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On Trade and Investment from the Colorado Office of Economic Development and International Trade

Laura Brindle and Katherine Wang

International Trade and Foreign Direct Investment - A Quick Overview

In 2016, Colorado exported a total of \$7.6 billion goods to the world. This reflects a \$370.1 million decrease from the previous year's total, which is in line with the national trend, when U.S. exports during this period also decreased. More recent year-to-date data through July 2017, however, show an increase of 5.6% compared to the same period the prior year (WISERTrade, State Harmonized System Database). Colorado's top export partners are Canada, Mexico, and China. The state's

top commodities traded, representing 45% of the total amount of exports, are optic, photo, medical, and surgical instruments; electric machinery; and meat and edible meat offal. In terms of imports, the state purchased a total of \$12.2 billion goods from the rest of the world. Top import partners, similar to exports, are Canada, China, and Mexico and top imported commodities include electric machinery, industrial machinery, and mineral fuel.

One only has to take a brief glance at any trade report published in the past few months to see that the strength of

the dollar has served as a constraint on exports for the United States and Colorado in 2016. Moreover, according to the World Trade Organization (WTO), world growth in GDP dropped during this period, while the weakening in investment spending also served to influence the slowdown in world trade. Nonetheless, there is reason to remain optimistic: as reported by the WTO, export orders and container throughput in major ports increased in the first quarter of 2017, thus indicating stronger trade growth for the year (World Trade Organization, World Trade Statistical Review 2017).

In terms of foreign direct investment, including the United Kingdom, Canada, France, Germany, and China, ultimately

2016 was a bright year for Colorado. A total of 23 projects were initiated by companies based out of countries generating a total of \$707 million in capital investment in the state and creating 1,500 jobs (fDiMarkets.com). Historically, the companies investing in Colorado are diverse, ranging from

Global Capability Lead, at DXC Technology, 2017 India Trade and Investment Mission, Bangalore Roundtable าen on with Joł Hickenlooper

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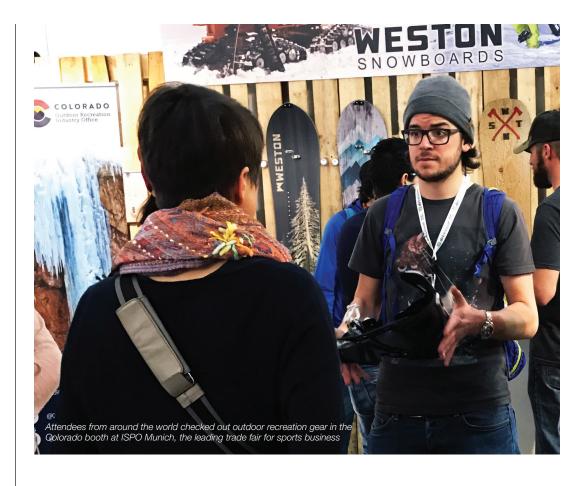
FROM THE **EDITOR**

International trade and trade agreements are important to Colorado and U.S. economic growth, supporting business, job, and wage growth. After three consecutive years of decreases in Colorado imports and exports, both rebounded through the first three quarters of 2017.

The articles in this issue, written by the Office of Economic Development and International Trade and Colorado companies conducting business globally, discuss the challenges and rewards of working in the international market.

> Please contact me at 303-492-1147 with comments or questions.

-Richard Wobbekind



software and information technology (e.g., Propertybase, SAP, Witbe) and energy (e.g., Vestas, Suncor, SMA Solar Technology) to extreme-weather outerwear brands, such as Canada Goose (fDiMarkets.com). Since 2003, 46.8% of companies that chose to engage in foreign direct investment (FDI) in Colorado maintain that the reason they picked this state is due to proximity to markets or customers, and 21.2% of companies cited the availability of a skilled workforce (based on recorded responses from fDiMarkets.com).

The Colorado Office of Economic Development and International Trade - Strategy

Trade and foreign direct investment can play an important role in positively impacting a region's economy. Exporting, for instance, can promote business growth, add jobs, and lead to companies paying higher wages for employees. FDI, as illustrated earlier, creates jobs, and not only results in capital investment in a community, but also leads to investment in innovative research and development. According to the International Trade

Administration, the total value of research and development spending by U.S. affiliates of majority foreign-owned firms (in the United States) amounted to \$57 billion (International Trade Administration, SelectUSA Foreign Direct Investment fact sheet).

