillations. Overall, however, these factors have increased tensions between the three North American states and China.

The increasing distance between North America and China has opened windows of opportunity for greater North American integration. These windows relate to two main sources. First, strategic Sino-American competition has increased pressures for "de-linking" especially in key sectors like technology. Second, the long aftershocks from the pandemic have highlighted potential benefits of "near-shoring" or creating more resilient regional supply chains. While these factors open certain possibilities, so far, none of the three governments has sought to exploit them systematically. Instead, many policy actions contradict the strategic rhetoric. For example, the inward-focused policies of Mexican President Andrés Manuel López Obrador (AMLO), notably nationalistic energy and electricity policies, have disincentivized private and foreign investment. As a result, Mexico has struggled to attract the badly needed investment that is leaving China. This failure comes despite all of Mexico's strategic advantages.[3]

Nor has the United States offered leadership or a North American vision. It is true that the Biden administration has attempted to overcome its predecessor's break with the Trans-Pacific Partnership (TPP). But these efforts have been partial. In terms of a North America approach, there has been even less to offer. Most notably, Trump took pride in the administration's increasingly isolationist policies. Many of these have been retained, more quietly, by President Biden. For example, U.S. subsidies for electric vehicles manufactured in the United States have alienated allies, including its neighbors, in a critical North American economic sector.

The only meaningful exception to the lack of trilateral response to China can be found in the USMCA. The three countries included a "poison pill" in the agreement's Article 32.10, which constrains signatories from starting FTA negotiations with non-market economies. The clause was specifically aimed at China.[4] Further, the increased regional content requirements for cars were intended to divert some supply chains away from the People's Republic of China (PRC) and back into the region.[5] But these USMCA inroads were done more for the sake of antagonizing China than for promoting North American integration.

As noted above, the COVID-19 pandemic has cast doubt on the wisdom of supply-chain integration with China. The most evident problems arose due to global dependence on Chinese medical inputs and supplies. In the short-run, North American countries were lucky that the outbreak hit them just as China resumed production, and they were thus able to procure medical supplies. However, in the long run, the experience may encourage governments and companies to make supply chains more local to mitigate the disruption to manufacturing caused by contagious diseases, especially as China continues to pursue a Zero-COVID strategy, putting entire cities in lockdown to prevent the virus from spreading. More than two years into the pandemic, China's responses to the virus have continued to disrupt trade and supply chains by shutting down important ports like Ningbo. The world and North American economies have struggled to cope with the continued threat of further disruptions, which have been exacerbated by the war in Ukraine and widespread sanctions on Russia. These shocks, coupled with the bottlenecks in U.S. ports, will create incentives for North American manufacturers to invest in new supply chains closer to home.

Turning from North America across the Pacific, China does not view North America as a region. Instead, it looks at each country separately. In a way, this is reasonable in the sense that North America's integration has been limited—and in may remain so in the foreseeable future. But dismissing a regional perspective on the relationship with China is short-sighted. Even though China has developed a unique relationship with each of the North American countries, its relations with the United States will undoubtedly determine those with Canada and Mexico. In this sense, the existence of a North American market has shaped each country's responses to China. In the next section, we will detail each bilateral relation and then discuss what this means for North America.

Bilateral Relations

China–United States

Ever since the United States first established diplomatic relations with the People's Republic of China, there has been a belief in the policy world that bringing China into the community of nations would foster its path toward democracy and free markets. In his 2000 speech in support of the China Trade Bill, President Bill Clinton said that China's entry in the WTO represented "the most significant opportunity that we have had to create positive change in China since the 1970s."[6] More recent experience shows that this has proven not to be the case. The frustration that China did not peacefully evolve into a capitalist multi-party democracy among policy thinkers appears to have boiled over into a generalized exasperation in negotiating with China. Starting with Trump's rise to power, China's bilateral relationship with the United States suffered a 30-year low amidst an escalation of reciprocal trade restrictions. President Biden's continuation of this policy toward China proves that an adversarial relation is the new normal. In a sharp contrast to the era of "constructive engagement" that began under the Clinton administration,[7] China has moved to the category of "strategic adversary" in the eyes of U.S. policymakers.[8]

Part of this owes to China's remarkable relative rise. This became clear as China survived the downturn of the 2008 financial crisis better than much of the rest of the world (albeit at a cost of increasing credit lending, deferring adjustment costs to the future). Two years later, China surpassed Japan as the world's second-largest economy.[9] In addition, the economic crisis critically undermined Chinese confidence in an American-led world order and encouraged greater assertiveness of Chinese foreign policy. According to then-U.S. Treasury Secretary Hank Paulson, Chinese Vice Premier Wang Qishan told him that China no longer saw the U.S. as the country to learn from and follow.[10]

Despite claims that China was opening, the reality was that it many respects its domestic market remained closed, even to important sources of foreign direct investment (FDI) and financial services. Payment processing companies like Mastercard, Visa, and American Express were blocked until early 2020, and now must compete with the largest e-payment market.[11] Foreign companies working in industries protected by China were either blocked entirely or initially grew and prospered only to later be pushed out of the country. Facebook was banned after Xinjiang activists used the website to organize protests in 2009.[12] Google had struggled with creating a censored search engine in China, and a hack from within the country targeting human rights activists led to the company eventually pulling out of the PRC.[13] Netflix has not gained market access, although it continues to find alternative ways to take advantage of the market, such as partnerships and licensing.[14] Once a highly touted market, Boeing's ability to sell its planes in China has faced obstacles and disruptions. Additionally, many U.S. companies have highlighted concerns about intellectual property rights and copycat companies in the PRC. Hence, China was still seen as a closed market with limited opportunities in many sectors, as well as an uneven playing field in which U.S. companies cannot succeed due to politics.

Despite those limitations, the two countries still became truly interconnected in other ways. The United States and China became each other's top trading partners in 2015. (Though more recent trade tensions pushed China to third place in 2019, behind Canada and Mexico).[15] Chinese FDI to the United States reached a peak of $46 billion by 2016.[16] And before U.S.–China frictions, China was still considered a top place to invest due to its expanding market. This came, partially, at a cost to regional relations. The United States started importing more and more of its auto parts, shoes, and textiles from China than from its neighbors—especially Mexico. In 53 different industries, U.S. exporters also lost ground to China in the Canadian and Mexican markets.

China's economic growth also triggered concern about the strategic consequences. In 2011, the Obama Administration started an effort to address China's rising influence in Asia and around the world.[17] Most of the Obama Administration's foreign policy attention was focused on the Middle East, the rise of ISIS, and Russia's increasing assertiveness. In the end, this "pivot to Asia" created closer ties with some of China's neighbors but remained incomplete when the Trump Administration pulled the United States out of the TPP.[18] Biden has tried to recover with the much thinner Indo-Pacific Economic Framework, but the initiative may be too little, too late, especially as it follows the Chinese-led Regional Comprehensive Economic Framework signed in late 2020.

The trade war launched by the Trump Administration built on and intensified these existing frictions. On both sides, advocates for warmer relations lost sway. As U.S. companies found it harder to do business in China, they lost faith in the relationship; meanwhile, more free trade-oriented thinkers lost sway in Beijing. This generated a self-reinforcing cycle of mutual suspicion between China and the United States. Some of the most-recognized U.S. companies remained blocked from China, while the "pivot to Asia" looked like Cold War-style containment with more modern window-dressing to Chinese thinkers. The stage was set for a re-evaluation of the bilateral dynamic between the countries. Even in sectors where American companies prospered in China, like agriculture, new barriers to entering China emerged (such was the case with pork).[19] President Trump pushed back on China with gusto, backed up by a Congress keen on being seen as tough on Chinese unfairness. Thus, the United States incrementally put tariffs on Chinese products, increasing the price of tens of billions of Chinese goods by a quarter. The relationship reached one of its lowest points in August 2019, when Trump called Xi Jinping an "enemy," and "ordered" American companies to leave the country.[20] But trade tensions are not simply a Trump legacy. Under Biden, U.S. Trade Representative Katherine Tai's statement that the United States would hold China to the Phase One Trade Agreement, inherited from the Trump administration, signaled the continuation of the adversarial relationship; it was clear that China fell well short of meeting its first-year commitments.

As the trade war escalated and persisted, neither country has viewed its counterpart to be negotiating in good faith. China changed draft trade agreements, causing suspicions on the U.S. side. The United States, on the other hand, does not appear to understand key nuances in China's system of government, for instance, that the Chinese government would ensure greater internal compliance with the terms of a trade deal using administrative and regulatory measures rather than enacting laws through its rubber-stamp parliament.[21] Companies that struggled in the Chinese market became more vocal, shaping an acrimonious U.S. narrative about doing business with China: China is a country that protects domestic copycats and treats foreign companies unfairly, while the U.S. government sits idly on the sidelines. Additionally, accusations of currency manipulation became prominent. The Trump Administration's policies and the trade war only intensified the perception of risk, deterring bilateral investment. The Biden Administration's addition of new Chinese companies to the Commerce Department's Entity List, as well as newly launched Committee on Foreign Investment in the United States (CFIUS) reviews of investments in the United States by Chinese companies, further undermined the business relationship between both countries. The U.S. business community feels that China has eaten its lunch by regulating to favor domestic companies, whereas Chinese companies face fewer barriers in U.S. markets. China has lost its reputation as a reliable place to invest because of Trump's tariffs. That said, the U.S. economy has gained little from the tariffs. The trade war has diverted investment, supply chains, and jobs without directing them to the United States; meanwhile, it has had a cost to U.S. consumers and exporters—especially in agriculture.[22]

Increasingly, the tech sector has taken center stage in the trade war. China has been aggressively pursuing self-reliance, particularly through its Made in China 2025 plan targeting key industries: Artificial Intelligence (AI), chips, pharmaceuticals, robotics, quantum computing, aerospace, and automotive. Meanwhile, the United States has targeted Chinese companies, particularly Hikvision, Huawei, and ZTE, due to national security concerns, as well as Chinese media outlets. But in reality, decoupling is much more difficult to achieve. Actions may be counterproductive; for example, banning Huawei is accelerating China's self-reliance and pushing China to develop its industries faster. Huawei's chips have increasingly been self-made to cut U.S. reliance, and the company experienced a short-term boost as Chinese consumers rallied around the company in symbolic resistance to perceived American bullying.[23] The United States and other countries have not invested as much in technological development, which, combined with China's massive subsidies, has given Chinese companies a price advantage.

This conflict escalated in May 2019 when the U.S. Commerce Department put Huawei on its "Entity List," which would ban U.S. companies from selling components to Huawei or its affiliates and essentially bankrupt it—albeit with several exemptions for American companies that would lessen the impact.[24] This measure was partially retracted as trade negotiations continued, but the United States has continued to pressure allies, including the UK and Germany, against collaborating with Huawei. The U.S. government then followed by putting Chinese tech companies, including IFlyTek, SenseTime, Hikvision, and more, on the Entity List due to human rights violations, creating a new reason for placing companies on the Entity List. Furthermore, the U.S. government required semiconductor companies that use U.S.-made machinery to apply for licenses from the Commerce Department to sell to China. This move aims to sound the death knell for Huawei and other tech companies.

U.S. technology companies such as Intel, Qualcomm, and Apple—all of which managed to replicate their success in China—are now in the crossfire. Intel and Qualcomm have faced questions about national security implications and the placing of their major Chinese clients in the Entity List. Apple has been affected because of the tariffs and the Chinese government constantly threatening to use it as a bargaining chip vis-a-vis Huawei. IP espionage, as well as overreactions to espionage, including keeping tabs on U.S. scientists of Chinese descent, have also become a lightning rod for these issues.[25]

China–Mexico

Sino-Mexican relations have been historically the shallowest of the three North American countries. The main cause of this is that China and Mexico are economic competitors in the U.S. market, particularly in textiles, electronics, and machinery.[26] Before China acceded to the WTO, there was relatively little discussion of trade among the two countries, but China surpassed Japan as Mexico's second-largest trade partner in 2003.[27] This trade relationship has tripled since then, with Mexico importing mainly phones, semiconductors, and computers from the PRC. Still, half of Mexico's imports and three-quarters of its exports are with the United States, compared to a sixth of imports and 1% of exports to China.[28] Only 17.4% of

Mexico's trade with China can be considered intra-industry, compared to 45% with the United States.[29] Trade imbalance, competition in the U.S. market, and closeness to the United States have prevented significant deepening of Mexico and China's economic relations.

This bilateral relationship has also been fraught with a few diplomatic tensions. The 2009 swine flu outbreak in Mexico led to a disproportionate response from China. Mexican citizens were detained in China on the sole basis of their nationality, no matter where they were coming from, flights were canceled, and visas were not issued.[30] The Enrique Peña Nieto administration (2012-2018) attempted to strengthen ties with China through trade promotion, building on the president's preexisting close ties to Beijing during his time as governor of the State of Mexico. However, the bilateral relationship was also mired in scandals. Dragon Mart, which had won a contract to build a subsidiary in Cancún, saw its project canceled due to administrative irregularities of permits and the environmental degradation of the Mesoamerican barrier reef.[31] Further, a Chinese company won a contract to build a Mexico City-Querétaro high-speed train through an uncompetitive bidding process. News of this contract broke just as President Peña Nieto was caught in a corruption scandal regarding the purchase of his and his wife's stately home. The political turmoil led the Mexican government to abruptly cancel the contract, and for China to eschew further dealings with a country it considered politically risky.[32] Then, in July 2020, the London Arbitration Court ruled in favor of Sinohydro in a dispute with Mexico's Federal Electricity Commission over a failed hydroelectric plant called Chicoasén II.[33] This further soured already embittered relations.

