

Full Length Research Paper

## Profitability of the informal cross-border trade: A case study of four selected borders of Botswana

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**In this study, the views of 520 informal cross border traders, obtained using systematic sampling and snow ball techniques from four selected border posts in Botswana, were used to show how profitable ICBT is. The results of the analysis show that the monthly profit generated by ICB traders is over ten times the minimum wage of workers in Botswana and gross profit margin from this trade is 54.99%. Whereas about two million United States dollars is generated as profits from the exported goods in the ICBT annually, the corresponding profits from imported goods is over five million United States dollars. A multiple regression analysis shows that the two most significant ( $p < 0.01$ ) positively correlated variables and predictors of profit generated from ICBT are the initial startup capital ( $r = 0.807$ ,  $n = 520$ ) and the number of years in ICBT business ( $r = 0.221$ ,  $n = 520$ ). The study recommends that the Government of Botswana should recognize ICBT as one of the arms for poverty alleviation and policies should be put in place to regulate this trade, enhance access to funding for ICB traders to start up their business, as it has potentials to help in economic diversification.**

**Key words:** Profitability, informal, cross-border, trade, gross profit margin.

### INTRODUCTION

Informal Cross-Border Trade (ICBT) has been defined in the literature in several ways. Lesser and Moisé-Leeman (2009) describe informal cross-border trade (ICBT) as involving legitimately produced goods and services, which escape the government regulatory framework, thereby avoiding certain tax and regulatory burdens; hence fully or partly evading payment of duties and charges. Such trade includes those which pass through unofficial routes and avoid customs controls, as well as those that pass through official routes with border crossing points and customs offices yet involve illegal practices. Such practices can comprise under-invoicing (i.e., reporting a lower quantity, weight or value of goods to pay lower import tariffs), misclassification (i.e., falsifying the description of products so that they are misclassified as products subject to lower tariffs), mis-

declaration of the country of origin, with or without clandestine operations such as secret deals involving formal importers, exporters, customs and other public officials (Macamo, 1998; Damon and Jeuring, n.d). ICBT is also referred to as parallel trade or smuggling (Kallungia, 2001). Little (2007) defines it as "a normal market response to cumbersome, time consuming export regulations and regional price distortions, and should be encouraged as a means to increase intra-regional trade (and 'regionalization'), meet local demand that is not being met by national production and markets, and ensure regional food security".

The impact of ICBT is difficult to estimate because of the unregistered characteristics of the trade. Apart from its negative impact on the formal economy of any nation through potential losses of tax revenues, possible

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promotion of illegal trade and corruption, violation of health and sanitary requirements and, to some extent, a negative environmental impact, it has an even greater positive impact on the individuals participating in the trade, their families and relatives through contribution to food security, creation of employment, provision of income and poverty alleviation, complementing the formal commercial network and contribution to the opening of new markets for domestic products. Estimates show that, on the average, 60% of the trade are informal (Macamo, 1999; Demon and Jeurig, 2009; Ackello-Ogututu and Echessah, 1998; Minde and Nakhumwa, 1998)

ICBT enables traders to obtain decent shelters for themselves and their relatives using the income generated from the trade and it has a multiplier effect on education and health care, not only for themselves but for their dependents. It is also a source of employment for the traders and their relatives (Mijere, 2006); yet ICBT has not been recognized by governments as a part of the national or regional economy.

In the literature, there has been mixed opinions about ICBT. In one school of thought, ICBT has been seen as socially and economically undesirable as the proposers of this view consider the trade as undermining established industries since they distort price incentives to producers. In another school of thought, ICBT has also been viewed as having the potential to undermine the efficiency and returns of intra -regional trade. Yet, a third school of thought sees ICBT as having the potential to push back the frontiers of poverty. Households participating in the trade have been able to support their families using ICBT incomes and poor families are increasingly escaping poverty (Kachere, 2011; Ackello-Ogututu and Echessah, 1998; Minde and Nakhumwa, 1998)

Muzvidziwa (2005: 31) also reiterated that "informal cross border trade is not only a source of livelihood; it is also a source of employment, making up for the shortfall as a result of the reduction in formal employment under Structural Adjustment Programmes (SAPs). As a result, informal cross border trade plays a key role in poverty alleviation, complementing the objectives sought under regional integration. For many of the economically poor, informal cross border trade has become a means of survival, a source of income and employment."

Tekere et al. (2002), in their study on informal cross-border trade between Zimbabwe on one hand and South Africa and Zambia on the other, concluded that ICBT provides an opportunity for a large number of unemployed people to earn an income considerably higher than the minimum salary in the formal sector (Ama and Mangadi, 2013). The authors concluded that, by engaging in ICBT, people who otherwise have no jobs become gainfully employed and in turn a chain of other service providers such as transport and commuter operators get jobs where otherwise these operators would be unemployed. The study also established that some families depend on ICBT source of income even for school fees

and other expenses, and that cross-border trading contributes positively to the empowerment of women and food security. These views were supported by Bracking and Sachikonye (2006), Mwaniki (1998), Muzvidziwa (1998) and Meagher (2003).

Mwaniki (1998) supported the view that several people in the region were shifting to the informal sector where they hope to earn a living and among such groups are the cross border traders who travel frequently to neighbouring countries to sell their products and return home with more goods for resale and some foreign currency. Mwaniki (1998: 42) also noted that all the cross border traders interviewed managed to raise incomes that took their households out of poverty, as the incomes accruing to them were above the prevailing official poverty threshold.

