

**Western Centre for Economic Research
Faculty of Business**

Annual Report
January 1 – December 31, 2000



University of Alberta

Western Centre for Economic Research

The year 2000 was another busy year for the Western Centre. Several large and complex research projects — such as the study on small business in Western Canada, and studies on Alberta's trade negotiation priorities — demanded considerable attention; there were more students, both graduate and undergraduate, involved in the Centre's activities and requiring guidance and supervision; there were preparations for a major conference on NAFTA in the New Millennium; and numerous presentations at conferences, seminars and other events. Further, the Director of the Centre, Edward J. (Ted) Chambers spent the January to April term as Visiting Professor at Boise State University in Boise, Idaho. While there he took every opportunity to speak to business groups, and to gatherings of faculty, students and interested members of the public, on the extent, significance and potential of closer academic and economic relations between the western provinces and western states. During his absence, the Centre was led by Rolf Mirus, who kindly agreed to assume the role of Acting Director, along with his existing responsibilities as Director of the Centre for International Business Studies.

Background on the Western Centre for Economic Research

The Western Centre for Economic Research (WCER) has as its primary objective the dissemination of research findings relevant to the Western Canadian economy to a wide audience of concerned citizens and, in particular, to decision makers within government and industry throughout Western Canada and beyond.

Sponsored by the School of Business and the Departments of Economics and of Rural Economy, the Western Centre is able to draw on a wide range of expertise and to offer academic research, conferences, workshops and seminars on a diversity of issues pertaining to the performance of

Western Canada's economy. The Centre's activities are often co-sponsored with other University of Alberta institutes, such as the Centre for International Business Studies, also housed in the School of Business, as well as with federal and provincial government departments and research organizations at other universities across the Americas. The results of research findings and conference deliberations are distributed through a series of Information Bulletins and similar monographs, where emphasis is continually placed on ensuring that the information is presented in a non-technical, accessible format.

Funding for the Western Centre is derived from two primary sources: fee-for-service contract work and financial support from the George M. Cormie Endowment. The revenue stream from this endowment permits the Western Centre to consider some independent initiatives, and to involve more academic staff and graduate students in its research activities.

Publications — Information Bulletins

The Information Bulletin series remains the Western Centre's primary vehicle for the dissemination of its research findings. Following are summaries of the Bulletins published in 2000.

No. 56 *Modern Asset Pricing and Project Evaluation in the Energy Industry* by David G. Laughton, Jacob S. Sagi, and Michael R. Samis, September 2000.

This study addresses asset valuation in the energy industry, with particular reference to the upstream petroleum industry. It reviews the shortcomings of the *Discounted Cash-Flow (DCF)* analysis, the method most commonly used in the energy industry to evaluate assets, and examines some of the advantages of an alternative approach, termed *Modern Asset Pricing (MAP)*. Several organizations in the upstream petroleum and

electrical generation industries have been experimenting with this approach — an approach which is also sometimes referred to as *Real Option Valuation (ROV)* — for approximately five years. Hence, a review of what is known about MAP methods is deemed timely, as well as an assessment of what remains to be done in the development of the modeling and computational elements of a MAP analysis which can usefully be applied in the energy industry.

Specifically, this study looks at (a) the ideas behind MAP analysis, how it is done, and how it overcomes some of the deficiencies of DCF, so that the costs and benefits of introducing a new valuation technique can be determined; (b) some distinct modeling and computational issues that arise in MAP analysis of production assets in the upstream petroleum industry¹; and (c) several applications of MAP, as well as two empirical studies. It concludes with the following comments:

“We have come a long way, and have a long way to go, in developing MAP technology for project evaluation in the energy industry. In looking at how much more can and should be done, it should not be forgotten that current gaps in DCF technology are as wide, if not wider, than those in MAP. We should demand more of the new method, to compensate for the costs of introducing it, but not so much more as to abandon a promising new development.”²

¹ Discussion in this paper is restricted to the valuation of production assets in order to keep its length manageable, but similar issues arise in the valuation of other assets. Similarly, the focus is primarily on the upstream petroleum industry, with only few references to the electricity generation industry.

² Laughton, David G., Jacob S. Sagi, and Michael R. Samis, *Modern Asset Pricing and Project Evaluation in the Energy Industry*, #56, September 2000, Western Centre for Economic Research, pp.64-65.

