

## Expanding the US-China cooperation on service programs: New opportunities for both countries\*

William J. Lawrence<sup>1</sup>, SUN Wei-dong<sup>2</sup>

(1. New York Institute of Technology, New York 10023, USA; 2. Jiangsu Finance and Economics College, Huai'an 223003, China)

**Abstract:** For years, the US and China have cooperated closely on manufacturing programs, which helps China become the world manufacturing center. While they both have gained much from the cooperation, there are also increasing frictions, disputes, complains and dissatisfaction with each other because of the huge trade unbalance problem and other significant issues. The US is eager to expand export to China, but China seems hesitating to decide what to import from the US. This paper presents an analysis about the benefits of the US-China cooperation with a primary focus on the service sector, which remains a large and untapped opportunity for China. The goal of the paper is to explore a new route to relieve the trade balance issues as they separately impact both nations. While focusing on analyzing several immediate opportunities, the paper also investigates several new ideas that rest on technology as well as entrepreneurial development.

**Key words:** the US-China trade balance; service sector economy; technology based communication

### 1. Introduction

China is a rapidly developing market economy, whose influence is increasing. Currently, it is ranked as the third largest economy in the world, just after the US and Japan, with a nominal GDP of US\$4.4 trillion.<sup>1</sup> The Chinese economy has been growing at a relatively fast pace in the past 30 years, with an average GDP annual growth rate above 10%.

Two factors contribute much to China's rapid economic growth. Export trade has increased annually, from 20.1% in 2001 to 40% in 2008. Chinese exports rose from \$14 billion in 1979 to \$1429 billion in 2008, while imports over this period grew from \$16 billion to \$1133 billion in 2008.<sup>2</sup> It has recently been predicted by some experts<sup>3</sup> that China will surpass Germany as the largest exporter in the very near future.

Foreign direct investment (FDI) represents the second major contributor to China's rapid growth rates of late. China has remained one of the world's premier destinations for FDI, since it gained the access to the WTO in 2001. In 2008 alone, China absorbed \$111.17 billion of FDI. That represented an increase of 27.65% for the year comparing with the 21% drop in global FDI and a 32 % slump in FDI for developed nations.

Evidences suggest that it will be hard for China to maintain its current growth if it continues to follow its recent historical development path (World Climate Conference-3, 2009). The high export volume has created increasing trade disputes between China and its trading partners. Statistics provided by the American Chamber of Commerce

\* Fund Project: Jiangsu Government-sponsored Scholarship Project for visiting scholars (Su foreign education [2008]45th), and the 2009 Research Project from Jiangsu Provincial Department of education.

William J. Lawrence, professor, New York Institute of Technology; research fields: economics, entrepreneurship, business ethics.

SUN Wei-dong, associate professor, Jiangsu Finance and Economics College; research field: international economics.

<sup>1</sup> 2008 list by *The CIA world fact book*.

<sup>2</sup> Ministry of Commerce of the People's Republic of China Comprehensive Department.

<sup>3</sup> WTO: China surpasses Germany as world's NO.1 exporter for first time, *China Daily*, August 26, 2009.

indicates that from 2001 to 2008, the US trade deficit with China increased from \$83.10 billion to \$268.04 billion (excluding service trade), accounting for 32% of the US total trade deficit (see Table 2 & Table 3). Decreasing the trade imbalance between US and China is a top concern in US-China relations. The rapid growth for China, which is stimulated by large exports and its huge FDI, largely the result of strong manufacturing sector, has been at the expense of wage and tax reform, rising pollution, energy, and effective land use programs and a more reasonable utility distribution and cost formula (GUO & N'Diaye, 2009).

However, China can still break through the development bottleneck if it appropriately restructures its strategy to better reflect short term problems which were to be ignored. China's past growth relied heavily on investment in manufacturing. Its non-manufacturing, especially its service sectors did not receive commensurate attention from planners. During period from 2001 to 2008, net exports and investment predominantly linked to building capacity in export-based sectors which accounted for more than 60% of China's growth, up from 40% in the 1990s. This is much larger than the 2001-2008 average of the G7 (16%) and Euro area (30%). The service industries in China now only accounts for 40% of GDP (2008),<sup>4</sup> which is much lower than that of any other economy in the same size class. However, this statistic shows a considerable potential for growth in service sectors in China which can be a crucial resource for China's sustainable growth.

