TENNESSEE AND CHINA:
THE CHALLENGES AND OPPORTUNITIES OF A GROWING TRADE RELATIONSHIP

Georgia Chrysalis Varlan
Senior Thesis
College Scholars Program
Chancellor's Honors Program
The University of Tennessee, Knoxville

ABSTRACT

GEORGIA VARLAN: Tennessee and China: The Challenges and Opportunities of a Growing Trade Relationship
(Under the direction of Dr. Yang Zhong)

In 2007, the state of Tennessee opened a trade office in Beijing to facilitate increased trade and investment between Tennessee and China, which has already grown by over 1,000 percent in the past five years. This paper begins by tracing a brief history of U.S.-China trade and economic relations, focusing on the period from the 1978 economic reforms to the present, as well as looking at some of the issues affecting U.S.-based entities exporting to China. Tennessee's trade relationship with China is analyzed within this context, focusing on Tennessee exports to China and using both state trade data and case studies of Tennessee companies doing business in China. This data is then compared to trade data from the twelve states that have a higher dollar amount of exports to China per year than Tennessee. The paper concludes by looking at what overarching conclusions can be drawn about states successfully exporting to and investing in China and makes recommendations on how Tennessee's state government and The Tennessee-China Development Center (Tennessee's trade office in Beijing) can grow Tennessee's overall trade volume with China and assist individual Tennessee businesses in trading with and investing in the Chinese market.

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INTRODUCTION

Since the Deng Xiaoping-led economic reforms of the late 1970s, China's economy has modernized and grown exponentially. In the past decade, China's economic growth has reached rates as high as 9 percent per year.[1] Though the current global financial crisis has slowed this growth, there is no doubt that China has positioned itself as one of the world's strongest economic powers and both an economic partner and rival of the United States.

The United States' economic relationship with China is multifaceted. Issues ranging from Chinese ownership of U.S. debt to economic solutions to global climate change appear on the agendas of policymakers from both countries.[2] This paper will focus on the issue of trade, specifically exports from U.S. states to China. In 2007, the state of Tennessee, following twenty-seven other states, opened a trade office in Beijing to facilitate increased trade and investment between Tennessee and China, which has already increased by over 1,000 percent in the past five years.[3] Currently this trade office, the Tennessee China Development Center, is focusing much of its efforts on attracting Chinese businesses that are already investing in the United States to consider investing in Tennessee and generally promoting the state of Tennessee in China as a favorable place

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[1] The Economist Intelligence Unit, "China, Country Briefing: Economic Data," *The Economist,* March 11, 2009, http://www.economist.com/countries/China/profile.cfm?folder=Profile%2DEconomic%20Data, (accessed March 25, 2009).

[2] The Economist Intelligence Unit, "China, Country Briefing: Forecast," *The Economist,* April 8, 2009, http://www.economist.com/countries/China/profile.cfm?folder=Profile-Forecast, (accessed April 13, 2009).

[3] Tennessee China Development Center, "Tennessee in China," http://www.tn-china.cn/English/t-zaizhongguo/index (accessed October 10, 2009).

for production and business for Chinese companies. There are also many Tennessee-based companies that have been doing business in China for a number of years. These companies, including large, international businesses like Federal Express, Jack Daniels Whiskey, and Gibson Guitars, as well as other small- to medium-sized companies, use China as both a market for their goods as well as a production site.[4]

This paper begins by tracing a history of Chinese economic reforms and U.S.-China trade and economic relations, focusing on the period from the 1978 economic reforms (when foreign trade first became a major part of the Chinese economy) to the present. With this context established, I will analyze Tennessee's trade relationship with China (focusing on exports to China), looking at both state trade data and several Tennessee companies doing business in China. I will then do a comparative analysis of trade data from the twelve states that currently have a higher dollar amount of exports to China than Tennessee does, as well as look at efforts that have been made by these states to promote increased trade between that state and China and some challenges they have faced in doing so. Finally, I will see if overarching conclusions can be drawn about how states successfully trade with and invest in China and will make recommendations on how the Tennessee state government and Tennessee China Development Center can help Tennessee grow its exports to China and assist individual businesses in trading with and investing in the Chinese market.

PURPOSE AND METHOD

Through my undergraduate studies of China and U.S.-China economic relations, I have found that many misperceptions and exaggerations exist about doing business in

[4] Li Weaver, interview by author, Beijing, China, November 21, 2008.

China and more specifically concerning the U.S.-China trade relationship. Much of the public knowledge about this trade relationship, as well as political and media attention, focuses on Chinese exports to the United States. Almost every year, at least one member of the United States Congress introduces legislation addressing this trade imbalance with various solutions, the most common in recent years being the idea of putting a large tariff (usually around 30 percent) on Chinese goods entering the United States in the name of fighting currency manipulation.[5] The issue of China's control of its currency is outside the scope of this paper, but this example just goes to show the extreme measures that are often debated as a part of the mainstream discussion of our trade policy with China.

This paper aims to explore a less-talked about side of the U.S.-China trade relationship – exports from the United States to China and their impact on economic growth in the U.S. The U.S. Department of Commerce defines "exports" as the measure of

> ...the total physical movement of merchandise out of the United States to foreign countries, whether such merchandise is exported from within the U.S. Customs Territory or from a U.S. Customs bonded warehouse or U.S. Foreign Trade Zone...compiled from copies of Shipper's Export Declarations, which are required to be filed with Customs officials at the point of exports. "Total exports" is the sum of domestic exports (commodities grown, produced or manufactured in the U.S., including those imported from foreign countries that have been significantly changed or enhanced in value in the U.S.) and foreign exports (commodities of foreign origin that have entered the U.S. but are "re-exported" in substantially the same condition they were imported).[6]

[5] Peter Morici, "Playing into Beijing's hands," *Asia Times Online*, 14 July 2006, http://www.atimes.com/atimes/Global_Economy/HG14Dj01.html, (accessed January 30, 2009).

[6] Industry Trade Data and Analysis, "Trade Data Basics," Office of Trade and Industry Information, http://ita.doc.gov/td/industry/otea/trade_data_basics.html (accessed January 25, 2009).

Though exports from both China and the United States have slowed because of the current global economic downturn and will probably decrease overall at least through the end of 2009, the export market to China is still one of large potential growth for U.S. producers. For producers that are already exporting to other parts of the world, expanding into China seems like a natural progression of expanding their overall export operations. There are even opportunities for growth for those producers already exporting to China; because many current exporters only have accessed China's larger markets (namely Beijing and Shanghai) thus far, developing export operations in some of China's secondary markets (as will be discussed later in this paper) presents a significant growth opportunity.[7]

The Tennessee-focus of this paper stems from several areas of interest for me: the operations of the Tennessee China Development Center, the benefits of trade with China to Tennessee exporters, and the public perception of trade with China by Tennesseans. Tennessee Governor Phil Bredesen's announcement of the opening of the Tennessee China Development Center was not a novel event; the state of Tennessee already had trade offices in Toronto, Canada; Dusseldorf, Germany; and Yokohama, Japan (all managed by the Tennessee Department of Economic Development) and is the twenty-eighth state to open a trade office in China.[8] At the time of the trade office's opening, China was already Tennessee's third largest export market, with exports growing from $184 million to over $1.3 billion between 2001 (the year China joined the World Trade Organization) and 2007. The governor heralded the opening of this trade office by

[7] United States Trade Representative, "U.S.-China Trade Relations: Entering a New Phase of Greater Accountability and Enforcement." February 2006.

[8] News Sentinel staff, "Bredesen Opens Tennessee Trade Office in China," *Knoxville News Sentinel,* 18 October 2007.

leading a 78-person trade mission to China in the fall of 2007. In addition to the opening of the Tennessee China Development Center in Beijing's Chaoyang District, the delegation also held meetings with Chinese officials in Beijing, Shanghai, and Hong Kong. Commenting on the trip, Governor Bredesen said that

> as "CEO of the state," it is his duty to help Tennessee business acclimate to the business conditions in China, which he characterized as a "much less known quantity" than other markets in Europe and North America. "I wouldn't be doing my job if I weren't trying to use state government to facilitate these contacts and promote trade and investment."[9]

Yet not all Tennessee leaders have been so eager to embrace the benefits of a growing trade relationship with China. Congressman Zach Wamp, who recently announced his candidacy for governor, was a particularly outspoken critic of the trip, writing in an article released by his congressional office:

> In the interparliamentary meetings in Washington between the U.S. Congress and the National People's Congress, I sat across the table with our Chinese counterparts and asked many tough questions. I was not blinded by the bright lights of Shanghai or Hong Kong and I came away with one troubling understanding: China's leaders believe their own propaganda and cannot differentiate between what is true and what is false. We are absolutely correct to promote trade and create economic opportunity in a global marketplace, but make no mistake about it – China is not the land of Oz and their "Wizard" is not the philanthropic, good-hearted person in the Wizard of Oz. China continues to build up its military complex with unacceptable trade imbalances, exporting contaminated fish and defective toys, treating its citizens like third world people while marketing itself as a showplace of the industrialized world. Respectfully, Governor Bredesen, proceed with caution.

Congressman Wamp cites various issues, from China's involvement with the regimes of North Korea and Sudan to currency manipulation, religious persecutions, and other human rights issues in his "cautionary" message to the governor, entitled "Free

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[9] Matthew J. Durnin, "Bredesen's China Trip Nets Dividends for State," *Knoxville News Sentinel*, 27 October 2007.

Trade with Free People."[10] While many of these issues are legitimate ones, the protectionist tone struck by Congressman Wamp is worrisome insofar as the potential losses that could be suffered by Tennessee businesses if Tennessee were to lose the advantage of good relations with China compared to other states also eager to grow their own economies via growth in China trade relations. It is difficult to know whether statements like these tie to the statement-maker's actual policies or are purely politically motivated; I believe, however, that this statement is indicative of a worrying trend to cast China as an easy villain responsible for domestic economic woes – the producer of cheap, unsafe goods and the location for outsourced jobs. In my opinion, this trend is more worrisome for the long-term economic future of the United States than of China.

Through this paper, I will highlight opportunities for American (and particularly Tennessee) companies that come with exporting to the Chinese market. The fact that this paper does not address many of the issues broached by Congressman Wamp (such as human rights) is not meant to negate their importance or the important role that the United States should play in the dialogue with China over these types of issues; rather, this paper is written on the supposition that economic engagement provides the opportunity for many net positives, such as job creation. Though this paper will focus on the effects of the trade relationship on Tennesseans and Tennessee businesses, the increased access to quality goods in China brought about by U.S.-China trade relations is also a net benefit for Chinese consumers.

When I visited the Tennessee China Development Center in the fall of 2008, I learned that much of the Center's time was focused on finding Chinese companies that

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[10] Zach Wamp, "Free Trade with Free People," A Word from Zach Wamp, http://www.house.gov/wamp/columns07/10.25.07.htm, (accessed March 5, 2009).

could be potential investors in Tennessee (such as those that could potentially set up manufacturing operations in Tennessee). In the year that the Center has been operating, this work by their small but dedicated staff has been laudable and will do much towards the goal of benefitting the economy of Tennessee through the strengthening of the Tennessee-China trade relationship.[11] In this paper, however, I will focus on an area that has thus far been looked at less closely – Tennessee exports to China and opportunities for growth in that area.

After looking at the reforms that have occurred in the Chinese economy since 1979, I will focus on China's ascension to membership in the World Trade Organization in 2001 and some of the current issues affecting the U.S.-China trade relationship. After this history, I will look at opportunities for growth in the Tennessee-China trade relationship. I will then comparatively analyze trade data showing American states' exports to China, focusing on the period from 2001 to the present (China's ascension to the WTO in 2001 meant that many trade barriers were removed and other WTO members, like the United States, gained more market access to China, making it a good statistical starting point).[12] Most of this trade data comes from the U.S. Department of Commerce's TradeStats Express database and is available up through the year 2008.

In 2008, Tennessee exported the thirteenth largest dollar amount of goods to China amongst U.S. states and fourth among states in the South Atlantic region.[13] I will

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[11] Weaver.

[12] "WTO Successfully Concludes Negotiations on China's Entry," WTO News: 2001 Press Releases, September 17, 2001, http://www.wto.org/english/news_e/pres01_e/pr243_e.htm, (Accessed March 1, 2009).