Since President Andrés Manuel López Obrador (often known as AMLO) took power in December 2018, Mexico has become much more inward-looking. AMLO's reluctance to travel abroad clashes with China's focus on high-level diplomacy, and his administration has shown little interest in bringing the two countries closer. Furthermore, AMLO's domestic political shake-ups have significantly limited the branches of government that usually favored closer ties with China. Notably, AMLO eliminated ProMéxico, Mexico's former export and investment promotion agency. In July 2019, Foreign Secretary Marcelo Ebrard met with high-level functionaries in China, but apart from wishful declarations and meetings, there is no evidence that Chinese investment in Mexico will ever reach even just one percent of the country's total investment stock and flow.[34] The investment environment is further complicated because the United States has explicitly asked the Mexican government and private sector to not accept Chinese investment in strategic sectors.[35] To focus on domestic issues and avoid conflict with the Trump Administration, AMLO often appeased U.S. demands in its relations with China, as it did regarding Central American migration.

Even before AMLO and Trump, expectations that Chinese investments would transform Mexico's infrastructure were rarely met.[36] Mexican interest in such investments may be driven less by interest in deepening relations, and more by the competitive prices offered by Chinese companies. In one recent example, in 2020, China's ambassador to Mexico announced that China had invested $600 million in AMLO's pet project, the Dos Bocas refinery.[37] Adding to the confusion, AMLO's Secretary of Energy quickly refuted this claim, saying that the project was completely financed by the Mexican government.[38] This mishap, more than anything, could be the current government wanting to maintain its promised nationalization of Pemex, as well as Mexico trying to avoid confrontations with the United States. In April 2020, Mexico announced that the China Communications Construction Company would be part of a consortium to build another pet project—the Mayan Train in southern Mexico—which continues to advance despite legal wrangling and political pressure from environmentalists and indigenous activists.[39]

China and Mexico have continued to integrate through other means as well. The Mexican government has shown interest in expanding cooperation in agriculture, trade and innovation. There was great initial enthusiasm for Chinese vaccines in Mexico, encouraged from the federal government, but more recently orders have been cut amidst failed deliveries and contracting irregularities.[40] Most of the ties are strongest not at the federal level, but among states and local governments that have particular interests with the PRC. Additionally, one in five Mexicans use Huawei phones, and Huawei telecommunications equipment is quite common throughout the country.[41] If you also count ZTE and Xiaomi, over a quarter of Mexicans use Chinese phones.[42] That said, when it comes to 5G technology, the main players may not be Huawei, but AT&T, Telcel, and Movistar.[43] Chinese apps no longer figure in the top ten most downloaded.[44] Chinese startups such as Mobike and Didi have filled Mexican cities with bike shares and taxis. Scholarships for Mexican students and researchers to study in China have increased modestly.[45] Unlike its two northern neighbors, half of Mexicans view China favorably, while less than a quarter view it negatively.[46]

Overall, the Chinese presence in Mexico pales compared to many other countries in the hemisphere, particularly those in the southern cone.[47] And AMLO's first and only visit abroad so far was to meet with Trump, showing that if it came to choose between the United States or China, it would prefer its northern neighbor.

China–Canada

Canada's relationship with China is one of the longest in the Western Hemisphere. Canada, leaving WWII virtually unscathed, had an outsized influence in international affairs for a couple of decades. However, this began to wane as Europe recovered and the United States grew in influence on the international stage, leaving less of a role for Canada. In this context, Prime Minister Pierre Trudeau articulated a new role for Canada in the world as a mid-sized power. Part of this strategy was to create new alliances, and Canada became one of the first western countries to recognize the PRC in 1970.[48]

Since then, Canada developed close relations with the PRC. In addition to having a sizable Chinese diaspora, China has been Canada's third-largest trade partner after the United States and the European Union since the early 2000s. Chinese FDI in Canada, especially with regards to real estate, has increased Canada's dependence on the PRC. Further, China and Canada have cooperated on key issues, such as SARS. From the point of view of China, its main interests in Canada are imports of commodities,[49] as well as having a soft window into the United States, particularly with regards to technological developments.

In recent years, however, China has become a lightning rod for Canadian foreign policy. Even though Prime Minister Justin Trudeau came to office intending to increase bilateral efforts, things have not turned out accordingly. During his trip to China in December 2017, Trudeau suggested starting FTA negotiations with China.[50] This was initially well received by China but was quickly discarded when, during his visit, he suggested it be a values-based FTA, including human rights, labor, gender, and the environment. The Chinese quickly shot this idea down. After a late-night meeting of negotiations at the Chinese Ministry of Commerce (Mofcom), led by Trudeau himself, his delegation left with nothing concrete, and the Chinese were not happy about being put on the spot without previous warning.[51]

The bilateral relation reached its nadir after Canada arrested Meng Wanzhou, daughter of Huawei's founder and CFO of the company, who the United States requested be extradited for allegedly violating American sanctions on Iran.[52] The Canadian ambassador to China, John McCallum, was recalled after suggesting Meng's arrest was not based in law, but purely political.[53] China, unable to retaliate as forcefully against the United States, decided to bully Canada instead. First, China detained two Canadians under dubious charges: Michael Kovrig, a diplomat working with the International Rescue Committee, and Michael Spavor, an entrepreneur.[54] Both were allowed only minimal consular access to Canadian officials, and Michael Spavor reportedly had his eyeglasses taken away.[55] Meng, on the other hand, has spent house arrest in her mansion in Vancouver. Second, China attempted to use its economic might to strong-arm Canada into releasing Meng. It revoked the permits of major Canadian grain companies due to finding "harmful organisms" in its canola.[56] Ultimately, all three were released in the fall of 2021, putting an end to the tense diplomatic and legal ordeal.[57]

The Meng Wanzhou case has also served as a soft window for the United States into China as well. China increasingly sees Canada as a U.S. puppet. Especially under Trump, Canada was caught in an uncomfortable position where the U.S. government asked it to stick its neck out vis-à-vis China while also sanctioning it and upending trade deals. Although U.S.–Canadian relations have settled under Biden, including the return of the NALS, tensions with China continue to cast a long shadow.

The Future of North America–China Relations

Currently, the future of Sino-U.S. relations looks bleak, and this will seep into China's bilateral relations with both Mexico and Canada. In the United States, the constituency for improved relations is weak. In addition to issues inside the beltway, the U.S. public has an overwhelmingly negative view of China. Only 26% of Americans view China favorably, while 60% view it negatively.[58] This is in sharp contrast to the view of China from the early 2010s, when half of U.S. respondents viewed the PRC favorably.[59] Hate crimes against Asians and Asian-Americans in the United States have also increased, which has garnered the attention of policymakers concerned about the effects of vilifying China.

However, the tariffs now in place will be politically difficult to remove, especially for a Democratic administration that may fear appearing "soft on China." That pressure has increased as China is perceived as siding with Russia in the wake of its invasion of Ukraine. Lasting tariffs and restrictions will undoubtedly affect the reorganization of global supply chains, forcing American companies to look elsewhere. The coronavirus pandemic has only accelerated these trends. The effect on U.S. agriculture is also unlikely to improve. Not only was the Phase One agreement made before relations between both countries significantly soured, but now China has openly fallen short of its commitment, bringing into question any future agreements.

With regards to Mexico, the Trump Administration was not shy in "asking" its southern neighbors to acquiesce to its desires. López Obrador has been more resistant to pressures from the Biden administration regarding condemning and sanctioning Russia, as well as following its diplomatic preferences in the Americas. Amidst growing global tensions, Biden may also pressure Mexico to decouple from China, especially in strategic tech sectors. But there is not yet much to disrupt within Sino-Mexican relations. Infrastructure investment may continue to grow given the projects the AMLO administration has set its eyes on, but not significantly. And there continues to be room for Chinese companies to participate regarding agriculture, trade, and innovation, especially at the local level.

Canada's situation is more complex, as it finds itself sandwiched between Chinese and U.S. pressures. Irreparable damage has been done to Canada's bilateral relationship with China over human rights criticism and the legal disputes discussed above. It is not politically expedient in Canada to side with China due to the importance of U.S.-Canada relations, while the PRC has signaled that Canada is disposable for them. Despite the resolution to the case of Huawei's CFO, Meng Wanzhou, and the release of the two Michaels in China, relations between both countries remain thorny, as was revealed in January 2022 when, against all scientific proof, China blamed the first omicron case in Beijing to a letter that arrived contagious from Canada.

Because of the strong interdependence of foreign policies, particularly of Mexico and Canada with the United States, their relations with China will depend on what is happening regionally. It is thus especially important to articulate and enact a North American strategy toward China.

Creating a North American Strategy

While we have described the three bilateral relationships as being fundamentally different, all of them are interlinked, particularly with regards to their dependence on U.S.–China relations. Additionally, the three countries hold compatible interests that need to be taken advantage of to fully respond to each country's China challenge. Given the recent enactment of China-led Regional Comprehensive Economic Partnership (RCEP), we know that China is thinking regionally in its own strategy to challenge the United States. The Biden administration has belatedly responded with its own economic grouping, albeit without the central attraction of free access to the U.S. market. This still leaves importance space for a North American approach, where market access and shared production platforms already act as an economic "glue." It would be a lost opportunity if the three countries fail to collaborate further.

As such, North America needs a coherent strategy to tackle the challenges China poses, while also pursuing areas of cooperation between the three countries and the PRC. This strategy will require identifying common themes in economic, security, and other areas relevant to the three countries. It must also grapple with each of the three countries' different relations to China. A North American strategy will necessarily require coherent domestic strategies toward China as well. All three countries, being federal systems, have a diversity of interests toward the PRC; subnational governments often are at odds with the federal government. Including and collaborating with these diverging interests at the domestic level will allow countries to clarify competing interests as well as areas of agreement.

Economically speaking, much is still uncertain. Supply chains are being reconfigured in the wake of the U.S.–China trade war, port bottlenecks, global pandemic, and sanctioning of Russia. The U.S.–China trade war accelerated North American companies' departures from China—a trend that had already begun as Chinese wages increased. The coronavirus has further put into question supply chain dependency on China, especially with regards to goods that are sensitive to public health and national security, such as 5G, medical supplies, auto parts, and aerospace. The passage of the National Security Law in Hong Kong will further push investments and supply chains out of China.

In response, many scholars and diplomats, such as Shannon O'Neil, Roberta Jacobson, and Tom Wyler, have argued for a more regional approach to industrial policy to make the three countries more competitive vis-à-vis China and Asia.[60] North American countries have the option to strengthen regional ties by shifting these supply chains to their neighbors. Mexico is capable of recapturing supply-chain links that shifted to China after 2000. However, doing this would require significant investment in infrastructure and training, as well as improvements in governance. The United States and Canada could be key partners here, providing the necessary support for Mexico to absorb these new opportunities. As a Biden Administration seeks economic innovation to compete with China, it would be helpful to consider how its neighbors can cooperate to make that happen. Further, as China has spearheaded RCEP, reducing tariffs significantly among 30% of the world's GDP and establishing itself as a trade standard setter, the United States has the opportunity to reconsider the Trans-Pacific Partnership, joining both Mexico and Canada.[61] So far, Biden has eschewed a revitalization of the TPP, but building trade ties from the North American basis remains a potent option.

Security will also require increased regional cooperation, but there are few explicitly unifying concerns—most are either shared between the United States and Canada or the United States and Mexico. Canada and the United States have similar security concerns with regards to China, both in terms of economic and political espionage, as well as concerns over the control of Arctic routes. With regards to Mexico, one sore area in security cooperation has been the trade in fentanyl. Most of the fentanyl that has fueled the U.S. opioid crisis is produced in China and is then trafficked into the United States by Mexican cartels.[62] For many years, China was reluctant to do anything about its fentanyl production to protect its chemical industry, despite pleas for cooperation from Mexico and the United States. In the past few years, China has stepped up to some degree—it recently released a blanket ban on the drug, although it still hasn't cracked down on its analogs.[63] More coordination between U.S. and Mexican agencies will be needed to further address the issue.

The United States and Canada already have strong ties in security cooperation, such as their participation in Five Eyes (an intelligence alliance comprising Australia, Canada, New Zealand, the United Kingdom, and the United States), but more can be done in terms of including Mexico in information sharing and other security-related cooperation. Mexico's participation as a nonpermanent member in the Security Council from 2021 to 2022 can be leveraged to protect the region's security interests, although AMLO's ambiguity regarding Russia has irritated diplomats in the United States, Canada, and Europe. The Mexican president's high-profile objections regarding the exclusion of certain Latin American governments from the Summit of the Americas likely won few friends in the Biden administration, despite efforts to patch up relations in a subsequent White House visit.

In contrast, Canada has signaled closer cooperation with the United States as the geopolitical environment gets more hostile. In May 2023, Canada took a major step to align with the United States—and alienate China—by banning Huawei from participation in its 5G networks. The configuration of countries that has opposed Huawei corresponds closely with U.S.-linked intelligence sharing, suggesting the dominance of national security and geopolitical concerns in the decision.[64] Before the decision, several Canadian intelligence directors spoke publicly about the necessity to ban Huawei from 5G networks.[65] It is also unclear to what extent Huawei will be present in Mexico's 5G development, a subject on continued contestation with the United States.