Mwaniki (1998) quoted in Kachere (2011) noted that informal contacts strengthen regional integration networks and relationships, and also noted that informal cross border trade contributes immensely to the process of regional integration. The study concluded that regional integration processes demand participation of all sectors of the economy including the informal sectors.

Tekere et al. (2002) noted that, despite the economic benefits brought about by ICBT, for example, alleviating poverty, there is some evidence that ICBT contributes to the high divorce rate and the single parent families largely headed by women. However, this study fell short of describing how ICBT has contributed in directly or indirectly in reconciling families through gainful employment and job creation, bringing about affordability and thereby, social rest. On the other hand, Mupedziswa and Gumbo (2001) noted that relations with parents and relatives were strengthened since the traders were remitting some of their proceeds as assistance, and their spouses were not against cross border trade, though they could not support them with startup capital. Nyatanga et al. (2008) acknowledged that "like all developing countries Zimbabwe faces a huge employment problem. Due to the deteriorating macro-economic environment in Zimbabwe, informal cross-border trade is viewed as a viable activity (particularly in comparison with rural farming) that generates employment, supplement income, improves food security by households and a means for improving living standards."

In a study looking at ICBT from a gender perspective, Gaidzanwa (1997), quoted in Tekere et al. 2000) argues that the assumptions made about ICBT cannot be isolated from the gender views of the social world. Her study revealed the public discourses around female cross-border traders and its impact and concluded that women are so creative in trading that formal traders could learn from their operations.

### ***Profitability of business***

Profitability is usually the primary goal of all business

ventures. Without profitability a business will not survive for a long time. It is therefore important that any business keeps track of both the current and past profitability and projecting future profitability is very important. Profitability is measured using the income and expenses from the business. Income represents money generated from the various activities of the business. One of the ratios that is used in measuring profitability of a business or company's performance is the gross profit margin (Hofstrand, 2013).

Gross profit margin measures company's manufacturing and distribution efficiency during the production process. It is a measurement of how much of each pula of a company's revenue is available to cover overhead, other expenses and profits. The ideal level of gross profit margin depends on the type of industries, the length of time the business has been in operation and other factors. A high gross profit margin indicates that the company can make a reasonable profit, so long as the company or business keeps the overhead cost in control. On the other hand, a low gross margin indicates that the business is unable to control its production cost (Hofstrand, 2013; Loth, n.d).

Measuring profitability is the most important step to measure the success of a business. A business which is not profitable cannot survive for long. Conversely, a business that is highly profitable will always have a reasonable turnover and is able to reward its owners with a large return on their investment. Increasing profitability should therefore be one of the most important tasks of the business managers. Managers should constantly look for ways to improve running of the business so that profitability can be improved. In the context of this study the authors have measured the profitability of ICBT using the gross profit margin. The gross profit margin has been used to analyse how efficiently and effectively companies are utilising the raw materials, labour and manufacturing-related fixed assets to generate substantial profits. A higher margin percentage is a favourable profit indicator (Hofstrand, 2013)

However, to date, there is still limited information on ICBT dimension as the tools for its measurement have not been very well developed (Kachere, 2011). The metric for measuring the dimensions of each trading activity might differ, but in all it is related to the aggregate income generated by each activity. In general, measuring ICBT profitability consists of monitoring trading activities in official and unofficial border posts, border markets and using aggregate data to capture trade gap. Estimated average monthly trade volumes derived from observed figures are used to calculate the annual volume and value of unrecorded trade flows between two trading partners (CTRCL, 2013). Further, a study of informal cross border trade is also very important in view of the start of the implementation of the SADC trade protocol. It is widely expected that implementation of the protocol will stimulate intra-SADC trade, greater economic inter-

dependence and augment production, employment and economic growth. The true picture of trade volumes among SADC countries is however obscured by lack of data on informal cross border trade (Nyantanga et al., 2008). There is, therefore, need to investigate the developmental role of ICBT, particularly on the participants of the trade in Botswana.

Although it is widely known that ICBT provides to the vulnerable population, particularly the women, a means of sustenance, hardly has any effort been made to estimate empirically its profitability in terms actual or marginal gains. This paper fills this gap by answering the following questions: What are the characteristics of the informal cross-border traders in terms of the goods that they traded in as well as demographics? What is the estimated average profit made monthly, the total costs of exports and imports annually, and the total sales value of the imports and exports? What is the profitability of the ICBT using the profit gross margin? How does the socioeconomic variables impact on profit generated from ICBT?

## **METHODOLOGY**

### **Location of study**

The study surveyed 520 women and men in informal cross-border trade across four major entry points into Botswana: Tlokweng Gate-Koptontein (South Africa), Kazungula Ferry (Zambia), Ngoma border (Namibia) and Kazungula Road Border (Zimbabwe). These four border sites were mainly selected because of the relative importance and volume of informal cross-border trade taking place across them. The choice of women and men traders for this study was to examine the gender differentials in ICBT. The study used both quantitative and qualitative methods. In addition to the survey of the women and men, documentary analysis, key informant interviews with border officials and other government personnel and focus group discussions (FGD) were conducted..

