Production, Infrastructure, Economic and Governance Constraints on the Performance of Uganda's Exportable Products to the Global Market

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This study is about the impact of supply side constraints such as production, infrastructure, economic and governance on the performance of Uganda in the global marketplace. Uganda's handicap is her inability to enter and sustain export growth in the open market. The study was designed to understand the relationship of these supply side constraints to export growth. A sample of critical exportable products was selected. Research found a significant correlation between Uganda's supply side constraints and the performance of exportable products in the global market. The paper presents recommendations to minimize the constraints in an effort to improve export earnings.

INTRODUCTION

"When Uganda attained independence in 1962, it was one of the most promising former British colonies. It had acquired considerable skilled manpower. Secondly, a well-managed and serviced agricultural sector enabled it to become one of the leading producers of Robusta coffee in the world. Tea and coffee, mainly cultivated in the western and central parts of the country, respectively, ushered in a regional equity of income" (Bonger, 1999).

Though full of promise, Uganda continues to run an increasing deficit on its trade and services accounts. According to a 2009 Uganda Bureau of Statistics report, the trade balance worsened from a deficit of 912.6 million US dollars in 2007/08 to a deficit of 1,353.7 million US dollars in 2008/09. This report further explains that this continued decline is primarily due to the low value of export earnings as compared to the high value of Uganda's imports. The response of Uganda's exports has been sluggish because of supply related bottlenecks as well as deficient product standards.

The vision of Uganda's national trade policy is to *transform Uganda into a dynamic and competitive economy in which the trade sector stimulates the productive sectors; and to trade the country out of poverty, into wealth and prosperity*. According to a December 2009 report, the constitution mandates the ministry of Tourism, Trade & Industry to coordinate trade policy issues (Uganda Ministry, 2009). But currently, trade policy coordination and implementation is fragmented among the ministries of Tourism, Trade and Industry Finance, Planning & Economic Development, Foreign Affairs and the President's Office.

On a positive note, all of Ugandan exports, except those covered by the common agricultural policy, enter the European market free of customs duties and quantitative restrictions. Uganda also qualifies for schemes of generalized system of preferences in major developed markets including the United States, Japan and Canada (World Trade Organization, 2010).

In spite of government vision and preferential treatment, Uganda's export growth for two key exports, coffee and fish products has been fluctuating in terms of volume and value. These two leading exports provide a good representation of the issues the country is facing. In 2009, coffee represented 17% and fish 6% of the country's total export earnings (Uganda Export Promotion Board, 2009). It is quite interesting to observe that when comparing 2002 to 2009, coffee exports actually decreased from 201,591 to 181,324 metric tons (Bank of Uganda, 2009).

THE PROBLEM

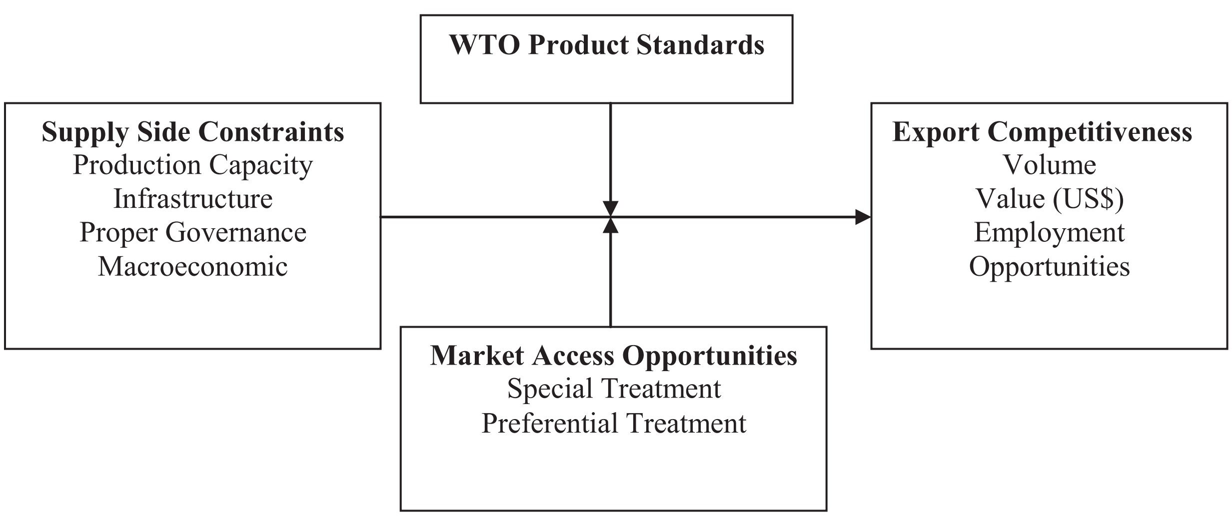
While market access supports remains available, Uganda's major handicap continues to be her inability to enter and sustain export growth in the open markets. It appears that the dominant barriers are deficient product standards and significant supply side constraints. The purpose of this study was to verify this relationship between product standards, supply side constraints and export growth in terms of volume, value and employment opportunities.