No. 58 *Alberta Non-Tariff Trade Barriers Study, 2000* by S. Stephen Janzen and Jean Frost, Research Associates, Western Centre for Economic Research, November 2000.

Commissioned by Alberta International and Intergovernmental Relations and Alberta Economic Development, this study provides a snapshot of Alberta's exporting manufacturers, and examines how these companies view important non-tariff issues that increase the complexities of the exporting business. Non-tariff barriers are defined in a broad sense, and include traditional non-tariff measures such as standards, as well as the more invisible trade barriers such as procedural delays, excessive documentation requirements, and lack of transparency and predictability in the application of government rules and regulations. Thus the survey deals with technical regulations and standards; customs procedures; import licenses and quotas; discriminatory regulatory practices; restrictions on shipping, marketing, distribution, etc; as well as any other general actions that the respondents see as limiting their ability to export.³

The research involved in-depth, one-on-one telephone interviews with 197 Alberta manufacturing companies selected from across industrial sectors. Over 75% of the companies contacted had been exporting for five or more years; and approximately one third of the 197 companies reported that over 50% of their gross earnings came from exports (more than half the companies reported 25% of gross earnings from exports). The majority of the companies (59%) employed between 6 and 50 people; 22% had more than 50 employees; and 19% had 5 employees or less.

A uniform survey questionnaire was used consistently in all interviews, and a team of students ably assisted staff of the Western Centre for Economic Research with many of the interviews.

The study's findings offer some valuable information. First, with respect to export markets, not surprisingly, 75% of the firms identified the U.S. as

³ Janzen, S. Stephen and Jean Frost, *Alberta Non-Tariff Trade Barriers Study, 2000*, Information Bulletin #58, November 2000, Western Centre for Economic Research, p. 5.

the most important existing export market. Japan followed with 11%, Mexico with 8%, and the U.K. with 6%. The U.S. was also identified as the most attractive potential market for new sales, followed by Japan, Australia, China, and Mexico.

With respect to obstacles to trade, customs procedures and regulations were seen as a major problem by many firms. Concerns ranged from confusing, frequently changing, obscure, and often contradictory rules, to difficulties in classifying a product, to the profusion of seemingly irrelevant paperwork, to bureaucratic ineptitude and to corruption (in some countries). Technical regulations and product standards (size, shape, function, packaging and labeling) were also identified as significant obstacles, with a third of the firms noting that even determining the existence of such regulations and standards was extremely difficult. Further, the process of obtaining the regulations and standards was complex and time-consuming.

Some concluding comments on the study's findings are that "firms are tired of customs-related problems, are overwhelmed by paperwork, and are entangled in a web of trade-related rules, whether shipping within Canada, within NAFTA countries, or elsewhere. Streamlining and modernizing customs procedures would not, by itself, create efficient world-wide trade. There needs to be a concomitant reduction in the use of standards as barriers as even minor differences in the acceptable standards between countries can create extra costs and headaches. When coupled with more traditional and visible barriers — transportation costs, currency exchange matters, taxation issues, local labour laws, and costly tariffs — the fact that Alberta manufacturers have achieved such evident success in export markets is truly impressive."⁴

⁴ *Ibid.*, p. 33.

No. 59 *The Alberta and Western Canada Export Experience under the Free Trade Agreements: 1988 – 1999*, by Edward J. (Ted) Chambers and Nataliya L. Rylska, Western Centre for Economic Research, December 2000.

This study, funded by Alberta International and Intergovernmental Relations, is the most recent of an annual series on Western Canada and the North American free trade agreements. It reviews the merchandise export records (i.e. exports of services are not included) of Alberta and the other western provinces since the first of the free trade agreements came into effect in 1989. Thus, the year 1988 is employed as a benchmark against which to assess not only the growth in aggregate exports, but also the changes in export totals and market shares for 100 categories of product groups shipped from the western provinces to the United States, Mexico and the rest of the world.

The study finds that Alberta merchandise exports to all foreign countries rose by \$21.86 billion, an increase of 168% over the period 1988 to 1999. Alberta's global exports in 1999 accounted for just over 42% of Western Canada's total, with Alberta's export growth remaining, by a substantial margin, the strongest and most sustained of the western provinces. In 1999, Alberta's global exports rose by 11.8% over 1998.

