# Analysis of Sino-U.S. Cultural Trade Deficit

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Abstract With the development of economic globalization, cultural industry as a sunrise industry plays a more and more important role in the international economy. International cultural trade is thriving under this trend. China as a traditional trading power, its cultural trade is also developing rapidly. As we know, the United States is most developed countries, so Sino-US trade relationship is one of the most important bilateral trade relationships in the world today. As opposed to continuing Sino-U.S. trade surplus in goods, culture trade has always been deficit, which is not commensurate to the role of China in the world. This is a question worthy of further study. In this paper, we study the current situation of Chinese cultural trade. By regression analysis, we find the factors affecting cultural trade. What's more, we analyze the causes of the Sino-US cultural trade deficit. Finally, we conclude that the international competitiveness of Chinese cultural trade is still weak, and the cultural industry is still in an inferior position in the international market, but, hopefully the Sino-U.S. trade deficit has a trend to narrow.

Key words Cultural trade; Competitiveness; Deficit

### 1 Introduction

Both China and the United States are the world trade powers, and Sino-US trade relationship is one of the most important bilateral economic and trade relationships in the world today. Relative to Sino-US continued trade surplus in goods, Sino-US cultural trade has always been a deficit, which is not commensurate to the role of china in the world. At present, the development of Chinese cultural trade is still very slow, and the deficit of Sino-US cultural trade is serious. How to promote Chinese culture to go abroad more actively, to make more and more culture products approach the U.S. market, and to access the international markets with a large-scale is a key problem which need to be well studied.

In the study of cultural trade, (Waterman and Rogers 1994) verified that economic growth has a positive correlation with the degree of self-sufficiency of TV programs. The faster the economic develop, the more TV programs domestic media will supply, and the less foreign TV programs we will import from other countries.(Linnemann 1966) holds that population size is related to the trade imports, the larger the population is, the more demand for cultural products one country has, and the more imports it needs. (Tinbergen 1962) tested the influence of geographic distance on the international trade. However, (Tharakan and Van Beveren's 2003) study in the India's software trade shows that the effect of distance is not significant, which indicates that the distance is not the important factor in its software export. (Marvastiet Canterbery 2005) confirms that culture similarity has positive effect on bilateral trade. (Jeongho Oh 2001) also proved that the culture similarity among countries has a positive correlation with the movie import. Besides, the closer the two countries are, that is to say, they have similar language, religion, national laws, the easier people accept the products, the larger the cultural trade size will be [1]. Schulze analyzed 49 country's cultural trade with gravity model, and found that the similar language, geography position and the level of income have strong influence on the cultural trade flow between countries. His analysis suggests that new trade theory could explain exchanges trade in reproducible culture (e.g. recorded music, books, movies), which is characterized by scale economies and differentiated products. However, it can't be extended to specific art (like painting and sculpture). The exchange between consumers of this kind of art is limited. He also emphasizes that trade patterns are influenced by the addictive character of culture product's consumption (Gunther G. Schulze, 1999).

Looking around at the research on culture trade scholars came from different countries had discussed, there is not too many researches on culture trade by county, particularly in the Sino-US trade, culture trade is extremely rare. Therefore, this research has important practical significance.

The rest of this article is scheduled as follows: The status of Chinese culture trade is presented in the second section. The third section we analyze the factors affecting Sino-US cultural trade. In section four we discuss the causes of the deficit in Sino-American cultural trade. Finally, we come to a conclusion in section five.

#### 2 The Status of Chinese Cultural Trade

Table 1 Book Copyright Trading Between China and the Major Countries and Regions

Unit: 10 thousand dollars

country	export	import	balance	Ratio of import to export(time)	
America	16	3932	3916	245.75	
England	74	1647	1573	22.26	
Germany	9	366	357	40.67	
France	7	320	313	45.71	
Canada	0	39	39	Total import	
Japan	15	705	590	47	
Russia	6	49	43	8.17	
Singapore	43	140	97	3.26	
Korea	304	554	250	1.82	
Hong Kong	169	204	35	1.21	
Macao	1	43	42	43	
Taiwan	673	1038	365	1.54	
others	117	345	228	2.95	
total	1434	9382	7948	6.54	

Source: General Administration of Press and Publication of the People's Republic of China, "the basic situation of the publishing industry of the whole country in 2005," see:

