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Evert Van der Sluis

South Dakota State University, evert.vandersluis@sdstate.edu

Benno Wymar

South Dakota State University

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South Dakota's International Trade

by

Evert Van der Sluis,

Associate Professor, and

Benno Wymar,

Professor Emeritus of Economics,
University of South Dakota

South Dakota's economy is closely linked to the rest of the world. The state's international connections not only consist of trade in goods and services, but also include investments of funds controlled by South Dakota-based companies and individuals abroad, and vice versa, foreign investment here. The state's economy is further linked to foreign nations by international tourism, overseas family ties, and other contacts between South Dakota residents and individuals living abroad. In this *Commentator* we provide a brief overview of the importance of one of the state's international linkages, its merchandise exports and imports. We also describe the types of products traded, and consider the impacts of international trade on the state's economy.

A Note on State Export Data

No U.S. organization – governmental or otherwise – maintains statistics on international exports by U.S. state. Nevertheless, the U.S. Department of Commerce provides estimates of state-level international exports by way of the Origin of Movement (OM) series. The series is compiled from transactions reported on the Shipper's Export Declaration or similar forms filed by exporters, forwarders, or carriers. The OM series reveals the transportation origin of exports, but does not reflect a product's production origin. For products consolidated into large shipments such as agricultural commodities, the OM series often reflect the consolidation point or port of exit.

A refined version of the state-level export data is provided by the World Institute for Strategic Economic Research (WISER). Under an agreement with the U.S. Department of Commerce, WISER seeks to improve unadjusted Census Bureau trade data by filling in missing industry and state information using an imputation algorithm.

The Economic Research Service of the U.S. Department of Agriculture (ERS) provides estimates of agricultural exports by state, calculated as the value of total U.S. exports of agricultural products multiplied by each state's share of the total value of the national production of such products. This method of tracing international exports to their state of origin is suitable for commingled agricultural commodities, but would not be appropriate for representing production origins of processed agricultural products. None of the data series above accurately represent actual exports by U.S. state, but we utilize them to represent South Dakota's exports for lack of accurate alternatives.

Economic Contribution of Exports

Partly because of the relatively small size of the state's economy, South Dakota generally ranks low in comparison to other states in terms of its total merchandise exports. Between 2002 and 2004, the state ranked 47th among the 50 states in terms of its annual state merchandise exports.

South Dakota's exports are also relatively small in comparison to its overall economic activity. The state's exports amounted to 2.7 percent of its average annual gross state product (GSP) of \$25.7 billion between 2002 and 2004, corresponding with a ranking of 46 among the 50 states in terms of their export share of GSP.¹ In comparison, the same three-year average annual export values of South Dakota's neighboring states of Minnesota,

¹ GSP measures a state's total economic activity, and is synonymous with a nation's gross domestic product or GDP.

Montana, Nebraska, North Dakota, and Wyoming were 5.7, 1.9, 4.2, 4.5, and 3.0 percent of their GSPs, respectively.

Export-related activities provide employment to a relatively large number of people in the state. In 2001, activities associated with exporting manufacturing products provided employment to 6.9 percent of the total civilian labor force, and 8.4 percent of all individuals working in the private sector in South Dakota. Further, export-oriented firms tend to be relatively specialized, and often produce complex products emphasizing value-added activities. Hence, job earnings in export-oriented firms generally exceed those in similar firms without a major export focus.

For a landlocked state such as South Dakota, actual exports may exceed the levels reported earlier, mainly because many products destined for export leave the United States from a major international port such as New Orleans, New York or Seattle. A further indication that exports may provide a greater contribution to South Dakota's economy than is evident from the earlier discussion, is that the state ranked 18th among the 50 states in terms of its agricultural exports in 2004. In particular, South Dakota ranked eighth among the 50 states in the nation in terms of its soybean exports, which totaled \$425.3 million in 2004. In the same year, South Dakota was the nation's ninth most important exporter of feed grains and feed grain products and the eighth most important exporter of wheat and wheat products, valued at \$329.0 million and \$264.7 million, respectively. South Dakota is also an important exporter of live animals and meat. In 2004, the state's exports of live animals and meat were valued at \$106.6 million. Further, South Dakota is the second most important exporting state of sunflower seed and oil, after North Dakota.