In designing the research the following objectives were established

- Determine the level of Uganda's supply side constraints
- Assess Uganda's product standards as required in global markets
- Examine the relationship between supply side constraints, product standards; and export growth in the global market
- Provide recommendations for addressing the export issues facing the country

THEORETICAL AND CONCEPTUAL FRAMEWORK

FIGURE 1
CONCEPTUAL FRAMEWORK MODEL



As indicated in the above model, it was expected that in spite of the market access opportunities, the supply side constraints and World Trade Organization (WTO) product standards would detrimentally affect Uganda's export competitiveness.

METHODOLOGY

Research Design

The study was cross-sectional for which both primary and secondary data were collected. To achieve the objectives of the study and to ensure consistency, literature on prior work, including studies and survey reports on various exportable products, markets for Uganda and present intervention program documents were reviewed as a starting point.

The Population

The population survey was comprised of exporters of fish and fish products as well as coffee. Other stakeholders including the Uganda Export Promotion Board, Uganda National Bureau of Standards and the Uganda Industrial Research Institute were consulted. These organizations were selected due to their knowledge about Uganda's exports growth and performance.

Sample Size

The two key exports, coffee and fish and fish products, were selected purposively and information was gathered from 50 respondents. This sample was comprised of 15 stakeholder organizations, 25 active coffee exporters and 10 fish and fish products exporters. The reason for selecting coffee and fish is that coffee is the leading exchange earner among the traditional exports and operating in a declining market while fish is a champion in the market among the non-traditional exports.

Data Collection

Primary and secondary data were gathered. Primary data were collected from the fifty respondents using customized interview guides and self-administered questionnaires. Pretesting of the questionnaire was done by one practitioner in trade and an academician in trade to validate the importance of the elements in the instrument. Consultative meetings were held between researchers and the Uganda Export Promotion Board officials designed as a general briefing and to establish consensus building. The data collection instrument was designed in a way that was not undignified to the respondents with special focus given to confidentiality and gender balancing. The data collection instrument was tested for validity and reliability. Secondary data was obtained from the 15 stakeholder organizations, as well as from electronic journals. The researchers also conducted desk reviews of relevant study reports from other stakeholder institutions to capture secondary information.

Survey Factors

The surveys included questions designed to obtain data on the following factors:

- Macroeconomic
    - External debt levels
    - Inexpensive long term development credit
    - Exchange rate fluctuations
    - World price fluctuations
- Good governance
    - Quality of public institutions
    - Suitable & appropriate legal framework
    - Level of transparency and disclosure
    - Level of leadership
- Infrastructure
    - Level of rural electrification

    - Level of fuel prices
    - Access to drinking water
    - Level of sanitation
    - Level of storage facilities
    - Adequate transport
        - Road transport network
        - Air transport
        - Water transport
        - Railway transport
- Capacity
    - Level of management skills
    - Level of vocationally trained work force
    - Level of formal education curricula not tailored to market needs
    - Level of entrepreneurial experience
    - Ability to identify specific interests in trade policy-making institutions
- Production
    - Adequate market and trade information
    - Cost of credit and inadequate range of finances sources
    - Cost of utilities
    - Level of supply of necessary technological products
    - Linkages between exporting entities and domestic productive entities
    - Labor productivity and structural limitations
    - Level of land tenure system

Data Analysis

The collected data were processed and analyzed using the Statistical Program for Social Scientists (SPSS). Pearson rank order correlation analysis was used to measure the strength and direction of the relationships among the variables. The data was collected over a three month time-frame. It was constraining to reach and collect the desired data from all respondents within the given time of three months. The respondents were busy officers who had little time to attend to the researchers. Nevertheless, research assistants were used to overcome this problem. Additionally, indicative of the broader problem in developing economies there were delays in online interactivity due to challenges such as low bandwidth and expanded web links. Nonetheless, the research team dedicated downloading of research materials in periods of less Internet traffic typically during the night and weekends in order to conduct timely research.