Nevertheless, there are many issues where the United States—and North America more broadly—and China not only can, but must, collaborate. In addition to still being economically interdependent despite shifting supply chains, geopolitical matters, such as relations with Russia, North Korea, terrorism, climate change, and the current global pandemic, will become increasingly important. In these cases, as well as in those where China poses a challenge to the region, rebuilding diplomatic relations will be key. Presenting the three countries as a unified block could also help gain influence and friends. This would also help the United States rebuild its diplomatic relationships with countries it has alienated. Mexico and Canada can serve as mediators where relations have turned tense, or where the United States has lost credibility.

The coronavirus may prove to be a critical juncture, not only because of the immense crisis it has created, but because competing narratives of leadership between the United States and China may impact U.S. credibility. [66] How the two giants' relationship evolves during the response to the coronavirus crisis may create a precedent for how cooperation, or lack thereof, will develop in the future, especially with regard to the climate crisis. The nature of U.S.–China relations will also influence whether Canada and Mexico will look toward each other and the United States for a coordinated response or hedge between the two global powers. The next step in the crisis will involve the scramble over vaccines—if the three North American countries can coordinate on this end and become immune to COVID-19 at a similar time, this will allow more space to strengthen ties amongst the three countries.

Ultimately, a North American strategy will largely depend on political will, although the COVID-19 recession may create an opportunity for integration and realignment. U.S. standing with its neighbors will be key in its recovery. However, the first signals from the Biden Administration have not been one of cooperation, but rather a continuation of President Trump's America First policy, particularly as pertains to the subsidies for electric vehicles manufactured in the United States. These actions from the United States keep sending the same message that it is not a reliable partner, forcing Canada and Mexico to keep their options open with regards to China and not burn any bridges.

Conclusion

The future of North America's relationship with China will be complex. Relations are more tense than they have been in decades, particularly with the United States and Canada. Serious economic and security interests are at play, including trade wars, tech competition, and Arctic exploration. At the same time, there are world issues that will require cooperation with China. These include climate change, pandemics, and trade. To best address these issues, the three countries need to develop more pathways for cooperation. But it doesn't look like that is going to be the case. The United States and Mexico have become more inward-looking, and outside of renegotiating the USMCA, little effort has been made to strengthen the region.

The Biden Administration has the opportunity to strengthen its relationships with North American allies to create a strategy that further integrates the three countries in a way where all three are better positioned with regards to China. While the general direction of China-North American relations is not likely to shift, there are opportunities for a shared—and smarter—approach. By going back to diplomacy and replenishing the State Department, the United States will be better equipped to challenge China effectively. The rise of China, as well as the country's increasing assertiveness, will continue to be a centrifugal force in international relations. This is not something that North American countries can change. However, by working together, the three countries can be better equipped to tackle their fundamental weaknesses toward China, becoming more competitive as a region in the process.

Endnotes

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15

Partners in North American Defense: Perspectives of Three Previous Commanders

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Although economics undoubtedly has been the principal driver of North American integration, the strategic logic for cooperation in defense is robust and growing. North America faces growing security challenges posed by China and Russia—highlighted most blatantly by the invasion of Ukraine—as well as continued risks posed by transnational crime and terrorism. In response, North America's defense cooperation should build upon and expand antecedents. Earlier cooperation often has been dual-bilateral in nature. U.S.-Mexican cooperation has been most focused on "new" or transnational security challenges, whereas the United States and Canada have a long history of cooperation on "traditional" defense issues. Bilateral efforts should continue, of course, but a broader strategic vision suggests the rationale for identifying opportunities where regional North American initiatives could add value.

Doing so is essential to the economic success, security, and competitiveness of the region. With the renegotiation and updating of the North American Free Trade Agreement as the U.S.-Mexico-Canada Agreement (USMCA), taking effect in July 2020, the continuation of dense trade and investment flows among the three countries seems assured. However, that economic success demands a secure environment and, especially, the continued amelioration of possible disruptions at the borders and beyond. For that reason, the post-USMCA agenda should encompass other areas of cooperation. As other chapters in this volume discuss in greater depth, law enforcement agencies in North America have embarked on ever-closer coordination in response to the rise of criminal cartels and the threat of global terrorism. And although cooperation among the three countries' military establishments has progressed (especially between the United States and Canada), and these developments should be noted, much remains to be done if the countries are to reach their full potential to secure an integrated continental defense for North America.

This chapter examines the background and prospects for that development in the sphere of military security. The return of annual North American Leaders Summits, and the commitment to regular North American Defense Ministerials, suggests attention to shared defense concerns in the areas of "regional defense, security cooperation, disaster relief, and humanitarian assistance." However, the region still needs to enunciate a clearer shared agenda and create more robust mechanisms to enhance trilateral cooperation. While the countries have divergent defense histories, there has been a gradual convergence in interests and practices. Differences will remain, but the shared need for robust defense of integrated economies and societies suggests room to build.

Different Histories, Different Perspectives

In judging the prospects for defense cooperation, one must remember the important similarities and dissimilarities that shape the three states' strategic outlooks. These emerge from their different geographies, positions, and histories—including with one another. All three countries occupy extensive portions of North America, geographically speaking, with Canada the largest at 9.98 million square kilometers, followed by the United States at 9.83 million square kilometers and Mexico at 1.96 million square kilometers. The United States, situated in the central portion of the continent, has the largest population by far at 337 million. Mexico's population is roughly one-third the size of its northern neighbor, 129 million people, and Canada's population is 38 million, a fraction of its neighbors' populations. The United States and Canada are wealthy countries, with highly advanced economies at per capita gross domestic products (purchasing power parity GDPs) of US$60,200 and US$45,900 respectively, while Mexico, an advanced developing country, has a per capita GDP of US$17,900.[1]

Canada's and Mexico's histories include significant military conflict with the United States during the 19th century. Canada, then a British colony, was both a base for military operations against the United States and the target of U.S. offensives during the American War of Independence and the War of 1812. For much of that century, Canadians were fearful of what they suspected was a U.S. interest in annexation; it was not until the turn of the century and the First and Second World Wars that the shift to an extraordinarily close Canada–U.S. strategic relationship took place. This bond of alliance strengthened during the Cold War, has persisted through the Global War on Terrorism, and remains strong today.[2]

Mexico's historic memory includes the secession of Texas in 1835, followed by the loss of the northern half of its territories in the Mexican-American War of 1846–1848, as well as U.S. intervention in the Mexican Revolution, including the potential complicity of then-Ambassador Henry Lane Wilson in the coup that overthrew the Mexican government in 1913 and the U.S. occupation of the port city of Veracruz in 1914. But it is also noteworthy that Mexico was an Allied belligerent in World War II, deploying a small air unit, the Aztec Eagles, to participate under U.S. command in the liberation of the Philippines. It also undertook maritime patrols of its Atlantic and Pacific coasts against the threat of German and Japanese submarine warfare, to which its shipping also suffered losses. Importantly, Mexico provided the United States with critically needed agricultural labor through the wartime *bracero* program and supplied its northern neighbor with crucial strategic commodities such as oil and copper.[3]

The United States, as a global superpower since the conclusion of World War II, has adhered to a concept of "forward defense" against adversaries, from the Cold War through to the struggles against terrorism and narcotics trafficking. It maintains forces in Europe, East Asia, and the Middle East and has fought full-scale wars from Korea and Vietnam to Iraq and Afghanistan. For seventy-five years, it has maintained extensive military support programs with defense forces in developing countries, including in the Western Hemisphere.[4]

Despite these distinct and formerly conflictual histories, more recently the three countries have had different, though more readily compatible, strategic visions. Canada's world view since the Second World War in many ways has paralleled that of its southern neighbor, leading it to make important overseas commitments as a participant in larger coalitions usually led by the United States. During the Cold War, Canada maintained forces in Germany as part of its commitment to NATO (North Atlantic Treaty Organization). More recently, after a long absence, it has returned to Europe on a small scale as part of NATO's Enhanced Forward Presence in the Baltic states. Where Canada has been unconvinced of the wisdom of American military action, as in Vietnam and Iraq, it has declined to participate except in a humanitarian capacity. It was willing, however, to join the coalition fighting in Afghanistan, where it made a major effort. Canada also has had an important history of participating in United Nations peacekeeping activities, although more recently it has drifted away from this role, only making a tentative effort to reenergize it under the current government of Justin Trudeau.[5]

Mexico traditionally has eschewed any military role outside of its borders, citing principles of respect for sovereignty as its justification. Until relatively recently, it sought to keep its military confined strictly to a territorial defense mission, in part to avoid the military involvement in politics that has plagued other Latin American countries. With its historic sensitivity to any U.S. intervention, Mexico long kept bilateral military-to-military relations relatively limited. However, the rise of a major internal security threat from well-armed and well-resourced drug trafficking organizations, coupled with the significant weakness of its law enforcement agencies, has led both to Mexican armed forces being deployed to the anticartel mission and to closer ties with the U.S. military. In addition, Mexico recently has agreed to participate in international peacekeeping, albeit on a very small scale.[6]

In recent decades, the United States and Mexico have had overlapping but not identical visions on defense issues. The United States seeks security on its southern border. Its major concern in recent decades has been preventing the entry of illegal narcotics and thwarting the broader threat to Mexico's stability and national security posed by organized crime. The threats of terrorism and illegal immigration are viewed through a similar lens. Mexican leaders have also been concerned with the drug cartels but have been wary of pressing too hard given the cartels' capacity for retaliatory violence. Their goal has been not to eliminate drug trafficking organizations so much as to contain and reduce their impact to the point where they constitute a law enforcement problem rather than a national security threat. At the same time, the United States has used its law enforcement capabilities in aggressive ways that can be highly irritating to Mexico and thoroughly disruptive of the bilateral relationship.[7] In some instances, U.S. actions have led to criminal cases lodged against senior Mexican officials. For instance, in late 2020, the United States arrested Mexico's former Secretary of National Defense General Salvador Cienfuegos on drug-trafficking and money laundering charges. However, when Mexico protested his arrest and threated to curtail security cooperation, the United States was forced to drop the charges against Cienfuegos and release him to return to Mexico.[8]

There are, accordingly, fundamental differences in the nature of defense relationships among the United States, Canada, and Mexico. The U.S.–Canada relationship has been strongly institutionalized through the North American Aerospace Defense Command (NORAD), sustained participation in NATO, the formal consultative mechanism of the Permanent Joint Board of Defense, and a host of exchanges and joint training opportunities at all levels. The U.S.–Mexico defense relationship lacks this structure. It reflects a more ad hoc quality, often dependent on funding decisions—as was the case, for example, in the creation of the bilateral Mérida Initiative to combat drug trafficking, which marked the first sustained large-scale provision of U.S. security assistance to Mexico, The

Canada–Mexico defense relationship remains embryonic, though the creation of the U.S. Northern Command (NORTHCOM) has created a structure into which both the Canadian and Mexican militaries can "plug in." The intermittent North American defense ministerial meetings involving the three countries likewise provide a vehicle for high-level trilateral defense discussions which may bear repeating.[9]

U.S. Security Architecture: Building on Cooperation in NORAD and Through NORTHCOM

The U.S. security architecture is immense and globe-spanning. While this means that great capabilities and resources can be deployed, the sheer size of the U.S. defense establishment produces asymmetries that can complicate bilateral and regional cooperation. The four North American Defense Ministerials have provided one, high-level channel of communication. However, the complex and shifting security environment also requires close collaboration on a frequent basis. For those tasks, the bilateral history of NORAD provides an excellent example of lasting and continuing collaboration. Meanwhile, NORTHCOM is likely to act as a key partner and conduit for achieving greater trilateral security coordination moving forward.

NORAD: A Mature Partnership

NORAD is a uniquely successful example of transborder defense cooperation. Canadian and American defense cooperation began even before the United States entered World War II with the establishment of the Permanent Joint Board of Defense by President Franklin D. Roosevelt and Prime Minister Mackenzie King in 1940. The board's semiannual policy consultations continue to this day. During the Second World War, the relationship was sealed in blood, most dramatically when Canadian and American troops landed simultaneously (together with their British partners) in France on D-Day in 1994. Shared postwar perceptions regarding the Soviet Union led both nations to join NATO as founding members and for them to address the threat to the continent from Soviet attack with development of the Canada–U.S. Emergency Defense Plan in 1951. Out of this basic framework, the two countries established NORAD itself in 1958. It has had a unique structure, with an American commander and a Canadian deputy and with the commander reporting to both the U.S. president and Canadian prime minister. With its many cooperative conventions and procedures, NORAD has virtually eliminated issues related to airspace sovereignty between Canada and the United States. This seamlessness reflects a level of trust, confidence, and cooperation not seen between any two other nations in history.