Greater access to the U.S. market has been important for export growth in all western provinces, and U.S. market share has increased for the top twenty exports of each province. More than four-fifths of Alberta's top twenty exports go to the U.S. market, compared with 69.5% in 1988.

The top five export categories in Alberta — energy, electrical equipment, wood and wood articles, meats, and wood pulp — accounted for 72.5% of the value of all exports in 1999. Slightly more than half of the growth in total exports since 1988 can be directly attributed to the energy industry. In 1999, Alberta's crude oil and gas exports totaled \$18.95 billion in export value, and U.S. market share reached 96.9%. Exports of electrical equipment and parts continued on the trend of strong growth evident

since 1995, and became Alberta's second most valuable export category in 1999. U.S. market share for these products was 89%. The value of meat exports also rose significantly (26.8% from 1998 to 1999), attaining fourth place in 1999. Exports of wood, pulp and paper products also grew, while machinery and parts, an important export category in previous years, declined.

Although the value of Alberta's exports to Mexico has tripled since 1988, this remains a small market for Alberta, with 1999 exports totaling \$240 million.

The study concludes that "Alberta's economy continues to benefit from export-led growth and the existing free trade agreements continue to prove that open markets benefit Alberta's sophisticated, competitive economy. Greater access to the American market remains the most important dynamic driving force of Alberta's export performance. In 1999 Alberta exported over \$268 of merchandise for every \$100 shipped in 1988. The FTA and NAFTA have provided a market oriented and competitive atmosphere for Alberta manufacturers and, as a result, the value-added content of provincial exports has risen. The broadening of commercial ties between the province, the region and the globe has helped Albertans better realize their export potential."⁵

No. 60 (**Forthcoming**) *Portraits of Small Business Growth and Change in Western Canada: 1988-1999* by Edward J. Chambers and Nataliya L. Rylska, Western Centre for Economic Research. Please refer to section on "Current and Ongoing Projects" below for further details on this study.

⁵ Chambers, Edward J. (Ted) and Nataliya L. Rylska, *The Alberta and Western Canada Export Experience under the Free Trade Agreements: 1988 – 1999*, Information Bulletin #59, Western Centre for Economic Research, December 1999, p. 28.

No. 61 *Alberta Tariff Reduction and Elimination Priorities — 1999 Supplement* by Xiujuan Hou and Lifeng Geng, Trade Policy Fellows, Western Centre for Economic Research, November 2000.

This study, funded by Alberta International and Intergovernmental Relations, updates earlier, unpublished work on Alberta's tariff and elimination priorities, and addresses trade with those countries with which Canada does *not* have a free trade agreement. The objective of these studies is to assemble information which will (a) serve as a guide to the tariffs that should be priorities for reduction in new multilateral trade negotiations, and (b) assist in identifying current and potential markets for which tariff reduction is a priority.

The study focuses on 1998 Alberta exports valued at a minimum of \$500,000 to any single country, and which therefore already enjoy a degree of success.⁶ Products are classified in accordance with the 6-digit level of the "Harmonized Tariff Coding System" (HS Code), and the study deals primarily with WTO "bound" duty rates. (The "bound rate" represents the maximum tariff that a country can charge following concessions made during the Uruguay Round.) Countries which were not yet WTO members (e.g. China, Saudi Arabia and many others) are also included in the study if 1998 export values totaled more than \$500,000. In these cases, other known maximum tariffs — e.g. Most Favoured Nation (MFN) tariffs — replace the "bound" rate.

The study provides (a) detailed tables showing the bound tariffs that a product faces in each country, as well as the 1998 value of Alberta's exports to that country; and (b) summary tables showing the total annual value of exports of the same product for the years 1994 to 1998.

As the study contains a wealth of detailed information, an adequate summary is not possible. The study provides (a) detailed tables showing the bound tariffs that a product faces in each country, as well as the 1998

⁶ Thus, the study may not have captured all potentially valuable export products.

value of Alberta's exports to that country; and (b) summary tables showing the total annual value of exports of the same product for the years 1994 to 1998. Following are a few broad observations.

