



RESEARCH IN GLOBAL STRATEGIC MANAGEMENT
VOLUME 10

Series Editor: ALAN M. RUGMAN

**NORTH AMERICAN
ECONOMIC AND FINANCIAL
INTEGRATION**

ALAN M. RUGMAN
Editor

RESEARCH IN GLOBAL STRATEGIC MANAGEMENT
VOLUME 10

NORTH AMERICAN ECONOMIC AND FINANCIAL INTEGRATION

EDITED BY

ALAN M. RUGMAN

Indiana University, USA

2004



ELSEVIER
JAI

Amsterdam – Boston – Heidelberg – London – New York – Oxford
Paris – San Diego – San Francisco – Singapore – Sydney – Tokyo

ELSEVIER B.V.
Sara Burgerhartstraat 25
P.O. Box 211
1000 AE Amsterdam
The Netherlands

ELSEVIER Inc.
525 B Street, Suite 1900
San Diego
CA 92101-4495
USA

ELSEVIER Ltd
The Boulevard, Langford
Lane, Kidlington
Oxford OX5 1GB
UK

ELSEVIER Ltd
84 Theobalds Road
London
WC1X 8RR
UK

© 2004 Elsevier Ltd. All rights reserved.

This work is protected under copyright by Elsevier Ltd, and the following terms and conditions apply to its use:

Photocopying

Single photocopies of single chapters may be made for personal use as allowed by national copyright laws. Permission of the Publisher and payment of a fee is required for all other photocopying, including multiple or systematic copying, copying for advertising or promotional purposes, resale, and all forms of document delivery. Special rates are available for educational institutions that wish to make photocopies for non-profit educational classroom use.

Permissions may be sought directly from Elsevier's Rights Department in Oxford, UK; phone: (+44) 1865 843830, fax: (+44) 1865 853333, e-mail: permissions@elsevier.com. Requests may also be completed on-line via the Elsevier homepage (<http://www.elsevier.com/locate/permissions>).

In the USA, users may clear permissions and make payments through the Copyright Clearance Center, Inc., 222 Rosewood Drive, Danvers, MA 01923, USA; phone: (+1) (978) 7508400, fax: (+1) (978) 7504744, and in the UK through the Copyright Licensing Agency Rapid Clearance Service (CLARCS), 90 Tottenham Court Road, London W1P 0LP, UK; phone: (+44) 20 7631 5555; fax: (+44) 20 7631 5500. Other countries may have a local reprographic rights agency for payments.

Derivative Works

Tables of contents may be reproduced for internal circulation, but permission of the Publisher is required for external resale or distribution of such material. Permission of the Publisher is required for all other derivative works, including compilations and translations.

Electronic Storage or Usage

Permission of the Publisher is required to store or use electronically any material contained in this work, including any chapter or part of a chapter.

Except as outlined above, no part of this work may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior written permission of the Publisher.

Address permissions requests to: Elsevier's Rights Department, at the fax and e-mail addresses noted above.

Notice

No responsibility is assumed by the Publisher for any injury and/or damage to persons or property as a matter of products liability, negligence or otherwise, or from any use or operation of any methods, products, instructions or ideas contained in the material herein. Because of rapid advances in the medical sciences, in particular, independent verification of diagnoses and drug dosages should be made.

First edition 2004

British Library Cataloguing in Publication Data

A catalogue record is available from the British Library.

ISBN: 0-7623-1094-4

ISSN: 1064-4857 (Series)

© The paper used in this publication meets the requirements of ANSI/NISO Z39.48-1992 (Permanence of Paper). Printed in The Netherlands.

NORTH AMERICAN ECONOMIC AND FINANCIAL INTEGRATION

RESEARCH IN GLOBAL STRATEGIC MANAGEMENT

Series Editor: Alan M. Rugman

Recent Volumes:

- Volume 1: International Business Research in the 21st Century
- Volume 2: Global Competition and European Community
- Volume 3: Corporate Response to Global Change
- Volume 4: Global Competition: Beyond Generics
- Volume 5: Beyond the Diamond
- Volume 6: Multinational Location Strategy
- Volume 7: International Entrepreneurship: Globalization of Emerging Business
- Volume 8: Leadership in International Business Education and Research
- Volume 9: Multinationals, Environment and Global Competition

PREFACE

This book contains selected papers first presented by invitation at the “Canada-United States Business Conference” held at the Kelley School of Business, Indiana University, on April 11–12, 2003. The conference was co-sponsored by the Canadian Embassy of the Government of Canada and the IU Center for International Business Education and Research (IU CIBER).