The Colorado Office of Economic Development and International Trade (OEDIT) - specifically the Global Business Development (GBD) Division—works to empower Colorado communities to take advantage of these opportunities in trade and investment. Given the amount of data generated in the world today, it's no surprise that OEDIT has taken a data-driven approach when promoting exports and FDI. Data analyzed include both the quantitative and qualitative. The office's strategies, for instance, take into account a host of factors: industry growth, supply chain spending (where industries are spending their money), company investment signals, and historical data on return on investment, to name a few. The idea is that by specifically prioritizing industries and markets, OEDIT can spend energy and

limited resources in a proactive and efficient manner.

Over the past couple of years, this has led the office to various targeted trade and investment missions. In one case, after identifying London as having a robust and innovative information technology cluster with a special focus on cybersecurity, OEDIT worked with consultants and professional networks to connect with Colorado companies with businesses in the United Kingdom and U.K. businesses with Colorado investments. This was also a chance to learn about private-public partnerships and how the private sector is developing skillsets demanded by employers. In another case, OEDIT visited Italian companies looking for expansion companies in the outdoor recreation industry space.

Grant Programs

A specific key area that OEDIT's strategy serves is the Advanced Industries Accelerator (AIA) Program by providing exporting assistance to current and potential exporters in target industries abroad.

For market-entry services, such as market research and identification of potential in-country customers, the division operates a Global Consultant Network. The network is a consortium of consultants in 10 international markets: Germany, France, United Kingdom, Mexico, Brazil, South Korea, Japan, India, China, and Saudi Arabia. Companies that use consultants receive a full market report that includes the market opportunity for a product or service; details on tariffs, duties, and licensing requirements; competition analysis; and potential in-country partners. Consultants can also schedule meetings with potential in-country partners for Colorado companies.

Once companies are ready to travel to an international market to close export sales, OEDIT has two grants, the state-funded Advanced Industry (AI) Export Accelerator and the U.S. Small Business Administration-funded State Trade Expansion Program (STEP), that help offset international business development costs. These grants offer companies up to \$15,000 for international sales trips, attendance at an international trade show, or participation in an OEDIT-led trade mission to a target international market. Shows such as ISPO, for instance, are valuable for Colorado companies wanting to gain international exposure; immediate export sales as a result of ISPO totaled around \$443,500. The AI Export Program also allows companies to use funds for intellectual property protection and legal fees related to a potential contract. These programs have resulted in a strong return on investment for both the state and the federal government. In FY2016-17, Al Export award recipients generated \$24 in export sales for every state dollar put into the grant program, and STEP resulted in \$67 in export sales for every federal dollar awarded through the program.

Colorado Successes

Longmont Company

A technology development and product delivery company operating in the aerospace, defense, and medical industries in Longmont received a total of \$23,000 between STEP (2016 grantee) and the Al Export Acceleration Program (2017 grantee). Currently, the company's biggest sales growth area is in the space industry where it provides deployable mechanical systems and thermal control solutions.

In June 2016, the company secured a large, multimillion dollar contract with a major French aerospace firm. With Al Export funding, the company sought to expand its engagement with the partner and identify new international sales leads. This funding was a key enabler in the company, growing its export sales to nearly \$4.5 million, and it attributes \$608,000 in export sales directly to the Al Export Acceleration Program.

Because of the increased export sales, the company created 15 new jobs in 2017, growing from 25 at the

beginning of 2017 to 40 presently. The types of positions created in association with the Al Export Program include quality engineers, production technicians, lab managers, and project managers. The company expects further growth through 2018 to address the needs of this multiyear contract.

Sterling Company

The Al Export Acceleration Grant Program is a part of the larger Advanced Industry Grant Program. These grants help accelerate commercialization, increase access to early stage capital, and increase exports for Colorado's Al companies. In 2017, a company that manufactures and markets a portfolio of wireless control systems for seed planters was granted an early stage capital and retention grant from the Al Program and then had an opportunity to meet with a potential client in Mexico.