First, with respect to agricultural products, these are generally still subject to relatively high bound tariffs and there is room for significant tariff reductions. Products such as bovine cuts — whether fresh or frozen, bone-in or boneless — and swine cuts face tariffs from 25% to 50% in several Asian markets, their primary destination. Horsemeat is Alberta's most valuable export among the "Meat and Edible Meat Offal" products. Destined mainly to Europe, it is also subject to tariffs. And so are products such as honey, exported mainly to the European Union; pulse crops, especially "peas, dried, shelled" which go primarily to various developing countries where tariffs range from 13.5% to 200%; all cereals; and most processed foods, especially in Asia. Rape seed and canola oil are significant export products for Alberta and, in these categories, producers are vulnerable to what is termed "tariff escalation" whereby the unprocessed product is subject to very low or insignificant tariffs, while the processed product faces much higher tariffs. South Korea and Japan are markets for which tariff reductions in the canola oil categories would be highly beneficial.

Among the non-agricultural export products destined to non-FTA countries, bituminous coal holds first place in dollar value terms. Primary markets are Japan (by far), followed by South Korea, the European Union, Brazil and Taiwan. All have insignificant tariffs except for Brazil, where the bound rate is 15%. Wood pulp also ranks among the top non-FTA exports by value, with tariffs in its primary destinations (the European Union and Japan) already set at 0%. However, a reduction in tariffs imposed by other importing countries (e.g. Brazil, Indonesia and China) would benefit Alberta producers. Other important categories include "Machinery and Parts" and "Electrical Machinery and Parts". For a discussion of these product categories, and additional Alberta exports, please refer to the study itself.

2000 Publications — Other

The Trade and Investment Impact of NAFTA on Canada by Rolf Mirus, School of Business, Joint Series on Competitiveness #22, Centre for International Business Studies, October 2000.

This paper summarizes “research that sheds light on the overall adjustment to freer trade in Canada, and introduces empirical findings for Alberta’s exports and foreign direct investment in Canada, to arrive at a more broadly based assessment of NAFTA’s effects on Canada’s and Alberta’s trade.”⁷

Following the signing of the free trade agreements came a surge in exports, with an increasing share destined for the United States (83.6% of Canada’s exports in 1998, as opposed to 73.4% in 1988). The author asks: how much of this growth can be attributed to a depreciating dollar (24.4% lower against the U.S. dollar in 1998 than it was in 1991); how much to the boom in the U.S. economy; and how much to the free trade agreements? He also asks whether, as a result of Canada’s export success, foreign direct investment into Canada has been reduced, possibly hollowing out the country’s industrial structure. Alberta’s export performance is reviewed, as is direct foreign investment into the province.

The author cites recent empirical work which confirms “a statistically significant and major shift in trend export growth, from 6.9% to 9.8%, that is attributable to their FTA/NAFTA – proxy variable.” This work also “confirms a positive but minor role for the exchange rate, as well as a major impact of the booming U.S. economy.”⁸ Nonetheless, the evidence clearly corroborates that Canada’s exports have received an added boost from the FTA/NAFTA. And the same applies to Alberta’s exports.

⁷ Mirus, Rolf, *The Trade and Investment Impact of NAFTA on Canada*, Joint Series on Competitiveness #22, Centre for International Business Studies, October 2000, p.3.

⁸ *Ibid.*, p.4

Evidence is also presented which suggests that increased cross-border trade did not come at the expense of reduced foreign direct investment in Canada. In fact, the evidence reveals that U.S. direct investment in Canada has been of higher than average profitability.”⁹

While the author concludes, “on the basis of the evidence adduced, the impact of the FTA/NAFTA on Canada and Alberta emerges as substantially positive,”¹⁰ he also adds, “little has been said about the further consequences of Canada’s and Alberta’s increased reliance on the U.S. market. The pain may be evident when the next U.S. slowdown arrives. But there is evidence in our data that Alberta has increased its manufacturing exports, hence has diversified its economy away from overly heavy reliance on natural resource exports.”¹¹

The Research Grants Program

This program, now in its third year, is made possible through the revenues available from the George M. Cormie Endowment and the Imperial Oil Endowment. A joint program with the Centre for International Business Studies, its purpose is to encourage academic staff and graduate students in the School of Business, and in the Departments of Economics and of Rural Economy, to investigate topics relating to (a) international trade and foreign direct investment — including such aspects as management issues, regulatory and commercial policies, international standard setting, and other like issues presenting a challenge to Western Canadian firms active in international markets, and (b) general international conditions having an impact on Western Canada.