Over time, the issue of continental airspace defense appeared less salient as the United States and the Soviet Union settled into nuclear postures of Mutually Assured Destruction while negotiating arms control treaties. In this context, the focus of U.S. and Canadian defense cooperation was centered in NATO. The terrorist attacks of September 11, 2001, however, highlighted the need to refurbish continental defense leadership, infrastructure, and equipment and to renovate the binational agreements underlying them. A 24/7 safety net of fighter aircraft and weaponry was placed under NORAD command to look inward across the continent in addition to maintaining the traditional gaze on external threats. The 2006 renewal of the NORAD agreement maintained the aerospace warning and control objectives while adding the mission of maritime control, which has become critical to efforts to counter drug and human trafficking by sea. Although Mexico does not participate formally in NORAD, it unquestionably benefits from the command's response capabilities, which provide significant aerospace and maritime security regarding traffic entering Mexico from U.S. and Canadian airports and vessels approaching from seas adjacent to Mexican waters.[10]

NORTHCOM: A Key Point of Entry in U.S. Defense for Canada and Mexico

A vital element in any emerging security architecture for the continent is NORTHCOM, which was established in 2002 by the United States in the wake of the September 11th attacks to coordinate its own efforts in the region. Its combatant command mission is to protect the territory and the national interests of the United States within the continental United States, Canada, Mexico, Puerto Rico, and the Bahamas, along with the air, land, and sea approaches to these areas. Given that geographical scope, it will be the central hub for U.S. defense cooperation with Canada and Mexico.

NORTHCOM includes component commands from the Army, Navy, Air Force, and Marine Corps as well as from U.S. Special Operations Command. It also includes a special task force to provide support to law enforcement agencies such as the Federal Bureau of Investigation; the Drug Enforcement Agency; the Bureau of Alcohol, Tobacco, and Firearms at the Department of Justice; and U.S. Customs and Border Protection and Immigration and Customs Enforcement at the Department of Homeland Security. NORTHCOM also has a task force to channel support to state and local authorities in disasters and other civil emergencies. The same senior military leader serves as commander of NORTHCOM and NORAD, and both entities are headquartered in Colorado Springs. In sum, NORTH-

COM encompasses many of the new and traditional security missions and relevant agencies that have played major roles in U.S.-Canadian and U.S.-Mexican cooperation.[11]

Because of its geographical and thematic reach, NORTHCOM furnishes a vehicle for direct U.S. military-to-military relations with Canada and Mexico. It provides a unique mechanism for these two countries to coordinate with and capitalize on U.S. capabilities. In 2006, Canada established a parallel joint command structure for protecting its homeland termed Canada Command, which subsequently evolved into the Canadian Joint Operations Command. The situation with regard to Mexico is different, as it does not employ the joint military command concept. Instead, the chain of command runs from the president (as commander in chief) to the secretary of defense (SEDENA, in charge of the Army and Air Force) and the secretary of the navy (SEMAR, in charge of the Navy, Naval Infantry, and Coast Guard), with no joint staff to oversee combined military and law enforcement operations. With this structure in place, it was not until the first decade of the 21st century that the first operationally effective working relationship among U.S., Canadian, and Mexican defense agencies emerged, as Mexico stepped up substantial efforts in counterterrorism and counternarcotics missions. In 2008, Mexico added a three-person liaison unit to NORTHCOM staff, facilitating expanded formal institutional interaction among the three nations for the first time.

Will Canada Mobilize the Resources Required to Remain a Pivotal Player?

NORAD and NORTHCOM provide appropriate and available structures to facilitate and channel continent-wide coordination on defense. However, much depends on the level of resources brought to bear on the mission. The United States implemented a substantial increase in its defense budget during the Trump administration, with appropriations for fiscal year 2020 set at US$721.5 billion, up from US$693.0 billion for fiscal year 2019. By comparison, the defense budget for fiscal year 2017 signed by President Barack Obama amounted to US$618.7 billion (increased by a supplemental appropriation after President Donald Trump took office). In the wake of Russia's invasion of Ukraine, the Biden administration has prioritized increased defense spending, proposing a record $813 billion budget in March 2022.[12]

Canada's commitment to defense from the aftermath of the World War II through the height of the Cold War was substantial. As noted, it included the deployment and stationing of forces in Europe as part of NATO's deterrence of threatened Soviet aggression. Through the 1970s, 1980s, and

1990s, however, Canada showed diminished interest in defense and significantly retrenched. With the September 11th terrorist attacks, however, Canada's posture changed. In the immediate aftermath it was among the first nations to commit support to Operation Enduring Freedom—the U.S. military response to the terrorist threat of al-Qaeda and its Taliban allies in Afghanistan—and was one of the first to deploy ground forces to coalition operations there. Canada also renewed its commitment to reinforce security cooperation with the United States in the areas of intelligence and information sharing, enhanced border and infrastructure security, improved passport security and integrity, counternarcotics and anti-human-trafficking efforts, and adapting the NORAD Agreement to encompass these enhanced security functions. Canada, for example, implemented a costly commitment to the continental counternarcotics mission through the contribution of naval vessels to Joint Task Force South operating in the Caribbean Sea.

Canada substantially expanded its budget outlays during the period 2007–2010. These expenditures resulted in a defense investment that transitioned the Canadian Armed Forces to a level of capability not seen since World War II. This boost in funding in turn enabled a major overseas presence of Canadian ground, air, and naval forces, as well as of Canada's highly trained special forces. All of these forces played important roles in coalition operations in Afghanistan. Following the final departure of Canadian troops from that conflict in March 2014, attention to and spending on defense and national security waned.

In 2018, however, Canada published a new defense policy statement entitled "Strong, Secure, Engaged," which identified three underlying global dynamics. First, the policy recognized the evolving balance of power from the unipolar days of the post–Cold War 1990s to a multipolar world with, notably, an emergent China. Next, it highlighted the changing nature of conflict and the likelihood that state-on-state conflicts have given way to a confusing array of proxy conflicts, often involving nonstate actors or unidentifiable troops. Finally, it emphasized the rapid evolution of technology in offensive weaponry and the threat that such technological capabilities could pose to Canada and its allies.[13]

The need to keep pace with technological change underlines the necessity for major capital investments in military equipment. These requirements include a multiyear program to rebuild Canada's aging navy, in which many vessels have been retired as unfit for service, as well as its air force, which in particular has needed replacements for its 1980s vintage CF–18 Hornet fighter aircraft. An ambitious program has been launched to build new frigates and lightly armed patrol vessels which can operate in the Arctic for at least part of the year. Nonetheless, there are already reports of delays and cost overruns in the naval construction program, and at least some work has been shifted to a shipyard not originally considered for it.

Different Canadian governments have mulled over the combat fighter modernization program, and final aircraft purchasing decisions have yet to be made. In 2010, the Conservative government of Stephen Harper indicated its support for the F–35 Lightning II, with Canada participating in an international partnership of countries planning to purchase it. During the 2015 campaign, Justin Trudeau expressed opposition to the F–35, but after his election, as prime minister, he proposed opening the fighter modernization program up for an international competition, in which the F–35 could compete as an option. In the interim, the Trudeau government bought used Australian F–18s to augment Canada's existing fleet of fighters. The competition for the new aircraft remains in process. Yet the slow process of renewing Canada's fighter aircraft has added significance given that, integrated into NORAD, Canada deploys fighters on 24/7 alert status ready to launch against any threat to the United States or Canada. Given Canada's geographic proximity to the northern attack routes most available to hostile actors, Canadian fighters often are slated as the first to arrive on the threatened scene, and as such their modernization has particular urgency as a critical component of NORAD as a whole.

How will Canada address its future role in continental defense? Can its politics transcend the "on-again off-again" approach to military security that has characterized its posture over the past two decades? During the Cold War, it did so with the development (in concert with the United States) of comprehensive early warning radar chains and strategic air bases. The nature of the contemporary threat to North America, however, has changed dramatically, and both Canada and the United States must now adapt to it. Long-range missile technology is spreading beyond Russia and China to adversary nations such as North Korea and Iran, fundamentally altering the strategic calculus. Such adversaries, in support of an attack or coordinated attacks, may be able to employ surface and subsurface technology to approach North American shores in order to disrupt defensive measures, shorten reaction times, and blunt offensive countermeasures. Particularly concerning is the ongoing development by Russia and China of long-range cruise missiles and hypersonic weaponry. As a result, the central assumptions of yesteryear with regard to the relative security provided by the Atlantic, Pacific, and Arctic Oceans and a protected airspace no longer govern continental defense and must be revisited.

In the past, Canadian geography provided North America with a critical defense asset: separation from the threat. At one time, the 4,000-kilometer distance from the nearest adversary provided by the Canadian Arctic and archipelago translated into seven hours or more of decision and reaction time. However, as new technologies have largely neutralized this asset, the United States has sought to invest in counter-technologies such as directed energy weapons, which upon deployment could significantly diminish the need for Canadian territory, airspace, or even Canadian assistance as a matter of U.S. national security strategy. Although much more needs to be done to make these technological investments a feasible component of national defense, the U.S. reaction to these dramatically shifting strategic dynamics has been vigorous, with progress on homeland defense both in implementation and forward planning. These advances highlight the question of whether Canada will undertake a parallel and proportionate commitment, accompanied by adequate budget support, to expand and modernize materially its national security profile and capacity. Absent action along these lines, Canada will be unable to maintain a genuine military partnership with the United States, including at NORAD, and the United States will continue to proceed principally on its own to address evolving threats.

There are ways in which Canada could signal a renewed dedication to continental defense, with an intent to bolster the alliance and strengthen efforts already underway in the United States. Were Canada to commit itself to the refurbishment of the existing outdated system of Canadian-based threat sensors and replace it with a layered, multisystem network applying advanced technology, the NORAD alliance would be reenergized. Similarly, if Canada signaled a real appetite to invest in a joint all-domain command, control, and response network, and share in the development of the systems (based on more than just manned aircraft) necessary to accomplish this outcome, it could help preserve and enhance the values and spirit of shared continental defense. Since the outbreak of the Russia-Ukraine war, there have been steps in this direction. In June 2022, Canadian Defense Minister Anita Anand announced that the country's modestly increased defense spending commitments will include Canadian $4.9 billion over the next six years for upgrading NORAD.[14]

The Arctic Dimension

More broadly, beyond addressing the threat of nuclear and advanced tactical weapons, Canada needs to generate a renewed, concerted, and sustained approach to the Arctic. Russia has increased its presence markedly in the region, including significantly modernizing a large icebreaking fleet, increasing a standing military presence in its own far northern territories, and systematically mapping the Arctic Sea. It is clear that Russia intends for its Northern Sea Route to become a commercial maritime route as global warming progresses. China as well is showing new interest in the Arctic, declaring itself to be a "near Arctic" state and looking for scientific and other ways to display commitment to the region.[15]

Canada, while retaining its commitment to protect the Arctic region from geopolitical conflict, needs to seriously reassess its posture there for the future, especially as the Northwest Passage also becomes a potential global commercial artery. Greater icebreaking capacity (including the ability to operate during the Arctic winter) should be given greater priority, and routine patrol regimes should be established as new naval vessels come on line. Canadian ground forces could increase their exercises in Canada's far northern areas, and regular air patrols could be scheduled as new aircraft come into service. Canada could also develop high-speed data transmission services—including the capacity to communicate efficiently—despite the demanding conditions of its northernmost environment.

Mexico's Drug Cartels: A Threat Both to Internal and Continental Security

Mexico's role in North American security arises in a far different context from that of Canada. Even as the "over the horizon" threat of nuclear attack provided Canada's public and policy makers with a shared sense of the need for close coordination with the United States on defense, the major threats to Mexico have a closer nexus to questions of internal security. These threats by their nature generate considerable domestic political sensitivity. Nor have suspicions regarding the United States—embodied in the oft-quoted observation of President Porfirio Díaz, "Poor Mexico: So far from God and so close to the United States"—entirely disappeared.

That said, Mexico is a vastly different country from the impoverished rural society of Porfirio Díaz's time at the turn of the 20th century. Industrialization and modernization have jump-started a powerful impetus for change in the 25 years since NAFTA came into force. Major U.S. firms, most notably in the automobile sector, have made existential bets on Mexico, installing manufacturing capacity and integrating Mexico with the vast U.S. market (and the smaller though equally advanced Canadian market). A substantial middle class has emerged, and education and health levels generally have risen. The de facto one-party state of the Institutional Revolutionary Party (PRI) was replaced with vibrant electoral competition. At the same time, Mexico's progress toward developed-country status has been incomplete and uneven, with considerable poverty and social exclusion remaining, particularly in its southern states.

Mexico has suffered from the rise of powerful drug-trafficking organizations to serve U.S. and (increasingly) global narcotics markets. These cartels engage not only in drug production and smuggling but also in related money-laundering and arms-smuggling activities. As organized crime syndicates, they alternatively collaborate and compete among themselves, and exercise genuine power over the territorial areas in which they operate. During the administration of President Felipe Calderón (2006–2012), the effects of organized crime in Mexico became alarmingly evident, bringing greater violence and mounting an open challenge to Mexico's national security. Corruption and the weakening of government discipline were both causes and effects of this development. Although Mexico's electoral democracy remains in place, its rule of law has been weak and is consistently under attack.[16]

Mexico's decision to engage the military in areas traditionally reserved for law enforcement, which continues to this day, has presented challenges both for Mexico and for its continental partners. It marked a break from the previous commitment of Mexico's political elite to keep the military "in its barracks" and far away from the reins of power—which its counterparts in Latin America have assumed on so many occasions. If corruption of law enforcement by organized crime led to the military's involvement, this involvement in turn has led to infiltration and increased corruption of the military by drug-trafficking organizations. This was dramatically exhibited in 1997, when three-star Army General Jesús Gutiérrez Rebollo, serving as head of Mexico's interagency counternarcotics authority, was convicted of taking bribes from the Juárez drug cartel.