## **2. The features of service programs**

Service is a non-material commodity. Service provision is defined as an economic activity that does not result in ownership, and this is what differentiates service from physical goods. It is claimed to be a process which creates benefits by facilitating either, a change in customers, a change in their physical possessions, or a change in their intangible assets. Service output is a component of the nominal gross domestic product of a nation. Service sectors such as gigantic supermarkets, luxury showrooms and business services and offices, which have typically peculiar features of advanced economies. The tertiary sector of industry, also called the service sector or the service industry, is one of the three industrial categories of an economy, the others being the secondary industry and primary industry. Many of this so-called tertiary sectors are more capital-intensive and knowledge-intensive than either the primary sector (agriculture, mining, forestry, and fisheries) or the secondary sector (manufacturing and construction).

Service sector programs consist of functions such as translation, tourism, communication, building, insurance, finance, advertising, culture, education, law, medicine, as typical examples.

Since service industries' products are intangible, they contain considerably less cost in solid raw materials, and typically have a considerably smaller environmental footprint than the primary and secondary sectors. A developed service sector also provides a mature or maturing economy with an invaluable hedge against swings in the business or trade cycle. Many services are actually counter cyclical and tend to have a relatively more stable employment and revenue base which could translate into small over all swings in the level of business activity, lower unemployment turnover and get a more steady flow of tax revenues.

## **3. The service situation of both the US and China**

The service sector is the largest and most significant part of the American economy. It represents about 80% of U.S. economic activity. Services are also an increasingly more important component of U.S. trade, and accounts for much of the growth in U.S. exports.

---

<sup>4</sup> IMF Working Paper, Asia and Pacific Department. *Is China's export-oriented growth sustainable?* Prepared by Kai Guo and Papa N'Diaye, August 2009.

The US economy tends to run larger and larger trade deficit (see Table 1), however, thanks to service contribution, the deficit has a much smaller impact on the total US economy than it otherwise would have been.

**Table 1 U.S. international trade in goods and services<sup>5</sup>**

(In millions of dollars)

Period	Balance			Export			Import		
	Total	Goods (1)	Services	Total	Goods (1)	Services	Total	Goods (1)	Services
2002	-421,603	-482,829	61,226	977,469	685,171	292,298	1,399,074	1,168,002	231,072
2003	-495,042	-549,012	53,970	1,020,186	715,848	304,338	1,515,228	1,264,860	250,368
2004	-609,990	-671,834	61,844	1,159,230	806,161	353,069	1,769,219	1,477,994	291,225
2005	-715,273	-790,851	75,578	1,281,457	892,338	389,119	1,996,729	1,683,188	313,541
2006	-760,359	-847,260	86,901	1,451,685	1,015,812	435,873	2,212,044	1,863,072	348,972
2007	-701,423	-830,992	129,569	1,643,168	1,138,384	504,784	2,344,590	1,969,375	375,215
2008	-695,937	-840,252	144,315	1,826,596	1,276,994	549,602	2,522,532	2,117,245	405,287

Note: Details may not equal totals due to seasonal adjustment and rounding.

In contrast, China has a great advantage over most major exporting countries, especially when compared with that of the US economy (IMF, 2006). China's historical reliance on labor-intensive industries, enhanced by the expanding tendency of the US to outsource almost all of its manufacturing capacity, has rendered China as a leading world manufacturing center. China continues to export even more manufactured goods to the US which accounting for 21%-32% of the US total goods trade deficit during the 2002 to 2008 period (see Table 3). However, despite the US advantage over China in services industries output, its service trade surplus with China accounted for less than 4.1% of its total service trade surplus before 2008 (see Table 3). The US trade deficit to China alone, accounted for 37.7% of its total deficit to the world in 2008 (see Table 3).

