1. The problem and the interest of the study

Openness to the rest of the world has for a long time been considered an effective means of enrichment of nations and financing of economic growth. However, because of this openness, some countries have an economic situation characterised by a trade deficit. This is the case for most African countries which, although very rich in raw materials, continue to have deficit trade balances and a low participation in world trade. According to Bacchetta (2007), Africa’s share in world trade is low. This share has decreased these last twenty years, moving from 4.3% in 1985 to 2.9% in 2005 whereas that of the whole of the developing world has gradually increased over the same period.

Like most African countries, Côte d’Ivoire is an exporter of raw materials. It is the top world producer of cocoa and yam, the third of cola, the sixth of coffee and top African rubber exporter. However, the figures on poverty reveal that close to one Ivorian out of two is poor. This means that Côte d’Ivoire is a country with enormous potential but which has not significantly managed to begin paving the way for its development. This situation is certainly the consequence of multi-form constraints to the export production capacity.

The objective of this study is thus to analyse the overall situation (structure, development and destination) of Côte d’Ivoire’s exports in order to detect the constraints to the export production capacity of enterprises in Côte d’Ivoire. This has led us to carry out a retrospective analysis of exports from 1970 to 2006 in order to grasp the various fields of export from 1970 to 2007, to analyse the production capacity in various spheres of activities and the diversifications which have taken place during this last decade. We then analysed the export development strategies and detected the limitations and the failures of the export policy over the period of
study, assessed the growth potential of production and exports as well as the potential of diversification of exports. Lastly, we gasped and clarified the various export constraints in Côte d'Ivoire and identified the possibilities of poverty reduction through trade.

2. Method of analysis

Three types of models are used for the analysis of exports in Côte d'Ivoire: a macro-economic model, a micro-economic model and value chain method.

The macro-economic approach is based on Balassa’s model (1990), improved by Numba (1996) and by Bolaro (1998). In this model, exports in volume are expressed as a function of the price of exports, the square of the price of exports (translating the threshold effect of these prices), the real exchange rate, the domestic production capacity (translated by the real GDP), foreign demand (which is the weighted average of Côte d’Ivoire’s share of exports of its principal partners in total exports that the GDP of its principal partners multiplies), the pressure of domestic demand (the country's final consumption), the stock of capital (gross fixed capital formation), a dummy variable (translating devaluation and political instability) and a term of error. The above-mentioned variables are considered in logarithm over the period considered. This choice is justified by the fact that a logarithmic transformation not only makes it possible to linearize the relations and to interpret the coefficients obtained in terms of elasticity, but also to smooth the variables by reducing the magnitudes of fluctuations. Two estimations are made: the estimation of total exports and the estimation of the exports of processed products. In the second estimation, the domestic production capacity is estimated through the industrial value added. This approach makes it possible to note the determinants of exports in Côte d'Ivoire.

The micro-economic approach is based on transaction costs as developed by Lyakurwa (2007). The competitiveness of exporting enterprises essentially depends on transaction costs. These transaction costs are analysed empirically on the basis of the results of the survey carried out within the framework of this study, but also on the basis of some development indicators in the various World Bank reports on the business environment in Africa entitled “Doing business in Africa”. This approach makes it possible to determine the constraints to export production.

Lastly, the value chain concept was used to analyse a product known as traditional and another known as non-traditional in Côte d’Ivoire’s exports. For the traditional product, cocoa is selected because of its weight in the volume of Côte d’Ivoire’s exports. With regard to the non-traditional product, we had the choice between cassava and cashew nut. Cassava has a high potential in Côte d’Ivoire. It is highly consumed at the national level and also in the sub-region. It is easily cultivable
throughout the country. However, cassava is a sub-sector which is still very disorganised. A World Bank study, however, has shown the export potential of this product. Our study does not select it because too few data exist for its analysis. The cashew nut has been able to position itself and even tends to exceed coffee in Côte d’Ivoire’s exports. This product is found in the country’s statistics on exports. It is an emerging product and the strengthening of its production will certainly contribute to solving the imbalance between the regions of the North and those of the South of Côte d’Ivoire, an unbalances which is often the subject of passion and threat of social cohesion.

