辩论

Discussion Paper

A STUDY ON THE EMPLOYMENT EFFECT OF CHINESE INVESTMENT IN SOUTH AFRICA

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PREFACE

This discussion paper presents the results of one of the visiting scholars at the Centre for Chinese Studies in Stellenbosch/South Africa in the first half of 2012. Ren Peiqiang from Xiamen University in Fujian Province, China, undertook this enquiry as part of his PhD studies. In his PhD, supervised by the co-author of this paper, Professor Huang Meibo, employment creation was only one aspect. Peiqiang was awarded his PhD degree in Xiamen.

The research for this paper was conducted in the first half of 2012 and with the help of the Chinese Embassy in Pretoria. Not least so the Commercial Councillor has to be thanked for assisting in providing access to Chinese enterprises. Peiqiang interviewed Chinese entrepreneurs and therefore provides a Chinese perspective on the topic of investment in South Africa. This paper, asking specifically about employment creation and labour relations, thus reflects thinking of entrepreneurs and managers of Chinese enterprises in South Africa. While this might not necessarily include the perspective of South African (organised) labour – or in cases even contract their views – this is a very valuable contribution to a discussion on Chinese enterprises' engagement in (South) Africa. It is, in the very sense of the word, a discussion paper that constitutes a Chinese contribution to the debate on China's economic engagement in South Africa.

Stellenbosch, October 2013

Sven Grimm

ABSTRACT

The employment effect of Chinese investment in Africa has always been questioned by the international observers. Therefore, in order to investigate the suspicions from international observers, this paper uses a survey of the investment of 16 Chinese enterprises in Johannesburg, South Africa (South Africa) to analyse their possible employment effect in South Africa. From the survey, we found these Chinese investments brought about job increment to the local people, alleviating employment pressure, including many local low-skilled or unskilled labour. On the other hand, we argue, South Africa's strict labour laws, its powerful labour unions, as well as the international orientation of Chinese enterprises in South Africa ensure the employment quality of Chinese enterprises will meet the host country's legal requirements. As a result, the assumptions of international observers concerning the employment effect of China's investment in Africa are untenable as far as South Africa is concerned. Finally, the paper argues that the improvement of investment environment in South Africa is a prerequisite for further expanding the employment effect of Chinese firms.

The author was a visiting scholar at the Centre for Chinese Studies, Stellenbosch University, where he worked on the employment effect of Chinese investment in South Africa.

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CCS discussion papers aim to contribute to the academic debate on China's global rise and the consequences thereof for African development. The CCS therefore explicitly invites scholars from Africa, China, or elsewhere, to use this format for advanced papers that are ready for an initial publication, not least to obtain input from other colleagues in the field. Discussion papers should thus be seen as work in progress, exposed to (and ideally stimulating) policy-relevant discussion based on academic standards.

The views expressed in this paper are those of the author.

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LIST OF ACRONYMS AND ABBREVIATIONS

B-BBEE	Broad-based Black Economic Empowerment
BEE	Black Economic Empowerment
FDI	Foreign Direct Investment
ICBC	Industrial and Commercial Bank of China
M&As	Mergers and acquisitions
TNC	Transnational corporations
UNCTAD	United Nations Conference on Trade and Development

1. THE EMPLOYMENT EFFECT OF FDI

The employment effect of Foreign Direct Investment (FDI) in a host country has attracted much attention from scholars. Consequently, there is a body of literature which has systemically studied how FDI affects employment in the host economy. This research body includes the effect of FDI on employment generation and employment quality.

1.1 THE EFFECT OF EMPLOYMENT GENERATION

FDI can have both positive and negative impact on the employment creation in a host country.

Positively speaking, FDI can create job opportunities for the host economy directly.

The direct effect of employment generation of FDI depends upon several factors, i.e., the size and mode (greenfield or acquisition/brownfield) of investment, as well as choice of technology. Investment sector and trade orientation adopted by transnational corporations (TNCs), the labour market conditions and infrastructure in the host economy, production costs and trade and industrial regimes of host country, etc (UNCTAD, 1999: 262). The sectors of the investment also matter as some sectors are more labour-intensive than others. However, if FDI switches from labour-intensive industries to capital and technology-intensive industries, structural unemployment may appear in the host economy as labour is replaced by capital or technology. Direct employment creation also depends on the substitution degree of products produced by TNCs with the products originally imported by the host country. The higher degree of substitution, the more jobs directly created by the TNC (Luo, 2009).

On the other hand, TNCs can create indirect jobs through forward and backward linkages, the employment policy of the host economy and the consumer behaviour of local employees and shareholders, etc. Indirect employment created by foreign affiliates in a host country can be large - significantly larger than that created directly - where linkages to local producers are strong. For the manufacturing sector as a whole, indirect employment effects in the formal sector range between one and two times the number of jobs created directly in foreign affiliates in a host country (UNCTAD, 1999: 265).

Even though FDI can have a positive effect on employment generation, it may also have some negative impact on employment in host country. For example, if FDI enters a host economy through mergers and acquisitions (M&As), it may lead to significant labour shedding in the acquired firms, as they restructure their activities in line with the objectives underlying the M&As. Moreover, FDI could, under certain conditions, crowd existing firms out of business, creating unemployment for their workers. It may induce local competitors to shed employees, either by reducing the local firms' production due to a decreased market share or because of efforts by local firms to increase their efficiency and competitiveness by downsizing their labour force (UNCTAD, 1999: 261).

1.2 THE EFFECT OF FDI ON EMPLOYMENT QUALITY

Because of their size, technological sophistication, advanced management and organizational structure, TNCs are often expected to offer better employment quality than domestic firms directly. In general, foreign affiliates are expected to offer superior conditions of employment, investing more in training and imparting more modern skills to their workers. Generally, conditions of employment consist of salary, welfare benefits, diverse positions of job, working conditions and labour relations. Studies suggest that more skilled labour will be employed in multinational companies, and their remuneration is higher than that of domestic firms (Lipsey, 2004; Yin, et al., 2011).

Apart from its direct effect on employment quality, FDI also has indirect effect on employment quality.

In theory, FDI can change domestic firms' salary through two channels. The first channel happens in the labour market. The change of remuneration in domestic firms caused by the high wage paid by TNCs is known as "wage spill-over" effect of TNCs. Generally, TNCs will have a direct impact on the labour market in host country as it prefers to employ skilled labour. Therefore, its demand will increase the wage of skilled labour, thus producing a "wage spill-over" effect on domestic firms.

The other channel is through the potential "technological spill-over" of FDI. If TNCs have a positive technology spill-over effect on domestic enterprises, it will increase their production efficiency. As a result, the wages in domestic firms will be higher than before (Xu, et al., 2009). First, the workforces who used to work in TNCs may be employed by domestic firms, thus promoting local firms' management and technology. Second, in order to ensure that the quality of intermediate inputs supplied by local suppliers can meet their quality standards, TNCs will provide technical support for them. Third, the innovation of organization mode and technology in TNCs will have a positive spill-over effect on the conditions of employment and skills upgrading in the host country (UNCTAD, 1994).

However, FDI also has a negative impact on employment quality in the host country. Some observers have shown concerns regarding the possibilities for TNCs to exploit their advantage of mobility over labour, which is largely location-bound, to squeeze wages and labour standards and indirectly induce governments to weaken their regulation over the labour markets (UNCTAD, 1999:269).

As indicated above, FDI has direct and indirect influences on employment generation and employment quality in the host economy, both positively and negatively. The details are showed in Table 1.

Table 1 Effects of FDI on Employment Generation and Employment Quality in Host Economy

Area of impact	Direct		Indirect	
	Positive	Negative	Positive	Negative
Employment generation	Adds to net capital and creates jobs in expanding industries	FDI through merger and acquisition may result in rationalization and jobs loss	Creates jobs through forward and backward linkages and multiplier effects in local economy	Reliance on imports or displacements of existing firms result in jobs loss
Employment quality	Pay higher wages, use higher technology and has higher productivity	Introduces practices in, e.g., hiring and promotion system that are considered undesirable	Spill-over of "Best Practice" (wage spill-over and technology spill-over) to domestic firms	Erodes wage level as domestic firms try to compete

Source: UNCTAD, 1994.

2. EMPLOYMENT EFFECT OF CHINESE INVESTMENT IN SOUTH AFRICA - FROM THE PERSPECTIVE OF LABOUR DEMAND

Chinese investment in Africa grows rapidly, and more and more Chinese firms are operating in Africa. Consequently, their employment effect has caused much attention around the world. According to various studies, the main suspicions concerning the employment effect of Chinese firms in Africa can be summarized in the following two points:

Suspicion 1: Chinese investment in Africa cannot create enough jobs for local people. Moreover, Chinese investors prefer to employ Chinese workers;

Suspicion 2: Even Chinese investment in some African countries can bring more jobs for local people, the employment quality of China's investment is low when compared to investors from developed countries. For example, Chinese firms continue to use their national mode of work, i.e., long working hours, low pay and poor working conditions, when they operate abroad. The job positions of local employees are low in Chinese firms, and local workers are often restricted from organizing trade unions or joining them freely. Some Chinese firms do not offer enough training for their African workers, etc. (Baah and Jauch, 2009).

Therefore, based on these two suspicions, this paper uses a survey by the Economic and Commercial Counsellor's Office of the Embassy of the People's Republic of China in South Africa (hereinafter as ECCO of the Embassy of PRC in South Africa) and 16 Chinese enterprises that invest in Johannesburg, South Africa to analyse the effect of Chinese investment on employment generation and employment quality, and to untangle these two suspicions.

2.1 SITUATION ABOUT CHINESE INVESTMENT IN SOUTH AFRICA

Many Chinese firms always choose South Africa as their first destination when they want to invest in Africa. Their presence in South Africa appears to be motivated by two factors: South Africa is a relatively attractive and sophisticated market in its own right; more importantly, it provides a useful springboard base for operations serving the (Southern) African market (Guliwe and Mkhonta, 2009). With the support from both governments and attracted by the potential of its market, Chinese investors go to South Africa.

As indicated in the first part, the direct effect on employment generation of FDI depends upon several factors, i.e., the size and mode (greenfield or acquisition) of investment, choice of technology and trade orientation adopted by transnational corporations (TNCs), the labour market conditions and infrastructure in the host economy, production costs and trade and industrial regimes of the host country, etc. The sectors of the investments matter to employment creation. At the same time, TNCs can create more indirect jobs through forward and backward linkages and affecting the employment policy of host economy, etc. Therefore, from the perspective of labour demand, the basic characteristics of Chinese investment in South Africa can, to some extent, decide its employment effect.

2.1.1. CHINESE INVESTMENT IN SOUTH AFRICA

Scale of investment

Compared to other African countries, South Africa opened up late for Chinese companies. At the same time, the South African market presented a number of structural challenges to Chinese firms keen on investing in the country. The two most important challenges are: the dominance and strength of local industries in the domestic market (particularly in sectors such as construction); and increasing investment regulations and codes, such as Black Economic Empowerment (Guliwe and Mkhonta, 2009). While these factors were intended to sway Chinese investors into other African countries, the Chinese firms, instead of being discouraged, retained their desire to invest in South Africa, especially after China and South Africa established diplomatic relations in January, 1998 (see Table 2). Although China's investment in South Africa fluctuates in this period, its overall volume is high. FDI flows from China met its peak (4,807.9 million USD) in 2008, mainly because the Industrial and Commercial Bank of China (ICBC) bought 20 per cent of Standard Bank of South Africa for USD5.46 billion in cash at the end of 2007, and the corresponding money transfer took place in 2008. China's FDI flow into South Africa reduced significantly in 2009 as the result of the global financial crisis, but it increased to USD411.2 million in 2010, the reason being Jacob Zuma's visit to China in 2010, which encouraged many Chinese enterprises to invest in South Africa. However, China's FDI flow into South Africa decreased significantly again in 2011, which was recorded as minus $14.2 million. The proportion of China's FDI in South Africa's total inflows has experienced similar situation. Meanwhile, China's FDI stock in South Africa has increased from USD44.8 million in 2003 to USD4059.7 million in 2011, and its proportion to total stock of Chinese investment in Africa has increased from 1.2 per cent to 25.0 per cent over the same period. South Africa is one of the main destinations for Chinese investment in Africa, not least so due to the ICBC-Standard Bank deal.