Export Destinations

Canada remains by far the most important export destination for products originating in South Dakota, absorbing 41.3 percent of the state's merchandise exports, and 38.2 percent of its manufactured exports between 2002 and 2004. South Dakota exported an annual average of \$302 million worth of merchandise to Canada between 2002 and 2004. Agricultural products made up \$107 million per year, more than one-third of all South Dakota exports to Canada. Nearly one-half of the agricultural exports to Canada

(16.9 percent of the total export value from South Dakota to Canada) consisted of meats. Other key South Dakota exports to Canada included oil seed cake and meal; computers; motor vehicle parts; and shelled corn.

The second most important export destination for South Dakota products is Mexico, which on average absorbed 17.1 percent of the value of merchandise, and 17.8 percent of the value of manufactured products shipped abroad from South Dakota between 2002 and 2004. Food and kindred products comprised by far the most important export category to Mexico, constituting 70 percent of the value of all South Dakota exports to that nation. The second most important exports from South Dakota to Mexico consisted of computers and electronic products, making up 17 percent of Mexico's imports from the state.

Among the remaining export destinations, Hong Kong absorbed 8.0 percent of all merchandise and 8.7 percent of manufactured exports from South Dakota between 2002 and 2004. The fourth most important importer of South Dakota goods was Japan, which received 6.2 percent of the state's merchandise shipments and 6.5 percent of its manufactured shipments exports. Among the remaining key importers of South Dakota products were the United Kingdom, Germany, China, Thailand, and Singapore, each of which absorbed less than five percent of merchandise and manufactured exports from South Dakota over the three year period. Jointly, the five most important importers of South Dakota products – Canada, Mexico, Hong Kong, Japan, and the United Kingdom – were responsible for absorbing over three-fourths of the state's total value of both total merchandise and manufactured products between 2002 and 2004.

The average annual exports described above mask important recent changes. For example, between 2001 and 2004, the value of total merchandise shipments from South Dakota to Mexico nearly tripled from \$58.0 million to \$158.8 million per year. Over the same four-year time span, the state's merchandise exports to both Hong Kong and China increased almost five-fold from \$16.1 million to \$90.0 for the former, and from \$5.9 million to \$29.7 million for the latter nation per year. In contrast,

merchandise exports the United Kingdom were reduced by one-half, and those to Japan and Germany remained fairly stable between 2001 and 2004.

Export Industries

The U.S. Department of Commerce provides information on exports by state for their 25 most important industries, classified on the basis of the U.S. Harmonized Tariff Schedule (Table 1). South Dakota's 25 most important export commodities make up an estimated 59.3 percent of the state's total export. The state's most important export products are machinery and electrical equipment, constituting 27.4 percent of the total value of the state's exports. A key example of a company producing electronic products is Daktronics, based in Brookings and employing around 1,900 individuals. While many of the Daktronics products are distributed domestically, the company is also a major exporter.

Animals and animal products comprise the second most important export industry, making up 16.5 percent of the state's total exports. Further, foodstuffs; stone and glassware; vegetable products; plastics and rubbers; miscellaneous products; transportation; and mineral products, each makes up less than four percent of South Dakota's exports. Examples of companies in the latter categories include 3M with plants in Aberdeen and Brookings, Adee Honey Farms of Bruce, Broin and Associates of Sioux Falls, Central States Fire Apparatus of Lyons, Larson Manufacturing of Brookings, Mustang Seeds of Madison, and Polaris Industries in Vermillion.

Imports

The U.S. Department of Commerce collects information on national U.S. imports of goods and services, but it does not track imports by individual state, nor do states themselves have the ability to keep records of their own imports. Much of the merchandise imported into South Dakota consists of consumer items entering the state through domestic distribution channels and domestic supply wholesaler and retailer networks, before reaching consumers. However, no state-level data are available on this mode of importing.

