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ChinAfrica and the Development of the Human Capital

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ChinAfrica and the development of the human capital

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Introduction:
The development of human capital and know-how is a key element and the foundation for economic growth, especially for least developed countries. The question is how the Chinese involvement in the African continent may affect the progress of African growth and productivity, the distribution of income and wealth, the development of human capital. It is well known that human capital depends on health the care and nurturing of children, education, experience, learning by doing for example. It also of depends on good governance, appropriate institutions and public and private expenditures on infrastructure. During the last decade tens of thousand Chinese entrepreneurs have uprooted themselves from China and migrated to Africa, the world's poorest continent, with Chinese-government approval.
Under what circumstances the Chinese involvement in Africa can really have a positive effect on the development of infrastructure necessary for the development of human capital? Can the establishment of Chinese companies on the continent cause positive spillovers such as learning by doing?
The aim is to understand how this relationship is beneficial for SSA, how this can enable SSA to improve its Human and Social capital. The paper divides in two parts. The first one will allow us to better understand the nature of the relation between these two geographical zones. The second one studies the implications of the China-SSA links on the evolution of Sub-Saharan Africa's human capital.

Keywords: Human capital, Foreign Direct Investisment, Natural Resources, trade, Infrastructure

a) Chinese assistance to Africa

China has increased its economic involvement in Africa every year for the last decade in the bid to gain access to resources in Africa, to develop outlets for Chinese laborers, and to acquire preferential access to markets. The links between China and Africa have deepened significantly in the areas of trade, investment, aid and migration. Since 2000, Forums on China-Africa Cooperation (FOCAC) are organized bringing together ministers of China and Africa. 49 African countries have attended in 2009 the meeting against 44 in 2000. The purpose of these forums for China is to plan for a three-year aid policy in order to forge closer economic ties with African countries.

Table 1: Past and future Forums on China-Africa Cooperation

Date	Location	Major Chinese Commitments
10-12 October 2000	Beijing in China	Opening a new, stable and long-term partnership featuring equality and mutual benefit between China and African countries...
15-16 December 2003	Addis-Abeba in Ethiopia	Action Plan (2004-2006): lowering customs duties,

		increasing assistance to African countries, training up to 10,000 African personnel in different fields, expanding tourism cooperation with Africa, increasing people-to-people exchanges …
3-5 November 2006	Beijing in China	Action Plan (2007-2009): joint energy and resources exploration and exploitation under the principle of reciprocity, combating HIV/AIDS, malaria, tuberculosis, Ebola, and other diseases, setting up 100 rural schools and increase the number of scholarships for African students in China to 4,000 a year by 2009 from the present 2,000...
8-9 November 2009	Sharm el-Sheikh in Egypt	Action Plan (2010-2012): support Small and Medium Business (SMEs) in Africa and debt cancellations for heavily indebted African countries and least developed...
2012	*Beijing in China*	
2015	*South-Africa*	

Sources: www.focac.org, http://english.focacsummit.org/2006-11/05/content_5167.htm

Over the past three years, Chinese leaders visited 36 African countries, while 36 African leaders, including presidents, vice presidents, prime ministers, presidents of parliament, were received in China.

According to Wang (2009), China went through three Phases in its Engagement with Africa:

Table 2: The three phases of Chinese involvement in Africa

Political Phase	Dormant Phase	Commercial Phase
Relations primarily of a political nature Economic aid for infrastructure and medical teams Effort to gain support for the Third World	China's priority shifted towards establishing a more market-based economic model while integrating itself with the world's leading economic powers Less effort towards gaining political influence	Followed the rise of China as an economic power with surging demand for raw materials FOCAC 2006 drew Chinese businesses' attention to Africa Increasing Chinese investment in more sectors

Sources : Edward Wang (2009)

China has increased its financial assistance to underdeveloped and capital-poor African states, notably (SSA), mostly in the form of grants, debt relief, infrastructure, or favorable lending terms (for example: loans with an interest subsidy) far beyond what Western companies and institutions are willing to provide, in exchange for access to natural resources. China cancelled an estimated $260 million in debt for the Democratic Republic of the Congo (DRC), Ethiopia, Mali, Senegal, Togo, Rwanda, Guinea, and Uganda. As of 2006, existing loans and credit lines were estimated to be about $19 billion (United Nations Economic, 2008). However, the rising importance of China and India and other non-Paris Club creditors as sources of concessional loans for poor African countries has increased the risk of further debt accumulation. China's Public Aid represents only 10% of total aid to the continent. Assistance in infrastructure is mainly in the fields of energy, telecommunications and transportation, water and health equipment, and construction.

Chinese participation in infrastructure development can help fill a gap in SSA. China has also stepped up its aid in the form of technical assistance, including training of Africans in Chinese institutions. Since 2006, China has helped Africa in nearly 900 programs of which half related to the well-being of local people, for example: China has also helped train more than 30,000 people and sent 350,000 technicians and 17,000 medical staff in Africa.