A value chain is a sequence of combinations of factors of production directed at targets such as land, capital, raw materials, labour and information which creates a marketable product whose value is higher than the total costs of inputs. It is a question here of tracing the supply chain of products and of allocating value to each successive stage of this chain. The analysis of the value chain aims at supporting the growth of the sub-sectors with high export potential. The purpose is to chart and categorise the internal economic processes in the sub-sectors. This analysis also makes it possible to identify new business opportunities and possible leverage points for solutions of improvement of the situation of the local actors and/or small enterprises.

The various analyses are based on both primary and secondary data. The primary data come from a survey carried out on Côte d’Ivoire’s enterprises on the one hand and the management structures of the coffee-cocoa sub-sector and on the other hand of the cashew nut sub-sector. The secondary data essentially revolve around flows and the determinants of exports from 1970 to 2005.

The method of selection of the two types of sample is made in two different ways according to the type of structure (exporting or non-exporting). At the level of the sample of non-exporting enterprises, drawing is done at two degrees. At the first degree of drawing, stratification is made according to the sectors of activity, the size of enterprises and the geographical area. At the second degree, a random draw is made inside each stratum.

At the level of the exporting enterprises, we gave priority to the exporting enterprises operating in the sub-sectors selected for the analysis of the value chain. Thus, 60 enterprises and structures of the two sub-sectors were selected (40 for the cocoa sub-sector and 20 for the cashew nut sub-sector) and 20 exporting enterprises not operating in the two sub-sectors were visited.
3. Principal results

This analysis of exports made it possible to bring to the fore the various constraints to export production in Côte d’Ivoire.

The macro-economic analysis shows that in the long term Côte d’Ivoire’s exports are negatively affected by domestic consumption which is here a proxy of the domestic demand pressure. This phenomenon primarily concerns processed products and foodstuffs on the markets of the sub-region. The arbitration between exportation and sale on Côte d’Ivoire’s market is often real for some processed and/or food products. Elasticity is definitely higher at the level of processed products (1.88) than at the level of total exports. This result is well confirmed by the estimation of the determinants of the exportation of Côte d’Ivoire products. This negative effect of domestic consumption on exports shows the inability of producers to satisfy the demand expressed to them (the demand on the local market and the demand on the international market). It is here a manifestation of export supply constraints.

It is then noted that the effective real exchange rate affects exports positively, which implies that the appreciation of the real exchange rate does not affect the competitiveness of exports taken as a whole. This situation is explained by the fact that primary products dominate the structure of exports whose prices are unilaterally fixed by the international market. Competition being quasi non-existent on the materials market, the appreciation of the real exchange rate can only encourage the producers of raw materials. It is the same for the price of exports. However, the effect is higher at the level of processed products. There is a positive relation between the GDP and the export supply capacity on the one hand and between the GDP and the gross fixed capital formation (GFCF) on the other hand. These two variables strongly act on the production capacity. The effects obtained are thus those expected. Here still, the impact of the GFCF is higher at the level of processed products with an elasticity of 1.04 compared with 0.28 for total exports. However, there is a threshold effect at the level of processed products since the effect of the price squared is negative and significant. The production capacity of local industries in the long term does not positively affect the expansion of exports.

The microeconomic constraints to the export production capacity can be of several types. The following can be cited: trade facilitation, corruption, prohibitive duties, standardisation, the cost of transport, the rackets of the police force, etc. All in all, it is a question of analysing the transaction costs and their effect on foreign trade in Côte d’Ivoire. This orientation goes through the analysis of the business environment systematically noted by the economic operators as a major obstacle to their activity. Indeed, the number of procedures, the irritating red tapes which are attached to them, and the multiplication of special taxes and licence fees on import/export activities constitute a serious hindrance to greater participation of Côte d’Ivoire’s
enterprises in the world economy and the conquest of new markets. Côte d’Ivoire is thus classified in the 161st rank out of the 181 economies assessed by the Doing Business 2009 report, that is to say a drop of six places compared to the previous year. At the regional level, the country is in the 30th rank out of 46 economies in sub-Saharan Africa, behind most of the ECOWAS countries (except WAEMU) and only in front of Togo (163), Mali (166), Benin (169) and Niger (172) for the WAEMU countries. Côte d’Ivoire’s performance is rather poor in most of the indicators. The country is classified among the last 40 countries for the creation of enterprises (167), the granting of building permits (160), cross-border trade (155), investor protection (150), payment of duties and taxes (148) and obtaining loans (145).

