



# Policy Brief

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## **The Impact of China-Africa Investment Relations: The Case of Madagascar**

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### **Section 1: Statement of the problem**

The rapid and spectacular expansion of the Chinese economy in the recent past is, for African countries, an opportunity to take advantage of not only in terms of strengthening the South-South cooperation, but also of developing African economies. It is thus important to define the channels through which African countries would do so. It is with this goal in mind that the African Economic Research Consortium (AERC) initiated the research project on the impact of the economic relation between China and sub-Saharan African countries.

The aim of this research was to undertake a comprehensive analysis of the principal systems and models of the past, current and future trends in economic relations, through foreign direct investment, between China and sub-Saharan African countries, and in particular, between China and Madagascar. The specific objectives were to gain a better understanding of the impact of the economic relations between these two countries, to point out the challenges that African countries face in their development prospects, and to formulate guidelines for the overall appropriate policy decisions that different African countries should make in order to further their interests in the light of the proven impact and the challenges still facing them.

Foreign direct investment (FDI) is the principal channel through which the impact of China's economic growth is transmitted into the typical African economy. In this connection, a number of research issues arise: Which sectors of the economy is FDI from China channelled into? To what extent is this FDI linked to aid? Does this FDI

increase the capital of enterprises, or is it just a type of shareholding that does not lead to an increase in capital? Are Chinese FDI enterprises in search of resources or markets, and do they target the local market or the foreign one? What economic benefits accrue from the FDI from China in terms of exports, imports, substitution, contribution to value-added, and employment? Does this FDI weaken or strengthen the domestic enterprises and how does it involve local companies? What are the effects of the FDI from China on the local economy in terms of skill transfer, vertical integration, utilization of local inputs, management of the supply chain, and technology transfer?

Over the period 2003 to 2008, the FDI which Madagascar received from China totalled about USD 20 million. After reaching a peak in 2004, the average settled down to USD 1.6 million over the last four years of that period (namely 2005 to 2008). So, what would be the impact of all that on Madagascar's economy?

## **Section 2: Methodology of analysis**

The present research is a complement to an earlier investigation on the data required to better understand the real impact of FDI from China on the domestic economy.

Available databases were used and people and organizations that have data related to FDI were contacted. A cursory survey involving FDI enterprises was also done.

The present research thus followed the principles and paradigms of a participatory approach which favours the involvement, ownership and empowerment of various categories of key persons concerned, that is, decision makers and other stakeholders. Particular attention was paid to the perception of and recommendations from key persons and stakeholders with a view to improving and readjusting the implementation of the government policy in its current and future phases.

The aim was for the study to bring out the qualitative appraisal from key persons, decision makers, and other stakeholders, supported by quantitative data and qualitative indicators, or by accounts of success stories, good practices or, paradoxically, cases of failure and weaknesses at different levels.

### ***Basic data***

These consisted of data on foreign direct investment, on the balance of payments, on trade in its greatest detail from 1995 to 2008, macroeconomic data, data on public development aid, etc.

### ***The phase of collection of data and interviews***

This phase aimed at principally collecting data of a qualitative nature. The data consisted of interviews with key persons and data and information from relevant entities such as the Ministry of Economy, the Ministry of Trade and Industry, the Embassy of the People's Republic of China, the Group of Enterprises, etc. But this phase also included quantitative data available at these entities.

The tools used included interview guides that were used to control the conduct of systematic interviews for the different categories of target groups.

Focus group discussions were carried out in the form of semi-structured interviews the topics of which were determined in advance but whose content depended on the responses and questions from the interviewees.

### ***The methodological approach***

The methodology followed the following steps:

- Identification of the type of information needed;
- Methodological design, including the design of data collection tools;
- Collection of basic data;
- Library research on the subject;
- Cursory survey;
- Processing and analysis of basic data and data and information collected using advanced statistical techniques (descriptive analysis, multidimensional analysis, econometric analysis);
- Analysis of indicators (structure of trade, balance of trade, exchange value, effective exchange rate, foreign direct investment, portfolio investment, GDP, GNP, BoP, etc.);
- Analysis of the impact of trade between China and Madagascar;
- Analysis of information;
- Analysis of policies;
- Use of research findings to guide the direction of analysis;
- Writing the report.

### ***Processing and analysis of primary and secondary data and literature review***

This section was devoted to processing existing basic data, to capturing, verifying and analyzing data, and to reviewing the literature. The data were sorted out and processed as they became available in order to observe the time limits imposed on the study. More specifically, this phase essentially bore on the following:

- Checking and validating the data collected with the entities concerned;
- Re-analysing the existing basic data for the purposes of the study;
- Drawing tables and graphs that would enable the understanding of quantitative and qualitative data;

- Using advanced statistical tools (multidimensional analysis, econometric analysis, etc.);
- Review of the literature.

This phase culminated in a quantitative and qualitative characterization of the impact of the investment relation between China and Madagascar.