In particular, the medical aid is very significant in terms of human capital. For example, according to Hamoudi A. and Birdsall N. (2001), the AIDS epidemic has a negative impact on both the rate of growth and social productivity of the human capital stock. The loss of physical capital assets may reduce the ability of skilled workers to contribute to overall economic production. The epidemic is likely to affect the rate of new human capital formation, and the productivity of the existing human capital stock. In particular, the loss of millions of adults, among them tens of thousands of teachers—affects the rate at which education systems in Africa are able to train the next generation, and reduces the ability of people to contribute to overall economic production.

The 47 countries of SSA attracted 58% of the African flows, up from 49% in 2006 (UNCTAD, WIR 2008). Developed countries remained the main sources of FDI in the region, although the share of developing countries, especially from Asia, has been increasing over time. Traditionally, FDI flows from Asia to Africa were mainly from the Asian newly industrializing economies (Hong Kong SAR, Republic of Korea, Singapore, and Taiwan Province of China). But recently, China and India have emerged as significant sources. Singapore, India and Malaysia currently are the top Asian originators of FDI in Africa, followed by China. This is partly a result of the "going abroad" strategy that was launched in 2000 by the Chinese Government. Chinese companies are present in 48 African countries. China's outflows of FDI amounted to $17.6 billion in 2006 (up by 44 per cent over the previous year, Table 3 and Table 4), resulting in a stock of FDI (excluding the financial sector) of $75 billion (Table 5). According to chinese official figures, the flow of Chinese FDI to Africa seem to represent only 3% of China's total FDI flows (Table 3). In fact, the weight of Asia, overstated, is biased because Hong Kong, which is a part of China and represents a significant level of trade, is treated as a foreign country. Chinese state-owned companies often enter into joint ventures with African firms to secure sources of commodities. But, the majority of Chinese investment projects in Africa have been carried out by private small and medium-sized enterprises. According to Wang (2007) among the 800 Chinese enterprises now operating in Africa mainly in resource sectors, only about 100 are state-owned. But, market-seeking investment is also a prominent motivation for Chinese enterprises investing in Africa, especially in the manufacturing, the construction and services sectors. At the same time, FDI flows from Africa to Africa increased substantially in 2006, mainly originating in South and North Africa.

Table 3: Chinese Regional distribution – flow: 2003-06 (USD millions)

	2003	**2004**	**2005**	**2006**
Asia	1 505 (52.7%)	3 014 (54.8%)	4 484 (36.6%)	7663 (43.5%)
Latin America	1 038 (36.4%)	1 763 (32.1%)	6 470 (52.8%)	8469 (48.0%)
Europe	145 (5.1%)	158 (2.9%)	395 (3.2%)	598 (3.4%)
Africa	75 (2.6%)	317 (5.8%)	392 (3.2%)	520 (2.9%)
North America	58 (2.0%)	126 (2.3%)	321 (2.6%)	258 (1.5%)
Oceania	34 (1.2%)	120 (2.2%)	203 (1.7%)	126 (0.7%)
Total	2 855 (100.0%)	5 498 (100.0%)	12 265 (100.0%)	17 634 (100.0%)

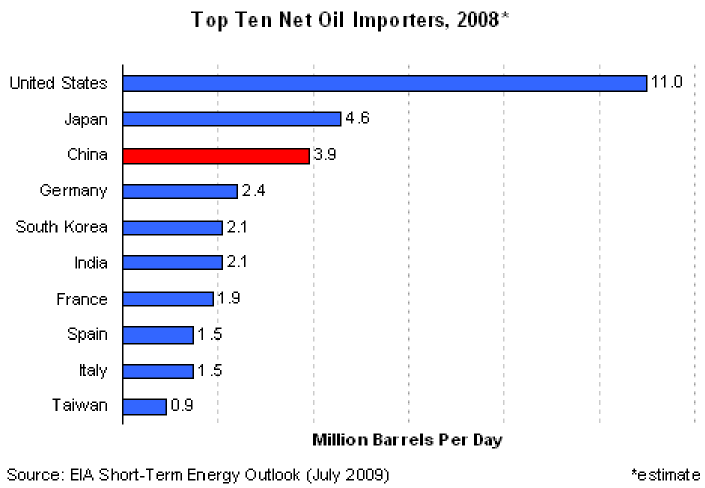
Source: MOFCOM, cité par OECD (2008), p. 135