Table 2 Chinese FDI flows in South Africa, 2003-2011

(Million of USD, per cent)

Year	2003	2005	2007	2008	2009	2010	2011
China's FDI flows in South Africa	8.9	47.5	454.4	4,807.9	41.6	411.2	-14.2
FDI inflows in South Africa	734	6,647	5,695	9,006	5,365	1,228	5,807
Proportion of China's FDI flows in South Africa to FDI inflows in South Africa	1.2	0.7	8.0	53.4	0.7	33.5	-

Source: World Investment Report 2007, 2012; 2011 Statistical Bulletin of China's Outward Foreign Direct Investment.

Mode of investment and sectoral distribution

According to UNCTAD (1994), compared to FDI coming from developed countries, FDI from developing countries is more likely to provoke an immediate increase of the production capacity in the host country, thus bringing about much more employment for local workers. This situation is caused by the mode of investment of FDI on one hand and is induced by the nature of investment sectors of FDI and the quality of technology adopted by TNCs on the other.

Firstly, Chinese investors favour a greenfield investment strategy when they invest in Africa (John et al., 2008). This strategy can expand African industrial capacity and create jobs opportunity for African countries (including South Africa).

Secondly, Chinese investment in South Africa mainly concentrates in the labour-intensive manufacturing sector, thus more likely to bring jobs to South Africans.

According to the information from ECCO of the Embassy of PRC in South Africa, about 160 Chinese firms have been registered by the ECCO up to June 2012, of which 49 firms have regular contact with the ECCO.[1] In addition, there are individual Chinese companies which have never had any contact with the ECCO after they invested in South Africa. Ten of the 42 firms whose date of entry is known came to South Africa before 2000 (see Table 3). Such a large number of firms invested so early, well before the Chinese "Go Out" policy adopted at the end of 1999, may point to the fact that Chinese firms see "Africa as the last place on earth to dig gold", a market neither saturated nor a major focus of western foreign investment, and therefore potentially profitable (Gelb, 2010). The fierce competition in the domestic market, particularly for Chinese home appliance manufacturers, is also a push factor driving them to invest in Africa. More importantly, Chinese companies realize the strategic importance of South Africa as a springboard for their products into Africa (Burke, et al., 2008). However, the bulk of the entry prior to 2000 was manufacturing firms which established relatively small operations in South Africa, and the total investment volume is low.

Under the push of "Go Out" policy and the additional support from the signing of the *Agreement on the Encouragement and Reciprocal Protection of Investment* between the two countries in 1997 and the *Agreement on*

[1] Interview with Economic and Commercial Counsellor's Office of the Embassy of the People's Republic of China in South Africa , 28 June 2012.

Avoidance of Double Taxation in 2000, more Chinese firms have invested in South Africa since 2000. It is worth emphasizing that the bulk of the entry since 2000 have been Chinese state-owned companies, i.e., Bank of China, China Construction Bank, Jiugang Iron & Steel (Group) Co., Ltd., China Harbour Engineering Company Ltd and Sinohydro Group Ltd., etc. Huawei and ZTE, the two leaders in Chinese telecommunication, having been tapping South African market by making advantage of their economic scale of production, relatively mature telecommunication technology and financing superiority. During this period, Chinese investment in South Africa is focused on manufacturing (9 firms), infrastructure and construction (7 firms), mining (5 firms), finance (5 firms) and telecommunications (3 firms) (see Table 3). As most of these sectors are labour-intensive industries, Chinese investment in South Africa can bring jobs to South Africans.

Table 3 Chinese investment in South Africa: period and sectoral distribution

Period	Number of firms	Sectoral distribution					
		Mining	Manufacturing	Infrastructure & construction	Finance	Telecommunication	Business & consumer services
Until 1994	3		2	1			
1995-1999	7	1	4		1		1
2000-2005	5		1		2	2	
Since 2006	27	5	8	7	3	1	3
Unknown	7		2	1			4
Total	**49**	**6**	**17**	**9**	**6**	**3**	**8**

Source: based on information from Economic and Commercial Counsellor's Office of the Embassy of the People's Republic of China in South Africa, 30 May 2012.

2.1.2. SITUATION OF INTERVIEWED CHINESE FIRMS IN SOUTH AFRICA

At the end of June 2012, with additional information collected from its official website, we held an interview with the ECCO of the Embassy of the PRC in South Africa and 16 Chinese firms that invest in Johannesburg, South Africa. These firms cover South Africa's different key industries and have operated successful in South Africa, especially in the appliance industry, which may reflect that these Chinese firms gain much more international experience than before.

Before we analysis the employment effect of these investments, we first discuss their motivations, mode of investment, level of technology, and the reasons for their choices (see table 4).

Motivation and sectors of investment

From Table 4, we can find that 12 of 16 surveyed firms entered South Africa for market-seeking purposes. Five firms chose resource-seeking as their motivations of investment. Three of them invested in South Africa to avoid trade barriers.

In the mining industry, all four interviewed Chinese mining firms came to South Africa to exploit its abundant mining resources.

In the appliance industry, the rise of the "emerging" South African middle class and the rapid upgrade of technology imply a good market potential of colour TVs in South Africa. In South Africa, a display screen of a colour TV is levied at a 25 per cent tariff, and the other parts of the TV, i.e., simple printing materials and package, are free of tariff; at the same time, most imported parts of refrigerator are tariff-free, while a 25 per cent tariff is imposed on refrigerators. The above factors are the main reasons why Hisense South Africa Development Enterprise (Pty) Ltd. (hereinafter as Hisense) chose to assemble colour TV and refrigerators in its industrial park.[2]

South Africa's automobile industry is well developed in Africa, and its production and sales of new cars account for nearly 80 per cent and 60 per cent in Africa respectively. In South Africa, apart from tires on which a 15 per cent tariff is levied, the remaining parts of trucks are free of tariff, while a 20-25 per cent tariff is imposed on imported trucks.[3] In order to develop its infrastructure, some specially imported vehicles such as engineering machinery is made free of tariff in South Africa. Therefore, FAW Vehicle Manufacturing South Africa (PTY) Ltd. (hereinafter as FAW), Sany Heavy Industry Co., Ltd. (hereinafter as Sany) and LiuGong Machinery South Africa (Pty) Ltd. (hereinafter as Liugong) came to South Africa successively. In addition, the working efficiency of South Africans was said to be low due to the frequent strikes, which, interviewees said, made the period of road maintenance very long in South Africa. As a result, interviewees said that there are many small stones on the road; when cars are running fast, their shields would be very easily hit by these small stones, and then broken.[4] This detection of a special market potential induced B auto glass company to invest in South Africa.

Table 4 Situation about the interviewed Chinese firms in South Africa

	Motivation	Mode	Investment activity
Mining			
Tubatse Chrome (PTY) Ltd.	Natural resource-seeking	Partial acquisition	Sinosteel Corporation bought 50 per cent of Samancor (ferrochrome producers) of South Africa in May 2007, and set up this company. Now its annual ferrochrome and chrome ore production are about 380,000 tons and 1 million tons respectively.
PMG Mining (Pty) Ltd.		Partial acquisition	Guangxi Dameng Manganese Industry Co., Ltd bought 42 per cent of PMG Mining (Pty) Ltd. in July 2010, and became its controlling shareholder.
JISSouth Africa Development (PTY) Ltd.		Greenfield (Joint venture)	Its ferrochrome project started operating in May 2007, and its annual ferrochrome production is about 600,000 tons.
A mining company		Partial acquisition	Its parent company bought 74 per cent of a mine firm of manganese ore in July 2010, and set up this company. Now its annual production of manganese ore is about 1 million tons.
Manufacturing			
Hisense South Africa Development Enterprise (Pty) Ltd.	Market-seeking; Avoid trade barrier	Greenfield (Joint venture)	It invested in South Africa in 1995. Now it assembles colour TV by importing production equipment and completely knocked down (CKD) colour TV from China, and sells Hisense's other home appliances. Now its market share of colour TVs and refrigerators

[2] Interviewed with Hisense South Africa Development Enterprise (Pty) Ltd. in Johannesburg on 4 July 2012.
[3] Interviewed with FAW Vehicle Manufacturing South Africa (PTY) Ltd. in Johannesburg on 29 June 2012.
[4] Interviewed with B auto glass company in Johannesburg on 6 July 2012.

			in South Africa is 13 per cent and about 13 per cent respectively. In July 2012, it invested 250 million Rand to set up an industrial park for producing of home appliances in South Africa, and planned to build an assembly plant which can annually produce 400,000 units of energy-saving refrigerators and 400,000 units of TV sets. This assembly plant is expected to be completed in the middle of 2013. The second phase of investment of its industrial park plans to assemble commercial air conditioners.
Sinoprima Investment & Manufacturing South Africa (PTY) Ltd.		Greenfield (Sole proprietorship)	It was established in 1999. Now it assembles colour TVs by importing production equipment and CKD of colour TVs from China. Now its market share of liquid crystal display television in South Africa is about 9 per cent.
FAW Vehicle Manufacturing South Africa (PTY) Ltd.		Greenfield (Joint venture)	It invested in South Africa 1994. Now it assembles trucks in South Africa by importing production equipment and CKD of trucks from China. Its maximum monthly capacity is 50 trucks, and its annual sales is about USD200 million. It is building a new assembly plant in South Africa, which is expected to be completed in January 2014. At that time, its annual production of trucks will increase to 5000.
Sany Heavy Industry Co., Ltd.	Market-seeking	Greenfield (Sole proprietorship)	It was set up in South Africa in September 2006. Now it sells Chinese engineering machinery, and its annual sale is about USD200 million. It has invested about 150 million Rand and has built a 6S centers[5] since 2009, which is expected to be completed at the end of 2013. At that time, it will import CKD of engineering machinery from China's headquarters to assemble engineering machinery in South Africa.
LiuGong Machinery South Africa (Pty) Ltd.			It started operating in November 2011. Now it imports engineering machinery from China and sells them in South Africa.
B auto glass company			It was set up in 2005. Now it imports automobile windshield glass and glass glue from China and sells them in South Africa.
Infrastructure & construction			
CRI-Eagle Investment	Market-seeking; Natural resource-seeking	Greenfield (Joint venture)	It was set up in March 2009. It had invested USD70 million in South Africa by the end of June 2012. Now it has two projects of real estate and a project of manganese ore.

[5] Sany's 6s centers cover assembly and maintenance area, spared parts warehouse, office building, equipment display center, training center and testing area.