**Table 2 U.S. international trade with China in goods and services<sup>6</sup>**

(In millions of dollars)

Period	Balance			Export			Import		
	Total	Goods (1)	Services	Total	Goods (1)	Services	Total	Goods (1)	Services
2002	-101,187	-103,115	1,928	28,101	22,053	6,048	129,288	125,168	4,120
2003	-121,998	-124,068	2,070	34,378	28,368	6,010	156,376	152,436	3,940
2004	-159,370	-161,938	1,624	41,983	34,744	7,239	202,297	196,682	5,615
2005	-199,105	-201,673	2,568	50,904	41,799	9,105	250,009	243,472	6,537
2006	-231,079	-234,101	3,022	63,673	53,673	10,000	294,752	287,774	6,978
2007	-254,106	-259,506	5,400	77,136	62,936	14,200	330,242	321,442	8,800
2008	-262,158	-268,040	5,882	85,602	69,732	15,870	347,760	337,772	Less than 9,988

Note: Details may not equal totals due to seasonal adjustment and rounding.

Most experts think that to decrease the US trade deficit to China, China must decrease goods export to the US. It is our position that Chinese manufactured export to the US is determined by comparative advantage principles of the market, and ongoing deficit balances might best approached by increasing the export of US services to China.

<sup>5</sup> U.S. Census Bureau, U.S. Bureau of Economic Analysis news, *U.S. international trade in goods and services*, Annual Revision for 2008 U.S. Department of Commerce, Washington, D. C. 20230.

<sup>6</sup> The same as footnote 2.

**Table 3 The degree of deficit and surplus of American good trade and service trade to China<sup>7</sup>**

Period	Deficit to China/total deficit (%)	Goods trade deficit to China/good trade deficit (%)	Services trade surplus to China/services trade surplus (%)
2002	24.0	21.0	3.0
2003	25.0	22.6	3.8
2004	26.0	24.0	2.6
2005	28.0	25.5	3.4
2006	30.0	27.6	3.5
2007	36.0	31.0	4.2
2008	37.7	32.0	4.1

#### 4. The benefits of cooperation on service programs for both countries

China and the US must recognize an unalterable reality surrounding the increasingly fast pace of globalization coupled with the equally rapid growth in technology, which will create an entirely new set of opportunities for the service sector in both countries when viewed together. Progressive economies can, indeed must, fall back on the time tested hypothesis that they are best advised to focus on that they have a natural comparative advantage in terms of production if they could get success in competition in the rapidly shrinking geography of world markets.

Capital and innovation intensive economies need to use that advantage as an export resource. That utilization involves not only exploiting its output and capacity to seek new and innovated ways if they can best expand their markets in nations without these same sectors. In addition, Capital and innovative intensive economies such as the United States, must implement the most contemporary educational and delivery systems so as to insure and maintain its leadership in this sector. Education becomes more than an output to stable growth. Current technological growth has made education at all levels an invaluable input to virtually all sectors of a modern capital, innovative and technology driven economy.

A better balance between a production and service sector economy for China is that it offers an efficient and important path towards a more responsible environmental conservation policy, a deficiency aimed at China by many of its trading partners. China's environmental problems are among the worst ones in the world, and are likely to get even worse. These environmental issues are serious for China because they have real socio-economic implications for the Chinese people and China's economy. China is known as the "world's factory" and this term is quite accurate. China is an export juggernaut in everything from t-shirts to TVs. China is the world's largest producer of steel, cement, aquaculture food and television sets, and is the second-largest producer of electricity and synthetic textiles. Unfortunately, being the "world's factory" often means exporting goods while at the same time, leaving unacceptable levels of pollutants behind on China's factory floor.

China has recently been labeled as both the world's biggest polluter and one of the world's most progressive developers and installers of renewable energy, particularly solar. Clearly, China wants to attain a positive impact in solving its pollution problems. To do so, it must not only upgrade the existing traditional manufacturing sectors, but also enhance its service sector output. A vibrant service sector will help China both relieve its pollution problems and provide a better overall output balance, so that its economy can continue to prosper throughout this century (International Monetary Fund, 2009).

#### 5. How to develop cooperation on service programs

<sup>7</sup> The same as footnote 2.

### **5.1 Expand education cooperation**

Clearly, a large number of Chinese students, scholars and doctors are eager to learn from America, but to do so, they must spend a considerable amount of money, time and energy to both apply for and implement the journey. Even more American students and scholars are also seeking intellectual, cultural and informational exchange with Chinese counterparts. However, to date, there are only 160,000 Chinese students studying in America and a mere 20,000 American students studying in China. Although President Obama declared in Shanghai on November 16, 2009, that American government would plan to enlarge the number of American students studying in China to 100,000, and his administration would simplify the visa procedures for Chinese students to go studying in America, these policies will not come close to meeting the demand for these programs on the part of Chinese students. China has more than 18,600,000 college students in 2008. If a more streamlined and efficient policy and application systems existed on both sides of the Pacific, numerous Chinese students would leap at the opportunity to study or visit America. The same enthusiasm exists on the part of many American students for studying in China.