According to Miroux (2009), developing countries actually invest about 3–4% of their GDP on infrastructure annually, whereas they should be spending about 7–9% on new investment projects and maintenance of existing infrastructure in order to achieve poverty reduction goals and a broader economic growth. In SSA, for instance, the gap between actual and needed finance for infrastructure investment may exceed 50%. The share of Africa in the developing countries FDI inward stock in transport, storage and communication, while still relatively small, increased however from 2.9% in 1990 to 11.4% in 2006, mostly as a result of significant investments in telecommunications. The share of foreign investors in infrastructure financing has been higher in Africa (36%) and Latin America (33%) and relatively low in Asia. Private domestic investment in infrastructure accounted for the smaller share in Africa (about 13% against 51% for public domestic investment). In Africa, out of the top 50 foreign investors in infrastructure, mostly from developed countries, over the 1996 -2006 period, 9 were from West Asia. Investment in wireless technologies has reduced subscription prices, sometimes to lower levels than those of fixed lines, thus enhancing affordability. TNCs has also helped some remote areas to gain access to telecommunications, are also involved in the development of transport corridors for facilitating trade and transportation links. According to UNCTAD (2009) “Additionally, high transport-related trade costs act as a severe disincentive not only to increased trade but also to FDI flows to landlocked countries .... Helping Africa to put in place the hard and soft infrastructure needed to strengthen the economic integration among African countries could pave the way for higher FDI flows and more intra-African trade, resulting in higher rates of economic growth”. China builds some important infrastructure in the field of communications and road transport. But China also realizes investment such as stadiums, buildings of prestige just for the glory of local authorities in order to access to natural resources. Chinese funds are being directed at projects for infrastructure for key suppliers of oil and minerals. According to an NYU Wagner School research team (cited by Richardson (2010)), Chinese-funded infrastructure projects yielded a breakdown of 54% to public works projects, 28.5% to the extraction or production of natural resources and 2.5% to humanitarian activities, with the remaining 15% unspecified. The kinds of projects included are as follows: infrastructure, mining, oil refining, hydropower, dam construction, national stadiums, telecommunications, electricity, medical training, universities and administrative buildings.

b) What seeks China in Africa?

b.1 natural resources

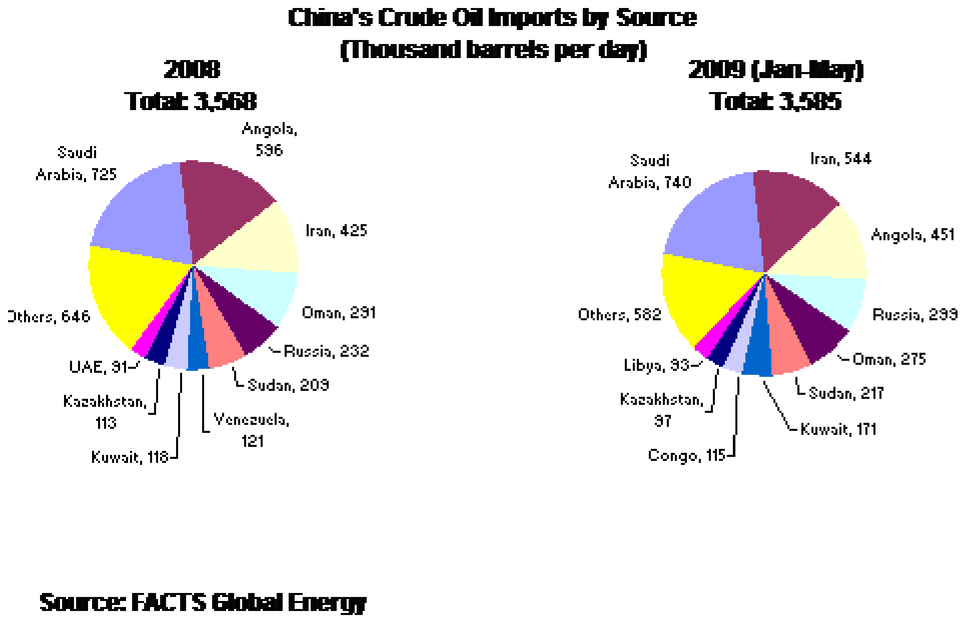
China requires massive levels of resources to sustain its rapid growth. China is now the world’s third biggest consumer of oil after the United States of America.



source : energy information administration, july 2009 (Official Energy Statistics from the U.S. Government) : http://www.eia.doe.gov/emeu/cabs/China/Full.html

Diversifying energy sources is seen as important for spreading risk. But, The Western companies have already set of the advance and have interests in many most lucrative sectors. China currently receives around

33 percent of its imported crude oil from Africa, 9 percent of the continent's total exports in 2006 (the United States purchased 33 percent exports from Africa, Europe around 22). But, China is projected to surpass the US in 2015. The continent's value of Chinese oil-company investment in Africa amounts to 8 percent of international oil company investment and only 3 percent total oil company investment there. China's technology is not as advanced as Western oil companies to evaluate deep-water oil fields. So, China has primarily looked to places with little competition, either because the oil fields were not as productive or because the investments were riskier, in political terms or in security terms. Consequently, China has frequently been the only investor in a project, or the majority shareholder. Beijing has also worked with governments that Western countries prefer to shun — such as Sudan. China must adopt a new strategy and accept minority stakes in projects with Western companies in order to gain technology, expertise, access to the capabilities they lack and to stay competitive on resource acquisitions in the long run for more difficult offshore projects. In the last few years, Chinese companies have signed or attempted to sign exploration contracts in nearly every African country with potential oil resources. Angola (newest member of OPEC), provides 16 percent of China's oil imports, second to Saudi Arabia and barely more than Iran, Sudan 6 percent and the Republic of the Congo 2.5 percent. Nigeria and Angola already supply China with as much oil as Saudi Arabia. China is busily signing contracts with Nigeria and Angola. China has either established or been pursuing oil deals with 100 percent of those countries that have at least 0.5 billion barrels of proven reserves. Peking has become the third major purchaser of oil from Gabon, after the United States and France. The competition for African oil comes not just Western and Chinese companies, India and South Korea are prominent too.