### **Instrument for the study**

Two instruments were used for the study, namely the questionnaire for ICB traders and structured questions for the key informant interviews and focus group discussions (FGD). The questionnaire was developed with the assistance of the literature in ICBT (UBOS, 2008; UN Women, 2008-Tanzania) and consisted of closed and open-ended questions. The open-ended questions gave the traders an opportunity to give their opinions about the various issues involved. The questionnaires covered several areas such as demographic characteristics of the ICB traders, socioeconomic situations, access to resources and services, implications and effects of ICBT, constraints related to ICBT, and strategies they used to overcome the constraints faced.

### **Pre-testing of questionnaire**

The questionnaire and the structured questionnaire were pre-tested using ICB Traders at one of the border posts and necessary corrections made before being used for the main study. The Cronbaach's alpha coefficient of reliability of the instruments was calculated as

0.90.

### Sampling design

Given the fact that no data exist on the number of men, women and youths in informal cross border trade, the study used a total number of informal trade businesses owned by men, women and youth (44, 277) as a proxy for the total target population (CSO, 2009). Using the sample size calculator at 95% confidence level (allowing an error margin of 5%), the minimum statistically appropriate sample size was determined as 381 (The Creative Research System, 2012). However, 40% of this statistically determined sample size was added to allow for increased power and take care of those who may be reluctant to participate in the interview. This gave a sample size of 533 for ICBT study. This sample size of 533 was allocated to the border posts using proportional allocation to size (PPS), where the size represents the number of men, women and youth who used the border posts in the past one year.

Two sampling methods were employed in the study. The systematic random whereby every third ICB trader at the border was interviewed in each of the border on a given day. This method was augmented by the snowball technique whereby an identified ICBT was asked if s/he knows any other person who is involved in informal cross-border trade. The advantage of this method is that it helped in identifying informal cross-border traders who do not use the official border posts. The snowball technique is advantageous over the house-to-house survey as the latter is associated with a largely quantitative tradition of measuring the rare event that often suffers from a lack of responses from the particular rare event such as maternal death in this study, whereas snowball sampling involves locating the household with the rare event through key informant approach. Snowball sampling has been found to be economical, efficient and effective (Snijders, 1992). Key informant persons within the Ministry of Trade and Industry, customs and immigration officers at the border posts were identified and interviewed.

### Data collection

Research assistants were trained on questionnaire administration and ethics of conducting surveys. The criteria for a person to be chosen as research assistant were based on her/his knowledge and skills in interviewing and knowledge of ICBT business. All research assistants were trained to observe keenly what was going on at the borders, what the informal cross-border traders (ICBTs) were trading in, how they were behaving in terms of apparent freedom to disclose information and their interaction with peers, customers and government officials at the border posts.

They explained to the traders the purpose of the study, assured them of confidentiality of information provided, and informed them that they was no monetary compensation for participating. Furthermore, the participants were informed that they can bow out of the study at any time they desired to do so without jeopardizing the survey. For those who accepted to participate they signed a consent form and proceeded with the interview. As the ICBTs are on a business trip, those who could not be interviewed at the border posts gave their telephone numbers and other contact details to the researchers. They were traced to their homes or workplaces with this contact information for the interview. At the end of the study, 520 ICBTs completed the questionnaires giving a response rate of 98%. Four focus group discussions and two key informant interviews were conducted.

### Limitations of the study

Trade and cross border trade in particular is a very sensitive topic

when discussed by people who make their living from it. The respondents are likely to be concerned about why they were asked the questions and what the interest of the researcher really is. They are likely to exercise fear of the possibility of the information collected being passed on to government authorities such as tax departments. Others may think that the research assistants are agents of income tax department disguised as researchers. All these are likely to affect the truthfulness of respondents despite good effort to reassure respondents that information provided were not going to be divulged to any other source.

## RESULTS

### Demographic characteristics of ICB traders

The demographic characteristics of the surveyed informal cross border traders are shown in Table 1. The percentages of males and females in the studied sample were 39 and 61% respectively. The majority of the female traders (29%) were between ages 31 to 35 years, followed by those 36-40 years (21%) while the majority of the males (30%) was between 31-35 and 26-30 years, respectively. By the definition of youths in Botswana, the sample can be described as consisting of mainly youths (18-35 years) (77% of males and 67% of females). More female traders (41%) than male (30%) were unemployed while more male traders (43%) than female (38%) were self-employed. While 22% of the females were employed in either the public sector or private sector; the corresponding percentage of the males was 27%. A slim majority of the female traders (33%) and male traders (30%) had secondary school certificate/Diploma; 21% of the females and 19% of the males had junior certificate while 19% of the females and 18% of the males had a university degree. More males (8%) than females (4%) had no education. The single (never married) ranked highest (44% of the females and 42% of the males); 29% of the males and 34% of the females were married while 21% of the males and 10% of the females were cohabiting. An overwhelming majority of the traders (83% of males and 74% of the females) had been in the ICBT for only 1-5 years while 15% of the males and 27% of the females had been in the trade for 6 -10 years.

Close to 58% of the businesses were located in Botswana, 18% were located in Zambia while about 10% were either in Namibia or Zimbabwe, respectively and 5% in South Africa.