The company traveled with a \$1,200 export grant to a town outside of Guadalajara, Mexico, to conduct product testing with a potential customer. Through this effort, the company identified modifications to make the product better suited to the Mexican market. With these modifications, the company secured the potential customer as its exclusive distributor in Mexico, resulting in \$50,000 in export sales. The company expects export sales to increase to \$450,000 and anticipates adding one new job because of the grant. Additionally, the company has applied for an FY2017-18 AI Export grant for market expansion in Germany.

Laura Brindle, Grant Manager, and Katherine Wang, Economic and Data Analyst, are a part of the Global Business Development Division at the Colorado Office of Economic Development and International Trade. They may be contacted at laura.brindle@state.co.us and katherine.wang@state.co.us.

Colorado Trade Rebounding

Michael Hansen and Joseph Kaplan

Introduction

After three consecutive years of decreases in exports, Colorado exports rebounded through the first three quarters of 2017. September year-to-date, Colorado exports increased 5.3% to nearly \$6 billion according to data from WISERTrade. In terms of the total value of exported goods and services, Colorado ranked 34th among states, with the total value of exports almost \$7.6 billion. In 2016, Colorado had a trade deficit (exports minus imports) on goods as the value of imports exceeded that of exports by an estimated \$4.6 billion.

Exports

Export growth generally moves in the same direction for Colorado and for the United States as a whole. In 2016, Colorado's goods exports shrunk by 4.7%, while the United States experienced a smaller, but similar, decline of 3.4%. Through Q3 2017, the United States outpaced Colorado's year-to-date export growth, increasing by 6.2% compared to Colorado's gain of 5.3%.

Through September 2017, Colorado's top export partners, in order, were Canada, Mexico, China, Japan, and Malaysia. Combined, these leading five export partners made up 53% of the total value of goods exports from Colorado.

Colorado exports peaked in 2013 at more than \$8.5 billion, subsequently declining 11.3% over the next three years to total \$7.6 billion in 2016. The year-to-date increase in 2017 represents growth in four of the state's five largest trading partners. The top five most commonly

exported goods from Colorado represent more than 60% of the state's exports:

- Meat and Edible Meat Offal
- Electric Machinery, Sound Equipment, TV Equipment, Pts
- Optic, Photo etc, Medic or Surgical Instruments Etc
- Industrial Machinery (including Computers)
- Photographic or Cinematographic Goods

Imports

After declining more than 14% from 2014 to 2016, Colorado imports rebounded in 2017. As of September 2017, Colorado imported almost \$9.8 billion of goods and services, representing a 7.7% increase from the same nine-month period in 2016.

Through September 2017, Colorado's top goods import partners, in order, were Canada, China, Mexico, Switzerland, and Germany, which collectively represent 68% of imports. Four of the five major import partners recorded increases year-to-date.

The top five goods imported to Colorado ranked in terms of total value were:

- Mineral Fuel, Oil Etc.; Bitumin Subst; Mineral Wax
- Electric Machinery Etc; Sound Equip;
 Tv Equip; Pts
- Industrial Machinery, Including Computers
- Optic, Photo Etc, Medic Or Surgical Instruments Etc
- Pharmaceutical Products

Trade Agreements

Colorado's international trade benefits from a number of trade agreements between the United States and its foreign trade partners. According to the Office of the United States Trade Representative, the Reciprocal Trade Agreements Act (RTAA) was signed into law by President Franklin D. Roosevelt in 1934, giving the U.S. president the power to negotiate bilateral trade agreements with other countries. Assisting the nation's recovery from the Great Depression, the RTAA created 19 new trade agreements between 1934 and 1939 that cut tariffs on goods and grew the volume of American exports. Since then, the RTAA has evolved into the Trade Promotion Authority (TPA) that enacts legislation that defines the objectives and priorities for negotiating trade agreements.