http://tradeinservices.mofcom.gov.cn/index.shtml?method=view&id=17372

In recent years, the pace of cultural products and services going abroad is accelerating<sup>[2]</sup>. According to Commerce Department statistics, in 2007, the import and export of Chinese cultural goods and services amounted to \$16.64 billion, of which the core cultural products amounted to \$12.92 billion, more than 26.6% increase compared to 2006. The ratio of China's import and export of cultural products is 7:1 in 2008, and the proportion is nearly to be 2:1 in 2009. We can find that cultural trade deficit of our country is eased, and our culture goes to the international market steadily. Take the film for an example, in 2009, a total of 22 production companies in China sale 45 films (of which 34 jointly shot films) overseas, exported to 68 countries and regions, achieving sales of 2.759 billion Yuan. Among them, the overseas box office income is 2.404 billion Yuan, 355 million after the product revenue, and the total revenue increased to 231 million Yuan than in 2008. The overseas market of China-made films is still concentrated on North America, Europe and the Asia Pacific region, the three traditional area. Two joint productions of these films are sold to the United States, whose box office revenues is 610 million Yuan, accounting for 22.11% of the total annual overseas revenue; 15 domestic films (including 9 jointly shot films) sold in Europe, realizing a revenue of 406 million Yuan, accounting for 14.72% of the total annual revenue; 8 Chinese movie (including 6 co-production films) are exported to Japan, the income is 761 million Yuan, accounting for 27.58% of total annual revenue; 11 co-production films are sold to Korea, realizing a total revenue of 3.14 billion Yuan, accounting for 11.38% of total annual revenue in overseas markets<sup>0</sup>. Since 2005, Press and Publication Administration released "the basic situation of the national press and publication industry" statistics: the deficit of core cultural products such as books, newspapers, periodicals, audio-visual products and electronic publications has expanded each year (\$148.5316 million in 2005, \$172.5639 million in 2006, \$214.7773 million in 2007, \$250.2964 million in 2008); the ratio of copyright import and export decreased during 2005 and 2007 (7.18:1 in 2005, 6.02:1 in 2006, 4.28:1 in 2007), but it increased to 6.91:1 in the opposite direction in 2008.2

From the above data we can see that Chinese cultural industry is exploring the forward path in the international market. Overall, Chinese cultural trade has improved, and cultural trade data showed a

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<sup>&</sup>lt;sup>®</sup> Source: Arts and Entertainment Consulting, in February 210, See

<sup>&</sup>lt;sup>®</sup> Source: "National press and publishing industry case", Press and Publication Administration Web site of the People's Republic of China, "Statistics" column, see http://www.gapp.gov.cn/cms/html/21/464/List-1 . html

rising trend. But we should also be noted that compared with developed countries, China's cultural trade is still in its infancy stage, and the cultural industry is at the low end of the global division of labor chain position. The core cultural products containing Chinese mainstream value and modern concepts remain small in international cultural trade volume, and the Sino-US cultural trade deficit will still be existed for a long period of time<sup>[3]</sup>. Case in book publishing, as shown in table 2:

From Table 2 we can see that our trade are basically balanced with the Hong Kong 、Taiwan、South Korea、Singapore and other major Chinese cultural circle in book copyright. That is, the output are chiefly to some Asian countries and areas like Hong Kong, Macao and Taiwan, however, towards America, Britain, Germany, France, Canada, Japan and other Western countries, the average deficit is 73.4:1, in which the deficit to the United States is 245.75:1. This shows that in the international cultural trade deficit, China is still passive to accept Western cultural products, while Chinese cultural products can mainly flow in the Chinese culture circle. Thus, Chinese cultural trade is still at an early stage in international markets, the Sino-US trade in services is still a big gap. With the era of cultural globalization, cultural trade had a significant growth in each country. If the Chinese cultural products want to occupy a place in the international cultural market, we need to make great efforts to be bigger and stronger, combining socio-economic and international situation to make medium-term and short-term goals of cultural industry development, step by step, only in that way will we really open up the internationalization era of China's cultural industry.

## 3 Factor Analysis of Sino-US Cultural Trade

Unlike general goods, cultural product has its own particularities. Cultural product not only has the commercial character, but also is awareness. We make the following assumptions:

- H1: Suppose GDP is positively related to the export of cultural products and negative to the imports.
- H2: Suppose a country's population size is positively correlated with cultural imports, and negative to the exports.
- H3: Suppose the geographical distance between the two countries is negatively related to cultural trade. The farther the distance between two country is, the higher the transportation costs will be, trade between the two parties will be less;<sup>[5]</sup> closer the geographical distance is, more frequently the culture trade will be.<sup>[6]</sup>

H4: Suppose we take the same language as the measure to test cultural similarities between two countries. Cultural similarity can be replaced by specific variables, such as language, religion, nationality (Boisso and Ferrantino, 1997; Frankel, 1997; Melitz, 2008). These variables can concretely reflect the cultural similarity between the two countries.

United States is the largest trade power in the world for the present, and its culture trade is relatively mature. This paper takes book publication of the United States in 2009 as an example to analyze the cultural factors affecting culture trade. We choose Canada, UK, Japan, Mexico, France, Russia, Spain, India, China, Italy, Germany and Brazil as its trading partners, and the data come from the U.S. Census Bureau. Geographical distance between the two countries is based on data obtained from Google Maps. Language is dummy variable. We evaluate it with the actual situation in each country. Using SPSS to make a regression analysis, [7] Table 2 reports our core results based on regression analysis:

The analysis shows that the regression results of the U.S. GDP variable is not significant, that is to say, in the factors which can affect one country's culture trade, the level of economic development of one country has no significant correlation to cultural exports. This is incompatible with our expectation. It's probably due to the selected sample is too small, and the selected number of developed and developing countries has a certain influence to the result (results). Population size is significant as expected, indicating that the number of people between two countries had significant impact on trade. The larger the population is, there is the greater demand and more import for cultural products; conversely, the import of cultural products is less. The coefficient of Geographical distance by regression is 22.906, but the variable is not significant, which does not match the initial expectation. This may be related to the characteristics of cultural products. A number of cultural products trade doesn't need to be transported, such as electronic publications, video, etc., which have little to do with geographical distance; small sample size may also be relevant, since the United States geographical distance between the 12 countries are established, and we only got 12 valid sample data. This may be a greater impact on the validity of conclusions. The regression of common language is significant,

indicating that if the trading parties have a common language, so their ethnic, religious, legal, and ideological may have some common points, and the influence of "cultural discount" in the consumption of cultural goods is smaller. So the cultural products are more easily to be accepted, and the cultural trade between countries is more frequently.

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Table 2	Coefficients	เลา

Model		Unstandardiz	ed Coefficients	Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	2201569.89 5	297520.839		7.400	.000
	Distance	22.906	14.917	.169	1.536	.163
	Population	002	.000	-1.267	-8.634	.000
	GDP	3.042	5.168	.062	.589	.572
	Language	-2139943.0 87	243748.439	-1.332	-8.779	.000

a Dependent Variable: book export

# 4 Reasons for Sino-American Culture Deficit

### 4.1 Shortage of specialization division

At present, China's cultural industry is lack of specialization division, and the industry is shortage of skilled workers, which resulting in inefficient cultural industries and unobvious learning effect. So the economy of scale is difficult to achieve. In the capital, the insufficiency of overall profitability of Chinese cultural industry hinds the inflow of the large scale of fund. The involvement of financial capital, some venture capital funds, and venture funds in the cultural industry in China, mostly limited to the level of specific cultural projects and cultural productions, the culture industry is short of the support of scale finance. In addition, the cultural products lack innovations and professionals. [8] These factors make the economies of scale of China's cultural industry difficult to achieve, and the international competitiveness of cultural products weak. What's more, it impedes the export of cultural products in China, and results in long-term Sino-US cultural trade deficit.

### 4.2 "Cultural discount" effect

From the U.S. trade deficit in culture we can see that Chinese cultural products are difficult to be accepted by Americans, whereas American cultural products are very popular in China, which is worth considering. Since English is the most common language in the world today, in line with the world, China has set up English courses in elementary and secondary schools. Language learning makes Chinese people know more about Western culture, so they gradually are accustomed to the western values and thoughts. In addition, China has advocated the philosophy of "learning from the West" for a long time, which further promote actively learn the Western culture. Hence, in the Sino-American culture trade, the U.S. is easy to export cultural products to China, and be accepted by Chinese people. However, there is a higher "cultural discount" when the West accept Chinese culture.

Therefore, the Chinese cultural products wants to go abroad and go to the world, not only should pay attention to local culture, but also need to attach importance to internationalization, taking the combination of localization and internationalization, can have a foothold in the international market.

#### 4.3 Insufficient investment

As to Sino-US cultural trade, the United States has advanced science and technology, high-quality management personnel. What's more, the United States invests a large number of research and development fund to the cultural industry, and has a wide channel to get valuable information, which makes American culture competitive in the international market. In the new elements theory, it means comparative advantage. While Chinese cultural products lack the input of new elements, technological innovation and R & D investment are small, the gap with the United States is relatively large, and the international competitiveness is weak. Therefore, China imports more cultural products from the United States, while exports less to the U.S, and this is a key reason for the deficit of Sino-U.S. culture trade.

### 4.4 Irrational of cultural trade structure

Research shows that from 1997 to 2006, the proportion of export of cultural goods in culture products in China is more than 0.99, which is such a high proportion. While the proportion of cultural services are very low; from the statistics of culture exports of core cultural goods and services, the

proportion of core cultural services is very low, not to 0.001. It shows that culture export in China is basically in cultural goods, but very little in cultural services.

China mainly exports cultural products in the cultural and educational entertainment, sports facilities and equipment, most of which are in the downstream of cultural industry chain. The value-added of these products is low, and the profit margin is narrow. The export of upstream cultural products like video broadcasting, book publishing, arts and culture, exhibition performances and other cultural services are very small, which seriously affected Chinese international competitiveness. In comparison, the U.S. culture trade is mainly "soft culture", which has high added value, large profit margins, and strong international competitiveness. [9] Hence, difference in the structure of culture trade is also an important reason of Sino-US cultural trade deficit.

### **5** Conclusion

By regression we analyze the factors affecting cultural trade, such as culture similarity (language, national religious beliefs, law, etc.) and population size, which are the main factors of cultural trade. However, it may be due to the sample, conclusions are not corresponded to our expectation. The influence of GDP and geographic distance on cultural trade is not significant. Practice shows that, in recent years, with the encouragement of the government and the efforts of enterprises, Chinese cultural trade is developing steadily. Sino-U.S. cultural trade deficit has a trend to narrow. Therefore, the cultural trade of Sino-America has a wide vista of research.

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