The primary objective of this conference was to bring together U.S. and Canadian-based business scholars to help develop a network of specialists on Canadian-U.S. trade and investment issues, in particular, and bilateral business issues more generally. With a primary emphasis on Canadian-U.S. issues, the conference was broad enough to incorporate NAFTA-related business issues and researchers with expertise on the business relations of North America.

Within a broad framework, issues of current interest and concern – NAFTA at age ten, the impact of the FTAA on NAFTA, were examined. Of particular importance in the post-September 11, 2001 environment, other issues included cross border trade and security. Key policy areas discussed included regulatory issues, issues of labor mobility, productivity, and specific sectoral issues (energy, transportation, etc.). In addition to an examination of key research issues, conference participants also considered the public policy implications of their findings – the likely impact of resulting policy options on business practice and its environments. Key members of the Canadian, U.S., and Indiana-specific business and policy making communities were involved in the conference.

Indiana is a major exporting state, ranking 14th of the fifty U.S. states. Canada is the State’s largest export market, receiving some 50% of its annual exports. Highlighting the importance of North American trade for the state is the fact that Indiana’s second largest trading partner, Mexico, receives a total of 13% of its annual exports.

Indiana University is well known as a major research university, and its Kelley School of Business is home to a significant number of highly-regarded research scholars. Like the University, the Kelley School of Business has been involved in international research and programmatic activities over the last five decades – in Europe, Asia, Latin America, and elsewhere. The IU Center for International Business Education and Research (IU CIBER), a designated U.S. National Resource Center, has been located in the School for more than a decade. IU

CIBER encourages and supports the international research endeavours of Kelley faculty and particularly encourages collaboration among academics and, as an extension of that work, their outreach to the business community. The IU CIBER is directed by the Kelley's School's L. Leslie Waters Chair of International Business, a chair designated for an internationally recognized scholar in the IB field.

Of the 30 papers prepared for the conference, a set of 18 were accepted for publication in this book. These are grouped into three major sections. In Part I, six papers deal with economic integration in North America, including papers on the strategies of multinational enterprises and exporting firms. In Part II, there are five papers dealing with financial integration in North America and the issues of a common currency. Finally in Part III, seven papers examining specific sectors and issues of public policy across the Canada-U.S. border.

I wish to thank Louise Siffin, Director of Global Programs at the Kelley School, for her help with the design and implementation of the conference. Teena Albright provided superb organisational skills to facilitate the attendance and presentation of a large number of visiting scholars. Finally, Mildred Harris prepared the manuscript for this book with great diligence and attention to detail, interacting with the authors to prepare a book of lasting merit.

Alan M. Rugman
Bloomington, Indiana University
October 2003

CONTENTS

LIST OF CONTRIBUTORS	<i>ix</i>
LIST OF FIGURES	<i>xi</i>
LIST OF TABLES	<i>xv</i>
PREFACE	<i>xix</i>

PART I: REGIONAL ECONOMIC INTEGRATION IN NORTH AMERICA

NORTH AMERICAN INTRA-REGIONAL TRADE AND FOREIGN DIRECT INVESTMENT <i>Alan M. Rugman</i>	<i>3</i>
CANADA-U.S. ECONOMIC INTEGRATION FOLLOWING NAFTA <i>Steven Globerman and Paul Storer</i>	<i>17</i>
REGIONAL VS. GLOBAL FINANCING STRATEGIES FOR U.S. MNEs <i>Joseph P. Daniels, Walid Hejazi and Marc von der Ruhr</i>	<i>47</i>
REGIONAL INTEGRATION OF U.S. BORDER STATES WITH CANADA: EVIDENCE FROM U.S. STATE EXPORTS <i>Larry Davidson</i>	<i>69</i>

PROTECTING CANADA AND THE U.S. AGAINST TERRORISM: A COMMON SECURITY PERIMETER? <i>Georges A. Tanguay and Marie-Christine Therrien</i>	85
---	----