### Main commodities they trade on

Agricultural products and outputs (42%) are the main commodities they trade on followed by industrial goods (41%). The composition of goods traded on shows gender specific differences with men engaged more in trading on agricultural products and outputs (43%, male; 41%, female) while women are more engaged in trading on industrial products (35%, male; 44%, female) and services (9%, male; 11%, female) (Figure 1). The top

**Table 1.** Demographic characteristics of the respondents.

Demographic Characteristics of traders		Sex of respondent			
		Male		Female	
		Frequency	%	Frequency	%
Age of respondent	18-21	9	5%	13	4%
	22-25	24	12%	41	13%
	26-30	60	30%	59	19%
	31-35	61	30%	99	31%
	36-40	26	13%	67	21%
	41-45	12	6%	19	6%
	46 and above	9	5%	21	7%
Employment status	Employed in the public sector	22	11%	37	12%
	Employed in the private sector	32	16%	31	10%
	Self-employed	87	43%	121	38%
	Unemployed	60	30%	130	41%
Marital status	Single (never married)	85	42%	140	44%
	Married	58	29%	108	34%
	Divorced	15	8%	23	7%
	Widowed	0	0%	16	5%
	Cohabiting	43	21%	32	10%
Highest educational qualification	No schooling	16	8%	12	4%
	Primary Certificate	21	10%	29	9%
	Junior certificate of education	39	19%	67	21%
	Secondary school certificate / Diploma	61	30%	105	33%
	University Degree	37	18%	62	19%
	Professional Certificate	22	11%	44	14%
	Any other(specify)	5	3%	0	0%
Number of years on ICBT	1-5	166	83%	237	74%
	6-10	29	14%	71	22%
	11-15	6	3%	11	3%

products imported into Botswana by the ICB traders were clothes (41%), shoes (29%), bags (25%), beans (14%), cooking oil (14%), potatoes (14%), bananas (13%) and saucepans (13%). The gender differentials in the types of products imported show that women are greater importers of clothes (female, 47%; men, 32%), bags (female, 29%; male, 19%), beans (female, 17%; male, 11%) than men, while the men import more of shoes (male, 30%; female, 28%), saucepans (male, 14%, female, 12%), maize grains (male, 14%; female, 9%) and coffee (male, 12%; female, 10%) (Figure 2).

The major products exported are shoes (23%), beans (23%), maize grains (22%), clothes (18%) and aggro vet drugs (12%). When the major exports are analysed by gender participation in ICBT, the result (Figure 3) shows that more women than men export shoes (25%, 21%), beans (26%, 19%), maize grains (25%, 18%), clothes

(21%, 15%), sandals (13%, 7%) and maize flour (10%, 9%). On the other hand, the men are greater exporters of aggro vet drugs (13%, 12%), human medicine (12%, 8%), fish (13%, 8%) and sorghum (10%, 7%). These export products are likely to be re-exports as Botswana does not produce most of commodities in bulk.

### Profits from ICBT

For the sustainability of any business venture, profit is the critical concern. The analysis of the opinions of the traders shows that 19% of the men and 15% of the women started their ICBT with less than P1000.00 (US \$125). An overwhelming majority of the men (80%) and women (81%) started their informal cross-border trade with amounts between P1000.00 and P10, 999.00 (US \$

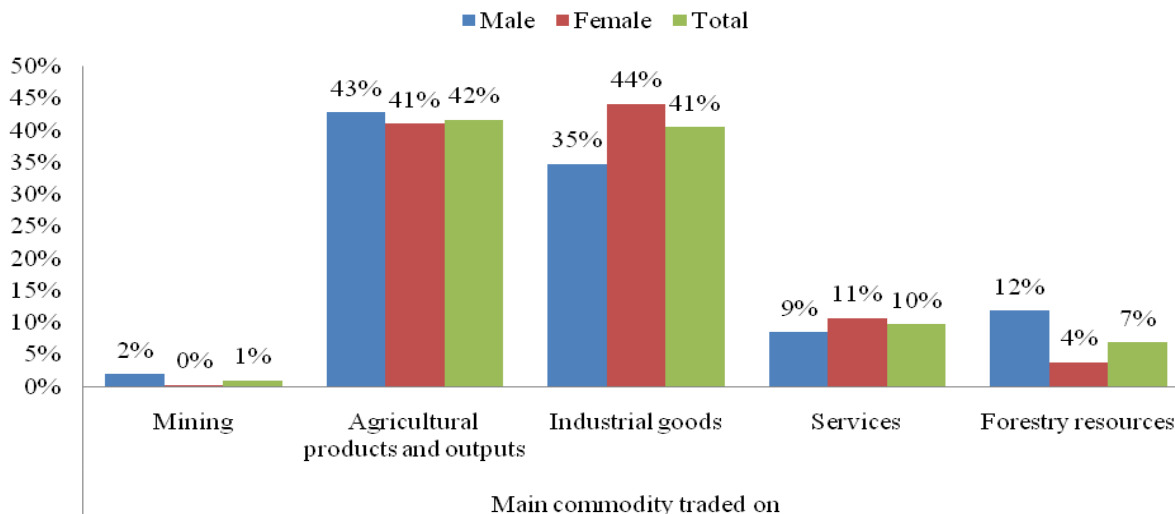


Figure 1. Main commodities the ICBTs trade on (male = 201; female =319).