source : energy information administration, july 2009 (Official Energy Statistics from the U.S. Government) : http://www.eia.doe.gov/emeu/cabs/China/Full.html

Africa holds a fraction of the world's proven oil reserves—9 percent compared to the Middle East's nearly 62 percent—but it could hold significant undiscovered reserves.

Table 6. Africa Proved Reserves of Oil (2009)

Country/Region	Oil (Billion Barrels)
Angola **	9.040
Benin	0.008
Cameroon **	0.200

Chad **	1.500
Congo (Brazzaville) **	1.600
Congo (Kinshasa)	0.180
Cote d'Ivoire (IvoryCoast)	0.100
Equatorial Guinea **	1.100
Ethiopia **	0.0004
Gabon **	2.000
Ghana	0.015
Nigeria **	36.220
South Africa	0.015
Sudan **	5.000
Sub-Saharan Africa	**56.980**
Africa	**117.064**

Source: http://www.eia.doe.gov/emeu/international/reserves.html
** indicates Chinese involvement

In 1998 the Chinese government reorganized the majority of the state-owned oil and gas assets into two vertically integrated firms, the China Petrochemical Corporation (Sinopec) and the China National Petroleum Corporation (CNPC). Two other major state-sector firms in China include the China National Offshore Oil Corporation (CNOOC), which handles offshore exploration and production, and China National Star Petroleum, created in 1997. China’s three largest oil companies, CNPC, Sinopec and CNOOC, are said to have boosted spending by at least nine percent in 2004 on oil exploration and production worldwide.

China needs also other natural resources for its industry such gas, metal, or timber. China's manufacturing sector has created enormous demand for aluminum, copper, nickel, iron ore. Chinese firms also import a significant amount of non-oil commodities such as timber, copper, and diamonds.

b. 2 Trade

Trade connections between SSA and Asia, particularly China has expanded dramatically, although European Union countries and the United States still account for 2½ times the export shares of Asia. China is now Africa’s third largest trading partner after the United States and the European Union. African exports to China have more than quadrupled between 2000 and 2005 to $19.5 billion. China-Africa trade amounted to 55.5 billion U.S. Dollars in 2006, a year-on-year growth of more than 30 percent for the fifth consecutive year. The total includes 26.7 billion U.S. dollars in exports to Africa, up 43 percent, and 28.8 billion U.S. dollars in imports, up 37 percent. The value of trade between China and Africa has increased by 45 % from 2007 to the end of 2008; total trade for 2008 was approximately US$ 106 billion. African exports to China increased by 54 % between 2007 and 2008 with African imports from China increasing by 36 %. But, trade between China and Africa has fallen of 28.7% between January and July 2009, at 44.99 billion dollars. The top export products to china in 2008 were Mineral products (82 %); Precious stones and metals (3 %); parts for motor vehicles (3 %); Wood products (2 %) and Base metals (1 %). These products signify 90 % of total African exports. The top African imports from China in 2008 were Machinery (10 %); Textiles and clothing (4 %); Transport equipment (4 %); Footwear (2 %) and Plastic products (2 %). The top 5 export products from China signify 21 % of the total African imports. The major SSA trading partners with China for 2008 were Angola (24 %); South Africa (17 %); Sudan (8 %) and Nigeria (7 %). So, oil and other commodities are still the main export items; SSA’s exports of manufactures are still confined to a few product categories. In addition to the African manufacturing firms risk losing local markets if they are not able to compete with imports from Asia. China and other Asian countries replaced the European Union as the main destination for raw-material exports, mainly cotton. China has become Africa’s third largest trading partner (27%), after the US (32%) and EU (29%) (UNCTAD 2007).

In order to boost trade access for most least developed African countries[1] (LDC), China raised the number of their export items that receive zero-tariff treatment from 190 to 440. However, China's exports of cheap manufactured goods such as electronics and household items have increased competition for domestically manufactured goods. Asian-sourced imports, particularly in the clothing and furniture sectors, have had a detrimental impact on local industries.
Tourism is also expected to grow China has already identified 16 African nations as tourist destinations and this resulted in travel to Africa by 110,000 Chinese tourists in 2005, an upsurge of 100 per cent from 2004.