WAL-MART IN MEXICO <i>Syed Tariq Anwar</i>	97
---	----

PART II: NORTH AMERICA FINANCIAL INTEGRATION AND A COMMON CURRENCY

ASSESSING THE BORDER: TESTS OF THE LAW OF ONE PRICE IN CANADA AND THE U.S. <i>Janet Ceglowski</i>	117
---	-----

THE IMPACT OF NAFTA ON THE INTEGRATION OF THE CANADIAN, MEXICAN, AND U.S. EQUITY MARKETS <i>Claire G. Gilmore and Ginette M. McManus</i>	137
--	-----

A SINGLE CURRENCY FOR NAFTA? <i>Patrick M. Crowley</i>	153
---	-----

NORTH AMERICAN INTEGRATION AND THE SINGLE CURRENCY? <i>Martin Coiteux</i>	175
---	-----

CANADIAN INVESTMENT IN THE UNITED STATES: A REGIONAL PERSPECTIVE <i>Prem Gandhi and Wayne Glass</i>	193
---	-----

PART III: NAFTA AT AGE TEN: SECTORAL STUDIES AND RELATED ISSUES

CANADA-U.S. AGRICULTURAL TRADE <i>Andrew Schmitz and Hartley Furtan</i>	213
--	-----

THE CANADA-U.S. SOFTWOOD LUMBER DISPUTES <i>Harry Nelson and Ilan Vertinsky</i>	237
TRUCKING SERVICES UNDER NAFTA <i>Christine Drennen</i>	263
COSTS OF THE U.S.-CANADA BORDER <i>John C. Taylor, Douglas R. Robideaux and George C. Jackson</i>	283
A CONTINENTAL ELECTRICITY INDUSTRY <i>Paul S. Ciccantell</i>	299
PARTICIPATION BY CIVIL SOCIETY AND NON-GOVERNMENTAL ORGANIZATIONS IN WESTERN HEMISPHERE ECONOMIC INTEGRATION <i>Jonathan P. Doh and Barbara Kotschwar</i>	317
HAS NAFTA FULFILLED ITS PROMISE? <i>Bernard L. Weinstein</i>	339
AUTHOR INDEX	349
SUBJECT INDEX	355

LIST OF CONTRIBUTORS

<i>Syed Tariq Anwar</i>	West Texas A&M University, Canyon, TX, USA
<i>Janet Ceglowski</i>	Bryn Mawr College, Bryn Mawr, PA, USA
<i>Paul S. Ciccantell</i>	Western Michigan University, Kalamazoo, MI, USA
<i>Martin Coiteux</i>	HEC Montreal, Montreal, Canada
<i>Patrick M. Crowley</i>	Texas A&M University, Corpus Christi, TX, USA
<i>Joseph P. Daniels</i>	Marquette University, Milwaukee, WI, USA
<i>Larry Davidson</i>	Indiana University, Bloomington, IN, USA
<i>Jonathan P. Doh</i>	Villanova University, Villanova, PA, USA
<i>Christine Drennen</i>	Bowling Green State University, Bowling Green, OH, USA
<i>Hartley Furtan</i>	University of Saskatchewan, Saskatchewan, Canada
<i>Prem Gandhi</i>	Plattsburgh State, Plattsburgh, NY, USA
<i>Claire G. Gilmore</i>	King's College, Wilkes-Barre, PA, USA
<i>Wayne Glass</i>	Center for the Advancement of Sustainable Tourism, Saranac Lake, NY, USA
<i>Steven Globerman</i>	Western Washington University, Bellingham, WA, USA
<i>Walid Hejazi</i>	University of Toronto, Toronto, Canada
<i>George C. Jackson</i>	Wayne State University, Detroit, MI, USA
<i>Barbara Kotschwar</i>	Organization of American States and Georgetown University, Washington, DC, USA
<i>Ginette M. McManus</i>	St. Joseph's University, Philadelphia, PA, USA

<i>Harry Nelson</i>	University of British Colombia, Vancouver, BC, Canada
<i>Douglas Robideaux</i>	Grand Valley State University, Grand Rapids, MI, USA
<i>Alan M. Rugman</i>	Indiana University, Bloomington, IN, USA
<i>Andrew Schmitz</i>	University of Florida, Gainesville, FL, USA
<i>Paul Storer</i>	Western Washington University, Bellingham, WA, USA
<i>Georges A. Tanguay</i>	University of Maine, Orono, ME, USA
<i>John C. Taylor</i>	Grand Valley State University, Grand Rapids, MI, USA
<i>Marie-Christine Therrien</i>	University of Maine, Orono, ME, USA
<i>Ilan Vertinsky</i>	University of British Colombia, Vancouver, BC, Canada
<i>Marc von der Ruhr</i>	St. Norbert College, De Pere, WI, USA
<i>Bernard L. Weinstein</i>	University of North Texas, Denton, TX, USA