The United States—whose massive market for drug consumption accounts in significant part for the problem—has increasingly seen the rise of narcotics cartels in Mexico as a threat to its own security. Across different political administrations, both countries have sought to neutralize the transnational criminal threat together and agree that a "military-only" strategy is not appropriate. Accordingly, they have adopted a hybrid strategy that relies principally but not exclusively on the military in Mexico to contain and counter cartel power, with tailored assistance furnished by NORTHCOM and U.S. law enforcement agencies to SEDENA, SEMAR, and civilian police forces. As the new strategy evolved, significant opportunities for military cooperation emerged and were implemented through NORTHCOM. Notwithstanding asymmetry between the two countries' capabilities, coordination and materiel assistance became the primary channels for cooperative action. The paramount need was to create a functional binational relationship where law enforcement and the armed forces from both countries could operate within the constraints of their respective national legal frameworks. Both countries recognized that the severe threat of deeply transnational organized crime could only be addressed within their respective judicial systems. The cartels, their kingpins, and thousands of members alike would be treated as lawbreakers to be apprehended and prosecuted, rather than as combatants against which to wage war. This approach was embodied in the 2007 U.S.-Mexico security cooperation agreement known as the Mérida Initiative.

The Mérida Initiative: A Major Step Forward in Cooperation

The Mérida Initiative has been a truly groundbreaking undertaking in both its objectives and methods. It is aimed at enhancing Mexico's capabilities, focusing on combating international organized crime and illicit traffic in narcotics and weapons as well as on reform and reshaping of the Mexican criminal justice system. The initiative also involves cooperation with Central American countries, though the U.S.–Mexico relationship remains central to its efforts.

Mérida Initiative assistance initially included the provision of helicopters to the Mexican police, army, and air force, as well as transport and reconnaissance aircraft, drug detection scanners, and telecommunications equipment. The United States provided assistance in training the Mexican military's special operations forces, particularly those of SEMAR, whose marines have played a leading role in counternarcotics operations—including in the July 2022 capture of long-sought trafficker Rafael Caro Quintero. At the same time, much U.S. assistance has been directed to improving law enforcement and judicial structures, protecting human rights, and (under the Trump administration) engaging in border interdiction and port security, as well as combating money laundering.

Despite Mérida Initiative assistance, efforts to apprehend and prosecute narcotics traffickers continue to face significant challenges. Additionally, Mexican security policy and the prospects for continental defense cooperation have been impacted by the election of Andrés Manuel López Obrador as president in 2018. López Obrador's platform signaled a shift in approach both to transnational criminal organizations and to U.S.-Mexican relations. He campaigned on withdrawing the military from any policing role and urged that Mérida Initiative assistance be refocused on social development. He has also expressed skepticism regarding proposed joint military–law enforcement approaches to combating the cartels, and most notably ordered the release of the son of Sinaloa cartel leader Joaquin "El Chapo" Guzmán in October 2019 after his arrest led to extensive retaliatory violence in Culiacán, Sinaloa's capital.

Drug trafficking and related violence and broader criminality nonetheless have remained major problems for López Obrador's administration. In the face of the evident inability of civilian police services to control escalating violence, the Mexican government has created a new "National Guard"—a gendarmerie-type force, drawn largely from military and naval police units, which reports to the secretary of national defense at SEDENA. SEMAR has been given responsibility for maritime customs and port security. In short, despite López Obrador's initial reticence, the military has remained, albeit under a different structure, deeply engaged in internal security and counter-cartel activities.

López Obrador generally sought to avoid confrontation with the Trump administration. His government cooperated in the renegotiation of NAFTA/USMCA and took action to contain convoys of Central Americans seeking to transit Mexico on their way to the United States. Nevertheless, he voiced opposition to the construction of a wall along the U.S.-Mexican border: a central talking point within the Trump administration. However, the arrest of General Cienfuegos in Los Angeles on drug-related corruption charges—namely, allegedly taking bribes from a drug cartel in Nayarit—sorely strained the bilateral relationship. Only Mexican threats to end bilateral law enforcement cooperation managed to secure Cienfuegos's release. López Obrador subsequently introduced legislation, approved by the Congress, to restrict Mexican officials from meeting with "foreign" agents (principally from the U.S. Drug Enforcement Administration) without high-level permission and require them to report such discussions back to the foreign and public security ministries. In the meantime, Mexico's attorney general exonerated General Cienfuegos of all charges and López Obrador denounced the original American charges as "fabricated." Though a great deal of cooperation continues, there have been signs that the affairs closed important channels of communication and cooperation.[17]

Future Challenges and Opportunities in North American Defense

Important structures now exist to advance security on the North American continent. NORAD is a fully elaborated bilateral alliance that addresses the traditional nuclear threat as well as newer ones such as transnational criminal organizations involving both terrorism and narcotics trafficking. NORTHCOM provides an important mechanism for coordination and collaboration, giving Canada and Mexico a vital point of entry into the U.S. military establishment's vehicle for continental defense. Despite the continuing challenges, the Mérida Initiative has provided substantial experience between the United States and Mexico to combat the national security threat posed by transnational criminal activity.

Likewise, there is precedent for taking up trilateral military coordination at the senior policy level. The United States, Mexico, and Canada have formally convened the North American Defense Ministerial meetings four times, most recently on May 19, 2021. All three countries have likewise participated in the biennial Defense Ministerial of the Americas meetings. Bilaterally, the United States and Canada continue to benefit from the meetings of the Permanent Joint Board of Defense. However, such structures ultimately depend on the political will to follow up on decisions made and the resources put into them. Canada, as noted, has the challenge of modernizing its fleet of fighter aircraft and more broadly deciding if it is prepared to make the full range of defense investments needed to allow it to remain a meaningful partner within NORAD. Mexico, which faces enormous internal security challenges, must decide whether the Mérida Initiative's mix of assistance to its military forces, as well as to police and judicial authorities, does indeed point the way forward. And all three countries face short- to mid-term pressures on defense budgets as a result of the COVID-19 pandemic and its human and economic costs.

At the same time, the mix of threats confronting the continent has been evolving rapidly. International relations are undergoing a fundamental transformation featuring a return to traditional great power rivalry, while rogue states such as Iran and North Korea as well as a variety of nonstate actors remain active. North America faces unprecedented defense challenges, whether from the deployment of hypersonic weapons, aggressive air patrolling, the increased presence of surface and submarine vessels off both coasts, or Russian and increasingly Chinese assertiveness in the Arctic. Adding to this complicated situation, the threat of cybernetic warfare has been underscored by recent major breaches of both U.S. and Canadian computer systems in the public and private sectors. Cyber threats may include not only defense establishments but also industrial plants and cross-border infrastructure such as dams and power grids. The role of military cooperation across the three countries in cybersecurity and defense—and the place, if any, of NORAD in these efforts—has been largely unexplored to date at senior leadership levels. Inevitably, this role must be a priority agenda item for consideration regardless of the decision's ultimate outcome.

Climate change likewise will significantly affect U.S., Canadian, and Mexican defense. In the face of more adverse and unpredictable weather, the continent's armies, navies and air forces will need to find cost-effective ways to protect their equipment and facilities. This may be a further fruitful area for cooperation. Given the higher probability of ever more devastating floods and hurricanes, cross-border cooperation among defense forces in their traditional role of providing humanitarian assistance and disaster relief similarly could be ramped up. Mexico took an important step, imbued with symbolic meaning, in 2005, when it sent an army field kitchen and naval vessels to the U.S. Gulf Coast to assist in relief operations during Hurricane Katrina. The need to institutionalize this type of precedent appears evident.

The role of the military in dealing with immigration and refugee flows is one with which Mexico is now familiar, given the experience of confronting Central American migrant flows since 2015. The United States has also periodically placed regular Army and National Guard units along its southern border to support civilian law enforcement. The degree to which the armed forces will continue to be engaged in this mission—and, if so, how they should be trained, equipped, deployed, and coordinated—remain open questions awaiting careful consideration, including whether military forces engaged in immigration enforcement will be trained and monitored to avoid violations of human rights.

In an unstable world, peacekeeping may be a further area for defense cooperation among North American partners, particularly Mexico and Canada. Canada, long a leader in this field, had withdrawn from it in recent decades but resumed efforts in 2019, participating in the United Nations' stabilization mission in Mali. Mexico, traditionally reticent about participating in peacekeeping, has recently begun to engage in this mission. It established a Joint Training Center for Peacekeeping Operations and currently has twelve service members stationed abroad in six countries. Were Mexico and Canada to commit seriously to peacekeeping, opportunities for joint training and even joint participation in operations should be explored.

In summary, the threats to the defense of North America are real, varied, and changing as are the opportunities for cooperation among the military forces of Canada, Mexico and the United States. Increasingly, continental security—viewed from perimeter and cross-border perspectives—will require this trilateral cooperation and could provide a stronger foundation for the national security of each of the three countries.

Endnotes

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16

North America and the Arctic

Jack Durkee

While the Arctic has historically been viewed as an isolated and barren region far removed from the broader global community, that misperception has now faded. The effects of climate change are dramatically reshaping the Arctic environment. Military activities are growing more frequent; shipping lanes are becoming more navigable; and the extraction of hydrocarbons and rare earth minerals is increasingly viable. At a global scale, these changes are converging with heightened geopolitical posturing to open an Arctic front in the great power competition among China, Russia, and the United States and its allies. The Arctic is now firmly embedded in media discourse, political debates, and geostrategic concerns of both Arctic and non-Arctic states alike. NATO expansion to Finland and Sweden may intensify these rivalries.

On the other hand, climate change is driving profound local changes. Although these receive less media attention than great-power jousting, the effects of climate change are no less important for communities in the region. Indeed, they are felt on a daily basis. For example, the critical infrastructure of 102 Alaskan communities, according to a 2019 U.S. Army Corps of Engineers and University of Alaska Fairbanks report, are under imminent threat from either erosion, flooding, or thawing permafrost.[1] Each of these environmental changes has cascading effects on the social, political, and economic landscapes of the Arctic—and, in particular, of the North American Arctic.

The North American Arctic—Canada, the United States, and Greenland (a territory of Denmark with home rule, as discussed below)—are at the forefront of this evolving Arctic. While there is no official entity or mechanism in North America to cooperate on Arctic issues, Canada, Greenland, and the United States use existing international organizations to in effect facilitate Arctic cooperation, coupled with frequent bilateral meetings and discussions among the three governments. On defense and security issues, they cooperate through official organizations (NATO, NORAD) and other informal entities (North American and Arctic Defence and Security Network). On governance and science issues, they cooperate through the Arctic Council and its six working groups. On Indigenous issues, they cooperate through the Arctic Athabaskan Council, the Gwich'in Council International, and Inuit Circumpolar Council.

The need for coordination and cooperation between Canada and the United States will be most salient across a host of issues. However, the changing Arctic matters for the North American economy broadly, given effects on trade and shipping, and North American environmental policies need to account for the Arctic. Concerns in the Arctic, ranging from the political leadership of Indigenous populations to the balance between economic growth and environmental protections have deep resonance across North America. I draw out some of these connections in greater depth below in a case study of Greenland.

By applying the principles of the *Navigating the Arctic's 7 Cs* framework, developed by Dr. Michael Sfraga, the chapter will identify and address the rapidly evolving issues and drivers of change at work in the North American Arctic.[2] The *Arctic's 7 Cs* are: 1) Climate, 2) Commodities, 3) Commerce, 4) Connectivity, 5) Communities, 6) Cooperation, and 7) Competition. Drawing on this framework, one can identify the main issues and opportunities present in the North American Arctic—including increasing military activities, destructive climate change, increasing economic development, and heightened geopolitical posturing—and better inform policy solutions for the region.

1. Climate

Climate change is the root of the Arctic's ascendance onto the global stage. According to NASA, September Arctic Ocean ice extent has decreased from about 3 million square miles (in 1980) to less than 2 million square miles (in 2019); Arctic sea ice extent in September (when it is seasonally at its lowest) has declined almost 13% per decade since 1979.[3] According to the National Snow and Ice Data Center, the September 2020 sea ice extent fell to the second-lowest annual minimum on record,[4] and the last fifteen years include all of the lowest sea ice extents on the satellite record. The broader Arctic region, in fact, is warming at nearly three times the global average.

Associated sea ice decline has many implications for the North American Arctic: more accessible borders along the coastlines; increased risk to mariners; stronger and more frequent storms; threats to coastal communities, due to coastline erosion and permafrost degradation; and shifting subsistence patterns.

2. Commodities

The changing climate and its subsequent impacts on the environment are making natural resources across the Arctic more accessible. Hydrocarbon extraction is a primary economic activity in the region; the Arctic is estimated to hold 13% of the world's undiscovered oil, 30% of the world's undiscovered natural gas, and 20% of undiscovered natural gas liquids.[5] With increased availability of these resources the Arctic is, and will continue to be, an important component of the global energy equation.

The Arctic also holds much more economic potential than just hydrocarbon extraction. Alaska's Bering Sea commercial fleet, in 2018, harvested 2.2 million tons of seafood worth an estimated $1.13 billion, supporting 10,500 jobs with an estimated labor income of $789 million.[6] Rare earth mining, described in more detail in the case study below, is also considered a major part of Greenland's economic profile. Alaska and Canada, as well as Greenland hold vast stores of strategic and rare earth minerals, which grow more consequential by the day. Currently, China holds a near-monopoly on the production of many rare earth minerals. In the context of increasingly competitive great power relations, it becomes imperative for North America to develop these resources in a sustainable, and perhaps coordinated, fashion.