Sinoma International Engineering (South Africa) Pty Ltd.	Market-seeking	Greenfield (Sole proprietorship)	It was set up in 2009, and now it is responsible for constructing the production line of cement of Itsoseng and the grinding station of Delmas.
C infrastructure & construction company	Market-seeking	Greenfield (Sole proprietorship)	It invested in South Africa in 1993, and has undertaken some large state-owned and private projects in South Africa. The amount of its total contract is about 1 billion Rand.
Telecommunication			
ZTE Corporation South Africa (PTY) Ltd.	Market-seeking	Greenfield (Joint venture)	It invested in South Africa in 2004. Now it provides telecommunication system equipment and technical services to Vodacom, MTN, Cell – C and Telkom.
Finance			
Bank of China, Johannesburg Branch	Market-seeking	Greenfield (Sole proprietorship)	It started operating in October 2000. Now it provides financial services to local and Chinese firms. Half of its credit is given to local firms, the other half to Chinese firms.
Transport			
COSCO Africa (PTY) Ltd.	Market-seeking	Greenfield (Sole proprietorship)	It invested in South Africa in March 1995. Now it provides shipping service to local and Chinese firms. Currently, its market share in South Africa is about 3-4 per cent.

Source: based on information from the interviews with Chinese firms having investment in Johannesburg, South Africa between 26 June 2012 and 7 July 2012.

Note: as required by three Chinese firms, they are referred to as A mining company, B auto glass company and C infrastructure & construction company.

In order to overcome its infrastructure bottlenecks, the South African government has launched a ZAR 787 billion plan of infrastructure construction, the "New Growth Path" and "National Development Plan 2030" since 2009, and considers infrastructure as one of its key industries in the future. Based on this, China's infrastructure and construction firms have been coming to South Africa.

South Africa's telecommunication infrastructure is very poor. For example, its optical transmission resources are very scarce and unstable. As a result, many rural schools are unable to access the Internet. Moreover, the technology adopted by the local suppliers of optical transmission is inferior to the average level of the world. Therefore, ZTE and Huawei consider there is a lot of opportunity in South Africa's telecommunications market.

Finally, the rapid economic cooperation between China and South Africa has brought much opportunity for Chinese service firms. For example, Bank of China, Johannesburg Branch (hereinafter as BOC, Johannesburg branch) and COSCO Africa (PTY) Ltd. (hereinafter as COSCO) have come to South Africa to offer services for their customers.

Mode of investment

In term of the mode of investment, except for 3 Chinese mining firms which chose the mode of partial acquisition when they entered South Africa, the rest of the firms chose greenfield as their mode of investment. Many interviewed Chinese manufacturers invest in South Africa via greenfield, which are likely to have greater short-run impact on the host economy, particularly in employment. Concerning greenfield, there are normally two kinds of structure of corporate ownership, i.e., sole proprietorship and joint venture. Chinese firms chose their structure of corporate ownership according to South African foreign investment policy or their own business strategy. Among them, the early Chinese entrants to South Africa such as Hisense and FAW tend to prefer joint venture over sole proprietorship. It may reflect the lack of experience of these firms operating in South Africa, and their hope to find local partners to reduce the risk of operations.

Level of technology

The employment effect of FDI is closely related to its choice of technology. With most interviewed Chinese firms, the technology they adopted is mature technology, which is beneficial to local employment.

Chinese firms investing in South African mining, telecommunication and transport usually adopt mature and appropriate technology, therefore, local industrial workers can be easily employed in Chinese firms, which in turn benefits their skill development. For example, Chinese mining firms use the technology that is widely used in the local mining industry rather than patent or unique technology. Regarding telecommunication, the technology used by different firms is almost the same. For instance, the principle and function of wireless base station of ZTE and Ericsson is similar. Local employees can be competent for similar jobs after training. In transport industry, the technology of shipping services is simple. Different companies have their own learning network systems, and local employees can easily grasp the skills as long as they participate in training.

In manufacturing industry, Chinese firms' choice of technology which is specially designed for South African market can create jobs for local unskilled or low skilled workers. Local workers that are hired by Chinese firms can easily grasp the skills of assembling colour TVs and maintenance technology, but the technology of display screens is controlled by Japanese, South Korean and Chinese enterprises. FAW has adopted its own market strategy when investing in South Africa. Trucks from European and American firms have very good quality, and their electronic systems are also very advanced. However, the advanced electronic systems can bring disadvantages to Africa. Once a small sensor is broken, the truck cannot be used in business. Due to the poor logistics system in many African countries, it may take several months to buy an electrical component. Normally, the owner of a truck cannot afford the corresponding loss caused by the failure of an electrical component. Therefore, FAW introduces some simple trucks which have more mechanical structure and less electronic structure, as the failure of mechanical structure is easier to fix than that of electronic components; Sany also introduces some simple engineering machinery into the African market. In spite of this, we cannot infer the technology of Chinese products is inferior to their competitors from the special market strategy adopted by Chinese manufacturing firms. Chinese manufacturing firms can also produce high-end products just as their competitors do.

However, in infrastructure & construction industry, as CRI-Eagle Investment uses the mode of build-transfer, and lets local contractors build projects, it cannot transfer the experience of project contract and high-speed rail technology to local contractors. On the other hand, both Sinoma International Engineering (South Africa) Pty Ltd. (hereinafter as Sinoma) and C infrastructure & construction company have adopted Chinese construction skills, but due to the language barrier, many construction skills are not quickly and accurately acquired by local workers. As a result, it is not good for their skills development.

2.2 THE EFFECT OF CHINESE INVESTMENT ON SOUTH AFRICAN EMPLOYMENT GENERATION

To untangle suspicion 1, in this part we will discuss the effect of Chinese investment on South African employment generation to see whether Chinese investment in South Africa can create jobs for local people, and whether Chinese firms prefer to hire Chinese workers.

2.2.1 MORE JOBS CREATED IN SOUTH AFRICA OR NOT?

Direct effect of Chinese investment on employment generation

As the unemployment rate in South Africa is very high, whether China's investment can create jobs for local workers is particularly important. From the mode of investment, sectors of investment and level of technology of Chinese firms, China's investment can create many jobs for South Africans. According the information from ECCO of the Embassy of PRC in South Africa, 49 Chinese firms which have contacted with the ECCO frequently can provide at least 13,000 jobs for local people.[6]

Form Table 5, we can find that Chinese investment in different industries in South Africa can create many jobs for South Africans. For instance, Sinosteel Corporation has four firms in South Africa: Tubatse Chrome (PTY) Ltd. (hereinafter as Tubatse), Sinosteel South Africa (PTY) Ltd., ASouth Africa Metals (PTY) Ltd. and Sinosteel International South Africa (PTY) Ltd. (a property management company which manages the building of Sinosteel). They can provide a totel of about 4,000 jobs for South Africans. Among them, Tubatse have created 1,098 jobs for local employees.[7] JISSouth Africa Development (PTY) Ltd. (hereinafter as JISSouth Africa) has also provided 1,797 jobs for South Africans. At the same time, Hisense, Sinoprima Investment & Manufacturing South Africa (PTY) Ltd. (hereinafter as Sinoprima), FAW, Sinoma and ZTE Corporation South Africa (PTY) Ltd. (hereinafter as ZTE (South Africa) have made a considerable contribution to job creation in South Africa. Now Hisense, FAW and Sany are expanding their scale of investment in South Africa, all of them aspire to promote South Africa's economic development and create more jobs for local workers. For example, the first phase of investment of Hisense's industrial park is expected to directly create about 600 jobs for local employees.[8] FAW's new truck assembly plant is expected to be completed in January 2014 in Coega, Eastern Cape. At that time, it will contribute about ZAR 104 million to South Africa's economy annually and create more than 1,000 jobs for South Africans;[9] Sany's centre is expected to be completed at the end of 2013, and its business will cover central and southern Africa. At that time, it can bring about 110-150 job opportunities for local people;[10] As its projects expand gradually, Sinoma will employ more local laborers, etc.[11]

Table 5 Effect of Chinese investment on South African employment generation

	Direct employment generation				Indirect employment generation
	Total	Chinese employees	Local employees	Localization rate of labour	
Mining					
Tubatse Chrome	1,100	2	1,098	99.8%	Create jobs for local people by

[6] Interview with Economic and Commercial Counsellor's Office of the Embassy of the People's Republic of China in the Republic of South Africa, 28 June 2012.
[7] Interviewed with Tubatse Chrome (PTY) Ltd. in Johannesburg on 2 July 2012.
[8] Interviewed with Hisense South Africa Development Enterprise (Pty) Ltd. in Johannesburg on 4 July 2012.
[9] Interviewed with FAW Vehicle Manufacturing South Africa (PTY) Ltd. in Johannesburg on 29 June 2012.
[10] Interviewed with Sany Heavy Industry Co., Ltd. in Johannesburg on 3 July 2012.
[11] Interviewed with Sinoma International Engineering (South Africa) Pty Ltd. in Johannesburg on 30 June 2012.

(PTY) Ltd.					promoting the development of local logistics firms, training firms and commercial services.
PMG Mining (Pty) Ltd.	140	40	100	71.4%	Bring jobs for local workers by promoting the development of local small firms.
JISSouth Africa Development (PTY) Ltd.	1,800	3	1,797	99.8%	Provide jobs for local contractors of projects and manufactures of mining equipment, etc.
A mining company	about 190	30	160	84.2%	Promote the development of local logistics and bring job opportunities for their workers
Manufacturing					
Hisense South Africa Development Enterprise (Pty) Ltd.	210	40	170	81.0%	Provide about 300 jobs for local logistics firms, advertising agency, firms of customs clearance, distributors and after-sale service firms.
Sinoprima Investment & Manufacturing South Africa (PTY) Ltd.	about 150	20	130	86.7%	Provide jobs for local logistics firms, firms of packaging materials and foam materials, firms of customs clearance and after-sale service firms.
FAW Vehicle Manufacturing South Africa (PTY) Ltd.	150	3	147	98.0%	Create about 200 jobs for 20 local truck distributors; bring jobs opportunities for local glass suppliers and raw materials (adhesives, screws, etc.) suppliers.
Sany Heavy Industry Co., Ltd.	34	22	12	35.3%	Create about 100 jobs for local distributors and about 150 jobs for local logistics firms, firms of customs clearance and parts suppliers.
LiuGong Machinery South Africa (Pty) Ltd.	More than 10	-	-	50.0%	Provide jobs opportunities for local parts (tires, fire extinguishers and diesel) suppliers, logistics firms and firms of customs clearance.
B auto glass company	60	10	50	83.3%	Provide jobs opportunities for local logistics firms.
Infrastructure & construction					

CRI-Eagle Investment	21	6	15	71.4%	Provide many job opportunities for suppliers of building materials, architectural design companies and projects contractors.
Sinoma International Engineering (South Africa) Pty Ltd.	500	380	120	24.0%	Provide job opportunities for local materials (sand, stone, steel bar, steel plate and wire) suppliers.
C infrastructure & construction company	12	6	6	50.0%	Provide job opportunities for local projects contractors, building materials suppliers and firms of equipment leasing.
Telecommunication					
ZTE Corporation South Africa (PTY) Ltd.	500	200	300	60.0%	Create about 5,000 jobs for local telecommunication operators, contractors of building projects and suppliers of telecommunication products.
Finance					
Bank of China, Johannesburg Branch	59	10	49	83.1%	Promote the development of enterprises through financial services.
Transport					
COSCO Africa (PTY) Ltd.	55	7	48	87.3%	Provide job opportunities in South African railway, road, ports; Provide jobs for firms of customs clearance, copywriting companies, and BEE consulting companies, etc.

Source: see Table 4.

Indirect effect of Chinese investment on employment generation

Apart from directly creating jobs, Chinese investment in South Africa can also indirectly create employment. Normally, when TNCs invest in the host economy, they can promote the development of their related upstream and downstream firms, which includes raw material suppliers, service firms (such as logistics firms, training firms, advertising agencies, firms of customs clearance, investment consulting firms and after-sale service firms, etc.) and product distributors, and then create job opportunities for their employees. This kind of job creation is called as indirect job creation of FDI.