## **Section 3: The main findings**

### **3.1. Specification of FDI from China in the economy**

The “trade” sector of this FDI represents 65% of Chinese FDI enterprises. In second position comes the “manufacturing activities” sector; it represents 17% of Chinese-capital enterprises. And yet it generates 45% of the stock of FDI from China in Madagascar’s economy. In other words, huge investment has been made in this sector, especially in the sub-sector of textiles and clothing that of food industry (sugar production). While nine out of 13 enterprises operate in the textile sub-sector, representing 68% of the stock of FDI in this sector, only one enterprise operates in the food industry, representing 32% of the stock of FDI.

Overall, the target market for the Chinese-capital enterprises is largely the local market, except for the “manufacturing activities” sector. The goal of the FDI from China is actually different depending on the sector involved. Investment in the “public buildings and works” sector and that in the “telecommunications” sector are mostly aimed at the potential of the local market because Madagascar lags behind in these two sectors, while in investment in the secondary sector principally targets markets outside Madagascar.

The setting up of a free trade zone in Madagascar has largely contributed to changes in the structure of exports in Madagascar. Free-trade-zone exports currently represent more than 50% of all of the country’s exports.

Overall, the bulk of purchases of inputs and services is done on the local market. Then, there is a considerable supply from foreign parent companies. Only the trade sector records a high rate of imports, with 96% of purchases of inputs. The goal of the investors in this sector is clearly to penetrate the local market with imported products, thus creating competition with local enterprises. It is the public buildings and works sector (at 51%) and the telecommunications sector (at 55%) that supply goods to the local market most. As for the manufacturing activities enterprises, most often they get supplies from their parent companies.

Chinese enterprises in Madagascar employed 6,041 people in 2006 (creating permanent employment, i.e. lasting for more than one year). This figure corresponds

to 10.7% of the entire workforce employed by FDI enterprises in 2006. More than 90% of these jobs are based at the subsidiaries of parent companies, which indicates how high the number is of Chinese enterprises of the subsidiary type.

### **3.2. Analysis of the macroeconomic impact of FDI from China using the computable general equilibrium method**

The flow of Chinese investment in Madagascar represented 17.11% of the total FDI in 2004. In 2008, it represented -1.16%. This fluctuation in Chinese FDI led to the fluctuation of the Madagascan economy. This Chinese FDI was mainly in the manufacturing, public buildings and works, and telecommunications sectors. From 2007 to 2008, the manufacturing sector rose by +1.37 points, while the telecommunications sector rose by 0.64 points. For its part, the public buildings and works sector declined by 1.11 points. Considering the weight of these sectors in the FDI from China, what are the effects of the different changes on economic growth and other aggregates? The answers to this question required the use of the computable general equilibrium method.

If the hypotheses in this study are correct, the effects of the shocks in the three sectors mentioned in the previous paragraph on Madagascar's economy are the following:

#### a) An increase in the manufacturing FDI from China by 1.37 points

Such an increase would lead to:

- An increase in the GDP by 0.036 points
- An increase in the intermediate level of consumption by 0.16 points, which is capable of leading to an increase in the building section by 0.06 points.

#### b) A decline by 1.11 points in the FDI from China invested in the public buildings and works sector

If a hypothesis of a decline in this type of FDI is borne out, this means that there is a tendency for a generalized decline and hence, a shrinking of the domestic demand, in the form of:

- A decline in the GDP by 0.023 points
- A decline in consumption by 0.024 points
- A decline in demand for intermediate goods by 0.14 points.

#### c) An increase by 0.64 points in the telecommunications FDI from China

If a hypothesis of an increase in this type of FDI is borne out, the GDP will increase by 0.0014 points and the domestic service production will increase by 0.34 points.

It should be pointed out that:

- The effect of the Chinese investment in the other sectors is not very significant for Madagascar's economy.
- However small it might be, the FDI from China invested in production and the public buildings and works sector has a significant effect on Madagascar's economy.
- The results reported above are not systematically symmetrical; so, the reverse is not necessarily the universe of the figures indicated.

## **Section 4: Conclusion and economic policy recommendations**

The image of Madagascar's economy has experienced an important change since the country has set up various policies of incentives and investment promotion. The setting up in the 1990s of a free trade zone has led to a strengthening of the country's industrial sector, a sector that is oriented towards the external market. The free-trade-area system has mostly benefited the textile and clothing sector. By the end of the 1990's there was also a vast privatization drive, which allowed foreign investors to penetrate Madagascar's economy. And since 2006, the huge investment in the mining sector has really boosted this economy.

Indeed, since the country set up the *EDBM*, an institution whose mission is to render the business climate more attractive and conducive for investments in Madagascar, the image of the country as an investment-conducive area has been highly enhanced. The *EDBM* identified six priority sectors, which then became the focus of their activities. The six are: tourism, agribusiness, light export industry, information and communication technology, infrastructures, and mining.