[13] TradeStats Express, "U.S. Exports to China by State," U.S. Department of Commerce and U.S. Census Bureau Foreign Trade Division, http://tse.export.gov/MapFrameset.aspx?MapPage=SEDMapStateDisplay.aspx&UniqueURL=nx5jihaqqenphub5beuaoy55-2009-4-17-14-7-10, (accessed 5 February 2009).

analyze data from some of these twelve states ahead of Tennessee. Though many of these states (such as New York and California) have vastly different populations, export products, and trade advantages and disadvantages than Tennessee, I will focus my conclusions on looking for similarities between these states with "successful" China export operations and see if there are any practices used in these states that could be applied to Tennessee exporters or used by the Tennessee China Development Center to assist Tennessee exporters. Looking at areas for growth for Tennessee exporters and potential exporters to China, I will focus on presenting practical solutions for the state of Tennessee to assist these businesses (via the Tennessee China Development Center) to successfully navigate the challenges of exporting to China.

In my conclusion, I detail potential areas for growth for Tennessee exporters to China. Through my research, I found that the there is great potential for growth in the number of small- and medium-sized enterprises (SMEs)[14] exporting to China. Many Tennessee SMEs are already exporting to countries besides China, and with assistance in marketing their products to Chinese companies and consumers could expand their export business to China. Furthermore, most Tennessee SMEs already exporting to China's major markets could take advantage of many programs offered by the United States government to expand their business into many of China's secondary markets.[15] In terms of specific sectors with the potential for export growth, my paper will detail my findings on the great potential for expansion in the exporting of healthcare-related products.

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[14] Medium-sized enterprises are classified as those with 500 or less employees, and small-sized enterprises are classified as those with less than 100 employees.

[15] *The Role of Small and Medium-Sized Enterprises in Exports to China: A Statistical Profile*, International Trade Administration, Office of Trade and Industry Information, U.S. Department of Commerce. December 2005.

Tennessee, and Nashville in particular, is home to a number of healthcare and medical manufacturing firms, and the recent efforts of several Tennessee businesses will help expand this already growing category of export products.[16]

In terms of recommendations for the state of Tennessee and the Tennessee-China Development Center, my findings also detail several specific efforts that could be undertaken in order to help Tennessee businesses increase exports to China. I will detail the need for the creation of a database of Tennessee businesses currently exporting to China, as well as the compiling of materials that outline some of the legal issues faced by exporters to China and the U.S. government programs available to assist Tennessee SMEs wishing to expand their export business to the Chinese market. My conclusion will also discuss the need for the further development of the Tennessee Chinese Chamber of Commerce and the important role that this private-sector, China-focused business council can play in helping to increase Tennessee's overall export volume to China.

HISTORY

The U.S.-China trade relationship spans back hundreds of years to 1784, when an American merchant, Robert Morris, sent a cargo ship, the Empress of China, from New York to Shamian Island near Guangzhou. Throughout the nineteenth and early years of the twentieth centuries, trade between the nations continued in small volumes. The 1911 fall of the Qing Dynasty did little to affect trade, which was concentrated mostly in the southern ports region far from the political capital of Beijing.[17] Under the Nationalist

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[16] David A. Fox, "Milken Ranking of Healthcare Industry," *Nashville Post,* 27 August 2003.

[17] Jon M. Huntsman, Jr., "U.S.-China Trade: Historical Perspectives and Future Expectations," speech to the Washington State China Relations Council, 27 June 2002, 1-3.

government, first led by Sun Yat-Sen and later by Chiang Kai-Shek, there was a growth in the number of private companies operating within China. In 1950, a year after the establishment of the People's Republic of China, the country had approximately 4600 private companies remaining from the Nationalist-era; these companies accounted for one-third of overall foreign trade during that year. By 1955, however, with the Communists exercising full power over the economy and implementing socialist restructuring, 99 percent of foreign trade was controlled by a small number of state-owned companies.[18]

During the civil war between the Nationalists and the Communists, trade between China and the U.S. continued to decline. In 1949, the United States put up a blockade around the coast of mainland China. After this occurrence and Mao Zedong's official rise to power as the head of the newly-established PRC, China and the United States' trade relationship was completely severed and would not be reestablished for 22 years. In the 1950s China relied heavily on the USSR for economic support, and almost exclusively conducted trade with the USSR and other socialist nations, importing machinery and equipment and exporting mostly raw agricultural and mineral materials. The 1960s, however, saw the severing of the China-Soviet Union relationship, which also led to the end of trade ties with the USSR and Eastern European Soviet-influenced and -controlled states. This time period, concurrent with Mao's "Great Leap Forward," saw the lowest historically recorded amount of engagement and trade by China with the outside world, with trade being almost completely nonexistent except for imports of basic

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[18] Jiangyu Wang, "The Evolution of China's International Trade Policy: Development through Protection and Liberalization," in *Economic Development through World Trade*, ed. Y.S. Lee (The Netherlands: Kluwer Law International BV, 2007), 192-197.

foodstuffs like grain (because China's agricultural production was so low a result of drought and the policies of the "Great Leap Forward").[19]

In the early 1960s, led by then-Prime Minster Zhou Enlai, China's trade policy became more pragmatic and China began to reach out to trade partners that it might have previously rejected on ideological basis. In 1965, Japan became China's top trade partner after just five years of trade relations; Japan also expanded its trade with Hong Kong, which was a British colony at the time. China also increased its imports (mainly industrial equipment) from various European nations. Richard Nixon's 1972 visit to China and subsequent efforts to reopen relations between the United States and China was the beginning of the renewal of the two countries' economic relationship. In 1971, U.S.-China trade totaled $5 million; by 1973 it was over $800 million.[20] Though Mao's increasing openness to internationalism and international trade opened the door for China to grow its trade relationship with the outside world, it was not until 1978 that China began to have sustainable growth in the area of international trade.[21]

The 1978 Third Plenum of the Eleventh National Party Congress Central Committee was a turning point in Chinese economic policy; led by Deng Xiaoping, the Chinese Communist Party began to make many key economic reforms that would allow China to pursue increased trade relations with the United States and other countries. In addition to easing regulations on foreign trade and investment, many reforms were aimed at building stronger domestic production and banking systems in China that could sustain

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[19] "U.S.-China Trade Timeline: 1794-2003," Stratfor Global Intelligence, http://www.stratfor.com/analysis/u_s_china_trade_timeline_1784_2008, (accessed February 20, 2009).

[20] Jiangyu Wang 192-197.

[21] Huntsman, 1-3.

both foreign investment as well as large-scale domestic production that would become the backbone of China's booming export economy. China's economic reforms during this time also helped to make it a more stable place for foreign entities to conduct business and set China on the path towards future reforms that would be made once China became a member of the World Trade Organization in 2001.[22]

Pre-1979, the World Bank cited "poor productivity, low technological levels, and stagnant living standards" as indicators of failure of the Chinese government to create a sustainable economic system. These problems could be attributed to several causes, chief among them a lack of openness and too great of a reliance of central planning.[23] Initially, CCP leaders aimed for the Third Plenum's main goals to be a push for political mobilization and transformation, a focus on equity of income distribution, and a commitment to increased military strength. Deng was able to shift focus away from these goals and more towards a general commitment to long-term economic growth through several key statements and actions. For example, "equity" was redefined from the more narrow constraints of traditional socialism to a focus on "avoiding polarization, achieving common prosperity, and eliminating poverty." Though Deng believed that equity was the characteristic that made socialism superior to capitalism as a national economic system, he nonetheless declared the importance of "letting some people get rich first."

By discouraging large-scale income redistribution, Chinese government policy during the 1980s could instead focused on overall income growth as a tool for economic

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[22] "WTO Successfully Concludes Negotiations on China's Entry."

[23] Christopher Howe, "Stability, Growth, and Reform: Recent Performance and Prospects for the Chinese Economy in the 1990s," review of *China: Revenue Mobilization and Tax Policy, China: Financial Sector Policies and Institutional Development, China: Macroeconomic Stability and Industrial Growth under Decentralized Socialism,* and *China: Between Plan and Market* by the World Bank, *The Quarterly* 131 (1992): 778-779.

construction. Additionally, the shift away from large-scale military spending, made possible by Deng's high-standing with the military and his assertions that long periods of peace and stability were possible, also allowed the government to shift substantial amounts of money away from both direct military and military-industrial spending towards civilian economic development projects.[24]

The late 1970s also saw many important reforms made to the Chinese banking sector. These banking reforms were particularly relevant to foreign trade and investment because they created specific institutions to deal with investment from foreign nations and business entities. Before 1979, China had only one state-run bank, the People's Bank of China, which served as not only a central bank but also a commercial lender and foreign exchange manager. Initial reforms began by creating new banks to separate these functions: the Industrial and Commercial Bank of China to deal with commercial issues (like lending for agricultural and construction projects) and CITIC and other small institutions to deal with foreign investment money coming in to the country. This decentralization changed the Chinese banking system by allowing surpluses to be more easily and widely distributed to various commercial projects rather than just flow back into one central bank. Between 1984 and 1992, more than 3,000 "non-bank financial intermediaries" were created, and important financial tools such as inflation indexed deposit accounts began to come into more widespread use. Developments like these in the financial system also contributed to an increase in household savings rates, which rose to 23 percent of disposable income from 1981-1987 and rose from 1.1 percent to 17

[24] Barry Naughton, "Deng Xiaoping: The Economist," *The China Quarterly* 135 (1993): 500-505.

percent of contributions to total national savings in the decade between 1978 and 1988.[25] In addition to creating a standardized banking system that was equipped with dealing with foreign investment, these banking reforms also put China closer in line with banking system in other large economies and laid a strong basis for further reforms of China's trade and investment policies in hopes of gaining membership in the General Agreement on Tariffs and Trade (GATT, the precursor to the WTO).

During the Deng Xiaoping-era of economic reforms, China opened up to the outside world more than ever before. Deng's interest in science and technology is one reason that China pursued a more open international policy during this time; it was obvious to him that during the past several decades China had fallen behind the West both in terms of domestic scientific production, innovation, and the use of common household and business technologies. Deng eagerly toured and admired factories in the United States and Japan and sought to bring this same level of technological production to China. One way this was achieved was through the creation of Special Economic Zones. In 1979, steps were taking to being the creation of the first Special Economic Zones in Shenzhen. Four Special Economic Zones were developed during the following decade and, though sometimes criticized, these Zones were often held up as exemplifiers of the advantages of economic openness.[26]

In the 1980s and 1990s, China also began to remove many of its self-implemented barriers to foreign trade. China allowed more of its domestic companies (though many

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[25] Howe, 778-780.

[26] Nicholas L. Lardy, "Chinese Foreign Trade," *The China Quarterly* 131 (1992): 691-720.

were still at least partially state-owned) to conduct trade, which was a break from the previous policy that limited foreign trade to approximately ten to sixteen government-designated "specialized foreign trade corporations." The government also moved away from state-planning as a control on foreign trade towards a system based on tariffs, licensing, and quotas. Though these types of measures are often seen as restrictions to foreign trade, in China the move to this system (and away from state planning) was seen as move towards trade liberalization and closer to the legal and regulatory system governing trade that is used by most other nations. Over time, these types of barriers were also lowered from their initial high levels. Though tariffs on most foreign goods were around 56 percent in 1982, by the time of China's ascension to WTO membership in 2001, the average tariff rate was around 15 percent (and continued to be lowered after that as a result of China's commitments as a WTO member, to be discussed later). Licensing and quotas governing imports were also reduced during the late 1980s and the 1990s. For example, 46 percent of imports were subject to licensing requirements in the late 1980s; by the late 1990s, though, this number was down to 8.45 percent.[27]

The economic reforms of the mid- to late-1990s were also characterized by a focus on reforming the financial system. The Asian Financial Crisis, as well as China's impending entry into the WTO, pushed Chinese leaders to act on reforms to the financial system, in particular dealing with the issue of bad debts owned by many banks. This set of banking reforms also stemmed from the same motivation as the banking reforms of the 1980s; to put China's banking system in line with the systems of other member countries of the WTO and to strengthen China's domestic financial institutions in order to make them more stable to attract more foreign traders and investors. As a result of these

[27] Wang, 192-200.

reforms, many state banks had acquired a large number of non-performing loans because the banks had existed almost exclusively in order to lend capital to state-owned enterprises. The reforms were pursued with three main goals in mind – "to free the state banks from local politics, to allow the Central Bank to play more of a regulatory role, and to get the non-performing loans off the books of the banking system." This led to a decision in 1994 to further divide the Chinese banking system into three types of banks - commercial banks, policy banks and cooperative banks. The role of private banks, though still relatively small, was also increased. The Bank of China, Industrial and Commercial Bank, Agricultural Bank of China, and China Construction Bank, which together made up 70 percent of China's domestic banking business, continued to be state-run, but were given greater freedom to make commercial loans. The People's Bank of China was also specifically reorganized so that its branches were divided along regional instead of provincial lines. This was done in order to try and reduce interference by provincial party officials and politicians in the lending activities of the banks.[28]