3. Commerce

Increased economic opportunities in the Arctic have, in turn, boosted commercial activity. For example, there has been a five-fold increase in commercial activity along Russia's Northern Sea Route (NSR) since 2014. In fact, the number of full transit voyages across the NSR increased from 37 in 2019 to 62 in 2020.[7] Transit across the NSR continued to grow despite the pandemic, again breaking records in 2021 with 86 full transits.[8]

Integrated commercial systems, similar to the model of Yamal LNG in Russia, and construction of a marine transportation system, similar to that within the contiguous United States, would help connect the North American Arctic to global markets. Such plans are now the subject of discussion among policy makers in the United States, Canada, and Greenland. Increased demand for expedition cruises highlighted a burgeoning Arctic tourism industry, with the *Crystal Serenity* bringing 1,700 people through the Northwest Passage in 2016—marking the first ship of this capacity to do so; expeditions like this would utilize a potential marine transportation system in the North American Arctic.

4. Connectivity

Despite these growing interests, the North American Arctic still suffers a dearth of basic infrastructure. Such infrastructure is needed to connect and serve local communities as well as to serve commercial interests. To highlight just a few of the deficits, there is inadequate physical infrastructure within communities across the region, inadequate internet and digital capabilities, and few deep-water ports. As a result, the digital and information abyss of the Arctic inhibits governance, community development, national and homeland security, health care, and basic operations throughout the region.

While enhancing connectivity would benefit economic development and national security capabilities in Canada, Greenland, and the United States, more importantly it would improve the lives and livelihoods of North American Arctic communities.

5. Communities

Though sometimes depicted as a northern "great game," the North American Arctic is home to multiple communities, whose interests are at the heart of the region's policy discussions. For instance, the development and implementation of Canada's Arctic and Northern Policy Framework, released in 2019, was led, in part, by First Nations, and other entities, in coordination with the Government of Canada. This exemplifies how Indigenous peoples in the North American Arctic are essential in shaping their communities, regions and governments, by building upon the knowledge they have accumulated over thousands of years and using it to inform and influence a more balanced and sustainable future.

The aforementioned Permanent Participants of the Arctic Council (Aleut International Association, Arctic Athabaskan Council, Gwich'in Council International, and Inuit Circumpolar Council) represent the interests of North American Indigenous communities—and through that help determine solutions to the issues and opportunities present in the Arctic.

6. Cooperation

Cooperation is a hallmark of Arctic governance, evident in the Arctic Council and bilateral and multilateral relations between the eight Arctic states. The United States and Canada are close allies, particularly in the Arctic, with NORAD offering an example of cooperation at the highest levels; this is complemented by frequent coordination between each country's Coast Guards, support for basic research, and search-and-rescue preparedness and coordination. After all, in the Arctic, both the United States and Canada share the tyranny of distance; cooperation is essential.

For example, in 2021 the *USCGC Healy* icebreaker completed a 133-day circumnavigation of North America. To make that trip, the *Healy* transited the Northwest Passage, with Canada's consent, passing from Dutch Harbor, Alaska to Nuuk, Greenland. During the journey, the U.S. ship's crew trained with Canadian Coast Guard and Rangers.[9] This transit was an expression of bilateral cooperation, while also exhibiting how Canada and the United States can overcome different views of the Northwest Passage's status, thereby demonstrating the importance of cooperation and bilateral Arctic research.

7. Competition

With rising attention and importance comes the potential for increased competition in the Arctic. Large-scale military exercises underline the latent potential for conflict in the region, a possibility made more salient by the Russian invasion of Ukraine and the resulting discussion of NATO's expansion to Finland and Sweden. There is potential for increased Russia–NATO competition in the region. Indeed, the invasion led to a suspension of activities of the Arctic Council. If Finland and Sweden's accession to NATO is fully ratified, Russia would remain as the only non-NATO state in the Arctic.

In addition, in 2018, China declared itself a "Near-Arctic State," even though such a classification does not exist within Arctic governance structures. Building on that widespread interest, the Russian-led *Tsentr-2019* exercise included about 128,000 military personnel from Russia, China, India, and Pakistan. The goal was to boost the countries' operational capabilities in the Arctic. Recent, large-scale Russian Federation military operations in international waters in the Bering Sea—which reportedly included fifty naval vessels, dozens of aircraft, and two submarines— highlighted the Arctic's military importance to the Russian government. During the Russian exercise, U.S. fishing fleets reported harassment by both navy vessels and aircraft, despite operating well within the United States' internationally accepted 200-mile Exclusive Economic Zone.[10] Although the Russian Federation and U.S. fishing fleets were well within their legal rights to operate in the region, Russian actions could have led to a conflict in the high seas from which a cascading and devolving set of events could have emerged. Of course, this has not gone unnoticed. In 2018, Norway hosted NATO's Trident Juncture Exercise, which included 50,000 NATO troops (20,000 of which were U.S. troops). This was followed in 2022—as the Russian invasion of Ukraine was unfolding—with Exercise Cold Response 2022 in Norway and surrounding seas.[11]

To be clear, there is no immediate risk or expectation of conflict in the Arctic, unless events like those previously noted escalate due to miscommunication or miscalculation. Many of the newly implemented military security measures—from Russia refurbishing Cold War-era military installations, to the United States' basing of F35 fighter jets in Fairbanks, to the staging of U.S. B1 Bombers in Norway and the visible port call of U.S. nuclear submarines in Tromsø, Norway—have both offensive and defensive capabilities. As detailed elsewhere in this volume, the United States and Canada have a long history of northward-focused military cooperation to build upon. However, both countries' interests have shifted subtly alongside the Arctic's evolution; updated modalities of cooperation are needed to recognize this changing picture.

Suffice to say, there is little competition between the North American Arctic states, even where perspectives diverge. The deeply ingrained cooperation measures and cultural and economic ties between Canada, Greenland, and the United States help resolve any issues that arise.

Case Study: Greenland

Greenland is an important lens through which to analyze opportunities for collaboration in the North American Arctic. Indeed, it provides concrete examples of many dynamics in the North American Arctic. There are longstanding and vibrant research partnerships in place between Greenland and the United States. Governance issues mirror those of North American Arctic governance at large. Greenland's geographically strategic location is of central importance to the defense of North America. Climate change is producing myriad global and local impacts in Greenland, highlighting the need to develop a more diverse and sustainable economy. In all these ways, Greenland is emblematic of the new Arctic.

First, it is important to underscore Greenland's distinct governance arrangements. Greenland can be classified as belonging to the North American Arctic, although Greenland is economically and politically closely connected to Europe. Greenland is an autonomous territory within the Kingdom of Denmark, giving it political links to Europe, though with significant home rule. Greenland is also economically tied primarily to Europe, given that the territory receives annual subsidies from Denmark. However, the territory has long had independence aspirations—with the approval of and in consultation with the Kingdom of Denmark. Geologically speaking, Greenland is part of the North American tectonic plate. Most importantly, Greenland has deep cultural ties to North America. The Indigenous peoples of Greenland share common cultural practices to the Indigenous peoples across North America. The Greenlandic language, *Kalaallisut*, is also part of the Eskimo-Aleut language family, which spans the northern parts of Alaska, Canada, and Greenland. In short, Greenland resides in both the Nordic Arctic (through its political and economic ties to

Denmark) and the North American Arctic (through its cultural and geographical ties, its longstanding defense relationships, and its growing economic and political aspirations).

One of the most important issues facing Greenland, as for the rest of the North American Arctic, is the first of the *7 Cs:* climate change and its impacts on the environment. The Greenland ice sheet, one of the world's two permanent ice sheets, is melting at exponential rates.[12] In the 1990s, Greenland's ice sheet lost an average of 25 billion tons per year; the current average annual ice sheet loss is 234 billion tons per year.[13] The effects of this deterioration of the Greenland Ice Cap are global, with a discharge of fresh water equaling some 120 million Olympic-sized pools being added to the oceans each year.

The Arctic is experiencing dramatic and sustained warming. The loss of terrestrial and marine ice results in a reduction of the light reflected from the surface, or *albedo*. Ice loss, then, creates a positive feedback loop as Greenland is absorbing rather than reflecting solar radiation. This localized warming has devastating effects on communities, and most particularly on subsistence lifestyles. The changing migration patterns of fish stocks, bird populations, and whales, among others, forces northern communities to adapt to the loss or decrease of typical food sources and makes irreparable changes to the marine ecosystem. In all, it represents existential change to these communities, reshaping how they interact with their environments, their cultural practices, and ultimately the viability of their communities.[14]

In this changing context, Greenland is working to build a more independent and sustainable economy, as interest both in the Arctic and the territory are increasing. The annual subsidy from the Kingdom of Denmark, totaling about $535 million (as of 2017), represents more than half of the Government of Greenland's revenue. After that, most of Greenland's revenues derives from fish exports.

However, there are three areas in which Greenland has considerable potential to diversify its economy: commercial shipping, mining, and tourism. These comprise the second and third of the *7 Cs*. Shipping companies, like Iceland's Eimskip and Greenland's Royal Arctic Line, are working to integrate Greenland into North Atlantic shipping routes. Greenland can connect to ports across the North American eastern seaboard, including the eastern Canadian provinces and south to Maine in the United States. In the mining sector, there are rare-earth mineral, uranium, and iron-ore mining projects in various stages of development. These have been politically contentious at times. The Inuit Ataqatigiit party campaigned on halting the Kvanefjeld mine. The Ataqatigiit emerged as the largest political party in the Greenlandic Parliament after the April 2021 election. In the tourism sector, the Government of Greenland in 2020 released a three-year tourism strategy, outlining goals and recommendations for the Greenland Tourism Industry. The strategy identified 2023 as a target due to its three transatlantic airports—Ilulissat, Nuuk and Qaqortoq—opening that year.[15] This strategy builds upon the increasing amount of tourists to Greenland before the pandemic, with the number of overnight guests in July (the month with the highest number of tourists over the calendar year) rising from 7,164 in 2000 to 17,506 in 2019. The combination of these three sectors offers economic opportunities currently not available.

Nonetheless, a lack of infrastructure is an obstacle to Greenland's aspirations: tying to the fourth of the *7 Cs*. Without the requisite infrastructure to handle increased shipping and increased mining, as well as the ability to support tour ships, the potential growth in those three areas will remain muted. Similar gaps in connectivity are evident across the Arctic as well; for example, Alaska needs improved infrastructure to meet increased demands in shipping, mining, national defense and homeland security activities, among others. Likewise, Canada lacks robust Arctic infrastructure to further develop its natural resources, connect and support local communities, and create more diversified and viable economies throughout its Arctic region.

Nor has Greenland stood apart from increased global competition. China, as part of its Belt and Road Initiative, has made its interest in Greenland known. Greenland's government has at times reciprocated that interest, stating that Greenland is open for business.[16] More broadly, China has advanced the idea of financing infrastructure in Greenland, Canada, and Alaska, just as they have done in other Arctic countries and around the globe. While geopolitical concerns are at the forefront of stakeholders' minds when interacting with China, the need for infrastructure and China's ability to provide funding does add a new dynamic to national security matters regardless of which Arctic nation is discussed. For example, China has a 29.9% stake in the Yamal LNG project in Russia, through CNPC and the Silk Road Fund.[17] Similar proposals and funding from China are seen in Canada and Greenland as well, mostly focused on mineral development. China is equally interested in supporting larger-scale infrastructure projects to include airports, runway, and ports.

Given that many other Arctic nations are uncomfortable with China's foray into the region, Greenland must weigh its need for infrastructure funding to support shipping, mining, and tourism against China's ability to provide such funding and Western powers' wariness of such investments—an example of weighing the merits of the sixth and seventh of the *7 Cs*. As elsewhere, investment equals influence. Countering Chinese interest and in response to Greenland's stated needs—and unique and strategic geostrategic location—the United States recently committed over $12 million dollars to an array of Greenlandic efforts. It also opened a U.S. Consulate in Nuuk.[18] Moreover, the Kingdom of Denmark has agreed to finance several infrastructure efforts including the expansion of runways to support tourism as well as other economic and national security interests.[19]

In light of climate change, Greenland is also considering ways to develop these sectors and projects in sustainable and environmentally friendly ways. The Government of Greenland has made it a priority to integrate communities into the development and decision-making process with regard to commercial ventures, so that economic benefits remain in the local community and in Greenland. Furthermore, the environmental issues these communities face will only be exacerbated if projects are advanced without sufficient focus on sustainability.

Lastly, Greenland's independence aspirations reflect a larger question for the North American Arctic: how and by whom are these Arctic regions to be governed, now and in the future? Sentiment across Greenland largely favors independence from the Kingdom of Denmark, with polls showing some two-thirds of Greenlanders would like to become an independent state.[20] However, this discussion is focused more on how to approach independence and when to do so, rather than if or why. Many of these discussions revolve around the aforementioned aspects of Greenland's specific situation: how to build a sustainable economy, how to survive and thrive without the annual subsidy from Denmark, and how to progress towards independence without seeing a fall in living standards? At the same time, these goals must be balanced with the need to ensure the safety and security of Indigenous culture, language, and food so that all aspects of Greenlandic life thrive during a time of dynamic change.