RESEARCH FINDINGS

Survey Respondents

Though the desire was for gender balance, most of the respondents were male (90.9%) with an average age between 30-39 years holding a bachelor's degree. This implied that the managerial competence and skill of the respondents was adequate to influence the export performance of the organizations. Additionally, 72.7% of the respondents indicated that they add value to their exported products, while only 36.4% of the respondents indicated that they receive any advisory service on trade.

Indicative Statistical Findings

Key findings from the questionnaire include:

- 63.6% of the respondents indicated that there is need for financial resources as a requirement for the exporting organization
- 45.5% of organizations require information technology. Market information is also indicated as a crucial requirement for exporting organizations to succeed in entering global markets

- Out of the total number of respondents, 54.5% indicated that exporting organizations required storage systems of a very high level
- It was discovered that 45.5% of the respondents agreed that there is a high level of macroeconomic constraint for exporting organizations to sustain their export business
- It is also shown that good governance was modest in constraining exporters of coffee and fish and fish products
- Less than half (45.5%) of the organizations felt they are able to have access to global markets
- Infrastructure was indicated as significant with 45.5% of the respondents
- Capacity was also highly rated (36.4%) as a constraint to exporting organizations in accessing global markets
- The exporters of coffee and fish highlighted production as a constraint (54.5%) to accessing global markets

Analytical analysis confirmed that there is a positive relationship between the supply side constraints of macroeconomic factors, good governance, infrastructure, capacity and production and the performance of exportable products in the global market. Analysis also indicated that there is positive relationship among the components of supply side constraints and the export value.

For example, while macroeconomics is positively related to the export value with P-Value <0.05 and $r = 0.286$, meaning that when there is an improvement in macroeconomic level, the performance of export value will also improve, good governance is also positively related to the export value with P-Value < 0.05 and $r = 0.157$. Infrastructure has a positive relationship with export value with a P-Value < 0.05 and $r = 0.094$ and production is positively related to the export value with a P-Value < 0.05 and $r = 0.268$. Summary analysis can be seen in the table below.

TABLE 1
CORRELATION DATA

Spearman's rho	Macro economic	Good Governance	Infrastructure	Capacity	Production	Value of Exports
Macro economic	1.000	.545	.690	.035	.612	.286
Good Governance		1.000	.558	.275	.814	.157
Infrastructure			1.000	.197	.696	.032
Capacity				1.000	.335	.094
Production					1.000	.268
Value of Exports						1.000

DISCUSSION

Export Level

In 2009, the catch of all fish from all lakes in Uganda was estimated to be in the range of 221,000 metric tons. (Uganda Bureau of Statistics, 2009). In a 2003 paper, Keizire confirmed that total annual fish production was lower than the maximum sustainable yield estimated at 330,000 tons for all the lakes in Uganda. As mentioned previously, in a similar time frame from 2002 to 2009, coffee exports actually decreased from 201,591 metric ton to 181,324 metric ton. These statistics support the findings that there are constraints which hinder the exportation of these critical resources.

Level of Supply-Side-Constraints

Findings indicate that constraints such as good governance, infrastructure, capacity production and macroeconomic conditions are indeed a hindrance to fostering a high level of export growth. The Uganda Export Promotion Board (2009) has similar findings of poor farmer organization, inadequate financial resources, poor post harvest handling and storage systems as limitations to the production of critical quantities for exports. As a result, it has proved difficult to ensure consistent and quantity supplies of exportable products. A report by UNCTAD in 1998 stressed that supply-side constraints were the root cause of less developed countries weak participation in international trade. In a 2005 report, Yenteshwar and colleagues said that factors such as; market information, affordable/accessible export finance as well as trade policy constitute crucial points that economies like Uganda should consider if they are to fit in the competitive global market. Both of these independent reports confirm the research findings of this study.