Looking at U.S. trade policy towards China, after Nixon's visit in 1972 the U.S. worked cautiously but earnestly to establish favorable trade relations with China. Between 1971 and 1979, when diplomatic relations were officially reestablished, bilateral trade between the U.S. and China cumulatively equaled $2.4 billion. In that same year, the U.S. and China signed the U.S.-China Trade Relations Agreement, which gave each nation most-favored nation trading status with the other for three years. Trade between

[28] Juan Antonio Fernandez, "The Chinese Economic Reform," China Europe International Business School, http://ceibs.edu/ase/Documents/reforms.htm (accessed February 4, 2009).

the two nations continued to grow throughout the 1980s, with government agreements, such as one to eliminate dual-taxation, being signed by American and Chinese leaders.[29]

From 1986-2001, the primary aim of U.S. trade policy towards China was working to put trade agreements in place that would help to bring China in compliance with the rules and practices of the global trading system. This was done with the goal of GATT (and later WTO) membership for China. During this time period, bilateral trade (which is calculated by adding goods exports to imports) between the two nations increased from $8 billion annually to $21 billion. China's admittance to the World Trade Organization in 2001 brought further increases in trade and but also some contention between China and the United States. As members of the WTO, China was able to enjoy lower barriers for their exports to other countries (previously many countries had placed higher trade barriers on China than those that applied to fellow WTO members). The absence of these tariffs allowed Chinese exporters to exploit multiple advantages (such as comparatively lower wages) and rapidly expand their foreign exports.[30]

Additionally and perhaps most significantly, WTO membership requirements forced China to make many efforts towards domestic liberalization of its laws on foreign investment and ownership, tariffs and quotas, and other economic regulations that might be barriers to trade. Membership also required China to protect intellectual property rights and comply with WTO regulations concerning state-owned enterprises. WTO membership has allowed China to be seen as a more stable place to invest and in turn attract more global capital and investment. After 2001, a growing number of foreign

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[29] "U.S.-China Trade Timeline: 1794-2003."

[30] United States Trade Representative, "U.S.-China Trade Relations: Entering a New Phase of Greater Accountability and Enforcement," February 2006.

governments worked to establish free trade agreements with China and many companies from various nations moved to open manufacturing bases in China.[31]

CURRENT STATE OF UNITED STATES-CHINA TRADE RELATIONSHIP

Currently, exports account for 40 percent of China's gross domestic product (GDP), with 22 percent of China's export growth from 1986-2006 coming from exports to the United States. From 2002-2006, the United States and China accounted for close to half of the world's total economic growth. In its first four years of WTO membership, China became the United States' third largest trading partner, with bilateral trade growing from $121 billion to $285 billion.[32]

China's growing middle class and growing number of new businesses make it a strong market for U.S. exporters. In addition to manufacturing and agriculture, service providers, technological industries, and financial services could also realize a large amount of potential business growth by expanding into the Chinese market. In 2006, China became the United States' third largest export market (from ninth in 2001); during this same time period, U.S. exports to China have grown five times as fast as U.S. exports to all other countries. In 2005 alone, American exports to China increased by 20 percent.[33]

Within the constructs of the WTO, the U.S. has lobbied for several important reform measures that have made it easier for U.S. business entities to export to and

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[31] Daniel J. Ikenson, "China and the WTO," *Apple Daily,* 8 December 2004.

[32] TradeStats Express, "2008 U.S. Exports to China," U.S. Department of Commerce and U.S. Census Bureau Foreign Trade Division, http://tse.export.gov/NTDChartDisplay.aspx?UniqueURL=nx5jihaqqenphub5beuaoy55-2009-4-17-14-30-9, (accessed January 20, 2009).

[33] United States Trade Representative.

operate in China. For example, efforts have been successful at forcing the Chinese (via the WTO) to eliminate import monopolies and allowing foreign enterprises to establish distribution networks in China. More specific efforts have been made by the U.S. government, either through direct diplomacy or through WTO challenges (or the threat of WTO challenges) that have been beneficial to the export business of several U.S. sectors. In terms of agriculture, the U.S. successfully pressured China to remove limitations on access to its soybean and cotton markets; this resulted in one-third of the total U.S. exports of each of these products ($2.3 billion worth of soybeans and $1.4 billion worth of cotton) being sent to China in 2005. In that same year, China became the United States' second largest market for aircrafts, and aircraft sales by U.S. companies to China totaled $4.4 billion. In the service sector, China became the United States' tenth largest market and a sector in which the U.S. notably has a trade surplus ($1.6 billion in 2004). Service export growth to China almost doubled compared to the growth in service exports to the rest of the world (20 percent compared to 11 percent) in that same year.[34] This was a result of the increased opening of the auto financing, legal services, banking, express delivery, and insurance markets in China.

Yet even though this growth on both ends signifies the strength of the relationship, the U.S.-China trade partnership has not been without its challenges. From the United States' perspective, the relationship remains imbalanced; the relative cheap costs of manufacturing in China (stemming from a less valuable currency, lower wage standards, and generally cheaper production costs) makes it almost assured that the export balance will always tip in China's favor. This dependence on exports, as well as China's focus on

[34] United States Trade Representative.

developing its own domestic industries, have come at the expense of commitments to further open Chinese markets and increase the protection of intellectual property.

Though there are many macroeconomic factors that help add to this trade imbalance – including overall economic growth rates of each nation, national savings rates, and domestic investment and consumption numbers, the United States government still alleges that that the Chinese government engages in certain trading practices that could be deemed "unfair." Specifically, the United States' government lists grievances with the Chinese government in the following areas related to trade policy:

> Continued Chinese barriers to some U.S. exports; failure to protect intellectual property rights; failure to protect labor rights and enforce labor laws and standards; unreported and extensive government subsidies and preferences for its own industries; environmental concerns; spotty compliance with some international trade rules; and a large and growing imbalance in our bilateral trade flows, resulting in a trade deficit of almost $202 billion in 2005.

The government goes on to warn, in a 2006 review of the U.S.-China trade relationship by the U.S. Trade Representative (USTR), that without "tangible evidence that China is acting responsibly" concerning the abovementioned issues, "popular support for a twenty-five-year-old trade policy of constructive economic engagement with China could be in danger, with potentially damaging consequences for both countries."[35]

In terms of promoting U.S. exports in China, the United States' government has several significant programs on the ground to facilitate day-to-day operations and growth in this area. Many U.S. cabinet-level departments (besides just the U.S. Department of State) have foreign services operations at U.S. embassies and consulates around the globe. The foreign services of the Departments of Agriculture and Commerce station more

[35] United States Trade Representative.

officials (a combination of American officers and local Chinese employees) in China than any other country. The Department of Commerce has two centers devoted exclusively to China. The China Business Information Center (CBIC) helps U.S. companies handle the opportunities and challenges of business in China, and the American Trading Centers promote U.S. exports in major markets throughout China. Additionally, the U.S. Department of State also employees a large number of economic officers in the U.S. Embassy in Beijing and the U.S. Consulates throughout China who assist U.S. businesses in promoting and growing export operations in China.

The United States government sees this period in U.S. China relations as a "new phase," and trade officials have recommended that the in order to keep a strong trade relationship between the two nations, "U.S. trade resources and priorities should be readjusted to meet new challenges." Though the current global financial downturn has pushed other economic issues to the forefront (such as China's ownership of U.S. debt), the trade relationship is still important to ensure future economic growth in both nations and will most likely be analyzed more closely by the public in each nations as both domestic economies continue to slow at least over the next year.[36]

Except for drop between 2001 and 2002 (caused by a recession in the United States during that time), overall U.S. global exports steadily rose between 2001 and 2008, from $729 billion in 2001 to over $1.3 trillion in 2008.[37] During this same time, total U.S. exports to China also rose consistently, from $19 billion in 2001 to $71 billion in 2008.[38]

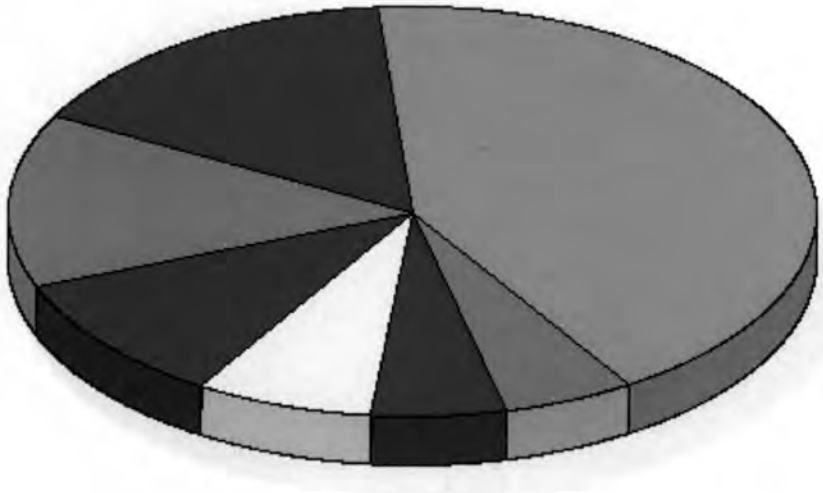
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[36] Huntsman 1-7.

[37] TradeStats Express, "U.S. Global Exports," U.S. Department of Commerce and U.S. Census Bureau Foreign Trade Division, http://tse.export.gov/ITAHome.aspx?UniqueURL=gqn0ggmvlefd0qntpaodyn55-2009-4-5-23-6-32, (accessed January 29, 2009).

[38] TradeStats Express, "U.S. Exports to China."

FIGURE 1: U.S. EXPORTS TO CHINA BY PRODUCT CATEGORY, 2008[39]



Product	Value ($)	Percent
85--ELECTRIC MACHINERY ETC; SOUND EQUIP; TV EQUIP; PTS	11,384,175,809	15.9%
84--NUCLEAR REACTORS, BOILERS, MACHINERY ETC.; PARTS	9,748,586,589	13.6%
12--OIL SEEDS ETC.; MISC GRAIN, SEED, FRUIT, PLANT ETC	7,363,550,893	10.3%
88--AIRCRAFT, SPACECRAFT, AND PARTS THEREOF	5,108,332,098	7.1%
39--PLASTICS AND ARTICLES THEREOF	3,836,987,792	5.4%
90--OPTIC, PHOTO ETC, MEDIC OR SURGICAL INSTRMENTS ETC	3,741,926,820	5.2%
All Others	30,273,512,596	42.4%
Grand Total	71,457,072,597	100%

[39] TradeStats Express, "U.S. Exports to China."

Top U.S. products being exported to China include computer and electronic products, transportation equipment, chemical manufactures, machinery manufactures, and agricultural and crop products (see Figure 1). U.S. exports to China increased at a rate of 157 percent between 2000 and 2005; the next fastest-growing market for U.S. exports during that time period was Belgium, which had a 33 percent increase in U.S. exports. Putting this growth into perspective of the top five markets for U.S. exports (Canada, Mexico, China, Japan, and the United Kingdom), U.S. exports to Mexico have only increased by a small amount and U.S. exports to Japan and the United Kingdom have actually dropped during the 2000s.[40]

The growth in number of individual business entities exporting to China in some capacity has been robust. According to a 2003 U.S. Government Report on small- and medium-sized enterprises exporting to China, in 1992, a total of 4,092 U.S. firms (small, medium, and large enterprises) sent exports to China. By 2003 (the last year that specific national data is available for number of firms exporting to China), the number of firms had more than quadrupled to 19,028 (rising 27 percent just between 2001 and 2003). Interestingly, 89 percent (16,874) of these exporters in 2003 were small- and medium-sized enterprises (SMEs). This goes against the notion that a company must be a large multi-national in order to navigate the sometimes complicated business waters of China. Breaking this number down even further, almost half of U.S. businesses exporting to China (49 percent) are "very small companies," or companies with 20 employees or less.

China is the fastest growing market for SME exporters and was the fourth largest market for SME exports in 2003, behind Canada, Mexico, and Japan (with SME exported goods during that year totaling $9.3 billion). Both large-company exporters and SMEs

[40] *U.S. Exports to China by State.* The U.S.-China Business Council, 2006.

experienced huge growth in exports to China over the 1990s and early 2000s, with the number of large companies exporting to China growing by 127 percent and the number of SME exporters growing by 437 percent. In terms of their share of the actual number of exports to China, SMEs made over one-third (34.7 percent) of all U.S. merchandise being exported to China in 2003 (this is even greater than the 27.2 percent of worldwide U.S. merchandise exports by SMEs during that same year).

