

Investissements Directs Chinois et Exportations des États Subsahariens (fr.)

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Outline of Presentation

- 1 A Brief Introduction
- 2 Chinese FDI in Africa / Research Question
- 3 Econometric Model and Estimation Strategy
- 4 Results : broad estimations
- 5 Results by category of product
- 6 Policy implications

CHINA'S ENGAGEMENT WITH AFRICAN COUNTRIES KEEPS GOING

- ✓ China became Africa's leading trading partner | ✓ China's overall aid budget for Africa significantly grew | ✓ China FDI in Africa is remarkably growing since 2003

✳ In the last decade, China-Africa trade has grown by an average of 30% a year ; flows exceed USD 100 billion by year ; China absorbing 11-12% of Africa exports and providing 12-15% of its imports.

✳ Chinas overall aid budget for Africa, including debt relief and concessional loans rising from USD 1.4 billion in 2007 to USD 2.5 billion in 2009.

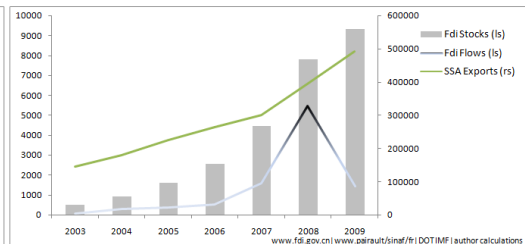
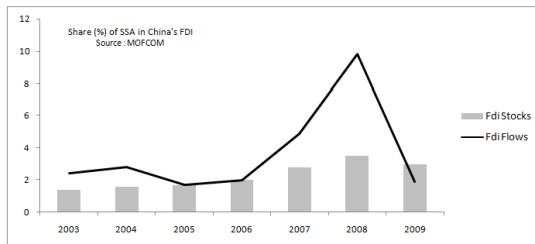
✳ In view of the investments, China FDI stocks in SSA have reach USD 9.3 billion in 2009 from USD 462 million in 2003.

CHINESE FDI (CFDI) FLOWS AND STOCKS IN SSA : STATISTICS

✓ The share of CFDI directed towards SSA is low | ✓ CFDI flows and stocks to SSA have grown

☒ Although the share of Chinese FDI directed towards SSA is fairly low, flows and stocks have grown remarkably since 2003, peaking at respectively 9.8% and 3.5 % of China's outward FDI flows and stocks in 2008.

☒ China FDI stocks in SSA have reach USD 9.3 billion in 2009 from USD 462 million in 2003. SSA's Exports towards world markets (*China exclude*) also grew (We will explain why).



THE DRIVERS OF CHINA INVESTMENTS IN AFRICA

✓ **The drivers of investment are commonly known** | ✓ **Incoming scheme : spread SEZs**

✳ China Foreign Direct Investment is to a large extent concentrated in resource rich countries, or with a great potential (size of domestic and regional market) : The fundamental approach of most of the investors in Africa.

✳ China invests across sectors such petroleum, mining, hydropower, roads, textile, etc.

✳ China investments in infrastructure, help to fill the SSA countries gap and promote regional integration. China remains the major bilateral player in the African infrastructure sector with more than 20% market share in contracting infrastructure projects.

✳ Investment Scheme : Building Infrastructure Contract, Joint-venture, etc., but Special Economic Zones (*SEZs*) are also expected to gain in importance as a vehicle for CFDI.

✳ Do any trade gain exist for Sub-saharan countries?, What deal for SSA?

Theoretical arguments predict that host country will be able to improve his exports the more he receives FDI (transfer of technologies, skills and technical know-how...).

ECONOMETRIC MODEL

$$\frac{EX_{i,f,t}}{GDP_{i,t}} = \tau_{i,f} + \alpha FDI_{i,z,t} + \beta' W_{i,t} + \mu$$

| “z” ∈ {China, OECD country}; “i” an Sub-saharan african country; “f” a foreign third market.}

| W (controls vector) : Real Effective Exchange Rate, Growth of GDP, International Country Risk Guide (ICRG)’s external conflict variable, World Bank’s World Governance Indicators variables set (control of corruption, political stability, rule of law).

| 46 SSA countries, 194 exports markets over the world, from year 2003 to 2009.

| FDI Flows (*FDIF*) normalized by Gross Fixed Capital Formation (*GFCF*),

| And Weighted by FDIS lagged stock (*FDIS*).

$$FDI_{i,z,t} = \left(\frac{FDIF_{i,z,t}}{GFCF_{i,t}} \right) * FDIS_{i,z,t-1}$$

ESTIMATION STRATEGY : TWO STAGE LEAST SQUARE (2SLS) FIXED EFFECT REGRESSION & STANDARDIZED COEFFICIENTS

First Stage Regression

$$FDI_{i,z,t} = \gamma_1 CONFUCIUS_{i,t} + \gamma_2 \left(\frac{Exports\ of\ Fuel}{Exports\ Total} \right)_{i,t} + \epsilon$$

| CONFUCIUS is a dummy variable which take value 1 for year "t" if *Confucius institute or center* is in activity in the SSA country "i" in year "t".