Currently China is one of the major trading partners with many African countries (Gabon's second largest client after the United States, second largest supplier of goods to Benin, fifth largest to South Africa, etc…). China is the second largest bilateral partner of Cameroon just after France.

[1] The 33 African LDCs are: Angola, Benin, Burkina Faso, Burundi, the Central African Republic, Chad, Comoros, the Democratic Republic of the Congo, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Niger, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, Somalia, Sudan, Togo, Uganda, the United Republic of Tanzania and Zambia (Cape Verde graduated out of LDC status in 2008).

Trade financing is often provided by the Chinese bank Eximbank.

Eighty-five percent of Africa's exports to China come from five oil-rich countries (Angola, Equatorial Guinea, Nigeria, the Republic of Congo, and Sudan), according to the World Bank. And China now ranks as the continent's second-highest trading partner, behind the United States, and ahead of France and Britain. Much of the growth was due to increased Chinese imports of oil from Sudan and other African nations, but Chinese companies see Africa as both an excellent market for their low-cost consumer goods, and a burgeoning economic opportunity as more countries privatize their industries and open their economies to foreign investment.

b.3 Chinese Migration

There are no reliable figures on the number of Chinese now working in Africa. The Chinese authorities identified 78,000 of them on the continent in 2006. According to Niquet 2007, there would be more than 130 000 Chinese settled in Africa, particularly Zimbabwe, Nigeria, Angola and the Republic of Guinea. But, an estimate by China's state-run Xinhua News Agency in August 2007 indicated that 750,000 long-term Chinese migrants were working and living in Africa. Direct flights were established between Angola, Zimbabwe and the People's Republic of China.

Over the last decade, tens of thousands Chinese have moved to the African continent, in rural and urban areas and are involved in agriculture, construction and trade, with Beijing's approval. In the 1960s, China's communist leader Mao Zedong has already forged close links with the continent to garner political support. Chinese have moved to Africa in the last 10 years for economic, not political reasons in the bid to secure raw materials and markets for its manufactured goods, but also for their own opportunities.

Chinese farmers are working in Kenya, Uganda, Ghana and Senegal, growing crops with African partners and then turning them into food products. At first, people were not willing to go to Africa but after the Chinese government called for people to go, they were more positive. Chinese farmers use their expertise to help Africans mechanize farms to increase crop yields.

China seems not yet a major player in African agriculture, but Chinese are beginning to have a big influence in retailing.

2) SSA growth and human capital: China's influence

According to Gusan and Exposito (2005), human capital allow a diminishing fertility rates and an increasing income per inhabitant, the increase of investment and consumption per inhabitant, an increase on industrial investment per head, productivity per worker, quality of institutions and political systems. Human capital also facilitates structural change and innovation. Their estimation of some econometric models of African countries shows the positive role that human capital has in development. For instance, shows a positive relationship, for 38 African countries, between Gdp per inhabitant and the educational level of population measured by the variable Total Years of Schooling. Human capital depends on both specific policies on health and education but also economic growth. There thus exist a virtuous circle between economic development and the level of human capital.

a – The economic evolution in China and in SSA in current crisis

The current financial crisis has affected developing countries in several possible ways: financial contagion and spillovers for stock markets in emerging markets (including stock markets in Brazil,

South Africa, India and China), the decrease in global demand notably for raw materials and in the net private capital flows, the credit crunch. The Development Aid is also under pressure because of debt problems and weak fiscal positions in the European countries and in the USA.
However, the global crisis shows great differences in the impact on the developing countries. It depends on the economic characteristics and policy responses, in developing countries. Developing countries that entered the crisis with large balance-of-payments and fiscal deficits are the most vulnerable. But, in most developing countries, the strengthening of macroeconomic policies, including fiscal and external positions and the best debt management during 2002-07 leave the developing countries less vulnerable. The Regional integration and the internal dynamics strongly reduce the negative impact of the crisis on the growth and development too.
The overall trade declined about 2 per cent in 2009, this is the first time since 1982. In 2007, FDI inflows increased by 30 per cent, reaching an all-time high of $1,833 billion. However, in 2008, world FDI flows declined by 21 per cent due to the global economic downturn, generally tighter credit conditions, and more risk-averse investors with deepening financial crisis. EU played an important role both in the surge in 2007 and in the fall in 2008. FDI into the USA already declined in 2007 and continued this trend in 2008. The USA remained the largest recipient country, as the depreciation of the dollar reduced the cost of FDI in the country.
The total FDI inflows into industrialized countries dropped by 33 per cent in 2008, whereas for developing countries, they increased by 4 per cent on average. Africa and Latin America recorded growing FDI inflows mainly in the first half of 2008. For 2009, capital flows are expected to drop further. Net private debt and equity flows to developing countries are also expected to decline by half from $1 trillion in 2007 to $530 billion in 2009, slowing down investment growth dramatically.
In 2007, the trend of increasing FDI flows between developing countries continued with Asia being the main source of FDI for other developing regions.
FDI flows to Africa grew to a new record of $53 billion in 2007, increasingly targeting extractive industries due to the increase in commodity prices. Overall, the service sector still accounts for the largest share of global FDI stocks, whereas the share of manufacturing is declining and the share of agriculture remains very low.