SMEs from every state, plus the District of Columbia, export merchandise to China. The top home of SME exporters to China in 2003 was California, which 5,464 firms. This was followed by New York (1,969 firms), Texas (1,459 firms), Illinois (1,394 firms) and New Jersey (942 firms).[41] Comparatively, Tennessee was home to 254 SME exporters during this same year.[42] The current state of Tennessee SME exporters and potential for growth in this area will be discussed later in the paper.

Looking at specific categories of goods exported by SMEs to China, the largest categories are computer and electronic products (total export value of $1.8 billion in 2003), machinery manufactures ($1 billion), and chemical manufactures ($928 million). Paper products, primary metal manufacturing, processed foods, and transportation equipment also made up sizable percentages of SME exports to China during that year. Out of all U.S. exporters to China in 2003, SME exporters were 84 percent of computer and electronic product exporters, 83 percent of machinery manufactures exporters, 83 percent of wood products exporters, 81 percent of leather and allied products exporters, and 80 percent of chemical exporters. Looking at the total number of exports to China in

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[41] *The Role of Small and Medium-Sized Enterprises in Exports to China: A Statistical Profile.*

[42] "Companies Export More to China," *Memphis Business Journal,* 1 December 2005.

that same year (as opposed to number of exporters), SMEs exported 82 percent of apparel manufactures exports, 67 percent of wood products, 60 percent of primary metal manufactures, and 52 percent of textiles and fabrics.[43]

These numbers show SMEs' importance in terms of overall U.S. exports and exporters to China. Even with the large number of SMEs already exporting to China, SMEs also represent a large potential growth sector in terms of future exporters to China. Later in this paper I will look more specifically at Tennessee SMEs exporting to China and the potential for growth in this area, especially from SMEs not yet exporting to China but already exporting to other places internationally.

GROWING TENNESSEE-CHINA TRADE

In 2001, Tennessee exporters were exporting over $11 billion total in merchandise globally. By 2008, this number (Tennessee's total global exports) had more than doubled to over $23 billion.[44] Tennessee businesses export goods to almost 200 nations around the globe.[45] The state of Tennessee is currently the fastest-growing exporter to China among all U.S. states. Between 2000 and 2007, Tennessee increased its exports to China by 625 percent (compared to an 81 percent increase for Tennessee exports to the rest of the world).[46] China is Tennessee's third-largest international export market, behind

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[43] *The Role of Small and Medium-Sized Enterprises in Exports to China: A Statistical Profile.*

[44] TradeStats Express, "Tennessee Global Exports," U.S. Department of Commerce and U.S. Census Bureau Foreign Trade Division, http://tse.export.gov/MapFrameset.aspx?MapPage=SEDMapWorldDisplay.aspx&UniqueURL=nx5jihaqqenphub5beuaoy55-2009-4-17-14-46-41, (accessed February 5, 2009).

[45] "Study Shows 617,437 Tennessee Jobs Tied to Trade," *Nashville Business Journal,* 3 May 2007.

[46] *Tennessee Exports to China,* U.S.-China Business Council, http://www.uschina.org/public/exports/states/individual/tennessee_2007.pdf, (accessed February 12, 2009).

Canada and Mexico (see Table 1). Though China still ranks third among Tennessee's export destinations, the dollar amount growth in exports to China between 2001 and 2008 has been robust. In 2001, Tennessee exported a little over $184 million worth of good to China; by 2008, this number had increased to over $1.3 billion. To put this over 600 percent growth into perspective, during this same time period Tennessee exports to Canada have increased by about 50 percent (from $4.1 billion in 2001 to $6.4 billion in 2008) and Tennessee exports to Mexico have a little less than doubled (from about $1.4 billion in 2001 to $2.5 billion in 2008).

Details on specific types of products that Tennessee exports globally can be seen in Figure 2. Transportation equipment is the largest single category of global exports at over $4 billion, making up 17.3% of exports (in dollars) in 2008. The breakdown for the rest of the largest categories of exports in dollars during that same year is as follows: chemical manufactures ($3.5 billion and 14.9 percent); computer and electronic products ($3.4 billion and 14.9 percent); miscellaneous manufactures ($2.7 billion and 11.6 percent), machinery manufactures ($2 billion and 8.7 percent); and primary metal manufactures ($795 million and 3.4 percent). All other merchandise (the top products of which are detailed in Table 2) accounted for $6.8 billion worth of global exports and 29.4 percent of Tennessee's global exports in dollars.[47]

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[47] Tradestats Express, "Tennessee Global Exports by Product," http://tse.export.gov/SEDChartDisplay.aspx?UniqueURL=glzfmb45ixj2xhuuk450yrn0-2009-4-21-1-40-53, (accessed February 12, 2009).

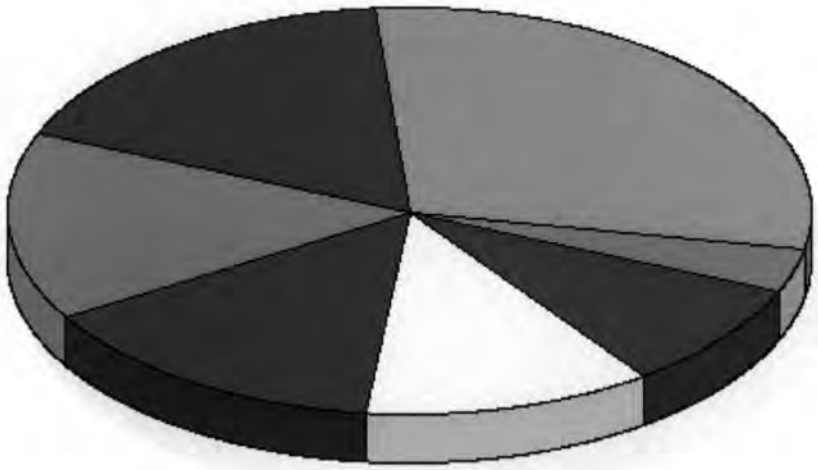
TABLE 1: TENNESSEE GLOBAL EXPORTS BY COUNTRY[48]

Top 10 Destinations for Tennessee Global Exports, 2001-2008 (in thousands of U.S. dollars)

Partner	2001	2002	2003	2004	2005	2006	2007	2008
World Total	11,320,177	11,628,712	12,624,433	16,159,165	19,173,897	21,647,640	21,864,789	23,237,044
Canada	4,128,059	3,955,637	4,233,439	5,242,410	6,147,421	6,945,612	6,785,688	6,417,095
Mexico	1,369,625	1,422,332	1,472,481	1,790,910	1,893,867	2,265,922	2,421,313	2,517,419
China	184,056	337,800	636,103	1,214,115	1,418,831	1,883,367	1,135,299	1,363,942
Japan	613,544	599,287	528,406	617,516	819,372	871,934	816,550	1,071,494
United Kingdom	655,458	632,236	646,308	718,792	739,048	866,068	887,204	1,031,785
Germany	455,231	444,184	439,683	541,917	677,376	773,424	779,651	810,896
Netherlands	339,145	353,826	399,814	467,409	637,409	710,792	627,632	694,507
Belgium	238,797	280,160	353,094	410,503	380,427	319,511	572,896	667,028
Australia	189,033	223,488	224,592	367,400	425,655	456,342	541,734	610,440
Brazil	191,241	220,366	252,006	295,408	275,152	313,906	330,492	477,708

[48] Tradestats Express, "Tennessee Global Exports."

FIGURE 2: TENNESSEE GLOBAL EXPORTS BY PRODUCT CATEGORY, 2008[49]



Product	Value ($)	Percent
336 _Transportation Equipment	4,029,246,299	17.3%
325 _Chemical Manufactures	3,471,196,874	14.9%
334 _Computers & Electronic Prod.	3,399,586,239	14.6%
339 _Misc. Manufactures	2,695,538,910	11.6%
333 _Machinery Manufactures	2,020,678,482	8.7%
331 _Primary Metal Manufactures	795,485,307	3.4%
All Others	6,825,311,953	29.4%
Grand Total	23,237,044,064	100%

[49] Tradestats Express, "Tennessee Global Exports by Product."

TABLE 2: TENNESSEE GLOBAL EXPORTS BY PRODUCT CATEGORY, 2008 (in thousands of U.S. dollars)[50]

Item	2001	2002	2003	2004	2005	2006	2007	2008
Total	11,320,177	11,628,712	12,624,433	16,159,165	19,173,897	21,647,640	21,864,789	23,237,044
336 _Transportation Equipment	2,430,702	2,770,509	2,400,930	3,362,784	4,327,730	4,439,123	4,100,477	4,029,246
325 _Chemical Manufactures	1,396,560	1,582,409	1,723,493	2,142,429	2,422,629	2,921,402	3,252,312	3,471,197
334 _Computers & Electronic Prod.	1,584,393	1,361,323	1,773,420	2,244,919	2,836,477	3,333,048	3,353,838	3,399,586
339 _Misc. Manufactures	499,011	581,275	636,520	1,091,737	1,637,446	2,070,730	2,354,125	2,695,539
333 _Machinery Manufactures	1,252,387	1,222,769	1,262,732	1,411,347	1,485,691	1,683,487	1,887,111	2,020,678
331 _Primary Metal Manufactures	266,234	266,168	253,900	338,250	559,007	929,090	899,081	795,485
111 _Crop Production	469,457	671,471	1,149,258	1,761,940	1,620,146	1,541,765	570,775	786,913
335 _Elec. Eq., Appliances & Parts	490,928	462,354	461,087	463,414	532,954	529,387	626,479	752,294
332 _Fabricated Metal Products	402,754	356,956	355,547	409,248	512,539	589,364	698,694	752,099
322 _Paper Products	482,545	425,874	332,060	382,816	552,138	625,142	658,939	680,451
311 _Processed Foods	231,487	204,648	284,440	311,181	318,384	300,006	473,676	606,966
326 _Plastic & Rubber Products	457,864	494,625	473,073	552,795	619,736	636,217	534,342	566,519
312 _Beverage & Tobacco Products	206,300	224,378	242,980	320,198	372,639	415,546	481,735	513,807
313 _Fabric Mill Products	152,578	141,604	215,528	258,663	317,344	365,819	354,354	375,696
323 _Printing & Related Products	144,793	170,084	187,578	170,112	208,249	225,935	280,804	318,638
990 _Spec. Classification Provisions	148,092	167,960	272,239	260,967	160,575	208,160	266,523	290,995
910 _Waste & Scrap	27,486	34,923	49,204	52,185	77,574	172,414	245,420	254,866
327 _Non-Metallic Mineral Mfgs.	148,973	132,628	149,030	161,961	167,603	130,438	137,422	188,993
511 _Publishing Industries	0	0	30,258	66,477	81,518	90,345	181,400	170,584
337 _Furniture & Related Products	39,068	40,270	37,894	42,727	39,590	91,613	91,273	94,192
321 _Wood Products	71,850	76,382	73,363	84,696	112,250	137,260	118,121	84,759
113 _Forestry & Logging	17,381	10,399	9,092	15,577	18,716	24,971	61,751	80,331
324 _Petroleum & Coal Products	6,858	2,141	10,384	9,224	5,956	12,032	45,673	69,868
212 _Mining	32,188	26,157	29,140	41,419	38,717	40,042	49,757	60,210
315 _Apparel Manufactures	102,196	89,185	101,011	84,684	58,244	53,370	46,105	56,446
314 _Non-Apparel Textile Products	29,889	28,418	28,084	24,471	27,547	32,722	36,235	41,979
920 _Used Merchandise	19,792	6,123	8,714	28,084	20,667	16,072	19,120	39,588
316 _Leather & Related Products	42,138	43,163	33,732	42,317	28,674	16,419	20,163	24,116

[50] Tradestats Express, "Tennessee Global Exports by Product."

According to a 2009 trade analysis of Tennessee's exports to China over the previous year, there were several important trends relating to Tennessee's global exports in 2008. Exports were strongest to countries outside of North America, particularly those that were able to buy more goods because they took advantage of the relative weak U.S. dollar in the first half of 2008. Two of Tennessee's largest exporting industries, the automobile industry and the laptop computer industry, experienced the largest drop in sales in 2008, which hurt exports to Tennessee's largest export market, Canada. This drop in automobile sales also hurt Tennessee exports to Mexico, the state's second largest export market. In addition to China, Tennessee's strongest export markets in 2008 were Japan, Europe, and Latin America. Looking specifically at exports to China, some of the biggest growth in 2008 occurred in products used in textile production, including cotton, artificial filaments, and nonwoven textile materials.[51] This growth was aided by a series of contracts for $500 million (350,000 metric tons) worth of future purchases of cotton signed in 2007 by the Chinese Ministry of Commerce with various Tennessee companies.[52] Exports to Taiwan and Hong Kong also rose in 2008, riding a wave of increased sales in electronics and chemical products to these areas.