LIST OF FIGURES

Rugman

Figure 1: Exports in the Broad Triad, 2000 (U.S. \$ Billion)	6
Figure 2: Total Outward FDI in the Broad Triad, 1999 (U.S. \$ Billion)	7
Figure 3: Intra-Regional Trade and FDI in the Triad, 1980-2000	8

Globerman/Storer

Figure 1: Average of Logged Canada-U.S. Deviations from the Law-of-One-Price	28
Figure 2: Variance of Canada-U.S. Deviations from PPP	29
Figure 3: BLS Indexes of Hourly Manufacturing Compensation Costs (U.S. Dollar Basis)	31
Figure 4: Ratio of U.S. to Canadian Average Weekly Earnings, 1991–2001 (in U.S. Dollars)	31
Figure 5: Returns on Equity and Investment	33
Figure 6: Manufacturing Net Profit Rates in Canada and the U.S.	34
Figure 7: Behavior of the Nominal Exchange Rate	38

Daniels/et al.

Figure 1: Distribution of FDI Stock	52
Figure 2: Distribution of FDI Across Industries	53
Figure 3: Total, Regional, and Global Distribution of FDI	57

Anwar

Figure 1: Major Global Retailers: Sales and Net Income (1997–2002)	106
--	-----

Gilmore/McManus

Figure 1: Standardized Stock Price Indexes of United States, Canada, and Mexico	141
---	-----

Crowley

Figure 1: BIC by Numbers of Clusters	164
Figure 2: 4 Cluster Classification from EM Using EEV Model (a) GDP vs. Unemployment (b) GDP vs. Lagged GDP	165

Coiteux

Figure 1: Relative Capital Inflows and the Bilateral Real Exchange Rate	184
Figure 2: Relative Terms of Trade and the Bilateral Real Exchange Rate	184
Figure 3: Relative Productivity and the Bilateral Real Exchange Rate	185
Figure 4: Relative Capital Inflows and the Bank of Canada's Relative Price of Commodities Series	186

Schmitz/Furtan

Figure 1: Canada-U.S. Agricultural Exports, 1989–2001	214
Figure 2: Canada-U.S. Dairy Exports, 1989–2001	215
Figure 3: Canada-U.S. Corn and Wheat Trade, 1990–2002	215
Figure 4: Canada-U.S. Fresh and Frozen Pork Exports, 1989–2001	217
Figure 5: Canada-U.S. Live Pork Exports, 1989–2001	218
Figure 6: Canada-U.S. Fresh and Frozen Beef Exports, 1989–2001	218
Figure 7: Canada-U.S. Live Cattle Exports, 1989–2001	219
Figure 8: Canada-U.S. Aggregate Producer Subsidy Equivalents, 1986–2001	224
Figure 9: (a) U.S. Commodity Payments vs. Direct Support, 1986–2001 (b) Canadian Commodity Payments vs. Direct Support, 1986–2001	225
Figure 10: Canada-U.S. Individual Commodity Producer Subsidy Equivalents, 1986–2001	226
Figure 11: Canada-U.S. Tomato Exports, 1989–2001	231

Nelson/Vertinsky

Figure 1: U.S. Lumber Demand and Domestic Supply, 1984–2001	241
Figure 2: Canadian Share of U.S. Lumber Consumption, 1984–2001	242
Figure 3: Domestic Lumber Supply in the U.S. from Selected Regions, 1978–2001	243

Drennen

Figure 1: Total U.S.-Canada-Mexico Trade by Truck (U.S. \$ Billions)	268
--	-----

Taylor et al.