China has averaged annual 9 percent growth for the last two decades. According Naudé (2009), the largest emerging markets, China and India, are also quite resilient and will continue to grow. With a favorable trade balance and massive foreign currency reserves, China was set to take advantage of the financial crisis that began in 2008.
In China, GDP growth slowed down from 11.4 per cent in 2007 to 9.1 per cent in 2008. The main reasons are the slowing demand for Chinese exports in industrialized countries. Growth forecasts for China have been revised downwards for 2009 to 7-8 per cent, which will most likely affect trade and foreign direct investment (FDI) prospects for Africa. China’s trade surplus increased in 2008 as the slump in imports was much stronger than the decline in exports, due to reduced commodity prices, weaker demand for inputs into export products and reduced domestic demand (United Nations 2009). China experienced in the first quarter of 2010, its first deficit in its trade balance since 2004, a trade deficit of $ 7.2 billion, reported April 10, 2010 Xinhua News Agency. Chinese exports in March 2010 reached $ 112.1 billion; an increase of 24.3% over the same month of 2009, while imports climbed 66% compared to March 2009 and reached 119.3 billion dollars. The Minister of Commerce Chen Deming has also felt that a return of exports to levels before the financial crisis could take up to three years. The Department of Commerce provides a trade surplus of 96.1 billion dollars for 2010, almost three times less than two years ago. While the United States and the International Monetary Fund (IMF) believes that the undervaluation of the Yuan, unfairly advantage Chinese exports, China believes that its monetary policy is necessary for the survival of Chinese industries and growth of employment, arguments strengthened by the trade deficit in March.

However, in China, signs of overheating are multiplying. According to French daily Le Monde on April 16, 2010, with its gross domestic product growth at a level of 11.9% in the first quarter year on year, the Chinese economy has regained its pace of expansion before the crisis - the comparative quarter in 2009, had displayed growth of 6.2%, one of the lowest in twenty years. It corresponds to an annualized rate of growth of between 10.5% and 13%.

Investment in fixed capital rose 25.6%. The contribution of investment to GDP growth would have increased to 57.9% in the first quarter, against 94.6% for 2009, reflecting the ripple effect of mega-recovery plan on the Chinese economy. Prices rose only 2.2% in the first quarter on a year, which contradicts the scenario of an overheating economy. However, low inflation reflects overcapacity in Chinese economy both in infrastructure, that heavy industry. The crisis came at a time when foreign reserves of emerging countries, such as China, were at historically high levels. This will play an important role in cushioning the impact of the crisis. High growth rates are needed to absorb the growing waves of labor market entrants. Future developments in China will be important for the eventual extent of the impact on developing countries. China, the other BRICs (Brazil, India, Russia and China) and in a more regional extent South Africa plays an increasingly important role as a catalyst of growth in many developing economies. Continued growth in China could, therefore, cushion the impact of the reduction in demand from the US and EU.

SSA has generally been spared the upheavals in financial sectors, but some banking sector problems are surfacing. Because, with economic growth decelerating, both enterprise profits and individual incomes, some loans are proving difficult to service. During 2007, inflation has doubled and the terms of trade shock tend to be highest in small importing countries such as Swaziland. However, countries such as Kenya, Malawi, Tanzania are projected to have faced terms of trade shocks of greater than 5% of GDP. South Africa, Kenya, Mozambique, and other countries saw their exchange rates sharply weaken and interest rates surge. As the global economy plunged into recession, falling export demand and declining commodity prices spread the impact of the crisis to far more SSA countries, suppressing economic activity and causing fiscal and external balances to deteriorate significantly.

African oil exporters have seen the widest swings in most of macroeconomic variables. The decline in output growth has been due directly to lower oil production, and the deterioration in current account and fiscal balances has resulted from declining output and lower prices. The Middle-income Countries, dominated by South Africa, are the next most affected in terms of output growth, but the impact on fiscal balances will be less than among oil exporters. African Low-income Countries and fragile states are least affected, notably because they are less integrated into the global economy.

As already seen above, FDI inflows to Africa rose to a record level in 2007, with the fastest increase in West Africa. However, in 2009 FDI flows suffered from a decline like the other regions. Developing countries require financial inflows to facilitate and accelerate economic growth, trade and development. These flows include Official Development Assistance (ODA), investment flows (both portfolio and foreign direct investment), trade credits and flows of remittances. All of these are set to be affected negatively during the current crisis.