A 2009 report on Tennessee's international trade standing showed several sectors for growth in 2008 as well as several sectors that experienced a decline in exports during that same year. Medical instruments were the largest overall growth industry in 2008, with global sales increasing by 15 percent in the third quarter of the year. This made

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[51] Steven G. Livingston, "Tennessee International Trade Report," *Global Commerce: Tennessee and the International Economy* Vol. 13 No. 3, Winter 2009, 5.

[52] "Business, Health Care, Educational Leaders to Join Governor Bredesen in China," Press Release from Tennessee Department of Economic and Community Development, 8 August 2007.

them Tennessee's third largest exported product. Many chemical products also made gains, including titanium dioxide preparations and miscellaneous cellulose derivatives, which increased sales by $105 million and $61 million, respectively during this same period. Though exports of actual laptops increased by 7 percent in the third quarter of 2008, exports of laptop parts and accessories decreased by 50 percent. The automobile industry also suffered in 2008, with exports of cars and SUVs both experiencing a third quarter loss of four percent. Overall, 2008 was a year of growth for Tennessee's global exports even though the state experienced a slowdown in exports to its two largest export destinations (Canada and Mexico) and in its two largest exporting industries (automobiles and laptop computers and parts).[53]

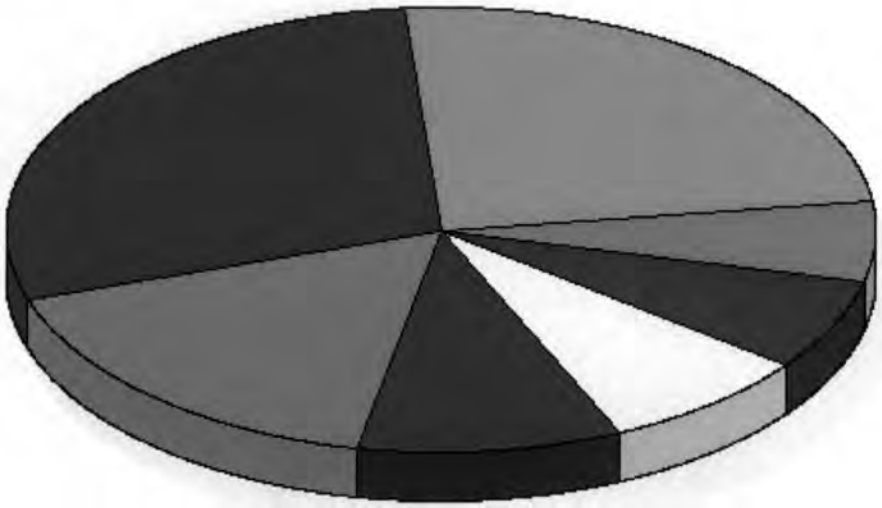
Figure 3 and Table 3 show the breakdown of types of goods exported from Tennessee to China. According to the U.S. Department of Commerce's Tradestats Express data for Tennessee exports to China in 2008 (as well as each year from 2001 to 2008), chemical manufacture products made up the largest dollar amount of Tennessee goods exported to China, at $390 million and 28.8 percent of the overall dollar amount of goods exported. This was followed by crop production with $230 million and 16.9 percent, waste and scrap ($133 million and 9.8 percent), computer and electronic products ($107 million and 7.9 percent), primary metals for manufacturing ($90 million and 6.6 percent), and manufacturing machinery ($79 million and 5.9 percent). All other goods totaled $331 million and made up the remaining 24.3 percent of exports in terms of dollars.[54]

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[53] Livingston.

[54] Tradestats Express, "Tennessee Exports to China," U.S. Department of Commerce and U.S. Census Bureau Foreign Trade Division,

FIGURE 3: TENNESSEE EXPORTS TO CHINA BY PRODUCT CATEGORY, 2008[55]



Product	Value ($)	Percent
325 _Chemical Manufactures	390,703,742	28.6%
111 _Crop Production	230,327,423	16.9%
910 _Waste & Scrap	133,984,981	9.8%
334 _Computers & Electronic Prod.	107,541,619	7.9%
331 _Primary Metal Manufactures	90,103,599	6.6%
333 _Machinery Manufactures	79,902,479	5.9%
All Others	331,378,529	24.3%
Grand Total	1,363,942,372	100%

http://tse.export.gov/SEDChartDisplay.aspx?UniqueURL=nx5jihaqqenphub5beuaoy55-2009-4-17-15-7-13, (accessed 10 February 2009).

[55] Tradestats Express, "Tennessee Exports to China."

TABLE 3: TOP TENNESSEE EXPORTS TO CHINA BY PRODUCT CATEGORY (in thousands of U.S. dollars)[56]

Item	2001	2002	2003	2004	2005	2006	2007	2008
Total	184,056	337,800	636,103	1,214,115	1,418,831	1,883,367	1,135,299	1,363,942
325 _Chemical Manufactures	79,476	99,176	107,861	168,582	300,606	307,287	361,524	390,704
111 _Crop Production	10,459	74,337	333,826	797,203	766,162	943,733	118,404	230,327
910 _Waste & Scrap	6,743	12,358	19,949	26,173	46,243	107,683	142,905	133,985
334 _Computers & Electronic Prod.	17,381	25,622	38,622	47,156	78,685	99,235	119,432	107,542
331 _Primary Metal Manufactures	1,433	1,100	2,732	10,356	24,235	50,144	48,812	90,104
333 _Machinery Manufactures	23,343	70,015	50,887	54,041	59,703	147,883	77,772	79,902
313 _Fabric Mill Products	2,488	2,021	4,162	8,898	14,377	38,518	39,982	66,590
339 _Misc. Manufactures	4,549	6,774	9,882	22,565	38,921	49,878	43,538	48,085
335 _Elec. Eq., Appliances & Parts	9,652	10,211	17,141	23,500	26,097	32,762	42,934	44,548
336 _Transportation Equipment	9,077	13,454	17,717	15,463	18,829	22,718	30,754	37,018
332 _Fabricated Metal Products	3,924	3,019	2,921	15,345	11,904	23,891	21,379	34,848
326 _Plastic & Rubber Products	2,914	2,573	1,572	1,942	2,892	8,385	11,339	15,459
322 _Paper Products	2,138	4,125	1,332	2,598	11,058	16,966	20,200	15,155
327 _Non-Metallic Mineral Mfgs.	964	1,349	3,065	2,300	2,149	3,767	4,237	14,562
113 _Forestry & Logging	1,464	1,763	2,217	1,040	1,718	2,154	5,314	10,261
311 _Processed Foods	1,783	1,556	5,261	3,342	1,910	1,553	5,561	10,124

[56] Tradestats Express, "Tennessee Exports to China."

The fact that no one sector dominates Tennessee's exports to China reveals two things: first, that Tennessee has a diverse range of goods being produced in the state that have a market in China and second, that there is most likely potential for growth in exports to China across many different industries. This is in contrast to several of the states that currently rank ahead of Tennessee on the list of top state exporters to China where one category of products (and in turn, one or two individual industries) make up close to or over half of all state exports to China.

Tennessee has several advantages in trading with China. Cotton is a major product produced in Tennessee and one of the top individual products exported to China from the state. In addition to the demand for cotton in China being tied to China's growing domestic market for clothing and textiles, Tennessee's cotton producers were also aided by the WTO Agreement on Textiles and Clothing, which caused import quotas to be eliminated on those types of goods in China beginning in 2005. Because Chinese textile and clothing manufacturers are now no longer protected by import quotas and subject to competition in their domestic market from international firms producing clothing and textiles, the Chinese companies have to increased their exports to the United States and other international markets. This increase in production has lead to an increased need for raw materials, which has been beneficial to suppliers of cotton like those in Tennessee.[57]

When many Americans think of the link between jobs and trade, they often first think of jobs from the United States being outsourced or moved offshore to countries that

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[57] Shayla Byrd, "The Orient Export," *Business Tennessee*, November 2004, http://www.businesstn.com/content/orient-export, (accessed March 1, 2009).

serve as cheaper production sites, such as India and China.[58] In Tennessee, job creation as a result of foreign trade is often looked at from the angle of attracting foreign companies to open production sites within the state, like the German automaker Volkswagen recently did when it opened a plant near Chattanooga, Tennessee.[59] These types of efforts are an important part of Tennessee's trade relationship and help to create jobs for Tennesseans, which is why the state puts a great deal of effort into attracting this type of investment (in its first year and a half of operation the Tennessee-China Development Center has focused on getting Chinese companies to open production sites and make investments in Tennessee). Yet the role of exports in creating jobs at home is often overlooked. This is a mistake; by increasing exports, businesses can increase profits and create jobs. The U.S. Business Roundtable found that in 2005, 17 percent of Tennessee jobs (617,437 jobs) were supported by international trade, up from 9 percent in 1992. In total, over 5,300 Tennessee businesses exported some amount of products abroad (as of 2004).[60]

Looking at individual Tennessee companies exporting to China, there are several large companies that can be noted. The product category that makes up the largest percentage (measured by exports in dollars) of Tennessee exports to China is chemicals, with Kingsport-based Eastman Chemical Company making up a considerable amount of these exports. In addition to chemicals, Eastman also produces plastics and fiber products. Eastman has operations and facilities to promote and produce its products

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[58] John Harwood, "Republicans Grow Skeptical on Free Trade," *The Wall Street Journal*, 4 October 2007.

[59] "Chattanooga Chosen for $1 Billion Volkswagen Plant," *The Chattanoogan*, 15 July 2008.

[60] "Study Shows 617,437 Tennessee Jobs Tied to Trade."

throughout the world, in North America, Latin America, Europe, Africa, the Middle East, and Asia.[61] Eastman began planning substantial increases in its investment in and exports to China over a decade ago, even before China's ascension to the WTO made doing business in China substantially easier due to the easing or removal of many trade barriers.

In 1995, Eastman pledged to invest up to $1 billion in China, focusing on both exporting and manufacturing three types of core chemicals – polyesters, oxo chemicals, and acetyl chemicals.[62] Today Eastman has two plants based in China. Eastman's first China plant is based in the city of Nanjing. Opened in 2000 and expanded in 2006, this facility focuses on producing hydrogenated resin, which is then sold to companies that produce adhesives used in goods such as glue sticks, packaging applications, and disposable diapers. The second plant, in operation since 2002, is located in Zibo City, Shandong Province, and makes products that are used to manufacture sheet flooring and toys (among other items), as well as products used in paint.[63]

Probably the most notable large Tennessee company to have success doing business in China is one that assists companies from Tennessee and around the globe with transporting and delivering, among other things, products to be export – Federal Express (FedEx). Entering the Chinese market in 1984 gave FedEx an advantage over many international companies that would not set up trade relations with or operations in China until almost a decade or later. In 1989, FedEx Chief Operating Officer Fred Smith, in a move that was criticized by most of Wall Street at the time, solidified FedEx's

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[61] Eastman Chemical Company Manufacturing Sites, http://www.eastman.com/Company/Corporate_Citizenship/Responsible_Care/Manufacturing_Sites/Nanjing.htm, (accessed March 15, 2009).

[62] "International Business: Eastman Chemical-China," *The New York Times,* 14 September 1995.

[63] Eastman Chemical Company Manufacturing Sites.

position in Asia by buying Tiger International Incorporated for $895 million. Though Tiger International was a struggling cargo carrier and most Asian economies at the time were viewed as unstable by U.S. analysts, Smith wanted to acquire the company in order to gain access to both its highly knowledgeable local management team and its flying rights into most major Asian airports. The move ended up giving FedEx a huge advantage in the Asian market, and today the company has 26 flights out of China and 120 to and from various Asian airports each week.