From Table 5, we can see that the surveyed Chinese firms can promote the development of their upstream and downstream. In doing so, the Chinese investment can provide some jobs for their employees. For instance, Hisense provides business for its logistics firms, advertising agencies, firms of customs clearance, distributors and after-sale service firms etc., and creates about 300 indirect jobs for the companies involved. Moreover, the first phase of investment of its industrial park can bring about 2,000 indirect jobs;[12] Sany Heavy Corporation has six entities in six African countries (Angola, Kenya, Ghana, South Africa, Democratic Republic of the Congo and Nigeria), which totally have created about 500 job opportunities for local people, including 50 direct jobs and 450 indirect jobs, with the latter far outdoing the former.;[13] ZTE (South Africa) has created about 5,000 indirect jobs for the local telecommunication operators, contractors of projects and suppliers of telecommunication products. Its ratio of direct jobs to indirect jobs is about 1:17, etc. [14]

"Crowd out" effect of employment

From the competitive effect of Chinese firms in South Africa's market, we can see whether Chinese investment would "crowd out" the business of local firms, and then have a negative effect on local jobs creation.

Chinese investment covers all key industries in South Africa, but local firms and multinational companies from developed countries have more powerful influence on South Africa's economy than Chinese firms (Kaplinsky and Morris, 2009). For these interviewed firms, their major competitors are local or global leaders of the industries. Therefore, they are now learning advanced technology and management from their rivals, and then gradually expand their scale of investment. As a result, they may not "crowd out" their competitors' investments. Even if the Chinese firms do compete with local companies, its impact is limited. For example, most engineering machinery produced by Sany is more advanced than that turned out by the only local manufacture – Bell. But they do not compete directly in the market.

In mining industry, if the mining resources are divided into A, B, C and D type (A is the best, D is the worst) according to their quality in South Africa, Chinese firms do not have chances to invest in A type of mining, which is monopolized by the traditional European and American companies for decades. Chinese companies such as Sinosteel, Baosteel, JISCO and Minmetals may not have opportunity to invest in B type of mining, either. Most Chinese investment in South Africa's mining is concentrated in C and D type of mining.[15] Therefore, Chinese mining companies can bring development fund to South Africa's mining, and are unlikely to affect its existing development structure of mining.

At present, Chinese infrastructure and construction firms such as CRI-Eagle Investment uses the mode of build-transfer and provide funds for local contractors to build projects of construction by themselves. In this way, Chinese investment, instead of competing with local contractors of infrastructure and construction, can produce the "crowd in" effect of FDI.

In the absence of local competitors, Chinese investment in South Africa's Colour TV industry and telecommunication will not produce a "crowd out" effect of FDI. Instead, it can promote the diversified development of these industries.

In the financial sector, ICBC's purchase of 20 per cent of Standard Bank of South Africa can provide a good opportunity for both companies' future development. Standard Bank's internationalization experience, customer service, information acquisition and financing services is worth learning by ICBC, as it can help ICBC to serve Chinese enterprises which are now investing in Africa. At the same time, ICBC

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[12] Hisense expanded its investment by building an industrial park from home appliances in South Africa (Hai xin da ju zeng zi nan fei, xin jian jia dian gong ye yuan). [Online] Available: http://tech.xinmin.cn/2012/07/31/15704056.html [31 July 2012], author's translation.

[13] Interviewed with Sany Heavy Industry Co., Ltd. in Johannesburg on 3 July 2012.

[14] Interviewed with ZTE Corporation South Africa (PTY) Ltd. in Johannesburg on 2 July 2012.

[15] Interviewed with Minmetals First Chorme Mining Co. (Pty) Ltd. in Johannesburg on 4 July 2012.

can help Standard Bank in terms of customer management, developing local computer talents and software of banking system.[16]

From the above analysis, we can conclude that most Chinese investment in South Africa would not produce the "crowd out" effect of FDI, and has a positive effect on local employment creation.

As indicated above, Chinese investment in South Africa not only brings jobs to South Africa directly, but also can create many indirect jobs by promoting the development of their upstream and downstream enterprises. For some interviewed firms, the number of indirect job opportunities is much larger than that of direct job opportunities.

2.2.2 PREFERENCE TO HIRE CHINESE WORKERS?

Localization rate of labour is a critical factor when TNCs invest in the host country, because it can affect their long-term development. From Table 5, we can find that the localization rate of labour of most interviewed Chinese firms is high. 14 of 16 Chinese firms have over 50 per cent of localization rate of labour. Among them, the localization rate of labour of Tubatse, JISSouth Africa and FAW are 99.8 per cent, 99.8 per cent and 98.0 per cent respectively. At present, the localization rate of labour of ZTE (South Africa) is about 60 per cent, and its long-term target is 80 per cent.

The reasons for high localization rate of labour in Chinese firms in South Africa can be summarized as the following: First, high unemployment rate in South Africa leads South Africa's government be strict with the entrance of foreign workers. In principle, if a local candidate is competent for a job, foreign workers are not allowed to apply for it. For example, South African Department of Minerals and Energy requires mining firms investing in South Africa to hire local labourers. Only when suitable local professionals are not available can foreign candidates be employed.[17] Therefore, the basic policy of South African Department of Home Affairs is that foreign workers are not allowed to be hired in industries that have limited job opportunities (CAITEC, 2011:43). Second, South Africa's trade unions and the communities in which Chinese firms invest always supervise the employment behaviour Chinese firms. If the community find South Africans are not employed for the low positions or some technical posts in Chinese mining companies, they will take measures such as burning tyres on the way to work or burning the offices to interrupt Chinese firms' business.[18] Third, sending Chinese personnel to work in South Africa is very expensive, as employers have to be responsible for many types of expenditure. On the other hand, Chinese personnel need time to get used to South Africa's business culture and overcome the language barriers. Normally, employing different people to do the same job on a particular phase caused by regular personnel deployment is a big burden for Chinese firms.[19] As a result, apart from the critical positions that are occupied by Chinese, Chinese firms prefer to hire South Africans in other positions if they are competent for them.

2.3 THE EFFECT OF CHINESE INVESTMENT ON SOUTH AFRICAN EMPLOYMENT QUALITY

This part mainly discusses the effect of employment quality in terms of employment conditions in Chinese firms and whether Chinese firms provide training for their local employees in the hope of drawing a preliminary conclusion about the effect of Chinese investment on South African employment quality and clarifying suspicion 2 from the international society.

[16] Interview with Economic and Commercial Counselor's Office of the Embassy of the People's Republic of China in the Republic of South Africa, 28 June 2012.

[17] The ten years in South Africa (Kai di tan nan fei shi nian) [Online] Available: http://www.focac.org/chn/jlydh/mtsy/t944761.htm [25 June 2012], author's translation.

[18] Interviewed with Tubatse Chrome (PTY) Ltd. in Johannesburg on 2 July 2012.

[19] Interviewed with FAW Vehicle Manufacturing South Africa (PTY) Ltd. in Johannesburg on 29 June 2012.

2.3.1. CONDITIONS OF EMPLOYMENT

When analysing conditions of employment, we approach it in terms of salary and welfare benefits, positions of job, working conditions and labour relations in Chinese firms.

Salary and welfare benefits

Chinese enterprises employ local employees according to the conditions of South African labour market, and the salary that most Chinese firms offer is the same as that of their competitors (TNCs from developed countries or local firms) or is in the middle level of the industry in which they invest (see Table 6). Regarding the criticism that Chinese enterprises often require African workers to work overtime without any pay, we found it not fact-based in South Africa. Chinese firms would communicate with their employees when they need them to work overtime. Only after getting agreement from their employees can these firms ask them to work overtime, and additional pay is arranged according to South Africa's labour law in such undertaking. On the other hand, the competiveness of Chinese firms' salaries can be seen from the stability of their local staff. In most interviewed Chinese firms, the turnover rate of mid and high level of employees is low due to the attractiveness of salary and corporate culture, and the limited number of mid and high jobs in South Africa. Unfortunately, the turnover rate of low level of employees is quite high because of their low loyalty to firms. This situation is associated with the excessive protection for workers from South African labour law. If local labourers find new jobs, their salary may be higher than that of former one. Moreover, they do not need to worry about whether they are competent for new jobs, because new employers find it is very difficult to fire them. So they will keep them no matter whether they are suitable for the jobs or not.

With respect to welfare benefits, China's firms provide legal welfare benefits such as social insurance, medical insurance, unemployment insurance, paid vacation, paid maternity leave, performance bonus and trainings in China's headquarters, etc. for different positions of South African staff. South Africa's strict labour law and powerful trade unions, and the international development orientation of Chinese firms can basically guarantee that local employees would enjoy their legal rights. On one hand, Chinese firms have targets of long-term development and consider themselves as local firms. As a result, they will provide legal salary and welfare benefits for their local employees. On the other hand, the legal rights of local employees are well protected by South Africa's labour laws and trade unions. It is very difficult for Chinese firms to overlook the legal rights of local staff.

Positions of job

As the level of technology adopted by Chinese firms is not very high, their investment in different industries in South Africa can create many kinds of jobs for local people. South Africans are not only hired as production workers and assembly workers, but also as technical personnel and managers (see Table 6). All local employees have a formal work contract with Chinese firms or are hired through labour brokers or consulting service providers. In these interviewed firms, we do not find temporary workers or workers without a formal work contract. For instance, apart from the critical positions that are occupied by Chinese, South Africans are employed in the rest of positions in Tubatse, JISSouth Africa and FAW. In Tubatse, only two Chinese were hired for the positions of general manager and financial manager, with other positions all occupied by local employees. There are 939 local production workers and 159 local managers whose position is or above production supervisors in Tubatse. The structure of job positions in JISSouth Africa is similar to that in Tubatse. In FAW, only three Chinese are employed as general manager, technical supervisor and equipment supervisor respectively, the rest of employees are local workers. Other companies such as Hisense, Sinoprima, ZTE (South Africa), and BOC, Johannesburg Branch create positions for ordinary workers and mid-high level jobs for South Africans. Sany's centre is expected to create 80-100 ordinary jobs such as assembly workers, technicians, purchasing staff and quality inspectors and 30-50 managers which include office personnel, administrative managers, human resources managers and accounting personnel for South Africans.[20] The reasons why Chinese firms prefer to hire local managers is that those local managers are capable to run the business according to the will of the board of directors, and are familiar with local market and business culture which are good for exploiting the market. The inconvenience caused by regular personnel deployment of Chinese managers is another reason why Chinese firms would like to employ local managers.

However, some Chinese companies such as LiuGong and B Auto Glass Company are the new entrants in South Africa, with most managers being Chinese. It may be that these two companies want to control their ownership and business strategy at the beginning of their operations. As their business develops and becomes more stable, this situation may change.

Thus, we can conclude that the suspicion from the international society that African workers are usually hired in the low positions of job and few local people are employed as managers in the Chinese firms is not supported in South Africa. The interviewed Chinese firms in South Africa can both create many ordinary jobs and manager positions for South Africans.