A maximum of four grants are approved each year, and none may exceed \$5,000 in value. The grant applications are assessed by an *ad hoc* committee of peer reviewers and, following approval, the first half of the

⁹ *Ibid.*, p.15.

¹⁰ *Ibid.*, p.3.

¹¹ *Ibid.*, p.15.

grant monies are disbursed, with the second half provided following submission of a draft of the study. The work is normally expected to be complete within nine months of accepting the first installment. Grant recipients are required to present their findings in a style that is readily accessible to the public and private sector. Normally, publication will be through the Centre for International Business Studies and/or the Western Centre for Economic Research. However, it is also anticipated that the papers will be reviewed through standard academic procedures and, whenever possible, lead to publication in refereed journals.

Following are summaries of the grant applications approved by the review committee in 2000:

1. David L. Ryan, Department of Economics, and André Plourde, School of Business, will examine *Energy Demand Asymmetries and Greenhouse Gas Abatement*.

At Kyoto, industrialized countries made commitments to reducing greenhouse gas (GHG) emissions. Economic instruments, such as taxes and tradable emissions permits, potentially offer an effective way of addressing these issues. In the context of energy markets, the fundamental way in which all such economic instruments operate is by bringing about increases in the prices of energy sources (electricity, natural gas and oil products), which in turn induce changes in consumer behaviour. Knowledge of the price-responsiveness of the demand for various energy sources is thus a crucial element in gauging the effectiveness of economic instruments in limiting GHG emissions.

The object of this research is to provide some evidence on price elasticities of non-transport energy demand for a number of OECD countries (including Canada). Two sets of questions are asked. First, can any evidence of a fall, over time, in the price responsiveness of demand for energy sources be detected? If so, has this fall been more pronounced for more carbon-intensive energy sources (such as oil products)? Second, can any evidence of asymmetric effects in the price responsiveness of demand

for the various energy sources be seen? If so, how important are these asymmetric effects, especially as far as carbon-intensive energy sources are concerned? The authors will then consider the implications for the likely effectiveness of economic instruments in reducing GHG emissions emanating from non-transport energy use.

2. Rajesh Chakrabarti and Barry Scholnick, School of Business, will look at *Home Country Bias, Transactions Costs, and Technological Change*.

This study argues that globalization is not nearly as pervasive as often believed, and that home country bias remains significant in many contexts. Even the extent of the influence played on trade and investment by the Canada-US border has been questioned. In other words, it is assumed that many economic agents still prefer to conduct business with citizens of their own countries even though it may be less costly or more profitable to conduct business with foreigners.

The research will examine two aspects of the "Borders do Matter" proposition. First, it has been assumed that transport costs are a linear function of distance when examining trade between the provinces and states. If data can be provided to show that this assumption is not correct, particularly in relation to pricing of cross border transport, then it may provide some explanation for the "borders do matter" conclusion. Second, the study will examine the common prediction that technological change will reduce home country bias because of the increasing role of electronic commerce. It assumes that the current volume of electronic commerce can provide enough data to test whether home country bias will remain or will dissipate as technological change allows consumers to purchase products as easily from a domestic web site as a foreign one.

Publications Resulting from Earlier Research Grants

Small Firms, Globalization and Canadian Public Policy by Zoltan Acs, Randall K. Morck and Bernard Yeung, Joint Series on Competitiveness #20, Centre for International Business Studies, January 2000.

This study examines the importance of small firms to Canada's standing in the global economy, and addresses the adequacy of current government policies to assist small firms in their exporting efforts.

The authors note that small and medium sized enterprises (SMEs) "are likely to become more important as Canada's economy becomes more integrated into the global economy because globalization is itself a process of entrepreneurial discovery. Firms that succeed in the global market must be innovative and able to hold on to the profit opportunities their innovations open. These are the same attributes a successful SME needs anywhere."¹² And they are attributes that many larger companies — which tend to be hierarchical, bureaucratic and conservative — do not have.