Between 2004 and 2006, FedEx's earnings increased by 21 percent and the volume of goods shipped has increased by 40 percent; the company credits much of this growth to its growth of operations in Asia. FedEx has made three major efforts in recent years to expand its business in China. In 2006, FedEx bought out delivery partner and Chinese company Datian Group in order to try and increase domestic delivery services within China's major cities. This domestic express service in China began in 2007. In 2008, FedEx received a previously-placed order of 20 Airbus A-380 cargo planes, which can hold up to twice the load of the Boeing MD-11s (the other type of plane that makes up much of the company's Asia fleet) and fly non-stop from FedEx's hubs in the U.S. to those in Asia.[64]

Lastly, in early 2009, FedEx moved its Asia Pacific operations hub from Subic Bay in the Philippines to Guangzhou, China's Baiyun International Airport. This hub in Guangzhou is FedEx's largest outside of the United States and shows its commitment to expanding its business operations in China. Guangzhou has become a major production center for both Chinese and international companies and a hotspot for international trade,

[64] "The Business Week 50: Strategies for Success - FedEx," *Business Week.* 3 April 2006.

making it a good location for FedEx to base its growing Asia (and specifically growing China) operations and assist companies exporting to and doing business in China and other parts of Asia. The company spent $150 million to open the new hub; it will serve over 220 countries around the world with 136 flights each week.[65]

FedEx and Eastman are just two examples of large Tennessee companies that have found success doing business in China. Even in the current economic downturn (which has caused Eastman in particular to have to make substantial cuts and layoffs), these companies will probably continue to expand their operations in China, as China represents a market for growth for the products and services of these two entities.[66] Yet the majority of Tennessee companies exporting to China and those that represent the greatest area for potential growth in Tennessee exports and exporters to China are small- and medium-sized enterprises (SMEs). Of the 5,300 Tennessee companies exporting goods overseas in 2003, approximately 80 percent were SMEs.[67] Out of those businesses, 245 were exporting goods to China (up from 78 in 1999). This shows that the number of Tennessee SMEs exporting products to China is steadily increasing, and reveals two areas for potential growth for Tennessee exporters and exported products to China: first, SMEs already investing in China can increase their presence outside of China's major markets, and second, the several thousand SMEs that are currently exporting to foreign markets besides China and are positioned to potentially move into exporting their goods to the Chinese market.

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[65] "FedEx Opens New Asia Pacific Hub in Guangzhou, China," FedEx Press Release, 9 February 2009, http://news.van.fedex.com/node/12822, (accessed March 29, 2009).

[66] Deborah Jian Lee, "Eastman Chemical Cutting up to 300 Jobs," *The Associated Press*, 9 March 2009.

[67] "Study Shows 617,437 Tennessee Jobs Tied to Trade."

For SMEs already exporting goods to China, there are several opportunities to expand their market beyond Beijing and Shanghai. Under the American Trading Centers Initiative, the U.S. Commercial Services and the China Council for the Promotion of International Trade give U.S. companies access to fourteen regional offices in various Chinese cities. SMEs can use the U.S. Commercial Services' experience and expertise in the Chinese market and proven international marketing tools in order to help successfully sell their exports to new cities and secondary markets throughout China. SMEs without current exports to or operations in China can also utilize these services.[68] Many Tennessee SMEs are already exporting things such as medical instruments, chemicals, computer parts, and agricultural products to markets in Latin America, Europe, and other regions of the world.[69] Moving into the Chinese market makes sense for many of these companies. China's growing middle class means more and more consumers with disposable income and the desire to purchase an increased amount of goods and services; Tennessee SMEs can serve this group both through direct exports of consumer goods (such as laptops) as well as providing parts and raw materials (like cotton for textiles) to growing Chinese companies.

The market for healthcare instruments and supplies is also one where Tennessee is well positioned to serve the Chinese market. In talking about his trade mission to China, Governor Bredesen spoke specifically about this market, stating that "China faces challenges in delivering health care to its more than three billion citizens. Tennessee's

[68] "Companies Export More to China."

[69] Livingston.

prominence as a center of health care education and innovation could play a major role in helping China deal with its healthcare challenges."[70]

Several Tennesseans are already making investments in the healthcare industry in China, and their successes could lead to a greater market there for Tennessee exporters of healthcare instruments and supplies. In 2007, the Memphis-based West Clinic, in conjunction with Shanghai's Kanglian Hospital, opened a regional cancer care center in Shanghai that provides state-of-the-art medical care to Chinese oncology patients.[71] The co-founder of Nashville's HCA, Inc., Dr. Thomas Frist, along his son-in-law Chuck Elcan, recently founded a new company, China Healthcare Corp. (CHC). The company's first project is a joint venture with a Chinese partner to build and operate a hospital (of which CHC will own and control 70 percent) in the Chinese city of Ningbo, near Shanghai. Healthcare is an area in which the Chinese government is looking to make reforms over the next several years; there is a general feeling that the public healthcare system is Chinese is insufficient, and because of this many Chinese live in fear of losing their life's savings over paying hospital bills because the public health system may not be able to adequately cover their expenses. The Chinese government realizes that the current problems with the healthcare system could potentially lead to social unrest as citizens demand improvements in efficiency and coverage.

CHC is hoping that an expansion of coverage in the Chinese public healthcare system will make the new hospital profitable once it begins operations (currently the

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[70] Phil Bredesen, "Tennessee Stands at Forefront of Changing U.S.-China Relationship," The National Governors Association, 30 May 2007, http://www.nga.org/portal/site/nga/menuitem.6c9a8a9ebc6ae07eee28aca9501010a0/?vgnextoid=d87a9886dc773110VgnVCM1000001a01010aRCRD&vgnextchannel=48399286d9de1010VgnVCM1000001a01010aRCRD, (accessed 25 March 2009).

[71] Durnin.

hospital is still waiting for final approval by the Chinese government but the majority of the negotiations have been completed). The hospital will also make money by reserving some beds for patients paying with private funds. The Chinese Health Minister, Gao Qiang, has said that "foreign invested hospitals," such as this one in Ningbo, "will be strictly supervised by the Chinese government, but there will no intervention in the economic management of these hospitals."

Looking at the potential for successful for ventures such as this, Julie Chen, an expert on Chinese business and healthcare and senior vice president at Connecticut investment bank CRT Capital Holdings LLC, says that

> The Chinese regime has targeted improvements in health care as a key element in its efforts to maintain social harmony amid the dramatic changes sweeping through the country's economy…If CHC's venture succeeds, it would open the floodgates to further American investment. Since Chinese entrepreneurs lack the capital and expertise to bring about improvements on their own, the central government is likely to take a favorable view of further interest from Nashville's health care niche players, such as developers of ambulatory surgery centers and specialty clinics for various diseases.[72]

CHC's success in the Chinese market would be a success for Tennessee-based healthcare companies looking to export both supplies and services to China and could also raise the level of expertise on healthcare and quality of healthcare provided in China.

As noted earlier, the Tennessee China Development Center is currently focusing much of its efforts on growing Chinese investment in Tennessee. Though the focus of this paper is the other side of this trade relationship, Tennessee exports to and investment in China, it is important to note the efforts being undertaken by the Tennessee China Development Center to promote Tennessee as a place for Chinese investment. Though

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[72] "HCA Heirs Could Make China Nashville's New Health Care Front," *The City Paper*, 28 July 2008, http://www.nashvillecitypaper.com/content/city-business/hca-heirs-could-make-china-nashville%E2%80%99s-new-health-care-frontier, (accessed 25 March 2009).

the Center has only been open for a little less than two years, its small but knowledgeable and dedicated staff has been hard at work promoting Tennessee in China.

Currently, the Center has undertaken a project of trying to create a database of Chinese companies that could potentially invest in Tennessee, focusing particularly on Chinese companies that already have investments or manufacturing operations in other U.S. states.[73] The Center has thus far focused on several industries in China, including automotives, telecommunication, heavy machinery production, and medical device manufacturing, that could potentially set up manufacturing operations in Tennessee. According to Li Weaver, the Center's director, they are "promoting Tennessee as an automotive manufacturing base, health-care capital of the United States and North American logistics and distribution center."[74]

The Tennessee China Development Center has helped promote Tennessee to Chinese businesses by lauding Tennessee's business-friendly tax system, which includes no state income tax, no sales tax on industrial equipment, and various other special tax credits and exemptions for manufacturing. Tennessee also has lower average hourly wages and a lower percentage of unionized workers than the United States as a whole. Various Tennessee cities offer different attractions for potential business location and investment: Memphis is a logistical hub, not only as the headquarters of FedEx but also with its Mississippi River location and the Memphis international airport serving as a large hub for Northwest Airlines; Nashville is home to a growing healthcare industry; and the Knoxville/Oak Ridge area is home to thousands of technology-based companies in

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[73] Weaver.

[74] Joe Morris, "New Office Promotes Volunteer State in China," *Tennessee Economic Development Guide,* 25 August 2008, 23.

addition to Oak Ridge National Laboratory, making it a center for highly-skilled, highly-educated science and technology workers. Furthermore, Tennessee as a state is a prime location for distribution (it takes only one day to deliver products from Tennessee to 76 percent of the U.S.'s major market).[75]

One Chinese company that is already investing in Tennessee is Fushi International, Inc., a manufacturer of bimetallic wire, which is used in industrial products in the automotive, utility, and telecommunication sectors.[76] Fushi's sole American manufacturing facility is located in Fayetteville, Tennessee.[77] Fushi acquired the Fayetteville facility after buying out Fayetteville-based rival Copperweld Bimetallics for $22.5 million (including $8 million in assumed debt), the largest purchase in Tennessee by a Chinese company.[78] Fushi has emphasized the importance of the Fayetteville site in the long-term growth of the company, making it the center of research and development and expanding its production to include fine wires along with the copper-clad steel and aluminum wire and dead solid annealed strand already being produced there.[79] Shortly after Fushi's purchase in late 2007, the company invested $3.2 million for new equipment for the facility. This investment came on the heels of Governor Bredeson's trade mission

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[75] Tennessee China Development Center, "Investment Advantages," http://www.tn-china.cn/English/touzi/Investment.htm, (accessed April 15, 2009).

[76] "Copperweld to Expand Product Line," http://usstock1.jrj.com.cn/news/2007-11-26/000002975203.html, (accessed April 15, 2009).

[77] Fushi Copperweld, Inc., "Manufacturing Facilities," http://www.fushiinternational.com/Manufacturing.aspx?p=Facilities, (accessed April 15, 2009).

[78] Drew Ruble, "Interesting Times," *Business Tennessee,* December 2007, http://www.businesstn.com/node/996, (accessed April 15, 2009).

[79] Fushi Copperweld, Inc.

to China, where he met with Fushi executives.[80] In my conclusions, I will make predications for further growth in Chinese investment in Tennessee in addition to looking at potential growth sectors for Tennessee businesses exporting to China.

TENNESSEE-CHINA TRADE IN COMPARTIVE PERSPECTIVE

All fifty U.S. states, plus the District of Columbia and the U.S. Virgin Islands, have had some amount of exports to China each year between 2001 and 2008 (except for no exports from the Virgin Islands to China in 2002). Out of all U.S. states in 2008, Tennessee was the thirteenth largest exporter to China (see Table 4), rising from twenty-second largest in 2001. This increase in Tennessee exports to China, a dollar growth from $184 million in 2001 to more than $1.36 billion in 2008, along with the rise in Tennessee's ranking for twenty-second to thirteenth, shows that Tennessee's growth during this time period is not merely a reflection of overall growth in exports from them U.S. to China but also that Tennessee increased its number of exporters and exported merchandise during this time period in greater numbers relative to other states.

In 2008, the total dollar value of all exports by U.S. states[81] (including the District of Columbia and the U.S. Virgin Islands) to China equaled $71.5 billion.[82] In this same year, the TradeStats Express breakdown of U.S. exports to China by state shows that twelve states exported more products to China (measured in U.S. dollars) than

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[80] "Copperweld to Expand Product Line."

[81] The United States, along with over 177 other economies, used the "Harmonized System" (HS), developed by the World Customs Organization to measure national trade data.

[82] TradeStats Express, "U.S. Exports to China by State."

Tennessee.[83] Those states are, in descending order from highest dollar exporter in 2008 with monetary total (rounded to the hundredth billion) of exports in parenthesis: California ($11 billion), Washington ($9.9 billion), Texas ($8.4 billion), Louisiana ($3.5 billion), New York ($2.8 billion), Illinois ($2.5 billion), Oregon ($2.5 billion), Georgia ($2 billion), North Carolina ($1.9 billion), Ohio ($1.8 billion), Pennsylvania ($1.6 billion), and Massachusetts ($1.6 billion).[84] These states are spread out across the United States, demonstrating that exporters to China are not concentrated in one region (such as the West) but rather spread across the country.[85] Tennessee is the fourth-largest exporting state in the South Atlantic region, behind Louisiana, Georgia, and North Carolina. Table 4 lists full monetary totals for all of these states, as well as the rest of the top 20 exporting states, for the years 2001-2008.

