

# Preview of *The Great Lakes Economy Looking North and South*

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In 1985, the Federal Reserve Bank of Chicago and the Great Lakes Commission conceived and produced a statistical compendium of the

Great Lakes region entitled *The Great Lakes Economy: A Resource and Industry Profile of the Great Lakes States*. Those who produced that volume, and those who used it, felt that decision makers and analysts needed a common set of facts with which to better understand the region's economic position and performance. This common set of facts has been used in developing common regional strategies, enhancing understanding, and focusing attention on the region's common concerns.

*The Great Lakes Economy Looking North and South*, published by the Federal Reserve Bank of Chicago in 1991, represents a culmination of several years' research which updates and eclipses its predecessor in several important ways (see Box for articles and authors). The recently published volume provides analysts of the region the opportunity to interpret the facts surrounding the region's endowments, performance, and changes. In doing so, several authors have chosen to look beyond the states themselves to the closely linked Canadian portion of the Great Lakes region.

With the rise of low cost transportation and communication, the world has shrunk but regions have grown—often spilling over national boundaries. As a result, the scope of topics in the book has been broadened. Resource and industry trends and performance

are still addressed in full but the linkages among the region's resources, people, and industries are also brought to the fore. Further, the region has moved through a series of development strategies so that it is now time to assess the past, to save what is valuable, to discard mistaken avenues, and to plan for the future. This article briefly discusses some of these issues and presents the authors' insights from *The Great Lakes Economy Looking North and South*.

## The historical perspective

Nothing remains the same except that changes are continual. So it is, has been, and will be for the Great Lakes economy. Understanding and observing the ongoing process of change helps us to navigate our course rather than merely react to the forces of change.

Like the continent, the region's initial development was motivated by inexpensive exploitation of its abundant natural resources. Timber was cleared and shipped east to build ships, bridges, and buildings. Agriculture was developed to feed a continent's burgeoning population. Minerals were excavated for use as materials for emerging goods-producing industries both here and abroad.

Following a familiar evolutionary pattern, derivative industries were established coincidentally with natural resource activities. The transporting of these resource goods to market

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led to the building of roads, canals, and railroads. The Great Lakes waterways provided a ready-made transportation system, thereby enhancing the region's profitable exploitation of its natural resources as well as paving the way for the movement of a wider range of commerce.

The need for manufactured goods, especially tools and machines, by natural resource and transportation industries gave rise to manufacturers including makers of farm implements, steel rails, locomotives and ships, and machinery related to lumber, paper, and mining. Later, as the Plains were opened to

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## The Great Lakes Economy Looking North and South

### The Great Lakes Economy

#### Chapter 1

##### **Binational Economic Linkages within the Great Lakes Region**

*David R. Allardice*, Vice President and Assistant Director of Research, Federal Reserve Bank of Chicago  
*William A. Testa*, Research Officer and Senior Regional Economist, Federal Reserve Bank of Chicago

#### Chapter 2

##### **An Overview of the Economy of the Great Lakes States**

*Eleanor H. Erdevig*, Economist, Federal Reserve Bank of Chicago

#### Chapter 3

##### **Population and the Labor Force**

*John Fraser Hart*, Professor of Geography, University of Minnesota

#### Chapter 4

##### **Interregional Competitiveness and Diversification**

*Robert H. Schnorbus*, Senior Business Economist and Research Officer, Federal Reserve Bank of Chicago  
*David D. Weiss*, Associate Economist, Federal Reserve Bank of Chicago

#### Chapter 5

##### **The Free Trade Agreement with Canada and the Great Lakes Economy**

*Eric B. Hartman*, Senior Policy Analyst, Northeast-Midwest Institute

### Resources and Industry

#### Chapter 6

##### **Water Resources and Policy**

*Michael J. Donahue*, Executive Director, Great Lakes Commission

#### Chapter 7

##### **Energy Issues for the Great Lakes Economy**

*Athanasios D. Bournakis*, Research Economist, Energy Resources Center, University of Illinois at Chicago  
*James P. Hartnett*, Professor of Mechanical Engineering, Director of Energy Resources Center, University of Illinois at Chicago

#### Chapter 8

##### **The Great Lakes Region Transportation System**

*Stephen J. Thorp*, Program Manager, Transportation and Economic Development, Great Lakes Commission  
*Albert G. Ballert*, Director of Research Emeritus, Great Lakes Commission

#### Chapter 9

##### **Agriculture and the Great Lakes Region**

*Gary L. Benjamin*, Economic Adviser and Vice President, Federal Reserve Bank of Chicago

#### Chapter 10

##### **Forest Resource Trends and Issues**

*Larry Leejers*, Associate Professor, Department of Forestry, Michigan State University

##### **Non-Fuel Mineral Resources**

*Henry P. Whaley*, Former Senior Vice President, Cleveland-Cliffs Inc.