There are many benefits for the exchange of both countries' students and scholars. The first and foremost is the chance to open closer communications and to get to know each country better, all of which would bring both countries more closely together in many ways. Another benefit by enhanced exchange will be economy. As we all learn more about each other, we open numerous doors for all to help promote each economic as well as cultural development. A third benefit will be realized by helping Chinese students master English as well as opening educational opportunities for American students to study Chinese. If more efficient and knowledgeable teachers provided, we can reduce the time it takes to learn each other's language, and we can then better create business, cultural, and artistic opportunities that can only help both nations achieve economic stability and growth better.

Identically, besides communication face to face, meeting on line is the best substitute than any other ways for education between both countries. It not only saves time and energy, but also saves money, so many people who could not afford to study or visit abroad before can realize their ideals. For example, online meeting with dimdim.com, glance or other videoconferencing software, represent an easy way to see and talk with many people at any time, regardless of where they're located. At present, there are many software companies that have developed very advanced technology to enhance international communications and conferencing. They support web meetings with up to 100 attendees, regardless of whether they do it on either Mac or Windows based machines. Attendees can see the contents of host's computer screen on their own computer screens. They can talk with the host conveniently and clearly. Therefore, even if students or scholars don't go abroad, they could be taught or met by teachers or scholars in another country. We believe that if Chinese students are taught English among a host of subject, by American teachers, they are sure to master English language well and fast at a much less cost and smaller environmental footprint. Additionally, other courses, seminars, lectures, forums, speeches and reports can be taught or transmitted with these technologies. The number of internet user in China has hit an estimated 253 million, ranking China the No.1 internet user in the world, while America has the most advanced technology in internet uses. Therefore, it is the time for China and America recognize the comparative advantage of each and both begin to develop and expand it to online virtual education.

### **5.2 Expand medicine cooperation**

Meeting on line can also play an important role in the field of medicine for both countries. Professional medical providers from both countries' could communicate and discuss difficult diseases more efficiently, as if they were in the same room. And they can also hold a joint consultation to decide how to best deal with some cures, surgical approaches, and diagnosis on a patient regardless of where they are by watching the x-ray, electrocardiograph and laboratory data as obtained.

It was a maxim that a patient must come to doctor and be observed by the doctor before being diagnosed. While in modern times, this type of observation can be almost entirely replaced by more accurate and discriminating clinical laboratory tests results which can then be transmitted to other countries or localities instantly. It means that doctors or experts outside of the countries who have not themselves examined the patient can participate in identifying the illness afflicting a person. America has been a dominant force in western medical skills and advanced medical equipment. It has long been recognized that China has many unique medical skills, which were very different from those practiced in the west. The combination of both skills would surely represent a scientific strength to deal with many illnesses. It is most crucial to diagnose the cause of an illness as quickly as possible. Before the advent of these new communication technologies, doctors and experts have to either fly to a country themselves or the patient have to fly to the place where local doctors and experts collaborate with each other. Now, meeting on line can win much valuable diagnosis and curing time.

### **5.3 Expand technology service trade**

Technology trade covers transactions of intangible assets, including patents, trade secrets, and other proprietary rights—that are used in connection with the production of goods, copyrights, trademarks, franchises, rights to broadcast live events, software licensing fees, and other intellectual property rights.

America takes huge advantage in these services and China desire to own these service products in order to enhance its service ability. However, China often complains that America sets many barriers to limit exporting high technology products to China and claims that it is one of the reasons for the unbalance trade between both countries. In contrast, America often complains that China lacks of effective IPR enforcement, which remains a major challenge (Koncz-Bruner & Flatness, 2009), as counterfeiting and piracy in China remain at unacceptably high levels and cause serious economic harm to American stakeholders across the economy, so American industries hesitate to market leading edge technology in China due to the high probability of piracy.

