

CHINESE FOREIGN DIRECT INVESTMENTS AND SUB-SAHARAN AFRICA'S EXPORTS

Investissements directs chinois et exportations des États subsahariens *(fr.)*

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Outline of the 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 7.6 billion in 2008 from USD 462 million in 2003.

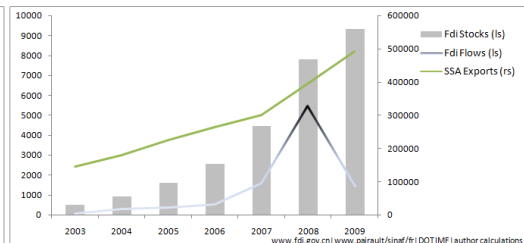
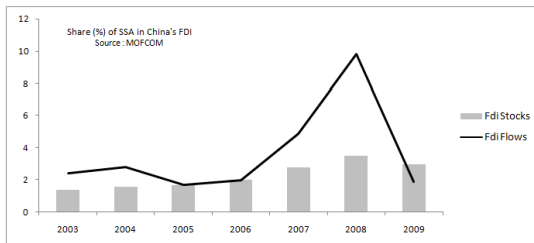
⊠ However, China investment in Africa and implications for continent are less analyzed than China aid and trade between China and Africa.

CHINESE FDI (CFDI) FLOWS AND STOCKS IN ASS : 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 Chinas outward FDI flows and stocks in 2008.

⊠ China FDI stocks in SSA have reach USD 7.6 billion in 2008 from USD 462 million in 2003. SSA's Exports towards world markets (*China exclude*) also grew.



THE DRIVERS OF CHINA INVESTMENT IN AFRICA ARE THE SAME AS OECD INCUMBENT COUNTRIES ONE'S

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

- ☒ China invests in infrastructure, help to fill the Sub-saharan african countries infrastructure gap and promote regional integration.
- ☒ China also invests across sectors such petroleum, mining, hydropower, textile, agriculture.etc.
- ☒ China Foreign Direct Investment is to a large extent concentrated in resource rich, or potentially rich, countries : the fundamental approach of most of the investors in Africa.
- ☒ Investment Scheme : joint-venture, but Special Economic Zones (*SEZs*) are also expected to gain in importance as a vehicle for CFDI, particularly in manufacturing.
- ☒ In view of the potential for trade, flows are directed towards countries with market access to regional economic community (*SADC, COMESA, CEDEAO*) : market-seeking and export-platform matter...China, for sure, drawn benefits.
- ☒ So, *Do any trade gain exist for Sub-saharan countries?* Theoretical arguments predict that host country will be able to improve his exports the more he receives FDI.

ECONOMETRIC MODEL

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

“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, stability, rule of law).

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

IDE Flows (*FIDE*) normalized by Gross Fixed Capital Formation (*GFCF*),

And Weighted by IDE lagged stock (*SIDE*).

$$IDE_{i,z,t} = \left(\frac{FIDE_{i,z,t}}{GFCF_{i,t}} \right) * SIDE_{i,z,t-1}$$

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

First Stage Regression

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

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.

CFID SEEMS TO HAVE POSITIVE IMPACT ON SSA'S EXPORTS LEVELS

SSA	[1]	[2]	[3]	[4]
<i>FDI_CHINA</i>	0.006*** (2.68)	0.007** (2.20)	0.006* (2.38)	0.003*** (2.46)
<i>FDI_USA</i>		0.034 (0.95)		
<i>FDI_FRANCE</i>			0.001 (0.08)	
<i>FDI_UNITED KINGDOM</i>				-0.008 (-1.49)

FOCUS ECOWAS	[1]	[2]	[3]
<i>FDI_CHINA * ECOWAS</i>	0.21 (0.89)	-0.0052 (-0.03)	0.37 (0.07)
<i>FDI_USA * ECOWAS</i>		-0.005 (-0.03)	
<i>FDI_FRANCE * ECOWAS</i>			0.020 (0.04)
<i>FDI_CHINA</i>	0.007*** (3.22)	0.006 (1.54)	0.006* (1.70)

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)

CFID SEEMS TO HAVE POSITIVE IMPACT ON SSA'S EXPORTS LEVELS ; NOT FOR ECOWAS

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SCALING UP MANUFACTURING CAPACITY

ECOWAS level of significance

SADC level of significance

	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^{level of significance}

SADC^{level of significance}

	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)
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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 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 destroyed.
 - | Policy implications : Regulate chinese investment flows with regard to exports policy objectives

THANK YOU FOR YOUR ATTENTION

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