#### Chapter 11

##### **An Analysis of Midwestern Research and Development Spending**

*Randel A. Pilo*, Lead Economist, Wisconsin Department of Development  
*David D. Weiss*, Associate Economist, Federal Reserve Bank of Chicago

#### Chapter 12

##### **Travel, Tourism and Outdoor Recreation in the Great Lakes Region**

*Stephen J. Thorp*, Program Manager, Transportation and Economic Development, Great Lakes Commission  
*Stephen L. J. Smith*, Professor of Recreation and Leisure Studies, University of Waterloo, Ontario

### Development Policy and Outlook

#### Chapter 13

##### **Joint Initiatives in the States and Provinces**

*Timothy McNulty*, Executive Director, Council of Great Lakes Governors

#### Chapter 14

##### **Toward Sustainable Development in the Great Lakes and the St. Lawrence River Basin**

*Daniel K. Ray*, Head of Research, The Center for the Great Lakes  
*Madhu Kapur Malhotra*, Partner, Kapur and Martin Associates  
*Christopher A. Baines*, Director (Toronto Office), The Centre for the Great Lakes

#### Chapter 15

##### **The Great Lakes Economy: A Regional Winner in the 1990s**

*Diane C. Swonk*, Regional Economist, First National Bank of Chicago

farming and livestock, the Great Lakes region's economy evolved further. Demands for the region's manufacturing products were boosted by settlers who needed both household goods and farm equipment. With regard to consumer goods, the region's fledgling retail businesses became pioneer "export sectors" by shipping specialized home goods overland to frontier households. Moreover, the region's transportation sector filled a vital need in shipping agricultural products to eastern markets. Emerging metropolises such as Chicago took on enhanced roles as wholesaler and financier to the developing Plains frontier.

These developments molded the region into a manufacturing center. In doing so, a critical mass of skilled workers, industries, raw materials, and transportation was assembled which amounted to an industrial complex that was much greater than the sum of its parts. As both luck and underlying conditions would have it, a second generation of manufacturing industries emerged which were a natural outcropping of the region's original development. As John Fraser Hart notes in Chapter 3, the manufacture of automobiles began "after local tinkerers got the idea of hitching marine engines to farm wagons". Other industries such as machine tools, consumer appliances, and construction equipment were similarly forged as inventors were able to bring their ideas to profitable fruition within the rich Great Lakes environment.

As evidenced by the region's above-average per capita income, which persisted through the 1970s, the region's intensive development provided a standard of living that had not been previously witnessed on so massive a scale. In hindsight, the erosion of the region's industrial preeminence in the 1970s and early 1980s stands as a mystery—not in why an erosion occurred but in how this preeminence was sustained throughout the century despite the rapid opening of the remainder of the continent.

### **The development legacy**

The Great Lakes economy of today is the legacy of this past development. Much remains and much has been squandered. According to Hart (Chapter 3), the population of the region apparently peaked around 1990 and is starting to decline. Also, members of the baby boom and baby bubble have not migrated

into the region. Members of older age groups have continued to migrate toward warmer climates, although many continue to reside in the region for part of the year.

Several forces make these moves compelling. Cold weather is not a natural draw for populations. And some of the same industries that have been responsible for the region's development, namely manufacturing and agriculture, have tended to shed workers as their productivity increased. Manufacturing decline has been abetted, no doubt, as world competitors have emerged. So too, many developing industries have largely bypassed the region because their production process requires neither bulky natural resources nor a large scale surface transportation system.

A labor shortage rather than a labor glut will be the driving force behind the region's future economic welfare. Increased labor force participation has postponed the day of reckoning both in the Great Lakes and in some other regions. But as the birth rate falls below the population replacement level, labor force growth will depend on the region's willingness and ability to attract immigrants from abroad. Lamentably, many parts of the region have not, so far, met this challenge and, perhaps, this too is a legacy of its past wealth when the region could afford an attitude and policy of cultural isolationism. As one counter-example, Ontario has prospered in part because Canada has had an open door to immigrants.