An analysis of the cocoa value chain market reveals that since 1985, the economic agents located in the importing countries monopolize an increasing proportion of the total income of the chain. The asymmetrical distribution of capacity in this value chain explains the inequality of the distribution of this income. Producing countries only have very little power. Production there is very split up and the disappearance marketing boards means that small farmers have even less possibilities of increasing their share of income. As regards importers, three actors hold the bulk of the capacity: importers (crushing and manufacturing multinationals, chocolate multinationals) and retailers. The governance of the cocoa value chain is thus in the hands of the crushing and manufacturing and chocolate multinationals. The activity of the actors of Côte d’Ivoire mainly boils down to the production of the cocoa bean.

From the analysis of the cashew nut value chain, it emerges that the multiplicity of actors along the sub-sector translates the complexity of the distribution chain. This situation favours the introduction of a veritable anarchy. The sub-sector lacks organisation at the level of the operators of the various links. Cooperatives lack dynamism and financial resources in the primary collection and marketing. The governance of this value chain is provided by Indian enterprises.

4. Economic policy implications

This analysis reveals that the real problem of Côte d’Ivoire’s exports remains export production capacity of processed (semi-finished or manufacturing) products. It is also noted that the weaknesses in the running of institutions (the corruption of the police force, the poor condition of roads, the multiplicity of the procedures for constituting an export dossier, etc) lead to high transaction costs for enterprises. These various additional costs which enterprises must bear constitute export constraints.

The analysis of the cocoa and cashew nuts value chain shows a low participation of the nationals in these two sub-sectors, especially at the level where revenue is highest. For these two products, processing and exportation are essentially done by Western and Indian multinationals who in fact provide the governance of these two
chains. It has thus been shown that trade in the case of these two products did not lead to poverty reduction in rural areas.

This study reveals that the export capacity constraints of Côte d’Ivoire are enormous. These constraints are multiform and can be linked to tariff barriers, transport and transaction costs, the weakness of institutions, standards and technical rules, difficulties of access to markets and the failure of markets, the impact of the real foreign exchange rate on competitiveness and the coverage of the foreign exchange risk, the weakness of human capital, the quasi inexistence of access to bank credit and the training mechanism, etc. These constraints are also linked to the smallness of the value added to products to be exported. Thus, the processing of products before their exportation seems to be one of the solutions to the performance of Côte d’Ivoire’s exports.

It is thus recommended that the organisation of the two sub-sectors be re-examined through a positive discrimination for the benefit of the main local actors: farmers on the one hand and local enterprises on the other. It is necessary then to eliminate the domination of activities along the two sub-sectors by only one type of actor (multinationals) through competition advantageous to the nationals.

Quality and transparency at all the levels of the business environment in Côte d’Ivoire are to be promoted if the government wants to reduce poverty through trade. It is especially urgent to modify the structure of exports through an intensification of the exports of processed or semi-processed products so as to retain a consistent value addition for the financing of the economy. Capacity building is a very necessary requirement for recovering support activities for the various value chains of agricultural products such as cocoa, cashew nuts, hévéa, the wood and many other products in which Côte d’Ivoire has a revealed comparative advantage.

Also, to reduce the constraints to the export production capacity of Côte d’Ivoire’s enterprises and thus to considerably reduce poverty through trade, the following actions are necessary:
- To master the local particularities;
- To determine the factors likely to influence the process;
- To ensure good performance of the markets, the accessibility of financial services, information and technology;
- See to the elimination of the concentrations of activities along the sub-sectors by only one type of actor (multinationals) through competition advantageous to the nationals;
- To exert rigorous macroeconomic management to reduce vulnerability to external shocks;
- To reform the trade liberalisation policies by taking account of past experiences;
- To develop the capacity of analysis and to finance rigorous case studies making it possible to have effects on each type of population in order to better orient policies and to improve their impact;
- To build national skills to recover support activities for the various value chains of agricultural products such as cocoa, cashew nuts, hévéa, pineapples, bananas, wood and many other products in which Côte d'Ivoire has a revealed comparative advantage.