At the same time, "small firms often have difficulty raising capital, handling rapid growth, and accessing world markets. The access issue is especially important because quick access to large markets is often critical to the financial viability of a radically new product."¹³

The authors therefore argue that, rather than attempting to enter a foreign market directly, SMEs should join forces with larger multinational companies which have experience in taking products to the international marketplace. In this manner, "the SME can expand its operations dramatically, producing for the entire global market, without doing any

¹² Acs, Zoltan, Randall K. Morck and Bernard Yeung, *Small Firms, Globalization and Canadian Public Policy*, Joint Series on Competitiveness #20, Centre for International Business Studies, January 2000, p.1.

¹³ *Ibid.*

export business directly and without establishing any subsidiaries of its own in foreign markets.”¹⁴

The authors also note that, as global competition continues to grow, large established firms will increasingly be on the lookout for efficient and innovative partners.

With respect to Canada’s Export Development Corporation, the authors argue that, as its role is primarily to assist firms to enter foreign markets directly, it may actually be keeping Canadian SMEs from looking to multinationals as intermediaries when that might, in fact, be the best way for them to obtain market entry. The authors also question the costs and benefits of EDC’s insurance services, and suggest that a re-examination of the role of the EDC would be timely.

Impact of Asian Flu on Canadian Exports, with Special Reference to Western Canada, by Dick Beason, Joint Series on Competitiveness # 21, Centre for International Business Studies, March 2000.

In this paper, the author looks at the impact of the 1997 financial and economic crisis in Asia on Canada’s export performance. The study is conducted in the context of earlier work on ‘contagion effects’ in financial markets during the Asian crisis. In other words, just as many feared that world financial markets would become de-linked from economic fundamentals and collapse as a result of contagion, so many feared a similar fate would befall world trade.

Earlier work by the author¹⁵ found that “there was never compelling evidence of pure contagion effects [in world financial markets] after the initial Asian collapse. That is, as is well known, all markets tend to be highly correlated with one another in the very short run, and this

¹⁴ *Ibid.*

¹⁵ Beason, D. and Chinwen Hsin, “Contagion Effects and Asian Flu,” *Asia Pacific Journal of Finance.*, Vol.2, pp.21-37, May 1999.

correlation tends to match very strongly the correlation between markets in the rest of the world with respect to the US. Even in this case, however, experience has shown us that the pure contagion element tends to be short lived, with most financial markets quickly returning to being driven by their own fundamentals. The best example of this is Black Monday in 1987, when most world markets were back on track within a few short weeks.”¹⁶

In order to determine whether there were any pure contagion effects of the Asian Flu on Canada’s or Alberta’s export performance, the author measures the extent to which this performance can be explained by fundamental factors such as exchange rates and the economic performance of the trade partner, and finds no evidence of other factors which might be identified as contagion effects. The author concludes that “for Canadian exports as a whole, the Asian crisis did little more than contribute to a slowing of what was otherwise robust growth. No fundamental break was detected. For Western Canada, on the other hand, the decline in Asian exports produced a significant negative impact on overall exports. That this came at a time of weak commodity prices did not help matters. In terms of policy, there has been a significant push for diversification of trade to Asia, and it might be argued that this policy was ill conceived. Indeed, most of the rhetoric surrounding the diversification policies took it for granted that Asia would remain a high growth region. Now that Asia is on the rebound, we may be able to enjoy the benefits of these policies. Still, a clear lesson has emerged: policy formation on the basis of extrapolation of past trends is a dangerous business.”¹⁷

¹⁶ Beason, Dick, *Impact of Asian Flu on Canadian Exports, with Special Reference to Western Canada*, Joint Series on Competitiveness #21, March 2000, p.3.

¹⁷ *Ibid.*, pp.7-8.

International Trade Policy Fellowships

The contract signed with Alberta International and Intergovernmental Relations in 1999 was continued through the year 2000. This contract enabled the Western Centre to award International Trade Policy Fellowships to 2 graduate students who applied to work on various trade policy research projects. The Fellowships have a maximum value of \$12,500, and are open to Ph.D. and Master's candidates in Business, Economics, Rural Economy and Political Science. In 2000, Fellowships were awarded to the following students:

- Alison Jeffrey, who received a half Fellowship for work to be done during the winter term, January 1 to April 30, 2001;
- Ryan Preclaw¹⁸, who received a full Fellowship for work to be done during the months May 1 to August 31, 2001; and
- Xiujuan Hou, who received a half Fellowship for work done during the fall term, September 1 to December 31, 2000.