The natural resources legacy also presents a wide range of challenges to the region. Many resources have been depleted by overuse or abuse. For example, the region's most economical iron ore deposits have been exhausted, leaving more expensive deposits which need intensive processing (Henry P. Whaley, Chapter 10). In addition, water quality degradation from industrial and residential pollution has only begun to be rectified. Michael J. Donahue (Chapter 6) lays out a framework for understanding the importance of the region's fresh water resources to the region's economy: 1) as a mode of transport, 2) as a factor of production, 3) as a supporting resource (that is, one whose existence is essential to other natural resources), and 4) as a marketable amenity. Efforts to understand the complex institutional environment in managing the region's water resources are difficult

but rewarding. Lessons drawn from the governments and institutions involved in managing the region's water resources extend well beyond the scope of the resource itself. Binational and federal-state relations in the management of water resources have often been jumping off points for broad initiatives in regional planning and cooperation. For example, the region's plentiful lakes and rivers have stimulated a resurgence in outdoor recreation and tourism (Stephen J. Thorp and Stephen L. J. Smith, Chapter 12). Several binational and interstate cooperative ventures have been launched to build and promote this industry including a region-wide system of scenic routes—the Great Lakes Circle Tour—and an overseas tourism promotion initiative for the region.

Other natural resources are no longer as economically viable because their use instigates problems rather than solves them. As Athanasios D. Bournakis and James P. Hartnett point out in Chapter 7, the region's historical abundance of coal remains intact—today the region holds 29 percent of the nation's reserves. But while the region's industrial wealth was built from these plentiful supplies, the age of coal has given way to the age of petroleum and natural gas of which the region has few reserves. Environmental concerns have further shifted national coal production from the high sulfur Great Lakes variety toward the lower sulfur Western and Appalachian fields. But the region's energy consumption remains more dependent than the nation on coal, largely for electric power generation. This consumption will be further tested by the recently amended Clean Air Act which, among other things, promises to significantly cut sulfur dioxide emissions. Provisions of the act will please parts of Canada. Demands for curbing acid rain have been vociferous from the northern side of the Great Lakes. As Larry Leefers notes, some Canadian forests have allegedly been degraded by acid rain, although the process is still not well understood (Chapter 10).

With the continued pressure away from coal usage, the net energy-importing status of the region will continue to grow. The region has made considerable strides in energy efficiency but the threats of the energy trade imbalance to the region's wealth will occupy future policy debate.

### **The challenges to the region today**

Much of the enduring resource base of the region is a man-made legacy. Stephen J. Thorp and Albert G. Ballert recall that the combination of an in-place transportation system, the Great Lakes, and an extensive inland river system promoted rapid development which, in turn, gave rise to a strong multi-modal transportation system (Chapter 8). Key regional issues for the 1990s include: maintenance of competitive balance among the modes; adequate infrastructure investment at all government levels; review of deregulation effects, particularly for passenger transportation; and the introduction of new technology and related energy conservation and land use planning.

Research and development (R&D) taking place in the region are another part of the industrial legacy (Randel A. Pilo and David D. Weiss, Chapter 11). The Great Lakes region has not received as much federal support for R&D as other U.S. regions across all broad sectors including the largest, the industrial sector, where some emerging defense and high tech industries have favored sites outside the region. Despite this handicap, the region's greater concentration of manufacturing and its attendant R&D compensates to such a degree that the region holds an overall R&D share that is as large as the region's share of the national economy. And as other analysts have shown, neither is the region devoid of high tech industries. Rather, after years of economic travails, the region has begun to recognize and act on a broad array of industrial opportunities; it has diversified. The region's informal development motto has become "high tech, low tech, any tech".

In constructing more formal measures of diversification, Robert H. Schnorbus and David D. Weiss (Chapter 4) find that, although the Great Lakes economy diversified to a greater extent than other regions from 1970 to 1988, its economy remains the least diversified of all. Rather, specialization continues to be the trend, particularly in the durable goods manufacturing industries which will have a great impact on the region's future. Despite declining shares of the region's labor force in manufacturing, Eleanor H. Erdevig (Chapter 2) reports that specialization is especially strong in primary and fabricated metals, ma-

chinery, paper and printing, and transportation equipment. Furthermore, much has been written about the closure and startup of motor vehicle assembly plants during the 1980s, but the overall effect on the Great Lakes area has been to rearrange auto production facilities rather than to lose facilities (on net) to other regions.

The dominant manufacturing sectors should not belie the vibrant service sectors which are partly a legacy of the region's natural resource and manufacturing industries. As Erdevig illustrates, 47 percent of industrial corporate headquarters can be found in the eight states stretching from New York to Minnesota. On the Canadian side, Ontario's primary urban area of Toronto has long held the top spot as administrative center for outlying goods-producing industries and, in recent years, its role as a world financial center has also been on the rise. Even as the region's large urban areas diversify into services, linkages to the region's goods-producing industries are deeply imbedded.