The Relationship Between Supply-Side-Constraints and the Performance of Exportable Products

One interesting note is that the findings indicate a weak correlation between supply side constraints and the performance of exportable products in the global market. This appears to be due to the fact that there are few participants in the market of exports and the constraints of these firms vary among individual firms. This is also because data from individual firms was compared with the data of the performance of the whole economy.

However, perhaps even more importantly, there is a strong association among the components of the supply side constraints. As an illustration, previous studies concur with our findings that transport infrastructures which constitute the main portion of infrastructure play an important role at most of the stages of export sector development. Most African countries, including Uganda, are characterized by poor transport infrastructure. The fact that an investment in infrastructure has not occurred in a significant manner in the last two decades could explain the very low upward mobility of African countries in export performance (Marco, 2004). The same writer confirms the case for producers exporting low value-added commodity products, which are highly substitutable and whose demand is very volatile and price sensitive.

CONCLUSION

This paper has detailed the wide spectrum of supply-side constraints that Uganda is facing in fostering her exporting firms to perform better in global market. These include limited and poorly-maintained physical infrastructure, lack of corporate governance, low production capacity, the absence of a skilled and experienced workforce, poor macroeconomic conditions and the high cost of conducting trade including geographical isolation, poor trade facilitation, and limited access to trade finance.

The issue that arises is how some of these constraints can be removed so that Uganda can realize an increase in her export receipts. The following paragraphs provide some policy recommendations, which, if properly formulated and implemented, can help remove some of the above-mentioned supply side constraints.

RECOMMENDATIONS

The problem of limited physical infrastructure can be addressed by attracting foreign direct investments (FDIs) in these businesses. However, these FDIs can only be attracted if the country creates a stable macroeconomic and legal environment and have transparent and efficient institutions.

With regards to transportation costs, an improvement of the transport infrastructure may help to reduce transport costs by up to 60 percent, while policies regulating market power in shipping and liberalizing port services may also lead to a reduction in transport costs by up to 30 percent (Evenett & Venables, 2002).

The problem of the absence of a well-educated and trained workforce can be addressed if business development service providers can act as vehicles for providing short-term professional and vocational training to enhance the capacity of the workers in all sectors of the economy. FDIs can be a very important source of strengthening the skills of the workforce through exposure to new technologies and management methods. However, none of these can totally substitute for deficiencies in the educational and training system of an economy. The emigration of skilled labor has been a major concern and constraint to effective investment in the export sector. Consultations with the private sector regarding their needs when developing educational and training curricula are one way to start a process to overcome this obstacle. The provision of job internships for students completing their university/tertiary education would also help address this problem.

According to a UNESCAP report (2004), the costs of conducting trade can be broken down into the following components: information and contracting costs, financing costs, transport costs and administrative and procedural costs. Reducing information and contracting costs would require policies that create a healthy level of competition in the telecommunication sector and improve access to information and communication technology. The development of trade promotion organizations, in partnership with chambers of commerce and other private sector associations, can also help to reduce the costs associated with identifying and reaching foreign markets. Reviewing contract laws and regulations may also be required. In addition, reducing export financing costs would involve the development of a national or regional trade finance infrastructure able to provide access to a wide array of specialized trade finance and risk management services such as export credit insurance, hedging, and forfeiting. The establishment of specialized trade finance institutions such as export-import banks and export credit agencies can then be considered to further enhance access to trade finance tools and instruments.

With regard to the issue of market information, Uganda's industry needs support at all levels to reach the global market. Many consumers are not aware of the unique organic agricultural exportable products such as Nile Perch and Arabic coffee as well as assorted fruits. On the issue of market access, Uganda will benefit from the global market if and only if the market forces are allowed to play the role of resource allocation. Here, hidden barriers in the disguise of the global liberalized economy should be removed, especially the non-tariff barriers that are more thorny than the "doctored" conventional tariff barriers.

Finally, the problem of the lack of access to trade finance can be addressed if the country creates an environment where contracts are easily enforceable, issues of collateral and security are managed effectively and financial institutions function efficiently and are able to offer a range of financial instruments to the various export industries. Another important measure is to improve the reliability of financial information provided by export businesses by adopting user-friendly accounting and reporting requirements.

There is much to be done and much that can be done and understanding the significant impediments to increased export viability and offering strategic solutions is an excellent place to begin.

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