Visiting Professorship at Boise State University, Boise, Idaho

As mentioned earlier, the Director of the Western Centre spent the January through April term as Visiting Professor at Boise State University. While there he taught a graduate course in International Business. He also spoke to numerous business groups, the public, and gatherings of faculty and students on the relationship between the western provinces and the western states. The magnitude and significance of the Canada-U.S. relationship was emphasized at every opportunity, and the audience cautioned not to lose sight of Canada in its quest for potentially riskier opportunities south of the border and in other markets.

During Dr. Chambers' stay at Boise State University, Rolf Mirus, Director of the Centre for Business Studies, kindly agreed to assume the position of Acting Director of the Western Centre for Economic Research.

¹⁸ Ryan Preclaw did not complete this fellowship.

Current and Ongoing Projects

Several major, comprehensive studies and research projects were in progress during the year 2000, with publication scheduled for 2001.

1. Information Bulletin No. 60, *Portraits of Small Business Growth and Change in Western Canada: 1988-1999* by Edward J. Chambers and Nataliya L. Rylska, Western Centre for Economic Research.

Funded by Western Economic Diversification, this study targets the need to increase understanding of the changing state and role of small business in Western Canada. Data from several databases and currently available surveys are used, and the data are extrapolated to form a single, comprehensive report allowing comparisons across the four western provinces in a methodologically consistent manner. As there is no universally accepted definition of small business, the study conservatively defines a small business as a unit with up to 50 employees. The classes of small businesses considered are the self-employed (those without paid help); those with less than 5 employees (which constitute what is generally referred to as micro-businesses); those with 5 to 19 employees; and those with from 20 to 50 employees.

The research is uncovering important new information about the significant role that small business enterprises play in the Western Canadian economy. It finds that small business in the West accounts for a larger share of job opportunities than in the rest of the country. It also finds that, in per capita terms, small business start-ups are substantially higher in the West as a whole and in each of the four Western provinces separately. Further, the study brings to light much new knowledge, including the location of "high tech" activities, the gender, age, and educational qualifications of small business owners, and the growth rate of small enterprises in 27 sub-provincial regions of the West.

2. *Alberta Tariff and Elimination Priorities*

Various detailed analyses of tariff and non-tariff barriers affecting Alberta exporters, are under way, funded by Alberta International and Intergovernmental Relations. In these studies, tariff schedules of trading partners are being cross-referenced with Alberta's most valuable export products to determine priorities for future trade negotiations, whether multilateral, regional or bilateral. One study, for example, will update Information Bulletin #61, referred to above, with export data for 1999, and address trade with those countries with which Canada does *not* have a free trade agreement. This information will help identify Alberta's tariff reduction or elimination priorities for new multilateral trade negotiations, as well as current and potential markets for which tariff reduction is a priority.

Another study will address Alberta's export relationships with the members of the Organization of American States (OAS) — including Cuba but excluding the members of NAFTA — in preparation for the April 2001 gathering of the OAS in Quebec City (the *Summit of the Americas*) and continuing discussions which will be taking place on Free Trade for the Americas.

3. *The Alberta and Western Canada Export Experience under the Free Trade Agreements: 1998-2000.*

This will be the next issue of the annual review of merchandise exports from Western Canada since first of the free trade agreements came into effect in 1989. As with previous reports, it will cover only merchandise exports — i.e. exports of services are not included. Information on the top 20 exports for each western province and for Western Canada as a whole will be provided, as well as separate presentations on the export relationship with the United States, Mexico, Chile, Costa Rica and Israel. The study will again be funded by Alberta International and Intergovernmental Relations.

4. Natural Gas Across the Andes: A Case Study of an International Business Venture

This case study records events associated with the commercial development and construction of NOVA Gas International's pipeline from Argentina into Chile. While initially intended as a "traditional," shorter, case study for classroom use, the project was deemed of sufficient general interest and historic import to warrant comprehensive treatment and possible publication as a book. Completed this year, the manuscript will be submitted to the University of Alberta Press for their consideration.

Financial support by TransCanada PipeLines aided in the research for this study, which was conducted in cooperation with the School of Economics and Administrative Sciences at the University of Chile.