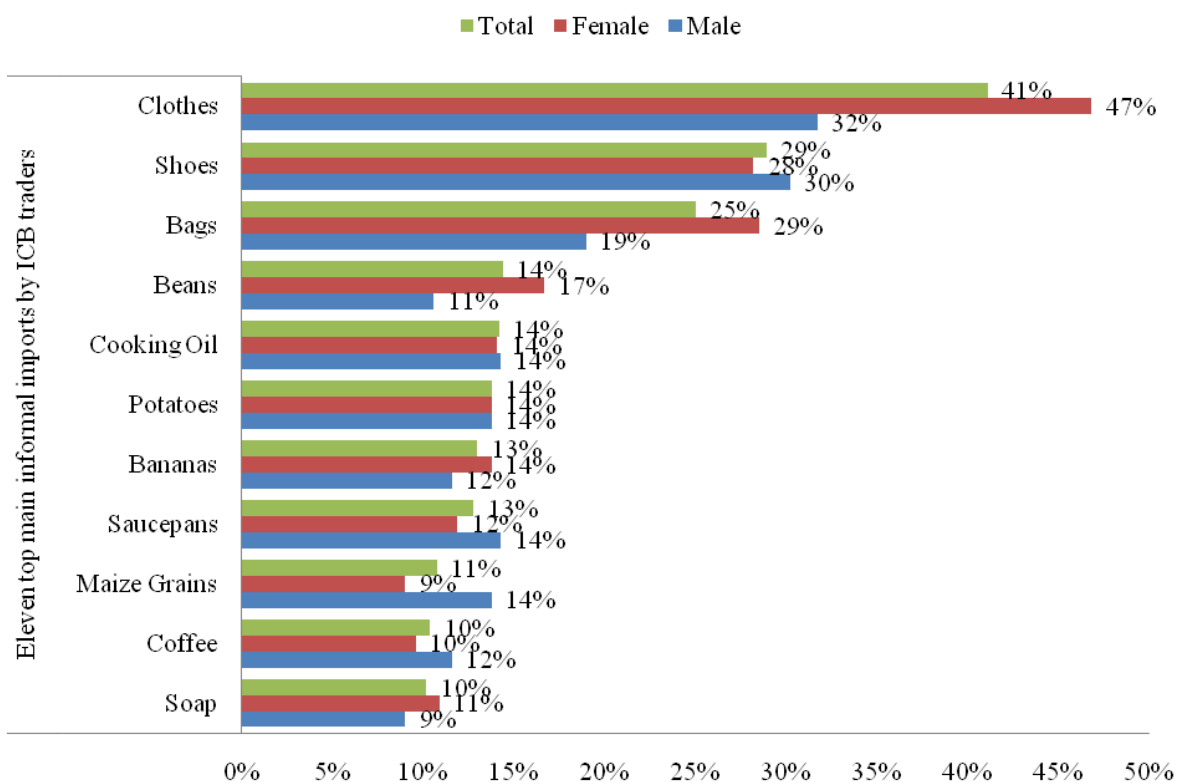


Figure 2. Top main informal imported products by ICB traders.

125-1374.88).

The traders were asked to state their average monthly profit (Pula) from ICBT. The responses show that the mean monthly profit of the ICB traders is  $P5554.80 \pm 277.33$  (US \$  $694.35 \pm 34.68$ ). The results

which are summarized in Figure 4 show that 67% of the traders made a profit of between P1, 000.00 (US \$ 125.00) and P5, 999.00 (US \$ 749.88) monthly while 20% of them made profits of between P 6, 000.00 (US \$ 750) and P10, 999.00 (US \$1374.88). Only 10% made a higher profit of over P11, 000.00 (US \$1375) monthly.

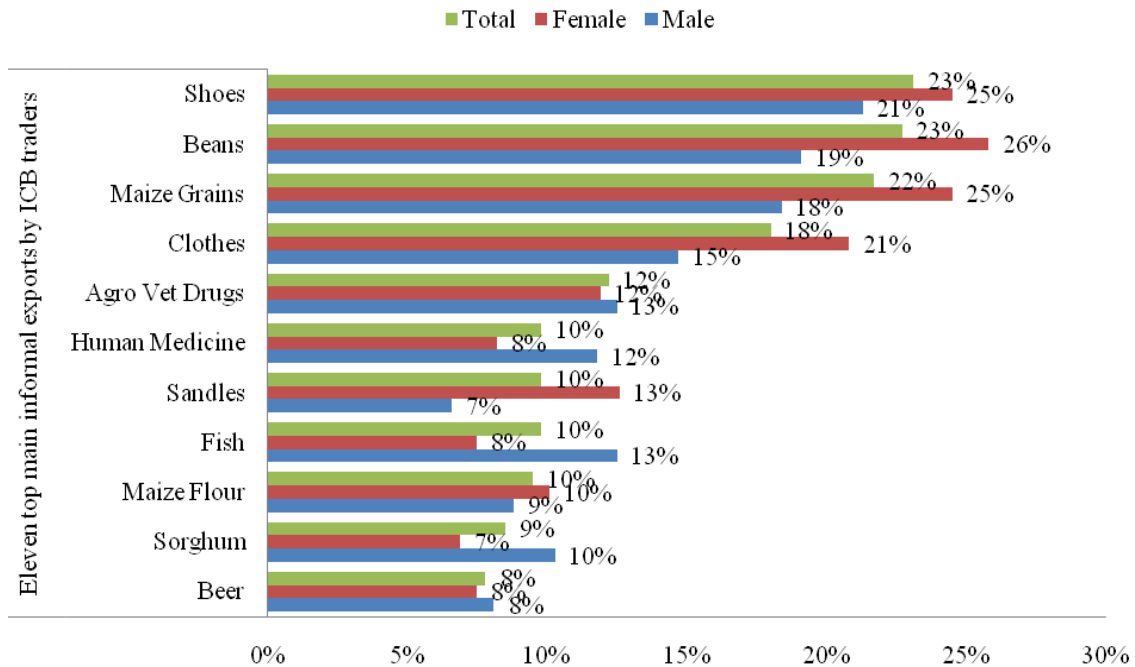


Figure 3. Top main exported goods by ICBT traders.