Chinese investors were among those attracted. Proof for this was the signing of a bilateral promotion and protection agreement by Madagascar and China, followed by a visit of local investors to China. However, until the end of 2008 the FDI from China was still smaller than that from other Madagascar's partner countries. In 2008 China ranked tenth as an investor in Madagascar; its stock of FDI was estimated at 1.9% of the total. If one excludes the mining sector, China ranks seventh, with the stock if its FDI being estimated at 7.3% of the total.

Chinese FDI in Madagascar is concentrated in three sectors: manufacturing, public buildings and works, and telecommunications. The three actually represent 98% of the stock of Chinese FDI in Madagascar.

Within the manufacturing sector, two sub-sectors get the lion's share: the sugar industry and the textile and clothing sub-sector. While the former sub-sector was

borne from the privatization of a production unit, the latter is a new project created from the setting up of a free trade zone.

With regard to the other two sectors, the relative heavy weight of the public buildings and works sector comes from the heavy investment in a firm that implements the use of the aid received by the Madagascar government for infrastructure building, such as the construction of a five-star hotel and the other infrastructure that was to be built to host the African Union summit that had been scheduled to take place in Madagascar in July 2009. As for the telecommunications sector, the investment in it came from the takeover of a state-owned telecommunication company by a firm based in Hong Kong.

The main motivation for Chinese investors has so far been to have access to markets. The FDI in the manufacturing sector is aimed in particular at the external market, represented by two destinations, namely the European Union and the USA. Indeed, 80% of the total production is destined for the external market. In this connection, Chinese investors take advantage of the agreements signed between Madagascar and Europe and the USA. The opportunities offered by the European market are related to the partnership agreement between Europe and the AGOA countries, while those offered by the USA market are related to Madagascar's membership of the AGOA programme.

Chinese investment in the other sectors essentially targets the local market. For instance, there are huge investment opportunities in the area of infrastructure, given that Madagascar's lags well behind in it.

The main question which the present study had to address was thus the impact of Chinese investment on Madagascar's economy.

The first type of impact was first of all the tapping of Madagascar's wealth and potential, both of which must generate value addition. However small it might be, the FDI from China injected in production and the public buildings and works sector has had a significant effect on Madagascar's economy.

The second type was job creation. The weight of Chinese investment in job creation in Madagascar is quite significant compared to investment from other partner countries: employment created by Chinese investment represents 10.7% of that created by the total FDI in Madagascar. This means that just 1.9% of the total stock of investment has brought about 10.7% of the total job creation. Most of the jobs created through Chinese FDI are in the manufacturing and telecommunications sectors.

Moreover, this investment supports the activities of Chinese firms established in Madagascar. Indeed, 51% of the purchases of inputs and external services are done on the local market. So, this strong relationship between firms operating from Madagascar is an important aspect of Chinese investment in the country, which indirectly creates value-added. The private sector in Madagascar thus deserves to be strengthened in order to meet the potential demand from the different types of investment.

There is, however, one negative point with Chinese FDI, namely the phenomenon of excluding the locals from investment projects, mostly observed in manufacturing and public works sectors. The phenomenon is actually mostly visible in big investment projects. For example, only 23% of the manufacturing industries with Chinese FDI have local investors as shareholders, while they represent only 3% of all the stock of Chinese FDI. Actually, Chinese investors in Madagascar prefer to invest in joint ventures with foreign investors, or to be the sole investors.

Therefore, for Madagascar to maximize the benefits from Chinese investment and minimize the disadvantages associated with it, it must put in place a set of policies that take into account not only its development needs, but also Chinese investment policies and needs. In this respect, in view of the deep analysis carried out in the present study of the impact of Chinese FDI on Madagascar's economy, the following recommendations are in order:

- Investment drives targeting the Chinese private sector and as well as the public sector should be strengthened. This should be done by appraising Madagascar's sectors with investment potential vis-à-vis the needs of Chinese investors.
- In relation to that, an information system should be put in place to enable local investors be aware of the needs of potential Chinese investors. This can be done by setting up a Madagascar-China economic forum.
- Moreover, considering the specific nature of Chinese FDI, the government of Madagascar can enter into direct consultations with the Chinese over Chinese needs related to exploiting Madagascar's natural wealth, notably in the mining and agricultural sectors. And a cooperation system should be put in place that would ensure there is a positive impact on Chinese investment on Madagascar's economic development, especially in the area of infrastructure.
- A mechanism should be set up that would ensure that local investors are shareholders in future projects targeted by Chinese investment, as this is the case in other African countries. This would foster technology transfer.
- The capacity of local firms must be strengthened in order for them to better meet the demands of foreign investors, in particular Chinese ones, in relation to



external services, so as to benefit from the indirect effects of the establishment their investment.

- Other market opportunities for Madagascar must be created by strengthening the regional integration framework that already exists.
- The country must ensure that it practises good governance so as to guarantee its presence on the markets of major western economies such as the USA and the European Union.