Table 7. Sub-Saharan Africa: Selected Indicators, 2005–10[1]

				Estimate	Projections	Projections
	2005	2006	2007	2008	2009	2010
Real GDP	**6.2**	**6.4**	**6.9**	**5.5**	**1.1**	**4.1**
Of which: Oil exporters2	7.6	7.4	9.2	7.0	1.9	5.5
Oil importers	5.5	5.9	5.7	4.7	0.8	3.3

Real non-oil GDP	**6.4**	**7.9**	**8.0**	**6.3**	**2.0**	**4.2**
Consumer prices (average)	**8.9**	**7.3**	**7.1**	**11.6**	**10.5**	**7.2**
Of which: Oil exporters	14.8	8.1	5.6	10.5	10.6	8.9
Oil importers	6.2	6.9	7.8	12.1	10.4	6.4
Per capita GDP	**4.1**	**4.2**	**4.8**	**3.1**	**-0.9**	**1.9**
Exports of goods and services	**36.6**	**37.6**	**38.9**	**41.0**	**31.2**	**33.5**
Imports of goods and services	**33.6**	**33.1**	**36.2**	**38.2**	**34.2**	**34.6**
Gross domestic saving	**22.8**	**25.5**	**24.5**	**25.0**	**19.3**	**21.5**
Gross domestic investment	**19.9**	**21.1**	**22.0**	**22.2**	**22.4**	**22.7**
Fiscal balance (including grants)	**1.8**	**4.8**	**1.2**	**1.3**	**-4.8**	**-2.4**
Of which: Oil exporters	8.8	11.3	3.6	6.3	-5.9	1.5
Oil importers	-1.3	1.5	-0.2	-2.0	-4.2	-4.7
Current account (including grants)	**-0.4**	**4.1**	**1.1**	**1.0**	**-3.1**	**-2.1**
Of which: Oil exporters	7.2	21.2	14.4	14.0	1.6	7.9
Oil importers	-3.9	-4.9	-6.2	-7.6	-5.6	-7.9
Terms of trade (percent change)	**7.5**	**7.3**	**3.1**	**8.6**	**-9.1**	**6.6**
Of which: Oil exporters	24.2	11.2	3.1	18.4	-28.6	17.9
Oil importers	0.0	5.2	3.1	2.1	1.1	0.1
Reserves (months of imports)	**4.7**	**5.9**	**6.0**	**5.3**	**5.8**	**5.5**
Oil price (US$ a barrel)	53.4	64.3	71.1	97.0	61.5	76.5
GDP growth in SSA trade partners (in percent)	3.7	4.1	4.1	1.9	-1.8	2.2
GDP Growth in sub-Saharan Africa 3	6.2	6.6	7.0	5.5	1.3	4.1

Sources: IMF, African Department database; and IMF, *World Economic Outlook* database.
Note: Data as of September 17, 2009. Arithmetic average of data for individual countries, weighted by GDP.
1 Excludes Zimbabwe.
2 Consists of Angola, Cameroon, Chad, Republic of Congo, Equatorial Guinea, Gabon, and Nigeria.
3 Includes Djibouti, Mauritania, and Sudan.

In past cycles growth rates in SSA stayed high during the first year of the global slowdown and generally bottomed out after the other economies. Recovery of past growth rates in SSA was generally slow. In contrary, in the other developing economies—notably those in Asia and in Latin America —recovery periods were generally stronger than those of the developed economies. The differences between the economic cycles of SSA and the rest of the world may be explained by the limited access to international finance, the poorly developed domestic markets, the heavy dependence on commodity cycles, and the inappropriate policy responses: some countries introduced trade restrictions or took procyclical fiscal measures because of the financial constraints.

In the current downswing the immediate impact on SSA seems to have been more severe, perhaps because of SSA's greater integration into the global economy. The fall in the ratio of exports to GDP in SSA seems likely to be much larger than in previous cycles. However, resilient domestic spending and an external environment that are expected to drive the recovery. An important force in sustaining domestic demand in 2009 has been raising fiscal deficits, which are expected to remain elevated in the initial stages of the recovery. And when the current crisis began, fiscal and external accounts were much healthier, for this region, than in the past. In addition, increased openness to trade and foreign capital, once financial markets have fully thawed should enable the private sector throughout the region to take better advantage of rising world demand. With population growth the fastest in the world (3% per year), an exceptional phenomenon of urbanization, we are witnessing the emergence of a genuine internal market, which will be the main engine of African growth. The rebound should be stronger for oil-producing countries. The region's LICs and fragile states have so far proved more resilient to the global recession than its MICs and oil exporters. Countries producing a broad mix of commodities have the best chance of returning to the higher growth that began earlier in the decade. Nevertheless, many of them remain vulnerable.

b - The impacts of the China's involvement on SSA human capital

China and other relatively buoyant Asian and Latin American economies are increasingly the source of SSA export growth. Leaders in China suggest that they can help the world by offering growth rates of up to 10%, and many African countries still gain significantly from this. According to UN (2009), the deepening of China's economic relations with Africa could have a positive long lasting impact on Africa's trade, including intra-African trade. Moreover, the importance of Chinese FDI, particularly in non-traditional areas such as agriculture, could have a notable impact on African economies and their intraregional trade flows if agricultural commodities are produced cheaply and at a large scale. China has recently invested in the production of food crops in Kenya, Zambia and Zimbabwe, for example. This has boosted local production and trade, contributing to improvements in food security in Africa. Ultimately, Chinese current involvement in Africa has diversified Africa's economic options, a positive development for the continent.