Standardized Coefficients for 2SLS Fixed Effect Regression : a convenient way for the comparison of the relative impact of explanatory variables in a regression

| The standardized coefficients are what the regression coefficients would be if the model were fitted to standardized data, that is, if from each observation the sample mean is subtracted and divided by the sample standard deviation.

| Subtracting the mean typically improves the interpretation of main effects , and dividing by the standard deviation puts all predictors on a common scale.

SSA	[1]	[2]	[3]	[4]
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FOCUS SADC	[1]	[2]	[3]
<i>FDI_CHIN * SADC</i>	-3.36 (-0.77)	-0.17 (-0.02)	-5.00 (-0.52)
<i>FDI_USA * SADC</i>		0.064 (1.08)	
<i>FDI_FRANCE * SADC</i>			0.053 (0.90)
<i>FDI_CHINA</i>	3.40 (0.78)	0.17 (0.02)	5.06* (0.52)

SCALING UP MANUFACTURING CAPACITY

ECOWAS

SADC

	Agriculture, Mining	Manufact. food, beverages, tobaccos	Textile, Wearing apparel, leather	Manufact. wood & prod.	Manufact. paper & prod.
SSA	-0.001 (-0.45)	0.001 (1.39)	-0.003 (-1.31)	-0.003 (-0.55)	-0.007 (-1.06)
ECOWAS	-0.81** (-1.98)	-0.35 (-1.54)	-0.09 (-0.40)	5.11** (2.51)	-2.81 (-1.37)
SADC		5.88* (2.13)	2.70 (0.42)		71.57*** (2.90)

	Manufact. of Chemicals & products	Manufact. of Non Metallic Minerals	Basic Metal Industries	Other Manufact. Industries
SSA	-0.005 (-1.26)	0.003 (0.72)	0.018 (1.07)	-0.001 (-0.45)
ECOWAS	1.23 (1.00)	0.31 (0.21)	-3.09 (-0.87)	-0.60 (-1.00)
SADC		3.09 (0.11)	38.55 (-0.52)	8.37 (0.79)

Agriculture and Mining; Manufacturing of Food, Beverages and Tobacco; Textile, Wearing apparel, Leather; Manufacture of Wood and Wood products; Manufacture of Paper and paper products; Manufacture of Chemicals and Chemic products; Manufacture of Non Metallic Mineral; Basic Metal Industries; Other Manufacturing Industries

SCALING UP MANUFACTURING CAPACITY | REINFORCEMENT OF RAW MATERIAL EXPORTS

ECOWAS

SADC

	Agriculture, Mining	Manufact. food, beverages, tobaccos	Textile, Wearing apparel, leather	Manufact. wood & prod.	Manufact. paper & prod.
SSA	-0.001 (-0.45)	0.001 (1.39)	-0.003 (-1.31)	-0.003 (-0.55)	-0.007 (-1.06)
ECOWAS	-0.81** (-1.98)	-0.35 (-1.54)	-0.09 (-0.40)	5.11** (2.51)	-2.81 (-1.37)
SADC	17.78** (2.48)	5.88* (2.13)	2.70 (0.42)	-107.40*** (-6.19)	71.57*** (2.90)

	Manufact. of Chemicals & products	Manufact. of Non Metallic Minerals	Basic Metal Industries	Other Manufact. Industries
SSA	-0.005 (-1.26)	0.003 (0.72)	0.018 (1.07)	-0.001 (-0.45)
ECOWAS	1.23 (1.00)	0.31 (0.21)	-3.09 (-0.87)	-0.60 (-1.00)
SADC	-34.45*** (-2.94)	3.09 (0.11)	38.55 (-0.52)	8.37 (0.79)

Agriculture and Mining; Manufacturing of Food, Beverages and Tobacco; Textile, Wearing apparel, Leather; Manufacture of Wood and Wood products; Manufacture of Paper and paper products; Manufacture of Chemicals and Chemic products; Manufacture of Non Metallic Mineral; Basic Metal Industries; Other Manufacturing Industries

CONCLUSION AND POLICY IMPLICATIONS

- SSA draws broad benefits from Chinese investment, as SSA's overall exports is growing.
- Good deal for ECOWAS countries : increase of their manufactured products exports and reduction of their confinement in raw materials products export.

| Transfer of technologies (*ZES cases*).

| Policy implications : Investment code may be manage to promote China investment, especially in *ZES* with scaling up perspective.

- Mixed deal for SADC countries : Increase of their manufactured exports, but confinement in raw materials products exports also.

| On one side, Transfer of technologies and on other side, Local industries are destroying.

| Policy implications : Regulate (Taxation scheme for *SEZ* matter; Fostering transfer of technologies) chinese investment flows with regard to exports policy objectives.

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