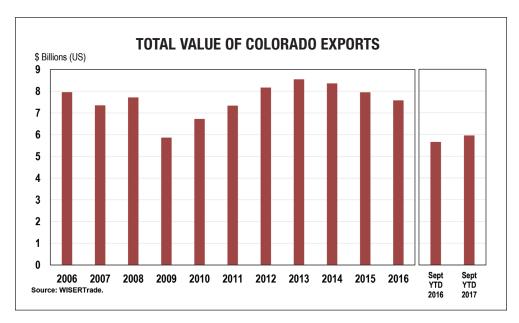
According to the Office of the United States Trade Representative, the United States currently has 14 active free trade agreements with 20 different partner countries. The oldest active agreement, the Israel-United States Free Trade Agreement, became effective in 1985. These agreements foster free trade between the United States and other countries in North America, Central America, South America, the Middle East, North Africa, and the Asia Pacific region. Additionally, the Office of the United States Trade Representative notes that the United States has over 70 Trade and Investment Framework Agreements (TIFAs) that provide frameworks for discussion on trade expansion with

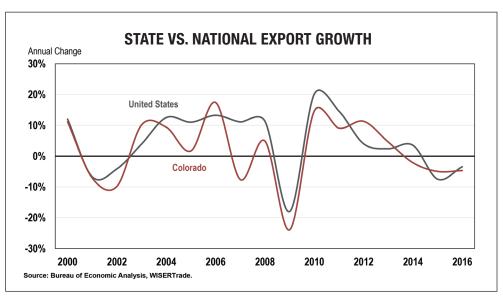
even more nations. TIFAs are seen as important components for developing future free trade agreements.

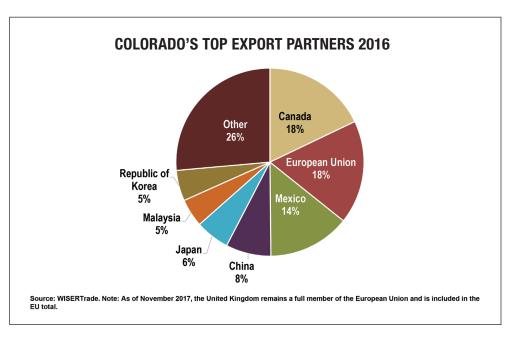
The current U.S. political climate has caused debate about many of the United States' largest existing and proposed free trade agreements. In a January 2017 presidential memorandum, President Trump officially withdrew the United States from the Trans-Pacific Partnership (TPP). While the United States was a major player in early TPP negotiations, the recent change in stance has essentially made ratification by the United States impossible.

The Trump administration has also vowed to renegotiate the North American Free Trade Agreement (NAFTA) between the United States, Mexico, and Canada (Colorado's top two international trade partners). NAFTA came into force in January 1994 and replaced the Canada-United States Free Trade Agreement of 1988. According to the Council on Foreign Relations, most experts estimate that NAFTA has had a positive impact on the U.S. economy, adding over \$80 billion to GDP over the life of the agreement. However, critics argue that NAFTA has made the U.S. manufacturing industry less competitive and has contributed to the loss of over 600,000 jobs and a wider trade deficit. In July 2017, the United States Trade Representative announced objectives for renegotiating NAFTA in order to improve "market access in Canada and Mexico for U.S. manufacturing, agriculture, and services." While it remains to be seen how these negotiations will affect the future of NAFTA, the many agreements adopted by the United States over the past century have been instrumental to international trade growth.

Michael Hansen and Joseph Kaplan are Student Research Assistants with the Business Research Division. They may contacted at Michael. Hansen@colorado.edu and Joseph.H.Kaplan@colorado.edu.









Doing Business Globally... Based in Colorado

Tom Shane

Fifty years ago, I entered the CU School of Business (it wasn't yet named Leeds). Growing up in another (un-named) state, when I got to Boulder, I knew immediately that I had found my new state to live in. I could even still root for the Indians, as Colorado didn't yet have a major league baseball team.

Graduating with a marketing degree, I knew that I wanted to remain in the industry that my grandfather, father, and uncles were in...jewelry. But I wanted to start my own business. I felt Denver would work better than Boulder for that retail location, due to its larger size. And I have never questioned my decision of where I made my home.