Table 6 Job Positions and salary in the interviewed Chinese firms

	Positions of job and salary of local employees	Salary of Chinese firms when compared to that of their competitors (TNCs from developed countries or local firms); The turnover rate
Mining		
Tubatse Chrome (PTY) Ltd.	939 production workers, including 500 miners (their minimum wage is 10,000 Rand per month) and 439 smelters (their average wage is 20,000-30,000 Rand per month); 159 managers, their average wage is 40,000-50,000 Rand per month.[21]	The salary is similar to that of its competitors. The turnover rate of miners is very low. Since its establishment in 2007, only three managers left the company because of emigration.
PMG Mining (Pty) Ltd.	40 equipment operators such as car drivers and excavator drivers, 40 ordinary staff, and 20 managers and cleaners.	Its salary is lower than that of large local companies as the skills of most workers are low. The turnover rate of skilled operators is a little high, but that of local labourers is low. Its salary will increase in the future according to local labour law.
JISSouth Africa Development (PTY) Ltd.	Apart from 3 Chinese employees, the rest of 1797 local staffs are miners, dressers, sintering workers, smelter and managers.	Its salary is similar to that of its competitors.
A mining company	Most employees are miners, the rest of local workers are coordinators and office clerks. Their salary is 5,000-8,000 Rand per month, 25,000 Rand per month and 25,000 Rand per month respectively.	The salary of miners is lower than that of competitors, but the salary of the rest of employees is similar to that of the competitors.
Manufacturing		
Hisense	70 managers which includes department	Its salary is similar to that of its

[20] Interviewed with Sany Heavy Industry Co., Ltd. in Johannesburg on 3 July 2012.

[21] The grade of employees in Tubatse is divided from A to E. Employees whose grade is D, E and F are managers, employees whose grade is below D are production workers.

South Africa Development Enterprise (Pty) Ltd.	managers, production supervisors, technical personnel and office clerks, etc.; 100 after-sale service workers and production workers, their salary is between 3,000 Rand per month and 5,000 rand per month.	competitors. The turnover rate of all kind of employees is low, e.g. the annual turnover rate of local production workers and managers is about 2% and zero respectively.
Sinoprima Investment & Manufacturing South Africa (PTY) Ltd.	40-50 TV assembly workers, their salary is 300 Rand per week; 8 production supervisors; 30 office clerks and managers, their salary is about 6,000-10,000 Rand per month; 30 after-sale service workers.	Apart from TV assembly workers whose salary may be lower than that of the competitors, the salary of the rest of employees is similar to that of its competitors. The turnover rate is low.
FAW Vehicle Manufacturing South Africa (PTY) Ltd.	47 truck assembly workers, 3 truck assembly supervisors, 30-40 after-sale service workers, 20 sales personnel, 7 department managers, 10 office clerks. Their salary is about 5,000-7,000 Rand per month, 9,000-10,000 Rand per month, 5,000-7,000 Rand per month, 5,000-7,000 Rand plus commission per month, 30,000-40,000 Rand per month and 10,000-20,000 Rand per month respectively. It still has some maintenance workers.	The salary of truck assembly workers is higher than that of its competitors. The salary of the rest of employees is similar to that of competitors. The turnover rate of mid-level of managers is low, but that of labourers is high.
Sany Heavy Industry Co., Ltd.	1 senior engineer, 25,000 Rand per month; 1 student engineer, 10,000 Rand per month; 4 car drivers (3000 Rand per month) and coordinators; 3 sales personnel, 25,000 Rand per month; 3 office clerks.	Its salary is similar to that of its competitors. The turnover rate of employees is low.
LiuGong Machinery South Africa (Pty) Ltd.	Local employees are warehouse keepers, technical personnel (7,000-8,000 Rand per month) and office clerks.	Its salary is similar to that of its competitors, but low and mid-level employees are not stable as they are looking for better jobs at any time.
B auto glass company	There are 50 local employees. It includes car drivers (3,000 Rand per month), glass installers (4,000-8,000 Rand per month, depending on their skills), sales personnel (10,000 Rand per month) and receptionists (5,000-12,000 Rand per month), etc.	Its salary is in the middle level of the industry. Employees whose salary is above 10,000 Rand per month are stable, but Employees whose salary is below 10,000 Rand per month are very unstable.
Infrastructure & construction		
CRI-Eagle Investment	5 cleaners, their salary are about 3,000 Rand per month; 5 office clerks and 5 managers; their average salary is between 15,000 and 20,000 Rand per month.	Its salary is similar to that of its competitors.
Sinoma International Engineering (South Africa) Pty Ltd.	Some consultants and security officers who are white and coloured people, the rest of labourers are South Africans.	The salary is attractive in the industry. The turnover rate of employees is low.
C	3 equipment operators and 3 office clerks,	The salary is attractive in the industry.

infrastructure & construction company	and their salary is about 5,000-7,000 Rand per month and 25,000-30,000 Rand per month respectively.	The turnover rate of employees is low.
Telecommunication		
ZTE Corporation South Africa (PTY) Ltd.	About 90 administrative staff, about 150 after-sale service workers, about 60 sales personnel, their salary is less than 10,000 Rand per month, 10,000-20,000 Rand per month and 30,000-50,000 Rand per month respectively; 20 human resource managers, financial managers and senior managers, their salary is between 70,000 and 100,000 Rand per month.	The salary of administrative staff, after-sale service workers and sales personnel is about 95% of that of competitors. The salary of human resource managers, financial managers and senior managers is similar to that of its competitors. The salary of Chinese employees is lower than that of South Africans, especially for senior managers, whose salary is less than half of South Africans'.
Finance		
Bank of China, Johannesburg Branch	Local employees are found in different departments such as accounting department, sales department, risk management department, administrative department and capital management department, etc.	Its salary is in the middle level of financial industry. The turnover rate of employees is low. Some employees even have worked for 10 years.
Transport		
COSCO Africa (PTY) Ltd.	The number of ordinary workers such as vouching clerks, customer service staff, market surveyors, port managers and office clerks, etc. is 43 and their salary is between 9,000-13,000 Rand per month. 5 department managers, their salary is about 30,000-40,000 Rand per month.	Its salary is similar to that of its competitors. The turnover rate of ordinary employees is about 10%.

Source: see Table 4.

Working conditions

The working hours per week and office/plant environment in Chinese firms meet legal standards, and their labour relations are well established. For one thing, the powerful trade unions and relevant South African government departments always supervise the working conditions of Chinese firms on site, and make sure they are up to the legal requirements. For example, when some Chinese companies are setting Key Performance Indicators (KPI) for their employees at the beginning of a year, they have to communicate fully with their staff and get agreement with them. If local staff are suspicious of KPI, finding it not complying with local labour law, Chinese firms will have to change their KPI to meet their requirements. For example, if South Africa's labour law requires employees to start work at 8:30am, Chinese firms cannot ask their employees to begin at 8:00am. Otherwise, local employees may resort to trade unions or their private lawyers to charge their employers. For another, the long-term development orientation of Chinese enterprises, the strategy of allowing local managers to manage the local staff so as to avoid conflicts caused by different cultures, and the intention of helping local staff learn Chinese business culture can guarantee that Chinese enterprises' working conditions stay in line with the South Africa's legal regulations.

Table 7 Working conditions in the interviewed Chinese firms

	Working hours per week	Office/plant environment	Labour relations
Mining			
Tubatse Chrome (PTY) Ltd.	5 days, 8 hours per day	Its plant environment is good as the Department of Mineral Resources of South Africa often inspects it safety measures and environmental matters.	Its labour relations are good as its international development orientation and the strategy it adopted which encourages local managers to manage local labourers and meet their reasonable requirements.
PMG Mining (Pty) Ltd.	5 days, 9 hours per day	Its plant environment is good as South Africa's relevant departments always inspect its safety measures, lighting, noise and dust prevention, etc.	Although it adopts the strategy of allowing local managers to participate in corporate business and manage local labourers, its labour relations are not very good.
JISSouth Africa Development (PTY) Ltd.	localization	Its plant environment can meet the legal requirements	Cooperation between local staff and Chinese staff is good.
A mining company	localization	Its plant environment meets legal regulations.	Labour relations are good.
Manufacturing			
Hisense South Africa Development Enterprise (Pty) Ltd.	5 days, 8 hours per day	Its office environment is comfortable as South African Department of Labour and Department of Health always inspect its working strength, working environment and sanitation, etc. All staff have working uniforms.	Labour relations are good as local employees recognize its corporate culture[22].
Sinoprima Investment & Manufacturing South Africa (PTY) Ltd.	5 days, 8 hours per day	Its office environment is comfortable and its environment of TV assembly plant meets legal regulations.	It tries to keep good relationship with local employees due to the existence of powerful trade unions.
FAW Vehicle Manufacturing South Africa (PTY) Ltd.	5 days, 9 hours per day (requirement from trade union of auto industry)	Its office and plant environment is comfortable as South Africa's relevant departments regularly inspect its safety measures and sanitation.	Its labour relations are good as the strategy it adopted allows local team supervisors to manage their teams. The turnover rate of mid-level managers is low, because they know Chinese business culture quite well

[22] Interviewed with the manager of Hisense South Africa Development Enterprise (Pty) Ltd. in Johannesburg on 4 July 2012.

			and can avoid cultural conflicts easily.
Sany Heavy Industry Co., Ltd.	5 days, 7 hours per day	Its office environment is comfortable as South Africa's Department of Labour, Department of Home Affairs and trade unions always inspect its working environment.	Its labour relations appear to be good. No local employees have been fired since its establishment.
LiuGong Machinery South Africa (Pty) Ltd	localization	n.a.	n.a.
B auto glass company	5 days, 8 hours per day, from 8am to 1pm in Saturday (count as overtime)	It bought a new plant in 2011, and the plant environment is new and comfortable.	Its labour relations are good as the strategy it adopted allows local white supervisors to manage the employees.
Infrastructure & construction			
CRI-Eagle Investment	5 days, 8 hours per day	Office environment is comfortable.	Labour relations are good.
Sinoma International Engineering (South Africa) Pty Ltd.	5 days, 9 hours per day	Department of Minerals and Energy, South Africa would regularly inspect its safety, working environment, health, etc. on site, and make sure they meet Mine Health and Safety Act. Therefore, its office environment is good.	Employing labourers and professional through labour brokers and consulting service providers
C infrastructure & construction company	5 days, 8 hours per day	Office environment is comfortable as its office is located at business centre.	It tries to keep good relationship with local staff, and the working efficiency of their employees is high.
Telecommunication			
ZTE Corporation South Africa (PTY) Ltd.	5 days, 8 hours per day	Office environment meets the regulation of South African Health Safety Environment	During the period of probation of employees, some cultural conflicts may occur, but it only recruit staff which recognize its corporate culture; Office of Cape Town, ZTE (South Africa) asks a teacher from Confucius Institute of Stellenbosch university to teach their employees and staffs from Cell-C (more than 20 people) Chinese. By doing this, they can learn Chinese culture and avoid cultural conflicts.
Finance			

Bank of China, Johannesburg Branch	5 days, 8 hours per day	Office environment is comfortable as its office is located at business centre.	Labour relations are good and local staff like its corporate culture[23].
Transport			
COSCO Africa (PTY) Ltd.	5 days, 8 hours per day	Office is in Bedford Centre, Johannesburg	It tries to keep good relationship with local employees due to the existence of powerful trade unions, and meet their reasonable requirements, especially for increasing their salary.

Source: see table 4.

Relationship with trade unions

According to the interviewed firms, South Africa's trade unions in all industries are excessively powerful. Generally, trade unions would protect workers' legal interests. As many Chinese firms consider themselves as local firms, they comply with South Africa's labour law, and try their best to negotiate with trade unions to avoid strikes.