Communities—the fifth of the *7 Cs*—across the North American Arctic are wrestling with these same issues. Indigenous communities in Alaska demand a more central role in the region's economic development. The 229 federally recognized tribes of Alaska, Alaska Native Corporations, Alaska Village Corporations, and the Alaska Federation of Natives, to name just a few of the important actors in the state, provide critical avenues through which Indigenous communities can lead and influence Arctic development. In Canada, the Arctic and Northern Policy Framework, released in 2019, was developed in consultation with Indigenous communities, First Nations, and many other groups. This approach, implemented by the Government of Canada's Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC), is a model for how North American governments should have Indigenous communities lead Arctic policy development and implementation and use their knowledge and expertise in doing so. Greenland has similar opportunities to have a community-led approach to governance issues.

The Arctic after Russia's Invasion of Ukraine

As mentioned in the Cooperation section, the Arctic Council has long been lauded for its ability to provide a platform for Russia, the United States, and the other Arctic states to cooperate on practical tasks with tangible outcomes, regardless of other geopolitical tensions that may include other Arctic nations. The Council, and Arctic cooperation to a larger extent, survived earlier destabilizing actions by Russia—namely its 2008 War in Georgia and its 2014 annexation of Crimea. Council activities, research cooperation, international investment, and other activities in the Arctic continued in spite of these actions, which contributed to the perception that the Arctic was a safe haven from the destabilizing effects of Russian actions elsewhere across the globe.

Russia's February 24, 2022, invasion of Ukraine is wholly different, in cause and in effect. The seven remaining member states—Canada, the Kingdom of Denmark, Finland, Iceland, Norway, Sweden, and the United States—universally condemned Russia's actions and on March 3, 2022, temporarily paused participation in Council meetings and activities. The joint statement released by the seven states highlighted how the Council relies on "sovereignty and territorial integrity, based on international law," which was fully violated in the case of Ukraine.[21] The Council's decision to take an extended and highly publicized pause in its work has brought to the forefront of Arctic community discussions just how the Council can feasibly move forward. A palpable example of the interest in this matter was on display during the 2022 Arctic Frontiers Symposium when a nearly full auditorium of attendees participated in a townhall discussion about the importance of, and need for, an active Arctic Council. Russia, which is the current Chair of the Arctic Council until mid-2023, rejected the pause (and its reasoning) and has continued efforts unilaterally. The other seven member-states, on June 8, resumed limited work on Council projects that do not involve Russia,[22] but questions remain about how the Council can move forward with—or without—Russia's participation. This situation will continue to evolve alongside the war, and certainly until Norway assumes Council Chairmanship in mid-2023. Arctic cooperation will be slow to return to pre-invasion levels, if that is even possible.

One important impact of the war and the Council's pause is the division of Indigenous groups in Northern Scandinavia and Russia. Three of the six Council Permanent Participants—the Aleut International Association, the Russian Association of Indigenous Peoples of the North (RAIPON), and the Saami Council—have populations in Russia, and the Aleut International Associate and the Saami Council have populations in both Russia and Western countries. In addition to the Council's broader multilateral pause, the borders between Russia and these neighboring countries closed. These Indigenous peoples depend on open borders to conduct their livelihood, and to share and reinforce cultural, social, subsistence, and linguistic ties. As a result, closed borders pose an existential crisis for these communities.

Another important impact of the war is Finland and Sweden's likely membership of NATO (as of July 2022). Until the war, both countries long opposed joining the military alliance, with public support in Finland for joining NATO never exceeding 28%,[23] and public opinion in Sweden showing similar levels of support.[24] In a rapid change, both countries now have overwhelming public support to join NATO, and on July 5, 2022, they signed NATO Accession Protocols, officially starting the ratification process.[25]

If ratification is successfully completed, as expected, the Arctic will consist of seven NATO members and Russia. NATO had been increasing exercises in the Arctic for several years now, as explained in the Competition section, but Finland and Sweden's accession, alongside heightened tensions caused by the war in Ukraine, may increase the pace of the alliance's future exercises. Indeed, the further integration of the two militaries into the alliance will be facilitated by their longstanding, close partnership with NATO in the Arctic. As NATO continues to bolster its capabilities and activities in the Arctic, Russia may respond with similar force projection exercises in the region.

The North American Arctic

As the foregoing suggests, the North American Arctic is now a global geostrategic region. Climate change and its effects on the environment underpin the existential changes across the region. The increased opportunities for economic development, from natural resource development to commercial shipping and tourism, to the national security issues at play, have captured global interest—but there is also an opportunity (and a need) for this development to be community-led. Collaboration amongst Canada, Greenland, and the United States can help integrate this approach, and allow for a more diversified economy.

Many of the issues Canada, Greenland, and the United States face in the Arctic are similar and shared, which suggests the benefits of cooperation amongst the three. Through Arctic-specific entities (such as the Arctic Council and its working groups) to more global institutions (such as NATO), and through bilateral measures (like NORAD), the North American Arctic states work together to solve the issues they face in the Arctic. With that said, many of the issues they face also exist at the subnational level. In these situations, it is both beneficial and expected for these states to address the issues separately.

The North American Arctic states could pursue several actionable items collectively:

- Developing ports and a marine transportation system along the North Slope of Alaska, into the Northwest Passage in Canada, and down across Greenland would facilitate more trade amongst the three, facilitate better search-and-rescue capabilities, and allow for safer tourist expeditions.
- Enhancing existing measures to mitigate the effects of climate change, so that Arctic communities in Canada, Greenland, and the United States can sustain their livelihoods.
- Empowering Indigenous peoples and communities to lead and participate in all of these issues, from policymaking to economic development, research, and beyond.
- Strengthening current avenues of cooperation—such as NORAD.

While existing avenues of collaboration can be solidified across the North American Arctic, there is also a need for recalibrating our perceptions of the region. Rather than viewing the Arctic from a South-North perspective, consider an East-West alignment. From Alaska, through Northern Canada, and on to Greenland, the North American Arctic is a continuum of shared people, aspirations, opportunities, challenges, and solutions—all with a similar or complementary set of worldviews. Allies in time of peace and war, interdependent because of geography and economics, linked by oceans and seas, and the bounty found in their waters, and the geostrategic shipping lanes that raise the prospects of prosperity or conflict, the North American Arctic has more in common, and more at risk, than one might at first consider. The future for the Arctic should start with a new vision of the North American Arctic, where trade, linked telecommunication and ports, and responsible development with Indigenous leadership and insight may enable a more navigable future against a tide of change.

The deep economic integration across Canada, the United States and Mexico provides a strong platform that the North American Arctic can, with the right investment, plug into. Development in the Arctic has the potential to strengthen both local communities in the North American Arctic and the rest of the continent, but this will only be achieved if there is a robust dialogue across the federal governments of North America and communities in the North American Arctic. Beyond the economic sphere, issues of climate change, environmental protection, and representation of indigenous communities are of great importance across the North American Arctic and have grown in prominence in the trilateral (U.S.-Canada-Mexico) agenda, opening opportunities for further dialogue and cooperation.

Endnotes

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Conclusion: Risks, Vision, and a Way Forward for a Continental Future

Tom Long and Alan Bersin

The creation of a North American economic region over the last three decades has generated significant benefits for Canada, Mexico, and the United States. Through the North American Free Trade Agreement (NAFTA), its antecedents, and now the U.S.-Mexico-Canada Agreement (USMCA), the countries of North America have established a framework for economic—and especially manufacturing—integration. Following the early example of the automotive industry, the North American private sector has created a robust regional production platform. Many of these firms emerged as global leaders, boosting the region's position in the global economy. More recently, North America has become an interconnected energy powerhouse, with even greater promise for the future transition to greener economies. The North American model has involved dynamic, bottom-up economic integration by the private sector within a permissive, if largely indifferent and inactive, governmental context. This approach has allowed business interests in Canada, Mexico, and the United States to take advantage of their market complementarities, exploit economies of scale, and leverage their relative strengths. Accompanying this interdependent economic expansion, North America has experienced extensive, if uneven, social integration, occurring for the most part outside of a clear institutional structure. People have relocated, north and south, snowbirds and migrants alike, to their neighboring country, voting for the region with their feet.

As this experience suggests, economic and social relations—and not state-led international organizations—sit at the core of North American interactions. Forging a continental future should start with building on this foundation, not looking to replace it by replicating other models. That said, the undeniable importance of commerce for North America has at times distracted our attention from other important issues—even those on which further economic success itself hinges. Incapacities, inequities, insecurities, and inefficiencies have been left unresolved, diminishing the benefits of North American regionalism.

The past six years have demonstrated that non-trade issues can pose substantial risk and cause significant damage to even well-developed commercial relationships of the kind we have come to take for granted in North America. The first blow came from domestic political scapegoating; the second arrived in a pandemic form of contagious disease. North Americans should not forget our common economic interests, but we also ought to spend more time contemplating questions beyond trade and investment. By covering a diverse array of North American issues—and analyzing each of them thoroughly—this volume has made the case, we believe, for considering a multifaceted approach to the region.

North American leaders—those who will gather at the North American Leaders Summit, as well as those in business, academia, and civil society—should consider both big questions and immediate, pragmatic necessities. Just how far do the boundaries of North America extend? What sort of governance arrangements are both suitable and feasible? How can the region hone its competitive advantages? What coordinated policies, at and beyond the borders, could make the region's inhabitants more secure and enrich their human capital? If North America's next decades are to build upon the economic and commercial successes of its first three, the region's leaders must start forging more inclusive and effective strategies now. The USMCA, with its contentious origins and substantive continuities, embodies only a small step in that direction, through the incremental improvements it contains.[1]

In these concluding reflections, we draw from across the breadth of the volume to suggest a synthetic vision and concrete agenda keyed off what has worked well so far. When pursuing "the North American Idea,"[2] moreover, the region's leaders should not get bogged down, as former U.S. Ambassador to Canada Bruce Heyman counsels, in the perpetual debate about bilateral, parallel bilateral, and trilateral approaches to making progress in this space.[3] Instead, those who favor North American cooperation should move forward where feasible, given the political facts on the ground in each of the three core countries, letting the pocketbooks and priorities of the people determine the sequence of progress. The following section of the conclusion notes some risks for North America. Then, we offer a broad orientation for thinking about regional cooperation. Finally, we suggest some near-term steps that could enhance the benefits of integration—and deliver them to broader constituencies—and in that manner expand popular support for an ambitious vision of a continental future.

Risks and Resilience

The underlying North American economic model has proved remarkably resilient. Upon NAFTA's entry into force, it was confronted immediately with a currency crisis occasioned by the peso's collapse. Several years later the region was traumatized by the major terrorist attack on 9/11 and a game-changing shift in security policies. Over the last two decades, North America has weathered the rise of Chinese competition, a global financial crisis, U.S. domestic backlash, and a debilitating and disruptive pandemic.[4] Although the region evinces an ability to bounce back that is underappreciated, each of these shocks has taken its toll on North America and left its scars. In the absence of robust mechanisms of regional communication and coordination, both immediate responses and longer-term recoveries have been ad hoc, halting, and costly in collateral consequences.

North America cannot anticipate the next crisis. However, by sketching several "known unknowns" below, we seek to spur consideration of the sorts of mechanisms that should be in place to improve regional resilience when the shockwave hits.

One immediate concern—and a persistent worry of Canadian and Mexican policymakers and businesses—is a possible return of nativist backlash from the United States. For the moment, the USMCA has quieted opposition to North American integration, and implementation has been broadly collaborative despite some contention around energy in Mexico and U.S. "Buy America" provisions.[5] That the new agreement was negotiated by an anti-NAFTA president, yet gained bipartisan congressional approval, seems to have offered some political cover. However, Canada and Mexico remain understandably preoccupied that some other U.S. protectionist policies—tariffs, national security exemptions, and "Buy America" provisions—have continued, enjoy support, or could return. Given their outsized dependency on the U.S. market, disruptions entail high economic, social, and political costs for the region.[6]

The United States' heft, and the salience of anti-integration currents, makes its domestic politics a particular concern. However, similar forces are at work elsewhere across the region. The explosion of "Freedom Convoy" protests in Canada in early 2022 shuttered parts of Ottawa and blocked border crossings. More populist currents have gained strength in the Conservative Party, while segments of the Canadian left continue to view reliance on the United States with a wary caution. In Mexico, President Andrés Manuel López Obrador has so far defended trade relations with the United States. However, he also has resurrected a Mexican political tradition that tends to see international cooperation as a cover for international intrusion.[7] On energy, elections, democracy, anti-corruption, counternarcotics, human rights, and press freedom, López Obrador bristles at criticism. Many of his most fervent supporters are skeptical or even hostile to strengthening regional mechanisms, particularly where they touch these issues.

North America faces another source of persistent uncertainty—this one now institutionalized in the form of the USMCA "sunset clause." This provision, contained in Article 34.7, calls for a review of the agreement after six years. More controversially, the article provides that the USMCA will end sixteen years after entering into force—unless Canada, Mexico, and the United States each agrees to extending it for another sixteen-year term. In effect, the clause grants the three countries' executive branches a unilateral veto to withdraw from the USMCA should they find the agreement wanting.[8] Optimistically, the review provision could spur positive improvements in the USMCA (as Trump advisors indeed argued).[9] In practice, the effect of the sunset clause is to exacerbate North America's asymmetries. Canada and Mexico are less able to leverage a threat of withdrawal, allowing the United States alone to use the clause to force new concessions. For this reason, Canada and Mexico made significant and partially successful efforts to weaken the clause by adding a ten-year cancellation period after the initial review. Nonetheless, as compared to NAFTA, the USMCA introduced a sixteen-year clock that adds to the uncertainties international investment and business planning already face.[10] Reducing this uncertainty would provide economic and diplomatic benefits by lengthening time horizons for investors and governments alike.[11]

Finally, North America remains vulnerable to global disruptions and remains poorly equipped for dealing with global calamities on a regional basis. Previous shocks, like the September 11 attacks and the COVID-19 pandemic, produced a mix of cooperation and breakdown in North American relations in both 2001 and 2020–21. Given weak formal regional coordination mechanisms, the default responses to crisis have been national in nature. In the above instances, this prompted border closures which proved extraordinarily costly in each case, as documented by Edward Alden.[12] While that response may be understandable in the absence of other options, more robust regional planning and coordination should seek to minimize the possibility of closures in the future and build in protocols to ensure immediate and sustained attention to facilitating border reopening at the earliest practicable moment. In addition, in contrast to the deafening radio silence that occurred during the pandemic, it will be crucial to ensure regular and candid communication to the public and especially the U.S.-Mexican and U.S.-Canadian border communities most adversely impacted by such closures.