We have stores today in numerous states throughout America. But we are very centralized, with our Denver headquarters handling as much as we can, freeing up our stores to focus on

providing our customers with the best experience they can. Today, if customers can't get a great experience, which they can then share with their friends, they would prefer to buy over the internet. So, we compete to provide them with things that the internet never will be able to offer.

The vast majority of our products are imported. We buy stones worldwide... Belgium, Israel, India, Thailand, Sri Lanka, etc. We cut those stones to our own exact specifications to both maximize their beauty and to fit them into our custom designed jewelry. That jewelry is also produced all over the world...China, Hong Kong, Thailand, Italy, and (unfortunately) just a small portion is still made in America. So, effectively we send our stones (once re-cut) to the manufacturers of the jewelry that our designers have created, so these manufacturers can set our stones into the jewelry that they are producing for us.

They then send the finished jewelry to our Denver headquarters, where we quality inspect it and then distribute it to our American stores.

Our industry is, on a worldwide basis, more traditional (old fashioned) than most. With very few exceptions, this is a family run and privately (family) owned industry. Regardless of the country, we deal with the owners and their kids, cousins, etc. In numerous cases, my son is working with the grandchildren of the founders, who used to work with my Dad or Uncle. We go to each other's kids' weddings and family events, wherever in the world they may be. Our word is our bond.

While of course we employ buyers and designers, and of course they employ stone cutters, jewelry CAD operators and sales people...ultimately the relationship remains familial and multigenerational. Thus, the focus is long-term, trying to

understand each other's problems so we can compromise to make it a win/win situation. We don't squeeze our suppliers to death. We need them as much as they need us, going forward. So, this is exactly opposite most department stores' or publicly traded companies' mentalities. Long term, we love this atmosphere...not just for the smiles, but for the belief that it is the best way to conduct business worldwide.

Being based in Colorado has its advantages. Physically, it is in the center of the country (in terms of flying to different American cities to visit our stores). As Denver continues to grow, the number of international flights will continue to increase, facilitating ease to get to our destinations worldwide...to buy what we need at the source.

Unlike manufactured product, our stones come out of the earth. Each one thus differs from the other. Each stone shown to us for possible purchase has to be examined as is, with our expertise focused on determining if the stone can meet our quality standards after benefiting from our re-cutting. If not, we don't buy it. If it can, then it has to be negotiated individually as to price. Of course, our valuation, which the seller doesn't have

any way of knowing, is not what the stone is now, but what it will be turned into by our planned re-cutting. This is time consuming, as one can imagine. Hardly subject to automation!

Getting world-class executives to come to Colorado to work for us is easy...there is no state people would rather move to. Conversely, getting our Colorado trained store employees to transfer to stores in many of our other states is more of a challenge!

We have been honored and recognized publicly many times for the way in which we conduct business. Twenty years ago, I was knighted in Belgium for making Americans aware of how Antwerp was the world's diamond capital. We have been recognized in other places as well, including by the Indian Diamond and Colored Stone Producers Association.

We have our own facility in Bangkok, where we re-cut and polish the rubies and sapphires that I buy (one of my few, still hands-on, non-executive activities). I live in Bangkok 40% of my life. While frequently jet-lagged, I love the ability to travel worldwide, and live in a foreign country as if I were a local. Forty years ago I lived in Antwerp in much the same way. Again, living like a local, I learn

so much about people. Languages require translation, but cultures require comprehension of ideologies.

This foreign living experience has been the greatest benefit to my life. Sometimes, when I am with Americans who have only traveled internationally for vacations, I realize how one-sided people can be. Of course, when in Europe or Asia, if I am with people who also have not traveled internationally, they also think and act the same narrow way about their own country of origin.

As I observe politicians worldwide, I find that their greatest weakness, with very few exceptions, is their lack of sensitivity to other cultures and other perspectives. The world would likely be more peaceful if all politicians were more worldly.

If there is a lesson in life to pass on to graduating college students, it would be to get familiar with other cultures. No matter how great the United States is, having a worldly perspective will help them throughout their lives, whether in business, in raising their kids, or just in overall being self-fulfilled.

Tom Shane is the Owner of the Shane Co., which has been conducting business in Colorado since 1971.