However, due to what is perceived as over-protection of the workers, trade unions have been found to impede on the normal operations of some Chinese firms, the consequences include rapid salary increases, "salary could increase but could not decrease" mentality of the employees, difficulty to fire workers, which amounts to great increase in production cost. What's more, trade unions usually use strikes as a tool for collective negotiations and solving labor disputes. Since the 2010 FIFA World Cup, South Africa's trade unions have launched more strikes to fight for workers' rights than before, and it has become a big concern for Chinese enterprises. They thought the South African government and many firms got a lot of profits during the World Cup, but the poor Africans got very little share of the benefits. Meanwhile, their desire of rights, which were suppressed during the period of Apartheid, is now released. So they strike to fight for their interests. Trade unions often call strikes if Chinese firms do not meet their requirements. Trade unions can protect legal rights of workers, but if they do not take measures appropriately, it only further intensifies the conflicts between employees and employers and brings much loss for both sides.

The negotiation between trade unions and Chinese companies focuses on wages and benefits of workers. If no agreement is reached, the former will generally resorts to strikes. In addition, many Chinese companies are also interrupted by other strikes which are mainly from the logistic industry. Considering now Hisense, Faw and Sany are expanding their scale of investment, and Chinese infrastructure-construction firms will give up the mode of build-transfer and directly invest in South Africa, the effect of local trade unions on Chinese companies' operations will be stronger in the future. Compared to nonmanufacturing-type enterprises, manufacturing-type enterprises are more likely to be affected by trade unions, the proportion of their local staff who are members of trade unions is also higher (see Table 8). Some enterprises do not set up their own trade union due to the fact that their total number of employees is less than 50 people.

In the interviewed Chinese firms, we seldom found that they are hostile to trade unions or prevent their local staff from organizing or joining trade unions. For Chinese companies, how to deal well with trade unions is a critical factor in the process of their internationalization. On one hand, firms need to respect the role and interests of the trade unions and provide legal salary and welfare benefits for their employees.

[23] Interviewed with the managers of Bank of China, Johannesburg Branch in Johannesburg on 1 July 2012.

On the other hand, they need to communicate well with the trade unions, and let them know that the firm needs their supports to develop well. Only when the firms develop well can they provide job opportunities for local people. Of the requirements from the trade unions are not in conformity with the goals of enterprises, both firms and trade unions will face big losses.

Table 8 Relationship between Chinese firms and trade unions

	Proportion of membership of trade unions to total employment	Content of negotiation	Actions taken by trade unions if no agreement reached	Effect of strikes caused by other industries
Manufacturing-type enterprises				
Tubatse Chrome (PTY) Ltd.	Proportion in grade D, E and F is 2-3%; proportion of staffs whose grade is below D is 90%.	Salary, welfare benefits	Strike	Affected by strikes from railway workers and port workers.
PMG Mining (Pty) Ltd.	80%	Salary, welfare benefits, training, working time	No actions are taken, workers go to work as usual	Affected by other strikes.
JISSouth Africa Development (PTY) Ltd.	More than 70%	Salary	Strike or Slack	Affected by strikes caused by trade unions of the transport industry.
A mining company	More than 80%	Salary, welfare benefits	Strike	Affected by strikes caused by port workers and truck drivers, etc.
Hisense South Africa Development Enterprise (Pty) Ltd.	The proportion of production workers is about 29%	Salary	Strike	Affected by strikes caused by port workers, car drivers and municipal personnel.
Sinoprima Investment & Manufacturing South Africa (PTY) Ltd.	The proportion of production workers is above 80%	Salary	Strike	Affected by strikes caused by port workers, taxi drivers and staffs of gas station.
FAW Vehicle Manufacturing South Africa (PTY) Ltd.	More than 80%	Salary, welfare benefits	Strike	Affected by strikes caused by trade unions of the transport industry.
Nonmanufacturing-type enterprises				
Sany Heavy Industry Co., Ltd.	Without trade union	-	-	Affected by strikes caused by port workers and car drivers, etc. as its products cannot be delivered on time.
LiuGong Machinery South Africa	Without trade union	-	-	Affected by strikes by port workers and car drivers, etc.

(Pty) Ltd				
B auto glass company	60%	Salary, endowment insurance	Strike	Affected by strikes by port workers, staff of gas station, etc.
CRI-Eagle Investment	Without trade union	-	-	-
Sinoma International Engineering (South Africa) Pty Ltd.	Without trade union	-	-	-
C infrastructure & construction company	Without trade union	-	-	-
ZTE Corporation South Africa (PTY) Ltd.	Without trade union, but local staffs have private lawyers	Contract disputes	-	Strikes by building workers will affect its project construction; Strikes by taxi drivers will affect its business activities.
Bank of China, Johannesburg Branch	Without trade union	-	-	-
COSCO Africa (PTY) Ltd.	Above 50%		Strike	Badly affected by strikes by port workers, rail workers, municipal personnel, etc.

Source: see table 4.

2.3.2. TRAINING

When South Africa when through its political transition in 1994, many educated white people chose emigration because they did not know about the prospect of this new political setting. Now, the employment policy in South Africa requires firms to hire employees in the order of black people first, followed by coloured people and white people when equal qualification of candidates is found. Arguably, such policy risks to exacerbate the phenomenon of "brain drain" for skilled labour if skilled labour is to be found predominately amongst the white part of the population. As education discrimination in the past has resulted in large number of unskilled (or insufficiently skilled) black labour, Chinese firms try their best to make some contribution to local employees' skill development by providing training.

As indicated in Table 9, Chinese enterprises provide training to three categories of people: ordinary employees, managers and third parties (e.g. product distributors, operators and after-sale service companies, etc.). Chinese firms offer basic job skills training such as operating equipment to ordinary employees through "learning by doing". Some firms take the approach of "apprenticeship" which is widespread in Africa when providing training for local unskilled youngsters. Often, due to insufficient basic education, black labourers are only trained some basic skills; from their education basis, it is very difficult to learn advanced technology and management. In the mining and the infrastructure & construction industry, Chinese companies also provide training of occupational health and safety to their ordinary employees; for local managers, Chinese firms offer them management training and training of personal career development, etc. Local excellent ordinary employees and managers have chances to go to corporate headquarters (China) for further training free of charge; for third parties, Chinese firms mainly provide training in product knowledge, after-sales maintenance services and operations management, as well as technical guidance and technical support. Such training has proved helpful in cultivating and developing local industrial workers.

Table 9 Training provided by Chinese firms

	Content of training
Mining	
Tubatse Chrome (PTY) Ltd.	Provide safety training and job skills training to all kinds of workers (miners, smelters, plumbers, maintenance workers, furnace-men, breakers and heavy truck drivers, etc); Provide training for equipment operation to long-term apprentices by using local traditional apprenticeship; Provide management training to managers, for example, human resources staff have to learn local labour relations, financial personnel need to learn local financial knowledge, etc.
PMG Mining (Pty) Ltd.	Provide training on safety and occupational health to local miners, and let Chinese technician teach them job skills; Provide training of equipment operation to truck drivers and excavator operators; Provide job skills training to managers, etc.
JISSouth Africa Development (PTY) Ltd.	Provide safety training, occupational health training and job skills training to local miners, dressers, sintering workers and smelters, etc.; Provide management training and job skills training to managers.
A mining company	Provide training on safety and occupational health to local miners, and ask Chinese technician to teach them job skills and equipment operation.
Manufacturing	
Hisense South Africa Development Enterprise (Pty) Ltd.	Chinese technicians teach leaders of assembly teams TV assembly technology through "on the job training", who in turn train their team members; Provide management training and training of personal career development to managers and after-sales service personnel; Provide technical guidance to after-sale service partners in other areas (e.g. Bloemfontein).
Sinoprima Investment & Manufacturing South Africa (PTY) Ltd.	Chinese experienced technicians teach local TV assembly-workers assembly technology and equipment operation through "learn by doing". After that, they select skilled assembly-workers as production managers and provide them with management training; Provide training of maintenance skills to maintenance men through apprenticeship; Provide job skills training and management training to managers (includes office clerks); Provide technical support to after-sales service partners.
FAW Vehicle Manufacturing South Africa (PTY) Ltd.	Chinese technicians train leaders of different assembly teams, and then let them train their team members, the content of training includes truck structure, truck assembly skills and maintenance skills.; Provide job skills training to after-sales service staff and sales personnel; Provide corporate culture training to managers. Every year some excellent managers and representatives of assembly workers are sent to China to visit its headquarters; Provide maintenance skills training to after-sales service teams of product distributors.
Sany Heavy Industry Co., Ltd.	Provide training of products knowledge, service skills, business etiquette and international trade knowledge to its employees. Excellent employees will be sent to China's headquarters to learn its business culture and visit its industrial park for 1 month, 3 months or 6 months. During the past 2 years, 8 employees were sent to its headquarters; Provide trainings on the operation and maintenance of engineering machines and electric

	hydraulic devices to maintenance teams of product distributors.
LiuGong Machinery South Africa (Pty) Ltd	Provide maintenance skills training to its maintenance men; Provide product distributors with training of products (loader excavator, gearbox) knowledge and after-sales maintenance skills.
B auto glass company	Provide jobs skills training to sales personnel and installation persons.
Infrastructure & construction	
CRI-Eagle Investment	Provide training of occupational health, safety and management to its managers and office clerks.
Sinoma International Engineering (South Africa) Pty Ltd.	Provide code of practice and safety training to its staff.
C infrastructure & construction company	Provide training on equipment operation, occupational health and safety to its equipment operators.
Telecommunication	
ZTE Corporation South Africa (PTY) Ltd.	1. Training for employees: provide training on telecommunication product knowledge and telecommunication technology to its employees; Provide training of after-sales service skills to local college students, it also trains project engineers for South Africa. In addition, in order to promote employees' personal career development, it sighed memorandum of understanding (MOU) with Durban University of Technology (April 2012) and University of The Free State (June 2012). According to MOU, ZTE (South Africa) offers training of telecommunications technology and telecommunications product knowledge, and these two universities find excellent college students to participate. Meanwhile, these two universities also offer management training such as time management, personal career development to its key staffs; The details of cooperation between both sides had been under discussion when we interviewed it; 2. Training for telecommunication operators: Chinese senior specialists train the existing technical teams of local operators through "on the job training" and telecommunication courses. By doing this, it gradually transfers skills on network operation and network maintenance to local technical teams. It has a small training centre in South Africa. 30 Cell-C employees have accepted training in its training centre since the second half of 2009. When we interviewed it, ZTE (South Africa) and Cell-C were planning to hold training on knowledge of telecommunication and professional products for their new employees.
Finance	
Bank of China, Johannesburg Branch	As required by its headquarter, it provides internal training (industry analysis, case studies, South Africa's foreign exchange control system, etc.) to its experienced or high-level employees; it also support its employees to join external training such as training held by financial association, lawyers association or PricewaterhouseCoopers, etc.
Transport	
COSCO	Its department managers provide training of job skills to local potential employees

Africa (PTY) Ltd.	(vouching clerks, customer service staffs and market surveyors); Provide training of equipment operation to port supervisors; Provide management training to department managers.

Source: see Table 4.

However, Chinese companies are very prudent when deciding whether to provide professional training to their local employees. This situation is closely associated with South Africa's labour laws which are regarded as protecting workers too much. When local staff accepted training, they would ask their employers to raise their salary because they thought their skills were improved. If firms do not accept their requirements, they probably will find better jobs in other firms. It is a big challenge for some Chinese firms as they do not have legal ways to protect their rights when provide training to their employees, and this directly undermines their enthusiasm to offer local staff professional training.

3. SOUTH AFRICA'S LABOUR MARKET RESTRICTS THE EMPLOYMENT EFFECT OF CHINESE INVESTMENT—FROM THE PERSPECTIVE OF LABOUR SUPPLY

According to most interviewed Chinese firms, South Africa's investment environment as a whole is better than that of the rest of African continent. For example, the conditions of market competition, the legal environment, supporting facilities and the level of government services in South Africa are better than they expected. In order to create more job opportunities for its people, the South African government has issued different industrial policies for supporting industries' development. The friendly relationship between the Chinese government and South African government is another good factor which encourages Chinese enterprises to invest in South Africa. However, South Africa's investment environment still needs improving in term of South Africa's labour market. Only by improving its investment environment can it further expand the employment effect of FDI.

