

# Analysis of the Structure of Foreign Direct Investment in China's Agriculture

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**Key words:** Agriculture, FDI structure, Unreasonable distribution

**Abstract.** The utilization of foreign direct investment (FDI) in China's agriculture has made some achievements since 1978. In this paper, we analyze the structure of FDI in China's agriculture respectively by sub-sector, region, source and inflow form. And the results are as follows: (a) smaller agricultural FDI inflows scale, lower rate of foreign funds paid in full, (b) single channel to attract agricultural FDI, imbalance sectoral structure in agricultural FDI, (c) concentrated regional sources of agricultural FDI, unreasonable geographical distribution of agricultural FDI inflows, (d) lack of advantage in the utilization of agricultural FDI, imperfect in domestic investment environment.

## Introduction

Since the implementation of the policy of reform and opening, China has made the remarkable achievements in the utilization of foreign direct investment (FDI), which has made a positive contribution to China's rapid economic development, and become important development experience in China's process of opening up. FDI inflows scale in China's agriculture increasing year by year, and has broad prospect of development. According to the data from UNCTAD, 2005-2007, FDI inflows scale in China's agriculture reached \$0.75 billion, respectively accounting for 25.07% and 22.45% in the FDI inflow agriculture of developing countries and world. Besides, China is the largest country in utilization of agricultural FDI in 2000-2007. China Statistical Yearbook shows that FDI inflows scale in China's agriculture reached \$2.06 billion in 2012, which indicating that China's agriculture has a strong attraction for multinational companies.

In the review of agricultural FDI, Jansik (2004) analyze the food industry FDI in Central and Eastern Europe, which came from Western Europe, and Hallam (2010) had focus on agricultural FDI in developing countries, Chaturvedi (2011) studied the role of agricultural FDI in economic development of India, Hang et al. (2012) analyze the extent, nature and preliminary impact of FDI in agriculture in Cambodia. For the research of China's agricultural FDI, Chen Yanjiao and Qiao Juan (2005) analyze the problems and countermeasures in China's agricultural FDI, Lv Licai and Xiong Qiquan (2010) review the experiences and literature of FDI in China's agriculture for 30 years, Xu Yubo (2012) analyze the policy evolution of FDI in China's agriculture. From the above literature review, the overall level is the focus of most scholars who analyze the FDI of China's agriculture. There are few scholars to study the structure of agricultural FDI in China. For example, the sub-sector, region, source and inflow form of FDI in China's agriculture.

## Utilization of FDI in China's Agriculture

According to World Investment Report 2013, in 2009-2011, global FDI inflows scale of agriculture, hunting, forestry and fisheries reached \$6.28 billion, which is nearly nine times compare to the FDI inflows scale in 1990-1992, and indicating that FDI inflows scale of agriculture

showing a rising trend. Among the global agricultural FDI, the developing countries accounted for a larger proportion, which was 84.12% in 2009-2011. In the global context of agricultural FDI growth rapidly, the FDI inflows scale in China's agriculture also showing a rapidly rising trend, see Fig. 1.

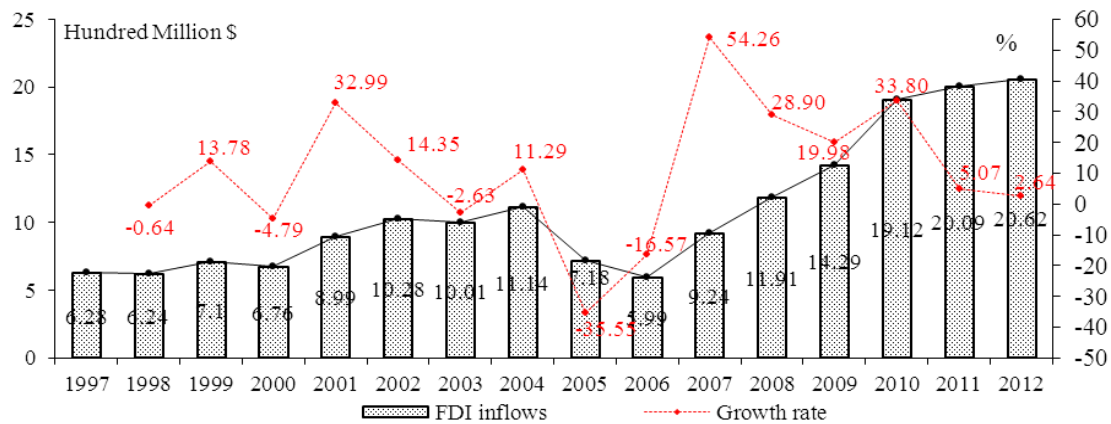


Fig. 1 The FDI inflows scale and growth rate of China's agriculture in 1997-2012  
Source: China Statistical Yearbook, 1998-2003.