**Influence of socioeconomic factors on returns from ICBT**

In order to determine how socioeconomic factors affect the returns from the ICBT, a multiple linear regression was fitted with the profit from ICBT as dependent variable and the factors age, highest educational qualification, employment status, gender, marital status, number of years on ICBT, frequency of trips for ICBT, number of trips in a year, and start-off capital for ICBT of the respondents as independent variables. The results are shown in Tables 2 and 3. Table 2 shows that the model highly significantly fits the data ( $p < 0.001$ ; Adjusted R-square = 0.679).

Table 3 shows that age, sex of respondent, frequency of trips for ICBT and a number of trips in a year are negatively correlated with profit generated from ICBT whereas highest educational qualification, employment status, marital status, number of years involved in ICBT and initial start-off capital for ICBT are positively correlated with profit from ICBT. The numbers of years involved in ICBT, initial start-up capital, frequency of trips for ICBT, number of trips in a year, being employed in the private sector, levels of educational qualifications are all significant predictors of profit from ICBT ( $p < 0.05$ ). Age is not a significant predictor of profit ( $p > 0.05$ ).

**Profitability of ICBT**

To generate data necessary for the computation of the

profitability of the business, the traders were asked a number of questions ranging from the number of trips they make yearly, the total cost of exported and imported goods during each trip, sales from the exported and imported goods, expenditure on transport, accommodation, feeding, tips and communications during each trip. There were also costs that could not be easily quantified. Most of these costs were associated with the risks of conducting business informally. They included: risk related to the possibility of having goods confiscated; increased tax barriers against their activity (following revenue maximization strategies pursued by the customs authorities); police harassment and payment of unofficial charges in the form of unofficial rents to the public officials; the possibility of rejecting goods on price and quality grounds (Macamo, 1999). The results are summarized in Table 4.

Gross profit margin is a key financial indicator used to assess the profitability of a company's core activity, excluding fixed cost. Gross Profit Margin is defined as:

$$Gross\ profit\ margin = \frac{Revenue - cost\ of\ goods\ sold}{Revenue} \times 100$$

From Table 4, the total sale from imports and exports is P 108,846,600.00 (US \$13, 605, 825) while the total cost of imported and exported goods is P48, 986, 700.00 (US\$ 6, 123, 337.50). The total expenditure during the various trips is P 8,011,145.00 (US \$ 1, 001, 393.13), Net sales = P 108, 846, 600 The Gross profit margin is given by,

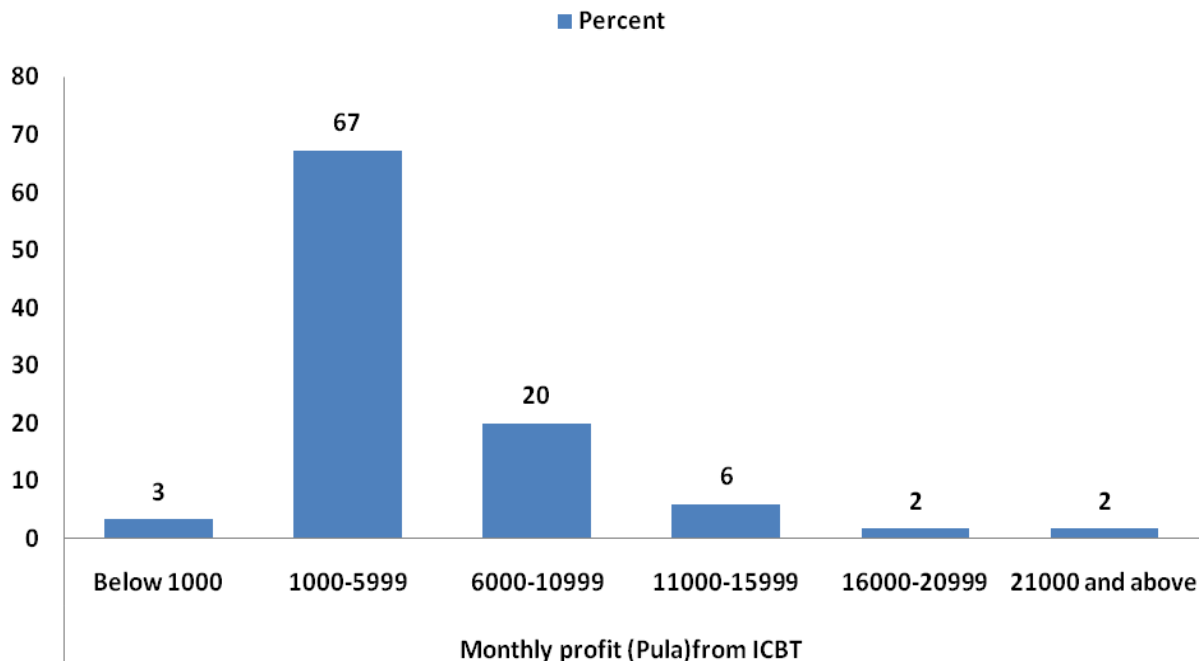


Figure 4. The average monthly profit made by the ICBT traders.