Figure 1: Total U.S.-Canada-U.S. Economic Activity, Canadian Land Exports to U.S. and Trucks in October 2000 to June 2001 to June 2002 (Percentage Monthly and Cumulative Period Change)	286
--	-----

Doh/Kotschwar

Figure 1: Framework for Understanding NGO Influence in Agreements	327
---	-----

Weinstein

Figure 1: U.S. Exports to Canada and Mexico, 1996–2002 (in Billions of U.S. Dollars)	340
Figure 2: U.S. Imports from Canada and Mexico, 1996–2002 (in Billions of U.S. Dollars)	341
Figure 3: U.S. Trade Balances (in Millions of U.S. Dollars)	341
Figure 4: Foreign Direct Investment in the U.S.: Capital Inflows (in Millions of U.S. Dollars)	342
Figure 5: Foreign Direct Investment in the U.S.: Capital Outflows (in Millions of U.S. Dollars)	342
Figure 6: Agricultural Trade Between Mexico and the U.S.	345
Figure 7: Breakdown of Subsidies to Mexican Farmers	345
Figure 8: Farmers in Mexico are Better Subsidized than in the U.S. (Guaranteed Income in Dollars per Ton)	346

LIST OF TABLES

Rugman

Table 1: Canada Direct Investment Position Abroad, 1986–1999	9
Table 2: Bilateral Stocks of U.S. Foreign FDI: Canada and the United States, 1982–2000 (Millions of U.S. \$)	10
Table 3: United States: The Relative Importance of Trade in Services 1971–2000	12

Globerman/Storer

Table 1: Distribution of U.S. Exports by Country (Percent of Total)	21
Table 2: Distribution of U.S. Imports by Country (Percent of Total)	21
Table 3: Distribution of Canada's Exports by Country (Percent of Total)	22
Table 4: Distribution of Canada's Imports by Country (Percent of Total)	22
Table 5: Geographic Distribution of Inward FDI Stock in Canada (Percent)	24
Table 6: Geographic Distribution of Canadian FDI Stock Abroad (Percent)	24
Table 7: Geographical Distribution of Inward FDI in the U.S. (Percent)	25
Table 8: Geographical Distribution of U.S. Outward FDI (Percent)	25
Table 9: Non-Permanent Immigration from Canada to the U.S.	26
Table 10: Share of Canada's Total Goods Trade (%)	35

Daniels/et al.

Table 1: Pattern of Accumulated FDI	56
Table 2: U.S. Bilateral Tax Agreements	58
Table 3: Estimation Results for FDI Stocks	61
Table 4: Estimation Results for FDI Flows with Tax Variable Intercept Dummy Variables	62
Table 5: Estimation Results for FDI Flows with Vintage Effects	63

Davidson

Table 1: Export Sales of Border States to the World, Canada, and Mexico, 1996 (in Billions of Dollars)	74
--	----

Table 2: Export Sales of Border and Non-Border States to the World, Canada, and Mexico, Percentage Change from 1996 to 2001 (in Percent)	75
Table 3: Export Sales Share of Border and Non-Border State Exports to World Destinations, 1996 and Change from 1996 to 2001	76
Table 4: Similarity Index Values by Export Destination in 1996 and Percentage Change from 1996 to 2001 (Index Values and Percent)	77
<i>Anwar</i>	
Table 1: Profile of Wal-Mart (August 2002)	99
Table 2: Global Retailers Ranked by Sales (2002)	100
Table 3: Global vs. Regional Strategies: Issues and Concepts	103
<i>Ceglowski</i>	
Table 1: Cross-Border Price Differences (%)	121
Table 2: Intranational Price Differences (%)	122
Table 3: Univariate ADF Tests for Cross-Border Prices	124
Table 4: Univariate ADF Tests for Intranational Prices	127
Table 5: National Average Cross-Border Prices (% Change)	130
<i>Gilmore/McManus</i>	
Table 1: Summary Statistics of Weekly Index Returns Series	142
Table 2: Correlation Coefficients of Weekly Stock Return Series	142
Table 3: Unit Root Tests for Weekly Stock Indices	143
Table 4: Bilateral Johansen Cointegration Tests Results	144
Table 5: Multilateral Johansen Cointegration Test Results	144
Table 6: Vector Error-Correction Model Results	145
Table 7: Variance Decomposition of Forecast Errors Results	146
<i>Crowley</i>	
Table 1: Parameterizations of the Covariance Matrix	160
Table 2: BIC Values by Number of Clusters Using the EM Algorithm	163
Table 3: Cluster Membership Using EEV Model and EM Algorithm	164
<i>Coiteux</i>	
Table 1: Dependence on Regional Trade as Measured by the Combined Intensity Index	179
Table 2: Regional Dependence Index	180