3.1 CHARACTERISTICS OF SOUTH AFRICA'S LABOUR MARKET

Promoting its social and economic development and creating jobs for its people are the top priorities for the new South Africa's government since its establishment. In spite of progress in its economic development, the unemployment rate in South Africa is still very high (see table 10).

With the end of Apartheid, South Africa's economy has seen substantial growth and the number of employed people in South Africa is gradually increasing. However, its narrow unemployment rate[24] is always about 25 per cent. Moreover, if discouraged work-seekers, that is, workers who are unemployed and would like to work but have given up looking for employment, are included, the broad rate of unemployment[25] in 2000 was up to 34.3 per cent and 37.4 per cent in the fourth quarter of 2012. At the same time, the elasticity of output to employment has declined significantly, namely each percentage of economic growth can bring fewer job opportunities for people. Studies suggest that the low elasticity of output to employment in South Africa is caused by the falling employment multiplier of existing manufacturing in South Africa and South Africa's unemployment is mainly caused by structural unemployment (cyclical unemployment accounted for less than 15 per cent of total unemployment in South Africa) (Marinkov and Geldenhuys, 2007).

[24] Narrow unemployment rate is the proportion of the labour force that is unemployed.
[25] Broad rate of unemployment is the proportion of the labour force that is unemployed and discouraged.

Table 10 Situation of South African labour market, 1995-2012

Year	Employment (thousand)	Unemployment rate (%)		Economic growth rate (%)	Elasticity of output to employment
		Narrow	Broad		
1995	8,069	17.0	29.0	3.0	1.267
2000	8,790	25.4	34.3	4.4	0.917
2005	9,425	26.7	40.5	5.0	0.500
2010	13,061	24.9	36.4	2.8	-0.561
4th quarter 2012	13,577	24.9	37.4	2.1	0.282

Source: Duncan, H. (2009); Statistics South Africa (2012); South African Reserve Bank (2012).

Note: Discouraged work-seekers are included when computing the broad unemployment rate. Elasticity of output to employment is the ratio of growth rate of employment to real economic growth rate.

The high unemployment rate in South Africa has received much attention from many scholars. Studies show that it is closely related to the imbalanced structure of labour market, labour laws and trade unions in South Africa (Maree, 2001; Banerjee, et at., 2006; Kingdon and Knight, 2004; Mahadea,2003; Leoka, et al., 2012; Schoeman, et al., 2010). These points and the respective literature will be explored in the following.

3.1.1 IMBALANCED STRUCTURE IN LABOUR MARKET

A very important feature of the South African economy is the imbalance in the labour market. There is a chronic shortage of skilled labour which co-exists with a very large surplus of low-skilled and unskilled workers (Maree, 2001). However, the employment structure in South Africa is transferred from the primary sector (agriculture, mining) to the tertiary sector (finance, wholesale and retail, etc.). The internal adjustment of the industry itself has led to a labour demand change from unskilled labour and low-skilled labour to skilled labour (Abhijit, et al., 2006). The structural contradiction between supply and demand in the labour market has led to a lot of structural unemployment in South Africa. Therefore, labour demand brought about by South Africa's economic growth is unable to absorb a substantial increase in labour supply during the same period, particularly the large number of low-skilled women and youth (Duncan, 2009).

In addition, compared to other sub-Sahara African countries such as Ghana, Uganda and Tanzania, the size of South Africa's informal labour-intensive sector is very small, which also cannot absorb its size of working population (Kingdon, et al, 2006). According to the Statistics of South Africa Bureau, the proportion of South Africa's non-agricultural informal employment to total employment in 2012 is only 17 per cent. The decrease in the development of informal sectors in South Africa can be attributed to the improvement of the business environment and the extensive penetration of formal sector in the economy, as well as the lack of production linkages among the informal sectors (Altman, 2007).

3.1.2 LABOUR LAWS DESIGNED WELL AND STRICTLY IMPLEMENTED

Since 1994, the new South Africa has promulgated the Labour Relations Act (1995), Basic Conditions of Employment Act (1997), Equity Employment Act (1998) and Skill Development Empowerment Act (1998). These Acts clearly define employees' rights, employment conditions, employees' skills development, and strengthen the position of trade unions and employees in various ways. At the same time, labour market institutions such as Bargaining Councils and Wage Boards in South Africa have set sectoral minimum wages and stipulate working conditions in many industries (see Table 11), which are applied to all firms in the industry and region via the "extension" provision. There are serious penalties for flouting the stipulations of these institutions (Kingdon and Knight, 2004).

Moreover, South Africa formally implemented the Broad-based Black Economic Empowerment Act (B-BBEE) in 2004 and extended B-BBEE to different industries. As a whole, B-BBEE protects the rights of vulnerable groups by setting goals of ownership, management control and skills development, etc. in the firms. Since the Petroleum and liquid fuels sector charter on Black Economic Empowerment (BEE) was issued in 2000, charters of mining, agriculture, finance, tourism, construction, and information and communication technology on BEE were approved, and stringent regulations about firms' employment behaviours were set.

3.1.3 TRADE UNIONS HAVE A WIDE COVERAGE AND ARE POWERFUL

Since the Black Trade Unions were recognized by South Africa in 1979, South Africa's trade unions have grown rapidly. Industrial trade unions are integrated into national trade unions. Local trade unions forced the Regional Labour Committee to merge into the National Labour Committee and make the collective bargaining centralized, which is contrast to the trend towards the decentralization of collective bargaining (Maree, 2001). The number of registered trade unions in South Africa was 213 in 1994 and grew to 464 in 2000, but decreased to 200 in 2010; the membership of registered trade unions was about 2.47 million in 1994 and rose to about 3.06 million in 2010; the registered union membership in proportion to total employment was 45.2 per cent in 1997, but dropped to 23.3 per cent in 2010 (Leoka, et al., 2012). This is due to the rapid development of atypical employment (temporary employment, informal employment, etc.) in South Africa. The significance of atypical employment for collective bargaining is that it reduces the coverage of negotiated agreements because trade unions in South Africa find it difficult to recruit and retain members who are atypical employees. The result is that trade union membership declines when atypical employment increases (Maree, 2001).

Because of their large memberships and their great influence on local politics and economy, trade unions play an important role in the evolution of industrial wage and the equilibrium of labour market in South Africa (see Table 11) (Banerjee, et at., 2006). According to Mahadea (2003), South Africa's employment declines about 6.3 per cent because of its powerful trade unions. Two main reasons can explain this. First, trade unions cause the growth of real wage to outpace the growth of labour productivity in South Africa. The misalignment of real wage and labour productivity causes large jobs loss (Leoka, et al., 2012). After accounting for individual heterogeneity, Butcher and Rouse (2001) found a 20 per cent union wage premium[26] for Blacks and a 10-13 per cent premium for the Whites. Second, some behaviour by trade union such as frequent strikes strains the labour relations in South Africa. In 2011, South Africa experienced a large number of wage strikes, leading to the loss of man-days of 6.2 million, compared to 14.6 million man-days loss in 2010 (Leoka, et al., 2012) and 0.5 million man-days loss in 2000 (South Africa RB, 2002). Therefore, firms aspire to substitute capital for labour and use capital intensive production technology to overcome the negative impact caused by the instability of the labour market (Schoeman, et al., 2010).

Table 11 Trade union and average wages settlement across sectors in South Africa, 2011

Sector	Union	Average minimum monthly wage-2011	Wage settlement-2011
Food/Agriculture	Food and Allied Workers Union, NUFBWSouth Africa W, Solidarity	2,533	7.5%

[26] The extent by which the salary of union workers exceeds that of non-union workers is called union wage premium.

Building/Construction	National Union of Mineworkers, United Association of South Africa	2,612	7.0%
Chemical	Chemical, Energy, Paper, Printing, Wood and Allied Workers Union, South African Chemical Workers Union, Solidarity	6,723	8.3%
Health	Staff Association	5,073	7.4%
Finance	Sasbo	6,109	6.7%
Food manufacturing	Food and Allied Workers Union, South African Commercial, Catering and Allied Workers Union, Solidarity	5,012	7.3%
Metal and engineering	National Union of Metalworkers of South Africa, Solidarity	5,380	8.5%
Mining	National Union of Mineworkers, Building Allied Mining and Construction Workers Union, Solidarity, United Association of South Africa	6,476	8.7%
Municipality and utilities	National Union of Mineworkers, National Union of Metalworkers of South Africa, Solidarity, South African Municipal Workers Union	5,794	6.5%
Retail/catering	Saccawu, Southern African Clothing and Textile Workers Union, Eccawusa	4,390	8.3%
Transport/freight	South African Transport & Allied Workers ' Union, Aviation Industry Workers Union	3,626	8.0%

Source: Leoka, et al., 2012.

3.2 THE EFFECT OF SOUTH AFRICA'S LABOUR MARKET ON EMPLOYMENT GENERATION

South Africa's strict labour regulations and powerful trade unions are beneficial for its employment quality in term of raising salary, improving working conditions and requiring more training. However, they may, indeed, have negative effects on its employment creation.

According to most interviewed Chinese firms, South Africa's labour regulations give greater weight to local employees than employers. As a result, it produces rigidity in local labour market and affects Chinese firms' daily operations. To sum up, Chinese firms are affected in the following factors which are caused by the local labour market.

3.2.1 HIGH LABOUR COSTS

Compared to other middle-income countries such as China, Brazil and Poland, the monthly wages of workers (managers, professional, skilled workers and unskilled workers)) in the manufacturing industry in South Africa are considerably higher than all the countries and job categories under comparison (Clarke, et al., 2007:60). The minimum wage of South Africa's various industries in 2011 is another example (see Table 11). High labour costs are a big burden for Chinese investors. For example, labour cost in Hisense and Sinoprima is 50 per cent higher than that of Chinese domestic workers. The salary of some key employees (e.g. R & D personnel, quality engineers and performance testers) in these two firms is doubles or triple that of their domestic counterparts; The annual labour cost in Tubatse accounts for more than 10 per cent of its total costs, while in China this is below 5 per cent; in the field of mechanical engineering, the salary of local ordinary maintenance workers is 7,000- 8,000 Rand per month, while for domestic Chinese workers it is only 2,000-3,000 RMB per month;[27]in telecommunications industry, ZTE (South Africa) recruits employees in accordance with South African labour market. Local employees get higher wages than domestic employees. In some high-level positions such as deputy project managers and sale personnel, their annual wage may be more than one million rand, while the Chinese personnel salary is less than half of it. Moreover, the annual wage for all industries in South Africa is adjusted according to the local inflation rate, which has risen sharply in the last two years. Such situation may cause tremendous pressure on Chinese firms. In addition, the Skills Development Act is geared towards improvement of South African labour force through a levy-grant scheme. However, the difficulty in claiming a grant has led many small businesses to view this program as more of a tax (Clarke, et al., 2007:69), which increases firms' training cost.

3.2.2 DIFFUCULTY TO ADJUST WAGES

A high union wage premium and the centralization of collective bargaining are the key features of the inflexibility of South Africa's labour market (Butcher and Rouse, 2001), and make it extremely difficult to adjust wages to the economic situation. Therefore, union-based workers are less affected than non-union-based workers from the wage-depressing effect of the wage labour market competition. Kingdon et al. (2005) show that the union wage premium increased in South Africa between 1993 and 1999: with union-based workers' wages falling slightly in the real terms and a sharp decrease of non-union-based wages. Thus, union wages were found to be unresponsive, while non-union wages were far more sensitive.