The deepening of China's economic relations with Africa could have a positive long lasting impact on Africa's trade, including intra-African trade. China's involvement in infrastructure development, for example, is filling a gap that will most likely increase domestic and regional market integration in Africa. Moreover, the importance of Chinese FDI, particularly in non-traditional areas such as agriculture, could have a notable impact on African economies and their intraregional trade flows if agricultural commodities are produced cheaply and at a large scale. China's investment in the production of food crops have boosted local production and trade, contributing to improvements in food security. Ultimately, Chinese current involvement in Africa has diversified Africa's economic options. China also has cancelled $10 billion in bilateral debt from African countries, sends doctors to treat Africans across the continent, and hosts thousands of African workers and students in Chinese universities and training centers.

According to Richardson (2010), Chinese paradox of abundant human capital and scarce natural resources makes Africa a key partner in fuelling the double-digit growth rates. In light of Africa's scarcity in human capital and rich natural resource base, the theory of comparative advantage would suggest that it is not economically efficient for African countries to push for manufactured exports. However, manufactured exports from Africa to China and India are increasing rather significantly. Natural resources provide a quick launching base for African countries to generate value-added activities. Although still limited to a few countries such as South Africa and Nigeria, resource-based manufactured products appear among the leading exports to China and India» Africa's silk road. In fact, China provides know-how to its raw materials providers. African firms could benefit from cooperation with Asian counterparts through technology transfer. Transfer of technology and management should be easier from Asian firms than those from the industrial countries. Asian firms have successfully entered western markets, through meeting technical and quality standards from which African firms could learn.
China provides also low-interest loans, and favourable financial conditions for infrastructural building projects. China sees Africa as a source of raw materials and a market for its manufacturing industry. China also sees in Africa a market which allows it to test its industrial products, and to offer them to less demanding customers (United Nations Economic, 2008). With 900 million potential consumers, the African market holds considerable promise. African governments believe that the Chinese intrusion is a way of injecting competitive dynamism, bypassing traditional commercial methods. Roads, bridges and dams built by Chinese firms are low cost, seem good quality and are manufactured in a short time unlike projects in Africa in general. And finally the current resilience of the Chinese economy to economic fluctuations allows the Sub-Saharan Africa countries to also be resilient. The growing trade links between Africa and China can counteract, as seen above, the downturn in Western countries.
However, Chinese firms often find very difficult to employ local managers and technicians that have experience operating in large construction projects. The shortage of skilled workers is one of

the major constraints they face in Africa. Chinese firms cope with this problem by either bringing skilled workers from China or by limiting the manufacturing component of their operations in Africa. Chinese corporations working abroad provide little employment for local people and are remarkably tolerant of corruption and human rights abuses. Most of the aid in infrastructure is provided in kind by Chinese companies, using Chinese inputs, including labor. Chinese infrastructure deals often stipulate that up to 70 percent of the labor must be Chinese. Given its abundant labor, it makes economic sense for China to also export it to Africa. It reduces its conflict with western styled African labor laws but it also provides little room for technological transfer to Africa (Uche C. (2009).

China is also seen as an exploitive major power supporting corrupt regimes in the same manner as the former Western imperial powers which sometimes views the weapons sales as a means increasing its ability to obtain access to significant natural resources. Chinese companies tend to become the focus of discontent, being accused of customs evasion and of competing unfairly with the local less-structured economies. The Chinese do not factor in human rights, democracy or economic reforms when doing business with or lending to African nations. This has come under heavy criticism. Some believe this will impede the spread of strong democratic and effective political institutions that will ensure all of this Chinese money ends up being reinvested and not in Swiss bank accounts.

Conclusion

The economic relation between China and Africa is polymorph and evolves. This relation concerns both financial aspects (public aid, loans, ...), foreign investment flows, infrastructure construction, commercial ties, staff training, migration and even cultural exchanges. To accurately assess the impact on growth, human capital, consumer welfare, income distribution and poverty reduction in sub-Saharan Africa depending on cheaper imports, distributional effects, transport infrastructure, increasing trade, changes of habit and mentality, requires fully appreciate the strength, the nature and the dynamics in the short and long run of African-Chinese links. In any case, these ties will be profitable for sub-Saharan countries if they manage to impose their specific requirements and if they do not just suffer China's strategy aimed to secure its natural resources supply. The efforts of the Sub-Saharan African authorities must focus on the human capital of their populations which is a necessary condition for a sustainable growth for this region in the future.

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