Going Global from Colorado

Robert Kline



In 2014, the global market for medical devices totaled more than \$340 billion according to Business Monitor International, and U.S. Department of Commerce

data show that U.S. exports of medical equipment totaled \$45 billion (MDDI newsletter, September 2015). Colorado is home to divisions of a few large medical device companies, such as Medtronic, Terumo, and Phillips, but many more

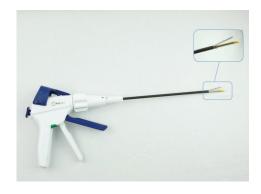
much smaller companies account for the bulk of the local industry. I have been CEO of three such companies, and international trade has been an important component of each company's strategy and ultimate success.

One of the challenges for companies in the medical device field is the requirement for regulatory approval in each new geographic market. Even with harmonization between countries, such as in Europe, this task can be formidable for small companies. Nevertheless, health care is truly a shared need globally, and many of the leading medical centers and physicians are located in foreign

countries. Therefore, most medical device companies need to think beyond the United States if they plan to achieve the full market potential of their products. Fortunately, many experienced regulatory consultants and services in Colorado can aid and support a small organization in creating the required documentation and obtaining the necessary product registrations.

At Medivance, Inc., a company I founded and led, we grew from a single-person start-up to a worldwide organization with commercial

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JustRight Surgical's stapler with tip call out

activities in over 25 countries. Medivance pioneered the use of therapeutic hypothermia treatment for critically ill patients and has been credited with saving tens of thousands of lives. A significant amount of the clinical research that led to the adoption of this new therapy was conducted in Europe and Asia. Many of the thought leaders and early adopters were outside the United States. Therefore, it was very important that Medivance establish an international presence.

Being a small company with limited resources, it was impossible to establish direct sales organizations outside the United States. Instead, we chose to work with local specialized distributors in key geographic markets. We started slowly, entering only a few European countries and partnering with small distribution organizations that were already selling to our primary customers in the intensive care units in major hospitals. The best partnerships were formed with distributors that shared our passion for the potential of the new therapy and for whom our products would comprise a significant portion of their total business. As our business grew, we added more distributors and eventually opened a European headquarters in the Netherlands and established direct sales operations in Germany.

Personal relationships played a significant role in our joint success with our partners. I, as well as many other Medivance team members, made regular visits to every country where we conducted commercial activities

and to many where we hoped to do business. Since we were not selling directly to the end-user of our products, it was important to visit often and spend time with our distribution partners and their customers. In addition, regular training for our distribution partners was conducted at our home office in Colorado. Even in today's world of 24/7 communication, there is no substitute for face-to-face interaction with your partners as they build your joint business. Medivance's location in Louisville. Colorado, just outside Boulder, with easy access to a major international airport, was important to these activities and the growth of our business.

Medivance manufactured all of its products in Louisville and exported them around the world. The presence of a highly educated and experienced local workforce enabled the company to grow quickly and meet a myriad of international business requirements. We were able to recruit technical, manufacturing, sales, marketing, and financial personnel with experience in the medical device industry from the local area. This saved the company a lot of time and costs associated with talent acquisition.

One issue often overlooked by small companies entering the international market is the hidden costs often associated with normal business processes, such as shipping and receiving goods. The economics of the entire business transaction needs to be clearly understood and defined before entering into a partnership in a new foreign market. There can be numerous tariffs and hidden costs associated with shipping and importing physical products in the destination country; these can be borne by the local partner or shared between the parties. Resources are available through the Colorado Office of Economic Development and International Trade (OEDIT) that can assist with understanding country requirements and expected business relationships. OEDIT can also facilitate introduction to potential business partners and will even provide

grants to cover some of the costs associated with the search.

The medical device industry is an important net exporter and contributor to our country's balance of trade. Colorado is an ideal place to locate and run an international business based on its growing and highly educated workforce; first-class infrastructure, including a major international airport; and supportive private and government resources. These attributes, combined with the state's entrepreneurial spirit, can greatly assist big or small companies looking to go global.

Robert Kline is the President and CEO of JustRight Surgical. He may be reached at rkline@justrightsurgical.com.

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For information/address change:

Business Research Division 420 UCB, University of Colorado Boulder Boulder, CO 80309-0420 • 303-492-8227