In 1999, the scale of agricultural FDI in China was \$628 million, and this number reached \$2.06 billion in 2012, and from the number of each year, China's agricultural FDI experienced an "inverted U". Before 2005, the scale of agricultural FDI increased from \$628 million in 1997 to \$1.11 billion in 2004, which showing a gradually rise trend with an average annual growth rate of 9.19%. However, in 2005, the scale of China's agricultural FDI plummeted to \$718 million, and this number reduced to \$599 million in 2006 which less than the scale of agricultural FDI in 1997, which showing that China's utilization of agricultural FDI experiencing a stage that from only concern FDI scale to pay more attention to FDI quality. Therefore, after the two-year adjustment period, in 2007-2012, the scale of agricultural FDI showing a strong growth trend, with an average annual growth rate of 24.11%.

## The Structure of FDI in China's Agriculture

### Sectoral Structure of FDI in China's Agriculture

Agriculture can be subdivided into four sub-sectors: farming, forestry, animal husbandry and fishery, Table 1 given the China's agricultural FDI inflows scale and growth rates in these four sub-sectors in 2003-2012.

In Table 1, the FDI inflows scale of China's farming sector from \$600 million in 2003 to \$1.33 billion in 2012, which increased nearly twice in 10 years with the average growth rate of 14.94%. The FDI scale was \$180 million in the sector of animal husbandry in 2003, and the number reached \$336 million in 2011. However, there was a slight decline in 2012, the FDI inflows scale was \$239 million, but the average annual growth rate was 13.69% during the review period, which is closer to the number of the farming sector. There were large fluctuations in FDI inflows scale of the sectors of forestry and fishery in 2003-2012, and the fishery sector has the trend of less fluctuations. In summary, in the four sectors of agriculture, there were the trends of stable growth in the FDI inflows scale of the sectors of China's farming and animal husbandry, while the sectors of forestry and fishery of FDI inflows scale showing the trends of large fluctuations.

Table 1 The agricultural FDI inflows scale and growth rate in sub-sectors (millions \$)  
Source: Ministry of Commerce of China, Invest in China.

	Farming		Forestry		Animal Husbandry		Fishery	
	Scale	Rate (%)	Scale	Rate (%)	Scale	Rate (%)	Scale	Rate (%)
2003	600	-	372	-	180	-	145	-
2004	500	-16.67	633	70.16	190	5.56	17	17.24
2005	300	-40.00	600	-90.52	130	-31.58	83	-51.18
2006	240	-20.00	900	50.00	54	-58.46	59	-28.92
2007	395	64.58	139	54.44	106	96.30	74	25.42
2008	554	40.25	173	24.46	160	50.94	114	54.05
2009	751	35.56	150	-13.29	211	31.88	156	36.84
2010	951	26.63	315	110.00	218	3.32	144	-7.69
2011	872	-8.31	353	12.06	336	54.13	109	-24.31
2012	1329	52.41	133	-62.32	239	-28.87	111	1.83

Besides, the proportion of FDI inflows scale in the sector of farming is the largest among the four sectors, which has an increasing trend from 33.49% in 2004 to 73.34% in 2012 with the average annual proportion of 54.02%. The proportion of FDI inflows scale in the fishery sector was 6.13% in 2012 with the average proportion of 10.59% during the reviews period, which showing the FDI inflows scale in the fishery sector was the lowest among the four sectors. The above analysis shows that the sector of farming is the main components of China's agricultural FDI, and also indicating that the sectoral structure of China's agricultural FDI is unreasonable.

### Regional Structure of FDI in China's Agriculture

According to the common practice of China's statistics, the areas of China can be divided into eastern region, central region and western region. Table 2 shows the agricultural FDI inflows scales and growth rates in the above three regions and the top three provinces.

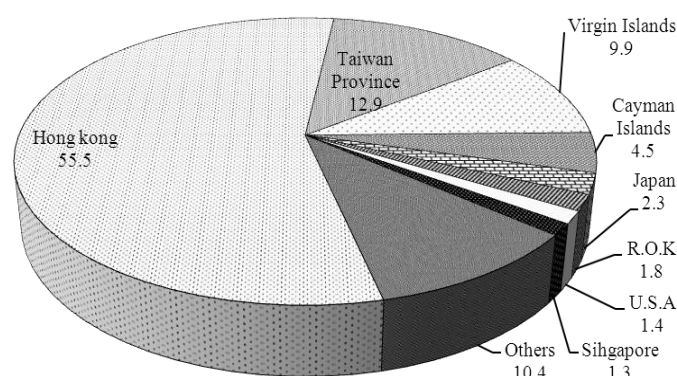


Fig. 2 The source structure of China's agricultural FDI in 2010 (%)  
Source: China Foreign Investment Report 2011.

In Table 2, the eastern region has the largest agricultural FDI inflows scale, followed by the central region, the agricultural FDI inflows scale in western region is the lowest, which the regional distribution is consistent with the overall FDI distribution of China. And, regional distribution of agricultural FDI is relatively reasonable compared to the overall. However, the improvement of regional distribution of agricultural FDI is only from eastern region to central region, the

agricultural FDI inflows scale in western region is still low, the proportion of FDI inflows scale in western region is less than 10%. Besides, in the aspects of agricultural FDI in the top three provinces, there were serious imbalances of regional distribution of agricultural FDI in both three regions. The top three provinces in each region accounted for more than half the proportion of agricultural FDI inflows scale, which indicating that the serious imbalance exist in the distribution of agricultural FDI inflows scale in the level of province of each region.