A documentation of the linkages between Ontario and the Great Lakes states is important in its own right and also suggests the close economic linkages among the states themselves (David R. Allardice and William A. Testa, Chapter 1). Both Ontario and the U.S. Great Lakes regions are the manufacturing centers of their respective nations so that together they form the manufacturing nucleus of the continent. Moreover, there are heavy trade and investment flows between the Great Lakes states and Ontario. Several industries are shared—especially the auto industries—while others are complementary. For example, Ontario concentrates more heavily in resource industries in exchange for machinery from the Great Lakes states. Canada and the U.S. are each other's largest trading partners. Trade between the six states ranging from Ohio to Minnesota accounts for one-third of total U.S.-Canada trade. And while the focus of foreign direct investment has shifted somewhat from the binational corridor in recent years, the existing stock remains paramount.

The close existing integration of the binational region has obscured the impact of the recent Free Trade Agreement (Eric B. Hartman, Chapter 5). Moreover, recessionary pressures have dominated the economies of

both countries in 1990—Canada more so than the U.S. It is perhaps no surprise then that many Canadians perceive the agreement as something less than a success. In coming years, the agreement will deepen bilateral integration. But as of this date, it is difficult to make a definitive assessment of the beneficial or negative impacts.

### **Development policy**

The events of the past and the realities of today's economy have also left their mark on economic development policy. The great wealth of the past, achieved partly through the spoilage of natural resources, gave rise to several practices and attitudes that hindered the region in realizing its full potential. These practices are now being rectified to various degrees.

First, the region's meteoric rise in standards of living instilled a complacency among the residents of the Great Lakes and, at least on the U.S. side, a degree of cultural and economic isolationism from the rest of the world. To be sure, there have been some countervailing pressures on the region's residents to look beyond their borders, such as the close proximity and more cosmopolitan outlook of Ontario to the north. More recently, the emergence of the global economy and competitive pressures have awakened the region to global realities (Timothy McNulty, Chapter 13). To regain competitiveness, the Great Lakes is now beginning to look in earnest toward world markets and the attraction of foreign skilled workers. In addition to export promotion efforts by individual states and provinces, interstate and state-province cooperative efforts have been initiated such as joint foreign trade offices and region-wide tourism promotion programs.

The legacy of abundant natural resources, and the open exploitation of their bounty, had also imbued a careless mentality in the region's economic development thinking about conservation. For these reasons, Daniel K. Ray, Madhu Kapur Malhotra, and Christopher A. Baines (Chapter 14) encourage regional policy makers to incorporate the concept of "sustainable development" into their development strategies. (Some are just beginning to do so.) Sustainable development "meets the needs of the present without compromising the ability of future generations to meet their own

needs, and that respects the limits imposed by the ability of the Great Lakes-St. Lawrence River ecosystem to absorb the effects of human activities.”

A final legacy from the region’s bountiful past resulted in the noncooperative and hostile business development strategies adopted by states during the 1960s and 1970s (Timothy McNulty, Chapter 13). The policy of “smoke-stack chasing” whereby states aggressively competed for new factories by offering tax and public facility subsidies ran rampant during this era and it is not fully erased today. Perhaps the closing of the Pennsylvania VW plant, which followed the aggressive bidding war in its site selection, galvanized policy action and re-directed it toward interstate cooperative efforts. Regardless, it seems that the states have learned from the errors of the past and are now embarking on a host of cooperative ventures ranging from regional industry promotion to resource conservation and management. If so, residents of the Great Lakes states can look forward to making the claim that the “level of cooperation within the Great Lakes states exceeds that of any other region in the United States”.

### **Growth in the 1990s**

While the future is always murky, it appears that future conditions favor the Great Lakes economy in the 1990s (Diane C. Swonk, Chapter 15). The exchange value of the U.S. dollar has now returned to levels that will keep many of the region’s products competitive in

world markets. The export boom experienced in the late 1980s may continue to buoy manufacturing and agriculture. However, as Gary L. Benjamin concludes in Chapter 9, Great Lakes farmers must also contend with stagnant growth in domestic consumption of red meats and dairy products. So too, the outcome of negotiations over agricultural subsidies in the Uruguay round of the General Agreement on Tariffs and Trade may also play an important role along with any future changes in trade-distorting policies.

Aside from world terms of trade, U.S. domestic spending on defense systems will also be likely to decrease in the 1990s which will tilt the distribution of domestic demand toward Great Lakes products (Diane Swonk). At the same time, cost pressures in the high growth regions of the U.S. during the 1980s have made Great Lakes locales increasingly attractive to business investment.

Even if these favorable factors do not materialize, the region’s course lies in a more favorable direction in comparison to yesterday. As the authors reveal in their discussions, the region’s development policies and public discussion have changed from being reactive to being pro-active, from adversarial to cooperative, and from inward-looking to global. This turnabout, in addition to the region’s economic resurgence in the 1980s, have allowed the region’s decision makers to make changes work for them rather than against them.