Table 2. ANOVA Table- Regression of profit on ICBT on socio-demographic variables.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	14368860404	23	624733061	48.505	.000
	Residual	6388381649	496	12879801.7		
	Total	20757242054	519			

Table 3. Test of significance of the socio-demographic variables.

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	Beta	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	4800.263	1576.410		3.045	.002	1702.998	7897.528
Age: 22-25	-1773.825	902.215	-.093	-1.966	.050	-3546.459	-1.191
Age: 26-30	-786.470	863.475	-.052	-.911	.363	-2482.990	910.051
Age: 31-35	-842.348	859.321	-.062	-.980	.327	-2530.707	846.011
Age: 36-40	-123.464	905.464	-.007	-.136	.892	-1902.483	1655.554
Age: 41-45	-816.840	1078.807	-.031	-.757	.449	-2936.434	1302.755
Age: 46 and above	-53.614	1114.501	-.002	-.048	.962	-2243.340	2136.111
Employed in the public sector	76.200	593.363	.004	.128	.898	-1089.616	1242.015
Employed in the private sector	1474.356	562.892	.076	2.619	.009	368.409	2580.304
Self-employed	500.150	388.854	.039	1.286	.199	-263.854	1264.153
Married	252.907	425.675	.019	.594	.553	-583.443	1089.256
Divorced	858.665	650.719	.035	1.320	.188	-419.841	2137.170



Table 3. Contd.

Widowed	-660.866	978.617	-.018	-.675	.500	-2583.611	1261.879
Cohabiting	470.066	499.165	.026	.942	.347	-510.673	1450.805
Primary certificate	1470.200	858.119	.069	1.713	.087	-215.795	3156.196
Junior Certificate of Education	2022.152	732.375	.129	2.761	.006	583.212	3461.092
Secondary School Certificate/Diploma	1664.376	714.326	.123	2.330	.020	260.899	3067.854
University Degree	1088.814	768.627	.068	1.417	.157	-421.353	2598.981
Professional Certificate	1696.848	840.621	.089	2.019	.044	45.231	3348.465
Female	-86.526	341.982	-.007	-.253	.800	-758.438	585.386
Number of trips in a year	-25.888	11.275	-.097	-2.296	.022	-48.039	-3.736
Frequency of trips for ICBT	-985.120	255.296	-.163	-3.859	.000	-1486.715	-483.525
Number of years you have been involved in informal cross-border trade	198.715	63.803	.091	3.114	.002	73.357	324.073
The initial start-up capital (Pula) for the ICBT	.925	.035	.771	26.307	.000	.856	.994

Dependent Variable: Profit (Pula) generated from ICBT monthly.

$$\text{Gross profit margin} = \frac{108846600 - 48986700}{108846600} \times 100 = \frac{59859900}{108846600} \times 100 = 54.99\%$$

This percentage shows us that the ICBT is highly profitable using 45.01% of its revenue to pay for direct costs of the business. It also means that ICBT in the country retains 55 thebe on each pula to service other costs and obligations that the traders might have.

### **Which is more profitable, exports or imports?**

$$\text{Gross profit margin on exports} = \frac{28471200 - 13547600}{28471200} \times 100 = 52.42\%$$

$$\text{Gross profit margin on imports} = \frac{80375400 - 35439100}{80375400} \times 100 = 55.91\%$$

The above results reveal that the business of importing goods into the country is more profitable than exporting. This result is expected as Botswana is not an industrialized nation. As has been shown in this report, a good proportion of the exports are actually re-exports.

## **DISCUSSION**

The study addressed the following questions: What are the characteristics of the informal cross-border traders in terms of the goods that they traded in as well as

demographics? What are the estimated average profit made monthly, the total costs of exports and imports annually, and the total sales value of the imports and exports? What is the profitability of the ICBT using the profit gross margin? How does the socioeconomic variables impact on profit generated from ICBT?

There were more women (61%) than men (39%) participating in the ICBT. The majority of the traders (60% of the men and 52% of the women) were within the age range, 26 and 35 years; 30% of the men and 41% of the women were unemployed while 43% of the men and 38% of the women were self-employed. Most of the men (59%) and women (66%) had a secondary school certificate or higher qualification. Thus the study has shown that the traders were mainly women, youths, unemployed and educated. Since the majority of the traders were youths, educated and yet unemployed, the ICBT must have served as a means of employment after completing their educational careers. The results closely agree with the 2007 Informal Sector Survey (CSO, 2009) which shows an unemployment rate of 20.7% with the males having a higher unemployment rate of 23.6%. With Botswana's current unemployment rate at 17.8% and the youths being mostly affected are even more worrisome (13.6% for males and 14.2% for females) (Global Economy.com, 2013; Republic of Botswana, 2012). However, the Government of Botswana has put in place a number of programmes such as Youth Development Fund, Construction Industry Trust Fund, and Young Farmers Fund under the Citizen Entrepreneurial