### Source Structure of FDI in China's Agriculture

Since the most recent year data was not available, we analyze the geographical distribution of agricultural FDI source using the data of 2010. See Fig. 2.

Table 2 The regional structure of China's agricultural FDI (millions \$)  
Source: Statistical Yearbook of each province in 2003, 2008 and 2012.

Regions	2002		2007		2011	
	Scale	Rate (%)	Scale	Rate (%)	Scale	Rate (%)
Eastern Region	80463	78.31	256093	68.42	208648	49.75
Jiangsu	8350	8.13	111185	29.7	67255	16.04
Liaoning	10385	10.11	16768	4.48	33769	8.05
Shandong	17034	16.58	22171	5.92	32213	7.68
Central Region	16317	15.88	84250	22.51	179519	42.81
Henan	1106	1.08	11672	3.12	47254	11.27
Jiangxi	5043	4.91	32450	8.67	46425	11.07
Hunan	4232	4.12	14794	3.95	34489	8.22
Western Region	5984	5.83	33961	9.07	31219	7.44
Neimenggu	741	0.72	1006	0.27	9610	2.29
Guizhou	36	0.04	514	0.14	8200	1.96
Jiangxi	2909	2.83	3459	0.92	6206	1.48

The top two sources of agricultural FDI are Hong Kong and Taiwan Province, the proportion of agricultural FDI inflows into China in these two regions were 55.5% and 12.9 respectively in 2010. Combined with the proportion of agricultural FDI storage in Hong Kong were 51.7% and 40.1% respectively in 2009 and 2001-2011, there was a rising trade in the agricultural FDI inflows scale from Hong Kong. In addition to Virgin Islands and Cayman Islands which have some hot money suspects, the agricultural FDI inflows scale from Japan, R.O.K, U.S.A respectively accounted for only 2.3%, 1.8% and 1.4% with the downward trends, witch showing that source regions of China's agricultural FDI are highly concentrated.

### Structure of FDI Inflows Form in China's Agriculture

There are three main forms of FDI inflows: wholly foreign-owned enterprise, equity joint venture and contractual joint venture. Figure 3 given the form structure of China's agricultural FDI.

Fig. 3 shows that the main form of China's agricultural FDI inflows were wholly foreign-owned enterprise in all four sub-sectors of agriculture. The proportion of the form of wholly foreign-owned enterprise in forestry was the highest among these four sub-sectors, which respectively reached 95.5% and 92.3% in 2007 and 2008. The proportion of the form of wholly foreign-owned enterprise in fishery ranked second, which was 69.8% in 2007 and reached 90.4% in 2008. The animal husbandry had the lowest proportion of the form of wholly foreign-owned enterprise, which was 74.3% in 2007. However, this proportion is far greater than the proportion of the form of wholly

foreign-owned enterprise in China's overall FDI inflows scale. Therefore, there were stronger tendency of wholly foreign-owned.

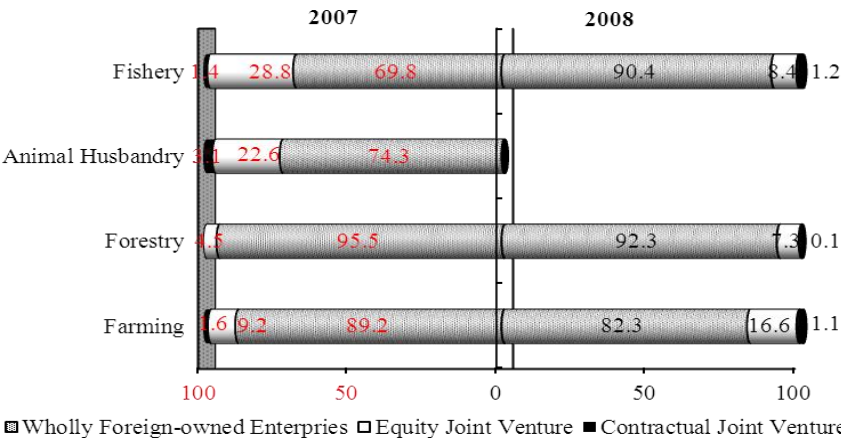


Fig. 3 The structure of FDI inflows form in China's agriculture (%)  
 Note: the data for animal husbandry in 2008 is not available.  
 Source: Ministry of Commerce of China, Invest in China.

### Summary

This paper mainly analyzes the structure of FDI in China's agriculture respectively by sub-sector, region, source and inflows form after studied the overall FDI inflows scale of China's agriculture. Some meaningful conclusions can be drawn. (a) Smaller agricultural FDI inflows scale, lower rate of foreign funds paid in full. (b) Single channel to attract agricultural FDI, imbalance sectoral structure in agricultural FDI. (c) Concentrated regional sources of agricultural FDI, larger differences of the geographical distribution of agricultural FDI inflows. (d) Lack of advantage in the utilization of agricultural FDI, imperfect in domestic investment environment.

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