5. WCER monthly indicators

The monthly indicators of economic activity for Alberta, British Columbia and Canada calculated by the Western Centre for Economic Research continue to be posted regularly on the Western Centre website. Attached, as an Appendix to this Report, are the charts constructed for Alberta. A commentary dated September 2000 reads:

"During the past 12 months the WCER Alberta Business Indicator rose by 3.2%. In the third quarter of 2000 both seasonally adjusted weekly hours and full time employment have increased, while inflation adjusted retail sales remained static in the range of \$2,350 million in \$1992. The increase in full time employment, accompanied by the rise in average weekly hours, reflect labour market tightness.

"Over the past 12 months the WCER British Columbia Business Indicator rose by 2.5%. During recent months of this year seasonally adjusted average weekly hours have been declining, full time employment has

remained relatively stable in the 1,540 to 1,550 thousand range and retail sales have displayed considerable growth since June.”¹⁹

The manner in which the indexes are constructed is outlined in the Western Centre publication, *New Indexes for Tracking the Alberta and British Columbia Economies*, Information Bulletin #52, December 1998.

6. “NAFTA in the New Millennium” Conference

The Western Centre is heavily involved in the organization of this conference — a cooperative venture between the University of Alberta and the University of California at San Diego — which will be held in Edmonton on May 24 to 25, 2001. Scholars from the two institutions will be joined by experts from the Universidad Nacional Autónoma de México, the Instituto Tecnológico Autónomo de México, University of California at Los Angeles, San Diego State University, Queen’s University, the University of Toronto and the University of Manitoba, among others. Topics will include the political economy of integration, subregional economies, public opinion and integration; challenges of labour standards, environment, immigration, agriculture and transportation; and relationship of the NATA to the FTA and the WTO. The conference will be open to interested members of the public and no fees will be charged.

Conference Presentations and Public Relations

The Director of the Western Centre is regularly asked to participate in conferences and seminars focusing on Western Canada’s economy, and to make presentations on the impact of local, national and/or international policies and programs on the region’s economic performance. Every effort is made to respond positively to these requests. Events at which presentations were made during 2000 included:

¹⁹ Western Centre for Economic Research web page — www.bus.ualberta.ca/cibs-wcer

1. Numerous presentations to the business community, to the public sector, and to faculty and students in Boise, Idaho, while spending the January to May term as Visiting Professor at the University of Idaho;
2. A workshop on “NAFTA and the New Millennium”, held in San Diego in September;
3. An Ottawa presentation on “Portraits of Small Business and Growth in Western Canada: 1988-1998” in October; and
4. The Women’s Enterprise Initiative meeting held in Calgary in November, with a presentation on small business growth in Western Canada.

In a similar vein, the Centre is frequently asked by the media and others for assessments of economic conditions in Alberta and other western provinces. Priority is continually placed on the prompt and credible response to these inquiries.

Internal Management

Many thanks are due to Rolf Mirus for taking on the responsibilities of Acting Director, and to Jean Frost and Stephen Janzen for their valued contributions and assistance throughout the year.

Respectfully submitted,

Edward J. (Ted) Chambers
Director

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APPENDIX

WCER Economic Indicators — Alberta

Monthly Commentary

Note: Since March 1999, the weights attached to the three series comprising the respective WCER monthly indicators of business activity for Alberta, British Columbia and Canada have been changed. Since that month the weights have reflected variance in the monthly percentage change in each series for the period from January 1992 through December 1998. Weights attached to each series in constructing the composite index were previously based on the monthly percentage variability of each series over the entire period from January 1976 to June 1998.

Commentary September 2000

During the past 12 months the WCER Alberta Business Indicator rose by 3.2%. In the third quarter of 2000 both seasonally adjusted weekly hours and full time employment have increased, while inflation adjusted retail sales remained static in the range of \$2,350 million in \$1992. The increase in full time employment accompanied by the rise in average weekly hours reflects labour market tightness.

Over the past 12 months the WCER British Columbia Business Indicator rose by 2.5%. During recent months of this year seasonally adjusted average weekly hours have been declining, full time employment has remained relatively stable in the 1,540 to 1,550 thousand range and retail sales have displayed considerable growth since June.

The way in which we construct the WCER monthly indexes is found in Information Bulletin No. 52 *New Indexes for Tracking the Alberta and British Columbia Economies*.