Collective bargaining seems to generate the effect of "Real Wage Resistance". However, the centralization of collective bargaining (collective bargaining is discussed at the national level) tends to reduce flexibility in wage negotiations. If firms cannot meet the requirements made by collective bargaining, they have to dismiss workers or close down, which was particularly the case for South African textile industry. Such consequences can be avoided if collective bargaining is decentralized --- negotiations taking place at regional level or inside the firms (Maree, 2001). South Africa's stringent labour legislation renders firms unable to adjust wages downward to meet competitive pressures. The extension of minimum wages to many sectors may well have destroyed jobs in small labour-intensive firms (Mahadea and Simson, 2010).

3.2.3 DIFICULTY IN DISMISSAL OF INCOMPETENT EMPLOYEES

In South Africa, the Labour Relations Act stipulates three prerequisites for legitimate termination, or fair dismissal: employee conduct, employee capacity, and operational requirement of the business. The employers must also prove that the dismissal procedure was fair. However, the burden of proof lies with the employers. If a local worker is not competent, the company cannot fire him/her directly. According to South African labour laws, the employer needs to send him/her a warning notice and offer more training. If s/he made the same mistakes, the employer will send him/her a second warning notice and set a deadline to correct his/her behaviour. If the mistake happens a third time, the employer needs to find evidence of the worker's incompetence and hold an internal hearing so as to dismiss him/her legally. If the employer does not follow the above procedures, the dismissed employee can file charges against the employer. If successful in the complaints procedure, the employer has to compensate the employee with one or two years' salary and is obliged to employ him/her again. Difficulty in firing incompetent employees, intensified by increasing salaries, makes foreign companies reluctant to employ more workers. In fact, many companies in different industries in South Africa do not want to recruit short-term workers. According to a manager who has worked in an auto company for four years in South Africa, if companies employ short-term workers, it will allow a 5 per cent increase in terms of the number of people a given company employs. If an employer recruits a short-term (three months) worker, he can prolong the

[27] 1RMB can exchange 1.33049 Rand in July, 2012, based on State Administration of Foreign Exchange, http://www.safe.gov.cn/.

contact for another three months if he feels the worker is competent or that the work is not finished. After half a year, if the work is still not done, the employer needs to give the worker a long-term contract. When the work is finished, the worker will become redundant and be a burden for the employer as the employer finds it is very hard to terminate the contact.[28]

3.2.4 DIFFICULTY IN HIRING PROFESSIONAL AND SKILLED STAFF

Many Chinese firms have difficulty in recruiting professional, managerial and technical staff. Reasons mentioned include the emigration of skilled people, the employment-equity of racial balance in each occupation group within a firm and the lack of skilled labour in South African. Generally, Chinese firms adopt two strategies to overcome skilled labour shortages: providing training to local employees and sending domestic personnel to work in South Africa. However, the problem cannot all be resolved by these two strategies. As firms do not have legal ways to protect the benefit of giving training to local workers, they are very prudent when deciding whether to provide training to their local staff. Moreover, they often have insufficient education, making advanced training difficult. For Chinese firms, sending domestic personnel to work in South Africa will incur all kinds of expenditures. On the other hand, firms are faced with increasing stringent restrictions on the immigration of foreign workers in South Africa. Though the Chinese companies sometimes found an urgent need to have Chinese personnel come to South Africa to manage a project, the need could not be quickly satisfied due to the lengthy procedure of visa application through the South African Department of Home Affairs. As a result, the scheduled projects were delayed. In view of the high unemployment rate in South Africa and the need for FDI to create jobs for local people, the South African government should reconsider its policy of immigration of foreign managers and technical personnel. Only by doing so can foreign investors' benefits be protected and more jobs be created for South Africans.

4. CONCLUSION

As indicated above, the suspicions concerning the employment effect of Chinese investment in Africa from the international society is untenable at least in South Africa.

In term of employment creation, most surveyed Chinese firms in South Africa not only directly create jobs for local people, but also bring indirect jobs through their forward and backward linkages. At the same time, the localization rate of labour in Chinese enterprises is high. Therefore, China's investment in South Africa is helpful in alleviating local unskilled and low-skilled labour's employment pressure. The international community should consider the Chinese firms' contribution to job creation in South Africa. In terms of labour demand, the most important thing is that Chinese firms need to tackle the employees' localization issue and provide as the most jobs possible to local competent candidates when they invest in Africa.

In term of employment quality, the interviewed Chinese firms not only provide many ordinary jobs, but also create some mid-level and high-level jobs. The international suspicion that Africans are always employed in the low-level jobs is not true in South Africa. According to ECCO of the Embassy of the PRC in South Africa, there are clear divisions of labour when Chinese firms invest in Africa. Some critical positions such as general manager and financial managers must be occupied by Chinese people as it matters for firms' development strategy, and sale personnel are mostly local people because of their knowledge about local market. Therefore, beyond some key positions that might be filled by Chinese 'ex-patriot' staff, Chinese investors should create as many jobs as possible to local competent candidates

[28] Interviewed with FAW Vehicle Manufacturing South Africa (PTY) Ltd. in Johannesburg on 29 June, 2012.

when they invest in Africa.[29] Only by doing this can they develop well in the long run provide more jobs for the local people.

South Africa's strict labour laws, the powerful trade unions and Chinese firms' international development orientation ensure the salary, welfare benefits and training in Chinese firms can reach South Africa's legal requirements. Meanwhile, Chinese enterprises also try to maintain good relationships with local trade unions so as to avoid strikes. The local setting – its policies, and its enforcement structures – thus provides the framework in which Chinese entrepreneurs operate.

As foreign investors, Chinese firms have an obligation to abide by the local laws in the host economy and follow the international practices of other multinational companies by providing good conditions of employment and enough training to local employees. As a host country, South Africa needs to reconsider its labour market regulations and give greater weight to the interest of employers and investors (Kingdon and Knight, 2007) by improving its basic education and technical training plans, and providing foreign investors with appropriate and competitive workforces. Only by doing this can South Africa attract more FDI to develop its economy and expand the employment effect of FDI.

[29] Interview with Economic and Commercial Counsellor's Office of the Embassy of the People's Republic of China in the Republic of South Africa, 28 June, 2012.

BIBLIOGRAPHY

Altman, M. 2007. *Employment Scenarios to 2024*. [Online]. Available: http://npconline.co.za [29 August 2012].

Banerjee, A., Galiani, S., Levinsohn, J., McLaren, Z. and Woolard, I. 2006. Why Has Unemployment Risen in the New South Africa? IPC Working Paper Series No.35.

Baah, A.Y and Jauch,H. 2009. *Chinese Investment in Africa: A Labor Perspective*. Windhoek: African Labor Research Network.

Burke, C., Naidu, S. and Nepgen, A. 2008. *Scoping Study on China's Relations with South Africa*. [Online] Available: http://www.aercafrica.org/publications/category.asp [24 August 2012].

Butcher, K. and Rouse, C. 2001.Wage Effects of Unions and Industrial Councils in South Africa. *Industrial and Labor Relations Review*, 54(2): 349-374.

Chinese Academy of International Trade and Economic Cooperation (CAITEC). 2011. The guidelines of foreign direct investment: South Africa (Dui wai tou zi he zuo guo bie (di qu) zhi nan: nan fei), author's translation.

Clarke, G., Habyarimana, J., Ingram, M., Kaplan, D. and Ramachandran, V. 2007. *An assessment of the Investment Climate in South Africa*. Washington DC: World Bank.

Duncan, H. 2009. Growth, Employment and Unemployment in South Africa. *South African Journal of Economics*, 77(4): 488-504.

Gelb, S. 2010. *Foreign direct investment links between South Africa and China*. Paper prepared for African Economic Research Consortium project on China-Africa Economic Relations. [Online] Available: www.aercafrica.org [8 August 2012].

Guliwe, T. and Mkhonta, S. 2009. Chinese investment in South Africa, in Baah, A.Y. and Jauch, H. (eds). Chinese investment in Africa: A Labor Perspective, African Labor Research Network, 300-332.

John, H., Stefan, K., Mithat, K. and Tamer. T. 2008. Foreign Direct Investment from China, India and South Africa in sub-Saharan Africa: A New or Old Phenomenon? UNU-WIDER, Research Paper No.2008/24.

Kingdon, G., Sandefur, J. and Teal, F. 2006. Labour Market Flexibility, Wages and Incomes in Sub-Saharan Africa in the 1990s. African Development Bank, 392-427.

Kingdon, G. and Knight, J. 2004. Unemployment in South Africa: The Nature of the Beast. *World Development*, 32(3):391-408.

Kaplinsky, R. and Morris, M. 2009. Chinese FDI in Sub-Saharan Africa: Engaging with Large Dragons. *The European Journal of Development Research*, 21(4): 551-569.

Kingdon, G., Sandefur, J. and Teal, F. 2005. Labour Market Flexibility Wages and Incomes in Sub-Saharan Africa in the 1990s. GPRG-WPS-030, Centre for the Study of African Economies, University of Oxford.

Leoka, T., Darmalingam, S., and Guma, N. 2012. *Labour pains*. [Online] Available: https://research.standardbank.com [15 September 2012].

Lipsey, R. 2004. Home and Host Country Effects of FDI, in Baldwin, R.. and Winners, A. (eds). *Challenges to Globalization: Analyzing the Economics*. Chicago: University of Chicago Press.

Luo, Q. 2009. The effect of FDI on developing countries' employment: a review (FDI dui fa zhan zhong guo jia de jiu ye ying xiang: yi ge wen xian zong shu). Journal of Ningxia University (Humanities & Social Sciences Edition), 31(2): 122-128, author's translation.

Mahadea, D. 2003. Employment and Growth in South Africa: Hope or Despair? *The South African Journal of Economics*, 71(1): 21-48.

Mahadea, D. and Simson, R. 2010. The Challenges of 'Low Employment Economic Growth' in South Africa: 1994-2008. South Africa JEMS NS 13, 4:391-406.

Maree, J. 2001. Trend in the South Africa Collective Bargaining System in Comparative Perspective. South African Journal of Labour Relations, 35(1):1-37.

Marinkov,M and Geldenhuys,J. 2007. Cyclical Unemployment and Cyclical Output: An Estimation of Okun's Coefficient for South Africa. *South African Journal of Economics*, 75(3):373-390.

Schoeman,C., Botha,I. and Blaauw, P. 2010. Labor Conflict and the Persistency of Macro Underemployment in South Africa. South Africa JEMS NS 13, 3: 272-292.

South Africa RB. 2002. The South African Reserve Bank Quarterly Bulletin, Pretoria, No.223.

South African Reserve Bank. 2012. Annual Economic Report.

Statistics South Africa. 2012. Labour Force Survey, Quarter 4.

UNCTAD. 1994. World Investment Report 1994: Transnational Corporations, Employment and the Workplace. New York: United Nations.

UNCTAD. 1999. World Investment Report 1999: Foreign Direct Investment and the Challenge of Development . New York: United Nations.

Xu, H., Yuan, P., and Li, H. 2009. FDI, labour market and the effect of wage spillover (Wai shang zhi jie tou zi, lao dong li shi chang yu gong zi yi chu xiao ying). *Management World*, 9: 53-68, author's translation.

Yin, D., Zhang, H., Huang, T. 2001. FDI and the demand of skilled labour in China (FDI yu zhong guo de gao ji neng lao dong xu qiu). *The Journal of World Economy*, 9:118-137, author's translation.

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