Looking at the TradeStats Express data for overall U.S. merchandise exports to China, the largest single category of exports in 2008 is electrical machinery, including sound and television equipment as well as their machine parts, totaling over $11 billion and making up 15.9 percent of U.S. merchandise exports to China. This is followed by nuclear reactors, boilers, and machinery ($9.7 billion and 13.6 percent); agricultural products like seeds, grains, fruit, and plants ($7.3 billion and 10.3 percent); aircrafts and spacecrafts as well as aircraft and spacecraft parts ($5.1 billion and 7.1 percent); plastics

[83] The North American Industry Classification System (NAICS) was developed by the U.S. Office of Management and Budget in conjunction with other government agencies and the Canadian and Mexican governments. It is the standard industry classification system for a variety of U.S. government statistics, including the state trade data used in this paper.

[84] TradeStats Express, "U.S. Exports to China by State."

[85] *U.S. Exports to China by State.*

and articles made of plastics ($3.8 billion and 5.4 percent); and optic and photo devices and medical and surgical instruments ($3.7 billion and 5.2 percent).[86]

Below is a breakdown of where China ranks as an export market and the top export categories for the top twelve states exporters to China in 2008 (the twelve states that currently rank above Tennessee):

- California – China is California's fourth-largest export market, behind Mexico, Canada, and Japan. California's top export category to China is computer and electronic products ($3.3 billion and 30.4 percent of California's exports in dollars to China).

- Washington – China is Washington's largest export market. Washington's top export category to China is transportation equipment ($4.2 billion and 42.7 percent of Washington's exports in dollars to China).

- Texas – China is Texas's fourth-largest export market, behind Mexico and Canada. Texas's top export category to China is chemical manufactures ($2.5 billion and 30.1 percent of Texas's exports in dollars to China).

- Louisiana – China is Louisiana's second largest export market (Mexico is the first). Louisiana's top export category to China is crop production ($2.6 billion and 74.7 percent of Louisiana's exports in dollars to China).

- New York – China is New York's ninth-largest export market, behind Canada, Switzerland, Israel, the United Kingdom, Hong Kong, Japan, Belgium, and Germany. New York's top export category to China is waste and scrap, or materials that have been derived from manufacturing or consumption and have raw materials that can be recovered from them ($929 million and 32.9 percent of New York's exports in dollars to China).[87]

- Illinois – China is Illinois's third largest export market, behind Canada and Mexico. Illinois's top export category to China is machinery manufactures ($525 million and 21.2 percent of Illinois's exports in dollars to China).

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[86] Tradestats Express, "Total U.S. Exports to China."

[87] Under the NAICS system, the U.S. government treats exports to Hong Kong (a Special Administered Region of the People's Republic of China since 1997) as a separate category than exports to China. Because this is the standard government classification system, this paper will also treat it as such.

TABLE 4: TOP 20 U.S. STATES EXPORTING TO CHINA (in thousands of U.S. dollars)[88]

State	2001	2002	2003	2004	2005	2006	2007	2008
U.S. Total	19,234,827	22,127,790	28,367,943	34,744,053	41,925,281	55,185,707	65,236,121	71,457,073
California	4,676,056	4,482,781	5,442,742	6,846,569	7,821,342	9,970,700	10,566,024	11,025,067
Washington	2,928,721	3,922,749	3,269,109	3,100,108	5,021,632	6,794,604	9,610,468	9,928,809
Texas	1,577,843	2,051,552	3,057,699	4,461,434	4,944,881	6,641,464	8,278,906	8,446,843
Louisiana	682,723	781,373	2,117,108	2,194,827	1,950,150	2,230,060	2,652,979	3,510,120
New York	1,036,173	1,117,943	1,442,417	1,882,005	2,067,883	2,179,310	2,504,762	2,820,050
Illinois	700,656	660,774	710,466	925,473	1,204,266	1,521,137	1,958,805	2,512,699
Oregon	452,551	679,632	574,885	793,952	807,324	1,396,056	1,426,353	2,468,799
Georgia	390,036	415,624	638,549	799,527	979,588	1,083,980	1,599,694	2,002,053
North Carolina	393,859	365,808	648,958	648,144	776,284	1,340,301	1,769,008	1,943,415
Ohio	449,614	510,157	642,994	964,644	939,395	1,303,825	1,498,252	1,818,057
Pennsylvania	319,651	425,131	563,090	784,127	933,179	1,264,317	1,293,499	1,630,564
Massachusetts	425,350	384,717	571,705	894,394	883,727	1,291,236	1,375,077	1,563,351
Tennessee	184,056	337,800	636,103	1,214,115	1,418,831	1,883,367	1,135,299	1,363,942
Michigan	251,283	284,029	366,359	608,845	699,245	1,015,969	1,313,683	1,288,073
Arizona	141,859	381,542	739,848	629,003	649,845	1,196,297	1,317,119	1,254,240
Wisconsin	319,570	345,021	548,314	580,176	673,256	870,111	1,178,915	1,231,218
Virginia	262,540	368,769	520,460	608,544	721,829	942,661	1,103,749	1,163,942
Minnesota	216,597	304,554	377,381	409,849	742,080	886,093	1,042,954	1,022,364
New Jersey	397,738	423,123	506,379	576,511	595,006	825,128	901,519	980,955
Missouri	108,302	128,982	259,695	366,017	521,250	761,503	1,015,605	944,970

[88] Tradestats Express, "Total U.S. Exports to China by State."

- Oregon – China is Oregon's second largest export market (Canada is the first). Oregon's top export category to China is computer and electronic products ($1.8 billion and 73 percent of Oregon's exports in dollars to China).

- Georgia – China is Georgia's second largest export market (Canada is the first). Georgia's top export category to China is processed foods ($18 million and 61.5 percent of Georgia's exports in dollars to China).

- North Carolina – China is North Carolina's second largest export market (Canada is the first). North Carolina's top export category to China is computer and electronic products ($380 million and 19.6 percent of North Carolina's exports in dollars to China).

- Ohio – China is Ohio's fourth largest export market, behind Canada, Mexico, and Brazil. Ohio's top export category to China is machinery manufactures ($369 million and 20.3 percent of Ohio's exports in dollars to China).

- Pennsylvania – China is Pennsylvania's fourth largest export market, behind Canada, Mexico, and Belgium. Pennsylvania's top export category to China is machinery manufactures ($370 million and 22.7 percent of Pennsylvania's exports in dollars to China).

- Massachusetts – China is Massachusetts's sixth largest export market, behind Canada, the United Kingdom, the Netherlands, Germany, and Japan. Massachusetts's top export category to China is computer and electronic products ($712 million and 45.6 percent of Massachusetts's exports in dollars to China).[89]

This breakdown shows that the types of products being exported in large numbers to China are varying. For some states, such as California, the large amounts of computer and electronic products being exported to China can be tied to a large number of firms in a concentrated area; in the case of California, the large number of different computer and tech firms based in the Silicone Valley area. In the case of the second highest state exporter to China, Washington, the dominance of transportation equipment as a large export can be tied to a specific company – Boeing, and a specific product – airplanes.

[89] Tradestats Express, "U.S. Exports to China by State."

Boeing was actually one of the first U.S. companies to export to China, filling a 1973 Chinese order for ten 707 aircrafts.[90]

Some of the states' top export products are similar by region (computer and electronics in California and Oregon and manufacturing machinery in neighboring Ohio and Pennsylvania, for example). Ohio and Pennsylvania are well known U.S. hubs of manufacturing, and their top exports to China are machinery manufacture products. This is the same for many of the other states (processed food, for example, is a top export from Georgia to other countries besides China and manufactured foods are a well-known product of that state). Others, like New York, whose top export is waste and scrap, are more surprising in that scrap metal is not usually associated with being a product of New York.

The purpose of looking at each of these states is to see if any of these states employ certain methods to help state businesses export to China and promote exports by these businesses in China. Obviously a large amount of trade success has to do the comparative advantages that each state has. This can be credited to certain types of products, industries, or companies being located in a certain state due to geography, population, state laws and regulations that make it a friendly home for that entity, or other less planned-out factors (like the company founder just happening to live in that state). It is highly unlikely that Tennessee will ever surpass a state like California as top exporter to China, if nothing else based on the fact that California's economy is substantially larger than that of Tennessee. It is also highly unlikely that a company that is a current high-volume exporter to China in another state (like Boeing in Washington) will decide to move a substantial portion of its operations to Tennessee. It is useful, however, to look

[90] Huntsman, 2.

at what efforts that the government and the private sector of these states are undertaking and see if any of these can be applied to Tennessee as a growing exporter to China.

Each of these twelve states has state trade offices, similar to the Tennessee-China Development Center, located in either Beijing or Shanghai (or both). All of these states opened their trade offices before Tennessee (many in the late 1990s and early 2000s) and thus have had time to build up a greater number of contacts in China and compile more data useful to their state's businesses attempting to expand their export market into China or increase their overall exports if already investing in China. Each of these state trade offices places an emphasis on helping their state's businesses gain greater access to the Chinese market; this focus on state exports manifests itself in several ways. Many of these state trade offices spend a significant amount of time creating informational materials and giving presentations to educate the businesses of their states about the methods and advantages of investing in China. Furthermore, the offices facilitate trade missions by state government officials and business leaders to China in order to both strengthen ties with Chinese officials and business leaders as well as to educate leaders in their state about the advantages of exporting to and doing business in China.[91]

The state trade offices and their counterparts in the state economic agencies back home also work on efforts to educate politicians, businesses, and the general public about the advantages of exporting to China (such as domestic job creation). These efforts have been met by different climates in different states based on the state's political, economic, and demographic situations. In states like California, Washington, and Oregon, exports to China are linked to industries that continue to grow and that support a number of high-paying jobs (like those in the computer and electronics industry). In these states, the

[91] Various sources, state trade agencies and foreign trade office websites.

public generally accepts trade with China as a net positive for state industries and the state as a whole. In states where the chief exporting industries to China are more manufacturing-based, like Ohio and Pennsylvania (where the top exporting category is machinery manufactures) as well as North Carolina (where, though computer and electronic products are the top single export category, various categories of textile products and materials related to textile production as well as manufactured furniture are also a large amount of the state's exports to China), public perception of trade with China is not necessarily positive.

The 2008 campaigns for U.S. President and U.S. Senator in North Carolina display this point. Trade with China became a big issue in North Carolina in 2008; many citizens felt that textile and furniture manufacturing jobs were being lost to China and that China was manipulating its currency to create a trade imbalance with the United States that was hurting businesses and workers in North Carolina. A group called the North Carolina Justice Center even alleged that the state had lost 79,800 jobs between 2001 and 2007 as a result of trading with China and that, in addition to this loss of jobs, cheap Chinese imports were causing wages to be lowered for North Carolina workers in the aforementioned manufacturing sectors that was driving these workers into poverty.[92]

Within this framework, then-candidate Barack Obama stated, in a letter to the National Council on Textile Organizations, that China was manipulating its currency to keep a trade surplus with the United States and that "China must change its policies, including its foreign-exchange policies" and "rely less on exports and more on domestic

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[92] John Quinterno, "China Trade has Cost North Carolina 79,800 Jobs," North Caroline Justice Center, 30 July 2008, http://72.14.235.132/search?q=cache:sB-T9_9_pWEJ:www.ncjustice.org/assets/library/1239_chinatrade.pdf+%22north+carolina%22%2Bchina%2Btrade&cd=4&hl=en&ct=clnk&gl=us, (accessed 5 March 2009).

demand for growth," and that as President he would "use all diplomatic means at my disposal to induce China to make these changes."

Directly speaking about the textile industry in North Carolina, the Wall Street Journal says that Obama

> ...also promised to closely monitor textile shipments from China, once import limits on a wide range of Chinese-made apparel expire at the end of the year. And he promised to make use of trade-remedy laws to protect industries, like textile producers, if they are threatened by unfair competition from abroad. "I am especially aware of the trade challenges faced by those working in our textile industries" he said.

These sentiments were not restricted to Democratic candidates in the fall of 2008; now-former North Carolina Senator Elizabeth Dole, a Republican, also echoed Obama's sentiments on trade with China, "writing the White House and urging steps be taken to ensure U.S. textile producers and workers 'not be put in harm's way' once the limits on Chinese imports expire" and complaining that "China has increased its subsidies for textile producers."[93]

Though neither Dole or Obama won in North Carolina, their remarks play off popular sentiments in the state and reflect a growing protectionist tone in many states with manufacturing industries (even those, like North Carolina, that are also large exporters to China).[94] It is also interesting to note that the states with the strongest opposition to trade with China (like North Carolina and Ohio) are the states out of the top exporters with some of the smaller populations of Chinese-Americans. Though this has

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[93] Gregg Hitt, "China-Trade Issues Thrust into Race as Vote Nears," *The Wall Street Journal*, 30 October 2008.