**Table 4.** Summary of transactions costs by the ICB traders.

Cost items	N	Amount (Pula)	US \$ Equivalent
Total cost of exported goods in a year	265	13, 547,600	1, 693, 450.00
Total cost of imported goods in a year	516	35, 439, 100	4, 429, 887.50
Revenue from exported goods in a year	265	28, 471, 200	3, 558, 900.00
Revenue from imported goods in a year	507	80, 375, 400	10, 046, 925.00
Total expenditure on transport	519	3, 926, 125	490, 765.63
Total expenditure on feeding	457	1, 357, 930	169, 741.25
Total expenditure on communications	77	195, 700	24, 462.50
Total expenditure on tips	3	18, 350	2, 293.75
Total expenditure on all line items	520	8, 011, 145	1, 001, 393.13

Development Agency (CEDA), to assist in creating more job opportunities, especially for the youth. A study undertaken by Okurut and Ama (2013) showed that the youths and women are unable to access these funds because of the stringent conditions that have to be met. This includes having a registered business, having some collateral and owning a business premises. This explains why the youths and women ICB traders were unable to secure loans from any finance houses to enhance the trade in the present. The study therefore recommends a relaxation of these eligibility conditions to access the funds in order to enhance the traders' access to these funds for ICBT.

On the major trading activities, the study shows that while men trade more on agricultural products and outputs than women, more women than men were trading on industrial products. The top products that men imported were cooking oils, potatoes, maize grains, coffee, shoes and saucepans. The women, on the other hand, imported mainly shoes, clothes, bags and beans. The exports by the women were mainly shoes, beans, maize grains, and clothes while the men exported mainly aggro vet drugs, human medicine, fish and sorghum. The results are in line with studies conducted in other SADC countries (UN-Women, 2009, 2008) which showed the major imports as textiles, clothes, sweets, juices, alcohol and other cooking oil and plastic bags. It is important to point out that there are no industries in Botswana except the mining and beef production industries. The exports were mostly re-exports from those who might be trading between Botswana and Zambia and Namibia..

Profitability of ICBT in this paper has been measured in terms of the income generated and expenses incurred by the informal cross-border traders in conducting their businesses. Income is represented by the money generated from the activities of the business and does not include money borrowed as they do not create income. Income is simply a cash transaction between the business and the lender to generate cash for operating the business or buying assets (Spireframe, 2012; Hofstrand, 2013; Loth, n.d).

The results show that ICB traders make on the average

a monthly profit of US \$ 694.35 which is over ten times the minimum wage (US \$69.00) in Botswana. In terms of the overall profitability of the business, the study obtained the gross profit margin as 54.99% which is quite high showing that for every one pula the traders have, 0.55 thebe are available to service other costs and obligations that the traders might have. This explains why the traders are able to buy food for their households, pay school fees for their children and relatives, have some money to reinvest in the business and improve their welfare as found out by Ama and Mangadi (2013). In a study by Macamo (1999) in Mozambique, the monthly net income obtained from informal traders was estimated, on average, to be equivalent to more than four times the minimum salary paid in the formal sector while the average income earned by informal traders was about two times the cost of essential goods for a family of five people. As a result of this differential gap, many people either switched from formal employment to ICBT or combined the two. Importation is shown to be more profitable than the exportation of goods with gross profit margin for imports equal to 55.91% and gross profit margin for exports equal to 52.42%. This is not surprising as Botswana is not an industrialized nation but relies on the neighbours for most of her needs including imported food. Botswana's imports are sourced predominantly from the SADC countries which had a massive 87.61% share of total imports (Botswana, 2006). Most of the exports are re-exports. During a Department of Women's Affairs workshop for ICB traders in Francistown, Botswana, three women interviewed reported selling groundnuts, beans, sweet potatoes and dried indigenous vegetables, television sets, blankets and DVD players imported from Zambia, Zimbabwe or South Africa. One of the women, Nomsa Mulenga of Jackalas 1, reported, "Since I started buying from Zambia in 2005 I run my own stall and I have been able to build and electrify my two and half roomed house" (The Voice Botswana, 2013).

The two most highly positively significant factors affecting profit generated from ICBT are numbers of years involved in ICBT and initial start-off capital for ICBT ( $p < 0.01$ ). The number of years on ICBT is an indicator

of the experience that the trader must have generated over the years in during the business. Thus the more the number of years of involvement in the trade the more diversified. One of the women interviewed during the Department of Women Affairs' workshop expressed that she started with one 50kg bag of groundnut but by 2005 she had ten of such 50kg bags for sale. Similarly, the profit generated by ICBT positively correlated with startup capital for the business showing that the more the amount of startup income the higher the likelihood of a higher profit. This calls for interventions to enhance the capital base of the ICB traders. These ICB traders are indispensable to the growing number of consumers who satisfy their basic needs through the small packages brought closer to their homes by the informal traders. They should be supported by government policies and instruments to grow.

The study shows that about two million United States dollars is realized from exports and about 5 million US dollars from imported goods as profits by the sampled ICB traders. These generated incomes escape tax from the government. Thus if the business is accorded recognition, this income could earn the government some tax revenue for the development of the country.

## RECOMMENDATIONS

On the basis of the results of this study, it is recommended that:

1. The study be expanded to cover all the 21 border posts in Botswana and data collected for a longer period on taxes collected at border posts. This will enable a holistic assessment of the impact of ICBT on the economy.
2. The government of Botswana should recognize ICBT as one of the arms for poverty alleviation and policies should be put in place policies to regulate this trade as it has potentials to help in economic diversification;
3. Reduction in the tax charged for the items the ICB traders bought as this could lead to reduced sales value and subsequently a quick turnover on the returns from their investment in ICBT. This would further enhance the profitability of the trade.

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