Although China's central government displayed strong leadership in modifying the full range of China's IPR laws and regulations in an effort to implement China's WTO obligations, effective IPR enforcement has not been achieved, and IPR infringement remains a serious problem in China. IPR enforcement is hampered by lacking of coordination among Chinese government ministries and agencies. And between sub-national authorities and the central government, there are lacks of training, resource constraints, and it is opaque in the enforcement process of governing and its outcomes of governing.

Therefore, on the one hand, Chinese regulatory authorities must initially make improvements in technology services enforcement. They must make sure that American providers' IPR must be protected efficiently; On the other hand, America must remove definite technology export limitations to China according to ongoing bilateral dialogues or negotiations. The more China is pushing to accelerate its transformation into a more market-based economy, the more should America decrease the limitations to exporting its technology service products to China.

### **5.4 Expand producer service trade**

The producer services industry covers logistics, technology, finance, information, commerce and so on, which facilitate manufacturing industry (LIU, 2008). It is a generally accepted view that advanced manufacturing industry could not exist without the presence of advanced producer service. Subsequently, it is much more difficult for manufacturing industry to maintain comparable and competitive advantages. Therefore, to enhance the producer services strength will definitely become China's concentration in the near future. Meanwhile, every producer service industry in China has donated a huge prosperous market.

For example, the Chinese logistics reached a value of \$81.4 billion, accounting for 40.5% of revenues generated for the Asia-Pacific region, and 13.8% of the revenues generated globally. The Chinese share in the

global market is predicted to increase continuously, rising to 19.8% by 2010; this is mirrored regionally, as China is predicted to increase its share in the Asia-Pacific region to 51.9% (see Table 4).

**Table 4 China logistics market value forecast**

Year	\$ billion	RMB yuan billion	Growth (%)
2005	81.4	667.9	24.00
2006	96.3	789.7	18.20
2007	107.7	883.4	11.90
2008	119.1	977.3	10.60
2009	130.0	1,066.5	9.10
2010	143.3	1,175.7	10.20
CAGR, 2005-2010			12.0

Data source: Datamonitor.

China's civil logistics market is difficult to penetrate (Office of the United States Representative, Executive Office of the President & Council of Economic Advisers, 2009), but its international logistics market is also a lucrative channel that can be easier to exploit. In March 2006, FedEx announced that it was introducing three new flights to China, taking FedEx's weekly total up to 26 flights, which means that FedEx has the highest number of weekly flights to China of all US-based logistics companies.

There are many other service data demonstrating the huge potential of China service sectors, and if America takes the chances, it will definitely expand the service sector trade with China and gain more service trade surplus with China (The US-China Business Council, 2009).

## 6. Summary

Relationship between the US and China has worked to the advantage of American economic interests. As a member of the WTO and the world's fastest-growing market, China service sector is being opened more and more to the US. The services sector accounts for most of the jobs and economic activity in the United States, and offers the best prospects for growth in U.S exports. The service sector trade means the decrease of trade unbalance degree between the US and China. Besides, the service sector trade is beneficial to China's sustainable development.

### References:

- GUO, K. & N'Diaye, P.. (2009). Is China's export-oriented growth sustainable? (IMF working papers with No. 09/172).  
 IMF. (2006, April). Projections for China. In: *World Economic Outlook*.  
 International Monetary Fund. (2009, October). Sustaining the recovery. In: *World economic outlook*.  
 Jennifer Koncz-Bruner & Anne Flatness. (2009, October). U.S. international services: Cross-border trade in 2008 and services supplied through affiliates in 2007. *Survey of Current Business*, 89.  
 LIU, Y.. (2008). The synergic development of China's producer service and manufacturing industries trial. *Seminar*. University of Birmingham.  
 Office of the United States Representative, Executive Office of the President & Council of Economic Advisers. (2009, July) *Preparing the works of today for the jobs of tomorrow*.  
 Ogallo, L. & Oludhe, C.. (2009). Climate information in decision-making in the Greater Horn of Africa: Lessons and experiences. *World Climate Conference-3*. Geneva.  
 The US-China Business Council. (2009, January). *China and the US economy: Advancing a winning trade agenda*.  
 The White House. (2009). Remarks by President Barack Obama at Town Hall Meeting with future Chinese leaders. *Museum of Science and Technology*. Shanghai, China.

(Edited by Ruby and Chris)