[94] North Carolina International Trade Services, http://www.nccommerce.com/en/BusinessServices/SupportYourBusiness/InternationalTradeServices/, (accessed March 27, 2009).

not been well-researched in academic journals, it is possible that states with a greater population of Chinese-Americans tend to have a citizenry with an overall better understanding of China and more incentives to promote trade with China. In fact, out of the top ten U.S. states with the largest population of Asian-Americans, six of the ten (California, New York, Texas, Illinois, Washington, and Massachusetts) are among the top twelve exporters to China.[95]

These states with large Chinese-American populations also tend to have the strongest private sector support of trade with China. Almost all of the states that are top exporters to China have active private sector state-China business councils or similar organizations. These organizations serve several purposes. First, they bring together businesses throughout the state with ties to China in order to share expertise on doing business in China as well as share business connections they may have there. Additionally, they lobby state and national officials on issues related to China trade. These types of organizations can also be good collectors of data and trackers of businesses in their state that export to and/or invest in China. State-China business councils can also serve as important educators to their communities about the benefits of doing business with China and put a human face on issues involving China trade policy.

CONCLUSIONS, PREDICTIONS, AND RECOMMENDATIONS

Trade with China is best understood within the context of China's economic reforms and growing openness to foreign trade. As Deng Xiaoping led China away from state-planning and control over all industries and towards reform in its banking and

[95] "Asian American/Pacific Islander Profile," Office of Minority Health, Department of Health and Human Services, http://www.omhrc.gov/templates/browse.aspx?lvl=3&lvlid=29, (accessed March 27, 2009).

financial system, China, a naturally attractive market for foreign trade and investment because of its large population, began to put the economic and legal standards in place to make it possible for more foreign entities to form investment and trade relationships with China.

China's ascension to WTO membership in 2001 broke down further trade barriers and put China into compliance with the legal system that governed international trade between most of the world's nations. WTO membership led to increasing trade ties between the United States and China as well as gave the U.S. a formal forum and legal construct within which to air trade grievances with China. For U.S. companies, doing business with China today, though easier than ever before, is still not without its problems. Additionally, China still employs certain trade barriers and heavy-handedness in dealing with the Chinese currency that tends to have a negative effect on U.S. exporters to China as well as American public perception of trade with China.

As the state experiencing the largest growth of exports to China, the opening of the Tennessee-China Development Center and the increased emphasis on trade with China by the governor are natural steps in further developing Tennessee's trade relationship with China. Tennessee comparatively exports a greater dollar amount of goods to China than most other states in its region and the majority of other states in the country. Tennessee holds several advantages as an exporter to China, many of which indicate that it will continue to grow its overall export dollars to China. Tennessee exports to China are not concentrated in one industry or from one large company; rather, many different industries and many different types of companies (including many small- and medium-sized companies) export goods from Tennessee to China. This leads me to

predict continued growth of overall Tennessee exports to China, as well as be able to predict growth by specific types of companies and in specific sectors.

The biggest potential for growth in Tennessee exporters to China is by small- to medium-sized enterprises. Because the Tennessee SMEs already exporting internationally have a general knowledge of exporting operations and capability to export, this is a natural area for growth and one in which the state of Tennessee can both encourage these SMEs to export to China and help them find appropriate markets in China. In Tennessee, the number of small- and medium-sized businesses exporting to China increased 214 percent from 1999 to 2002.[96] Many of these SMEs already exporting to China focus their operations on exporting to the Beijing and Shanghai markets (and Chinese companies based in these cities). The U.S. government has made considerable efforts to help U.S. exporters expand into additional major and secondary Chinese markets; Tennessee SMEs that are already exporting to China's two largest markets can take advantage of the knowledge and connections of the U.S. government by using these government offices and programs to expand their reach further into various markets within China. SMEs can also take advantage of the services offered by Tennessee businesses like FedEx that have already established themselves in China and provide a service that gives companies exporting to China greater access to cities throughout that country.

Looking at specific industries and products with strong potential growth, I believe that the healthcare industry, including producers of medical instruments and supplies, presents the greatest opportunity for growth in Tennessee exports to China. The state of Tennessee has become a leader in the healthcare industry, with Nashville as a hub for

[96] "Companies Export More to China."

healthcare-related businesses. With the rising public and government attention being paid to healthcare issues in China and its continually growing population, public healthcare will only grow in importance as a political, economic, and social welfare issue in China. Tennessee stands in the unique position to offer expertise in providing both services and healthcare-related products to the Chinese market. If ventures such as China Healthcare Corp.'s new hospital outside of Shanghai prove to be a success, Tennessee would stand at the forefront of new opportunities both for the Chinese healthcare system and U.S. healthcare companies investing in China.

As China's population continues to grow and more Chinese continue to move away from rural villages and into urban areas, there will be an increased demand for agricultural products in China. This is also an area in which Tennessee exporters, specifically Tennessee farmers, can increase their exports to the Chinese market. The demand for cotton will also most likely continue to grow as China-based factories continue to produce more textile goods for domestic and international consumption. I believe that traditionally and currently strong export sectors like chemical products, machinery manufactures, and computer products will also continue to have a growing market in China, as more international companies choose to base manufacturing and other operations in China and more Chinese companies continue to grow and purchase more goods and materials from the United States.

In terms of Chinese companies investing in Tennessee, it is very likely that Chinese businesses will continue to purchase American-based commodity companies throughout the U.S., in the case of Fushi International's purchase of Copperweld and its Fayetteville, Tennessee, facilities. Steven G. Livingston, a Middle Tennessee State

University Political Science professor and senior research associate at MTSU's Business and Economic Research Center, believes that the buyout of some American companies by Chinese ones can ultimately bring many benefits, including increased investments to improve existing operations and facilities. He also says that Chinese companies are less likely to relocate operations or drastically reduce the number of employees, stating

> That's the difference between a hedge fund or something else buying it versus the Chinese. They don't focus so much on rate of return. In fact, they are focused on getting long-term access to materials and manufacturing capacity. The Chinese have a lot of cash, and they are looking down the road and seeing where the big bottlenecks are going to be in their economy, much of it is going to be raw material-related, so they are going out and trying to lock that stuff up.[97]

Because of benefits such as these, the Tennessee China Development Center should continue its work promoting Tennessee as a place for Chinese businesses to invest. The Center can continue its current work of creating a database of potential Chinese investors in Tennessee, as well work to increase the name recognition in China of Tennessee as a business destination. Furthermore, the state government of Tennessee can keep using its tax structure and benefits to help attract foreign investment, as well as look at what tax measures other states are using in order to attract investment from Chinese companies.

After analyzing certain measures being taken by other states with large dollar amounts of exports to China, it is clear that there are also some additional measures can be taken in Tennessee, both by entities of the state government like the Tennessee-China Development Center and by Tennessee businesses, to continue to increase Tennessee exports to China. After looking at certain measures being taken by other states with large

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[97] Ruble.

dollar amounts of exports to China, I feel that are several things that can be done. Many are fairly simple, but by establishing a stronger base of support and tighter relationship network for Tennessee businesses exporting to China or wishing to export to China, the state government can assist in aiding private sector growth, especially for the aforementioned types of companies (SMEs) and industries where the most potential growth is possible.

First, it would be useful for the Tennessee-China Development Center to compile a database of Tennessee businesses currently exporting to or having operations in China. This type of database would be helpful on many levels. By knowing which of its own businesses had interests in China, Tennessee could make more informed policy decisions on whether to support or oppose national government trade policies towards to China. The Tennessee-China Development Center would also be better able to promote Tennessee businesses within China and pursue worthwhile opportunities and connections for Tennessee businesses there if they knew exactly what specific businesses it was promoting and assisting. Furthermore, Tennessee businesses wanting to export to China could use this database to see what types of opportunities exist in China for companies in their industry and perhaps even find potential partners to work with or learn from.

The Tennessee-China Development Center could also create programs and materials outlining legal issues that affect companies exporting to the Chinese market. This would be especially useful for SMEs, which do not typically employ large teams of lawyers, accountants, etc. like large businesses, and therefore do not often have access to in-house expertise on international legal and financial issues governing trade with China. National security issues, intellectual property rights, and just general cultural differences between

the U.S. and China can be daunting issues for an SME to navigate if the company has had little experience with or exposure to China. The state of Tennessee would not have to spend money creating new resources for these companies because the U.S. government (through the Department of Commerce and other entities) provides a variety of programs to assist U.S. companies in exporting to and promoting their goods within China. If the Tennessee-China Development Center could compile information on these programs and make that information available to Tennessee businesses, it would eliminate a lot of the initial legwork that would need to be undertaken by a business interested in exporting to China as well as potential uncertainty or hesitation about some of the difficulties of trading with China.

As previously mentioned, most states that have successful trade relations with China have a strong and active state-China business council that promotes trade with China from the private sector side. In July of 2007, coinciding with the governor's trade mission to China and the opening of the Tennessee China Development Center, the Tennessee Chinese Chamber of Commerce was founded by Nashvillian and Chinese-American Dr. Ming Wang. The organization's purpose mirrors that of the Tennessee China Development Center – to assist Tennessee companies in doing business in China and attract Chinese companies to do business in Tennessee. Other specific goals of the organization are to compile statistics on Chinese-owned businesses in Tennessee, host delegations from China to America and vice versa, and hold educational seminars on issues concerning China-U.S. relations and doing business in China and with Chinese companies.[98]

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[98] Cynthia Yeldell, "Chinese Chamber to Connect China, Tennessee, *Nashville Business Journal*, 6 July 2007.

The creation of this organization is a step in the right direction for creating strong private sector support for Tennessee's efforts to increase trade with China, as well as create a network of Tennessee companies doing business in China. In order to be a strong and successful force in Tennessee's trade relationship with China, the Chamber must make sure that it is an organization made up of all Tennessee enterprises doing business with China, not just those owned by Chinese-Americans (currently the entire board of the Chamber is made up of Chinese Americans, but the Chamber encourages and welcomes all companies doing business in or with China). The Chamber should work on utilizing the business contacts and networks of Chinese-Tennesseans as well as non-Chinese residents of the state that have done business in or have contacts in China. The Chamber can serve as a private sector foil to the Tennessee China Development Center and complement and assist in many of the Center's efforts (such as compiling data on Tennessee companies investing in China or helping new Tennessee exporters break into the Chinese market by providing expertise and contacts).

Both private sector entities such as the Tennessee Chinese Chamber of Commerce and the government entities like the Tennessee China Development Center can work to educate Tennesseans (politicians, business leaders, and the general public) about the economic benefits of the trade relationship with China. Tennessee's economy is not as heavily-reliant on manufacturing industries like North Carolina, and has not experienced widespread job loss that states such as North Carolina have because of outsourcing. The global economic downturn has caused, however, the voicing of more protectionist sentiments nationally, both by politicians and some in the media.

Entities with the mission of promoting Tennessee-China trade relations should be alert to these rising sentiments and also be aware that, as a state with a relatively small Chinese-American population compared to other states with equal or higher dollar amounts of exports to China, many Tennesseans do not have personal or business connections to China that might make them more receptive to having a positive view or at least a better understanding of the issues surrounding the U.S.-China trade relationship and specifically Tennessee's efforts to grow its trade with China. The Tennessee China Development Center, as well as private-sector entities like the Tennessee Chinese Chamber of Commerce, can educate the public about both the advantages and real challenges affecting Tennessee's trade relationship with China, specifically the trade relationship's effects on jobs for Tennesseans and opportunities for Tennessee businesses. Having greater information on Tennessee businesses investing in China (through the creation of the database) will also assist in these educational efforts.

The opportunities for Tennessee businesses to export to and invest in China far outweigh the challenges of doing so. China's continued economic reforms have eased restrictions on investing and made China a more competitive market for foreign imports. Tennessee exports to China have helped create jobs for Tennesseans and growth across many different sizes and types of companies. Even with the current global economic downturn, China is still a strong potential market for Tennessee exports. The state government of Tennessee, through the Tennessee China Development Center, can work together with the private sector to promote Tennessee companies in China and assist them in doing business there. Through these efforts, the state of Tennessee can ensure

that it continues to nurture and grow an increasingly important economic relationship that has net benefits for its own citizens.

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