A second, more direct, method of importing is by way of the Sioux Falls Trade Port. Approximately one-half of the 500 importing companies making use of the Port are located in South Dakota, and the remaining

organizations are located in the neighboring states of Iowa, Minnesota, and Nebraska. Between 2002 and 2003, nearly 10,000 containers were imported through the Sioux Falls Foreign Trade Zone and distributed throughout the region spanning areas of Iowa, Minnesota, Nebraska and South Dakota. However, the Port does not collect or maintain data on the contents or the value of the containers.

Many of the state's most important exporters are also key importers. For example, Daktronics is a major importer of materials used to manufacture the company's scoreboards, and Polaris purchases many of its inputs from other nations. Hence, the success of the state's most important exporting companies depends in part on their ability to import their inputs and services needed in the manufacturing process. Like exports, import activities provide essential employment opportunities for South Dakota's residents.

Canada and Mexico – the two U.S. partners of the North American Free Trade Agreement (NAFTA) – both provide estimates of imports by U.S. state for products and services originating in their respective nations. Based on these data, South Dakota imported \$312 million worth of good and services per year from Canada between 2002 and 2004. The single most important category of imports from Canada to the state consisted of agricultural products – just over one-fourth of all South Dakota imports from Canada consisted of agricultural products between 2002 and 2004. The vast majority of the state's agricultural (21.9 percent of its total) imports from Canada consisted of live animals.

Other key imports from Canada consisted of fertilizers, softwood lumber, and aluminum, including alloys, respectively comprising 11.0, 9.8, and 4.4 percent of the value of all South Dakota imports from Canada between 2002 and 2004. Additional imports from Canada included newsprint; motor vehicle parts; trucks; meats; and synthetic rubber and plastics. Thus, by comparing trade flows, it may be argued that Canada remains an important source of raw materials – including live animals – processed in South Dakota and whose products are in part exported north.

South Dakota imports from Mexico amounted to an annual average of \$94.1 million between 2002 and

2004. Because Canada and Mexico are the two most important U.S. trading partners, their combined exports to individual states provide a lower-bound indication of state-level imports. Based on the estimates by the two NAFTA partners, South Dakota imports from Canada and Mexico amounted to \$406 million per year between 2002 and 2004. Thus, over the same four-year period, South Dakota's combined trade deficit with Canada and Mexico was \$50 million per year.

Further Thoughts

International trade is an important contributing factor to South Dakota's economy, but it is not the only connection to the global economy. Foreign direct investment, international tourism and migration, and linkages between South Dakota people and organizations and their foreign counterparts each contribute to economic growth as well, but their role will be left for another discussion. Finally, negative aspects associated with increased internationalization – such as the occurrence of invasive species, international trade in less-desirable goods and services, the ability of criminals to take advantage of relatively open borders – are also left for another paper topic.

Table 1. Total U.S. Exports via South Dakota, Based on Origin of Movement Series, in 2004 Dollar Values and Percent of Total South Dakota Exports

Industry	Value (\$mln)	Share (%)
All Commodities Exported via SD	698.2	100.0
Top 25 Commodities Exported	413.8	59.3
Machinery / Electrical	191.4	27.4
Animal & Animal Products	114.9	16.5
Foodstuffs	25.5	3.6
Stone / Glass	19.5	2.8
Vegetable Products	17.0	2.4
Plastics / Rubbers	15.9	2.3
Miscellaneous	14.4	2.1
Transportation	10.6	1.5
Mineral Products	4.8	0.7

For Further Reading

Van der Sluis, Evert, and Benno Wymar. "An Economic Assessment of South Dakota's International Linkages." *South Dakota Business Review* Vol. LXIV, No. I, September 2005. Business Research Bureau, School of Business, University of South Dakota.

<http://www.usd.edu/brbinfo/BusinessReviews/2005/sep05rev.pdf>

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Economics Department
 South Dakota State University Phone: 605-688-4141
 Box 504 Scobey Hall Fax: 605-688-6386
 Brookings, SD 57007-0895 E-Mail: Penny.Stover@sdstate.edu
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Brookings, SD 57007-0895

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