Of course, there have also been positive examples of cooperation during crisis—the U.S. financial support of Mexico during the 1994 peso crisis, the Canadian welcome of stranded U.S. air passengers after September 11, 2001, and Mexico's repeated disaster relief efforts on behalf of its North

American partners are only a few salient examples. A recurring point made by contributors to this volume is that such instances should not only be lauded but adopted as models that can be expanded, replicated, and normalized as part of the North American regional fabric. Building this cooperation, in moments of crisis as well as on a quotidian basis, would benefit from a more expansive and articulable—which is *not* to say supranational—vision of the opportunities and benefits of North American cooperation.

An Updated Vision

North America needs more effective cooperation among its governments, as well as officially sanctioned coordination among other actors, to manage inevitable risks and to fully capitalize on opportunities. However, North America is not Europe: it differs in its traditions, approaches to government, economic structures, and the asymmetric degree to which the region centers on a single power.[13] Europe may offer lessons, but it should not be seen as an inevitable, or universally desirable, regional model. In forging a continental future, North Americans should think about what has worked, and what could work, here—as well as what has not. This should start by enhancing the region's strengths in trade, production, and investment and building out an expanded agenda concentrically from there, as Chappell Lawson has long urged.

The previous chapters have highlighted many other cooperative successes—beyond the economic and commercial—that may be scaled up in other policy arenas. What is, perhaps, more challenging is to think of successful approaches to catalyzing, managing, and sustaining such cooperation. Both NAFTA and USMCA followed a similar approach: inter-governmental negotiations produced contracts that define the countries' economic relationships. Both through and at the margins of these central agreements, other mechanisms for cooperation arose, including summits, arbitration panels, commissions for environmental issues, councils for competitiveness, and the ultimately frustrated stakeholder involvement of the Security and Prosperity Partnership (SPP).[14] However, the absence of an institutional framework—and a shared governmental indifference to creating one—have left these efforts largely isolated and unproductive.

Recently, the USMCA has formed a North American Competitiveness Committee—essentially resurrecting an SPP forum—that should identify obstacles and encourage information-sharing and regulatory alignment.[15] New "rapid response" mechanisms to address labor disputes of transnational relevance are also showing greater robustness and attracting support from civil society actors long skeptical of regional integration.[16] These formats hold out promise for promoting additional cooperation related to

North America's economic strengths. They need to be respected and nurtured by senior policymakers across the three countries if they are to succeed and grow into a tradition of regional attention and action.

On the other hand, coordination and ongoing consultative mechanisms regarding migration, border management, infrastructure, education and workforce development, climate change, inequalities, and other issues remain weaker and underdeveloped. We will not repeat here the suggestions of the volume's contributors for building, or expanding, mechanisms to advance cooperation on these crucial transnational issues that can be addressed most effectively at a regional level. Instead, we suggest several principles for an updated vision of North America: a flexible lens, multi-level leadership, and active engagement.[17]

First, North America's advocates must be flexible in the "lens" they apply to the region—employing a telescopic focus on some issues and a wide-angle approach to others. On the one hand, we should avoid thinking of the region too narrowly, in terms both of the issues on which cooperation is possible and of the geographical extent of the region itself. A wider angle helps us see how the traditional North American core of Canada, Mexico, and the United States is situated in a broader environment—from Colombia to the Arctic and from Barbados to Hawaii. This extended region, which Abraham Lowenthal refers to as the "near abroad," deeply affects the region's security and prosperity.[18]

The links are so important on issues of migration, remittances, and trafficking of arms and drugs that coordinated action within North America cannot be adequately understood without taking the Caribbean and Central America into account. This "wide aperture," as Richard Feinberg has suggested, could create great opportunities for making productive networks and trade patterns more efficient and secure.[19]

On the other hand, we need not always think broadly. There are instances where a sharper focus will be more appropriate. Not all issues need be North American issues; some are well-suited for local and national approaches (like primary education); others may be bilateral (like NORAD); and still others may be "bilateral-plus" with observation and consultation from a third party (like much border management). Beyond that, there will be an important—if narrower—set of issues that will necessarily require trilateral attention (like trade), and others that cannot effectively be managed without cooperation with the countries of Central America and the Caribbean (supply chains and, increasingly, migration and asylum).

Second, we must be ready to promote and encourage multi-level, and multi-actor, leadership to North American issues. While the North American region was launched, in part, by policy determinations from the very top in the form of NAFTA, much of the actual integration has originated far from national centers of power. To manage this robust, but diffuse, pattern of integration, North America needs to have many actors at the table to identify problems, propose solutions, and curate implementation. The strongly federal nature of the Canadian, Mexican and U.S. governments means subnational authorities play crucial constitutional roles in many issues and must be included in the regional calculus. Yet, the role of state and municipal governments in building North America has not been taken seriously enough. The critical role of subnational actors is recognized on certain issues—like emergency management—but rarely incorporated systematically into a broader vision of North America. Likewise, the influence of the private sector in North America is well-known, but less acknowledged and supported are the robust transnational connections among NGOs, communities, faith groups, and others. North American regional cooperation needs to generate and be generated by multi-level cooperation in a virtuous cycle that brings a diverse slate of state and nonstate actors regularly to the table—and keeps them there.

Third, North America needs active engagement. A range of actors, from businesses to migrant advocates, rallied to defend North America from the non-stop attacks on it in the United States during 2016–2018. Once the threat subsided with the NAFTA renegotiations, much of this energy dissipated. Forums and sustainable collaborations where North America is discussed and debated remain few and far between; even in academia, there is a dearth of attention to studying our closest neighbors. Episodic engagement allows misperceptions and misinformation to fester and spread; it drains the collaborative energy needed to develop and advance collaboration solutions. Maintaining active engagement requires a long-term vision of North America as a community to be sure, but it also needs greater leadership from the private and government sectors to support activities geared to producing and implementing it in a variety of policymaking and civic-action settings.[20]

Next Steps

But there also must be an immediate agenda, focused, we propose, on building a more inclusive and secure regional economy. Regional integration has generated growth, but too many North Americans feel like they have been left out of that prosperity—or worse, that it has come at their expense. These facts leave North America a vulnerable and easy political target and must be addressed.

North America's greatest achievement—the creation of integrated production and dynamic trade—remains therefore an area in which further cooperation is needed, designed specifically to alleviate, as much as practicable, the collateral consequences of that success. Both government and the private sector have made significant investments and reap continuing benefits from North American cooperation, and they should form the core coalition for reinvigorating North American cooperation in this respect.

Policymakers must work to expand North America's strong commercial relationships while also making their benefits more inclusive. Enhancing the skills and capabilities of the North American workforce is one crucial element; facilitating a greater level of worker mobility is another; and finally, greater investments in efficient management and infrastructure at the borders—for goods, people, and energy—will yield great dividends.[21] From this perspective, three sets of issues deserve priority:

(1) Cross-Border Mobility of Goods and People. Significant progress has been achieved over the last generation in expediting lawful travel and trade across the northern and southern U.S. borders. But the current status of trade facilitation remains a fraction of what needs to be done and is doable. Enlisting time and space, and big data—and the information technology now available to knit them together—holds out the promise of continental pre-clearance. Security, customs, and compliance inspections should be done on the factory floor, not at the borderline. Cross-border efficiency could pave the way to regulatory coherence, enhanced competitiveness and, in due course, to the Schengen-like border environment we need. North America has piloted collaborative border management; it should deepen that approach and become the bellwether of "ports of the future"—first at the core and then over time outward to Central America and the Caribbean.

(2) Harmonized Energy System. Energy independence—the ability to do work on your own power—is a laudable objective. But it can be achieved only on a continental basis. Increasingly, we share electric grids in the northwest and southwest regions of the United States with Canadian provinces and Mexican states. The same good sense commends itself both to a strategic approach to hydrocarbons and to a rational transition to their replacements. Building energy independence inside out from the requirements of the shared production platform already in existence in North America seems best calculated to accelerate its occurrence.

(3) Human Capital and Workforce Development. Ever the stepchild on the agenda—always present and never implemented—concerted development of North America's human capital is crucial to its future prosperity. The principal preliminary need here is for reliable data identifying what businesses in the three countries concretely require for their future workforce—and a plan to get there through training, education and professional development. While this objective may be the most difficult to accomplish of the three priorities proposed here, it also may turn out to be the most important.

Last Words

Much of the substance of North American integration will continue to occur unheralded, away from high-profile venues like the North American Leaders Summit. That said, advocates of North America should take advantage of this moment of attention to recall the benefits of regional integration, assess the merits of the “North American idea,” and consider how to forge a continental future. The NALS provides an opportunity on several levels.

First, any successful summit serves to focus the attention of a much broader array of actors from across government. For North America, this focus is particularly important because connections in the region are deeply “intermestic,” mixing elements of international and domestic politics.[22] Because issues cut across bureaucratic remits in North America, envisioning and working on a regional agenda requires breaking through these stovepipes. Canada, Mexico, and the United States should consider how to expand these discussions to include other states—for example, signatories of the recent Los Angeles declaration, when it comes to migration.[23]

Second, the summit provides an opportunity for a gathering of non-government actors on the margins of the meeting. An underappreciated success of the sometimes-frustrating Summits of the Americas has been the convening of business and civil society actors. The NALS have rarely done this, in part because the inconsistent meetings have too often been addendums to other events instead of prime-time gatherings. In North America, transnational ties among these actors are already much denser, and the possibilities of convening them are much greater. Enhancing these networks and getting these actors to think of their ties within a North American vision, would promote the sort of active engagement we advocate above as necessary to the overall enterprise.

Finally, in a time of growing geopolitical tension, continued economic apprehension, and an overhanging malaise and fear of decline in the United States, particularly, the NALS and its aftermath is an opportunity to remind the world just how important North America is—not as an appendage of the United States, but as a vibrant region in its own right. Leaders from government and beyond should use the NALS to speak North America’s name unhesitatingly,[24] with pride in its economic accomplishments, confidence its capabilities, and aspiration for its future. The “American Century” in fact is coming to an end, but it should be doing so in the context of a “North American Century” that is just beginning.[25]

Endnotes

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17. Colin Robertson, "We Need a Revitalized North American Idea Today," Wilson Center, June 2022, https://www.wilsoncenter.org/publication/we-need-revitalized-north-american-idea-today; Anthony Earl Wayne, "Is North America Worth the Investment?," Wilson Center, June 2022, https://www.wilsoncenter.org/publication/north-america-worth-investment.

18. Abraham F. Lowenthal, "Good Neighbors At Last?," *Democracy: A Journal of Ideas*, March 2021, https://democracyjournal.org/magazine/good-neighbors-at-last/.

19. Richard E. Feinberg, *Widening the Aperture: Nearshoring in Our 'Near Abroad'*, Wilson Center, Latin America Program, April 2021, https://www.wilsoncenter.org/publication/widening-aperture-nearshoring-our-near-abroad.

20. To this end, the national security/diplomatic infrastructure should be restructured to take into account the critical strategic importance of Canada and Mexico and North America to the U.S. future. In short, the time for several assistant secretaries of state regarding Middle Eastern issues – and one Assistant Secretary for the Western Hemisphere (including Mexico and Canada) is a revealing anachronism that requires remedying and realignment.

21. For further discussion, see Alan D. Bersin, "Making North America a Priority," Wilson Center, June 2022, https://www.wilsoncenter.org/publication/making-north-america-priority.

22. Bayless Manning, "Congress, the Executive and Intermestic Affairs: Three Proposals," Foreign Affairs, vol. 55 (1976): 306–324; Abraham F. Lowenthal, "United States-Latin American Relations at the Century's End: Managing the 'Intermestic' Agenda," in Albert Fishlow and James Jones, eds., *The United States and the Americas: A Twenty-First Century View*, 109–136, Norton, 1999.

23. Matthew Rooney, "North America is the Key to Central America," Wilson Center, June 2022, https://www.wilsoncenter.org/publication/north-america-key-central-america.

24. In doing so, they would correct a tendency identified some fifteen years ago in Andrew Hurrell, "Hegemony in a Region that Dares not Speak its Name," *International Journal*, vol. 61, no. 3 (2006): 545–566.

25. The term "American Century" was coined by TIME publisher Henry Luce in 1941; on the "North American Century," see Christopher Sands, "Getting the Know the North American Century," *North American Integration Monitor*, vol. 3, no. 1 (October 2005); William McKenzie, ed., *The North American Century*, special issue, *The Catalyst*, George W. Bush Institute, https://www.bushcenter.org/catalyst/north-american-century/index.html.

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