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BUYER TRADE APPROACHES: THE CASE OF BUSINESS FIRMS IN ERITREA

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ABSTRACT

We have examined buyer firms' trade approaches (cash, credit, and/or both), the reason why (to create customer confidence, to increase sales or both) they choose those approaches and the influences of firm characteristics specifically - size and age - on the firms to choose those approaches. From a developing economy perspective, the study shows that most firms buy both on cash and credit but proportionally more on cash. They neither buy only on credit nor get any incentive for early payment from suppliers. We found that buyer firm's own characteristics such as size and age influence the trade approaches applied by buyer firms. When size is measured in terms of five year average sales and five year average investment in assets, most of the largest firms buy more on both credit and cash compared to the smaller firms. However, when number of employees is taken as a measure of size, the finding revealed that the largest firms buy less on both credit and cash compared to the smaller firms. The consideration of age shows the youngest firms buy relatively more on credit and cash compared to the oldest firms.

KEYWORDS: Trade, cash, credit, buyer, size, age, developing countries, Eritrea.

INTRODUCTION

Basically, the objectives of firms are the profitability objective and the liquidity objective, the achievement of which depends on their trade approaches (trading on cash, on credit or a combination of the two). Cash is always a limited resource that firms may have to give it a second thought before opting to go for it as a first choice to finance their operations. One of the major tools that help in the achievement of these objectives remains then to be trade credit. Trade credit helps to achieve the profitability objective to investors by increasing revenues, but it potentially exposes business firms to risk of liquidity because it may decrease cash inflows by postponing cash collection to the future (NG et al., 1999).

Credit can be classified depending on the nature of the debtor/creditor as well as purpose of credit and time length. The debtor/creditor classification of credit includes business credit, individual credit, and government credit. Business credit among others includes trade credit, consumer credit, as well as short-medium- or long-term credit (McMillan and Woodruff, 1999).

Our concentration here is on trade credit, which is a short-term credit, arising when firms sell goods and services with the postponement of cash receipt to the short term future. Considerable research has been conducted to assess the determinants of trade credit (e.g., Pike et al., 2005; Marotta, 2005; McMillan & Woodruff, 1999; Deloof & Jegers, 1996). The use of trade credit depends on the characteristics of the buyer firm, the buyer firm's product and its environment. Yet, previous research has given little attention to trade approach determinants in the developing countries, like Eritrea. So far as the researchers' knowledge is concerned, there has been no research made with an objective to find the buyer firm characteristics that determine trade approaches used by the business firms in Eritrea. This paper contributes to the academic

knowledge by studying if buyer firm's size and age affects its trade practice by researching on (a) buyers' trade approaches and (b) the role of firm size and age on buyer trade approaches using Eritrean firms as a point of reference.

THE RESEARCH METHODOLOGY

As indicated by Tewolde, Tessema and Tesfayohannes, (2014), for this study we have followed Bouma and Atkinson (1995) proposal. They propose an outline of three phases in the research process. The first phase requires a researcher to clarify the issues to be researched and select a research method. In this phase the researcher has to select, narrow and formulate the problem to be studied, select the research design, design and devise measures for variable, set-up tables for analysis and select a sample or the units of analysis. The second phase concerns the collection of data about the research question, summarizing and organizing the data. The third and final stage relates to the analysis and interpretation of data including relating data to the research question, drawing conclusions, assessing the limitations of the study and making suggestions for further research.

MEASURES

Following are the measures taken to collect and analyse the data (see also Tewolde, Tessema and Tesfayohannes, 2014). First the concepts considered relevant to the study were identified, defined and conceptually. The second step was the preparation of the questionnaire and execution of a pilot study on 10 respondents (firms' managers). A pilot study was done in order to test whether [a] the questionnaire would enable us to gather the desired data, and [b] the respondents understand the concepts and measurements.

A cross-sectional survey research method is chosen as a preferred method for our research using exploratory and descriptive study approaches. We have preferred the survey approach due to its advantage over economy,

speed of data collection and its advantage in identifying attributes of a population from a small group of individuals (Creswell, 1994). Our survey generalizes the trade practice used by all business firms in Eritrea from a sample of 100 buyer firms. The 100 firms (sample) were randomly selected from a total of 2205 firms of the Central Zone (Zoba Maekel), which is the most industrial region of the country. The list was provided by the Ministry of Industry and Trade (MoTI, 2010). After conducting the pre-test or pilot study and making all necessary adjustments, questionnaires were distributed to the respondents and all respondents returned the questionnaires (100% response rate). In addition to the questionnaires, data has also been collected from the firms' financial statements of five years (2004 to 2008).

According to the size in number of employees, firms are grouped into three categories: small size firms (with less than 10 employees), medium size firms (with 11-50 employees), and large firms (with more than 50 employees). Likewise, according to five year average annual sales in local currency - ERN (Eritrean Nakfa, where 15 ERN is officially fixed at 1 USD), firms are grouped into three: small size firms (with less than ERN 15,555,000), medium size firms (with sales ranging between ERN 15,555,000 and 46,665,000, and large size firms (with more than ERN 46,665,000). On the basis of the five year average investment in assets, we grouped them into three categories: small size firms (with less than ERN 21,216,000), medium size firms (between 21,216,000 and 63,648,000), and large size firms (more than ERN 63,648,000). According to their age, the firms are grouped into three categories: Young (less than 10 years old), medium (between 11 and 50 years old), and old (more than 50 years old).

The managers of the firms were asked to give their opinion on their trade practices. For example, managers are asked (a) what trade approaches they use (cash or credit or both) and

(b) how they apply their approaches or (c) why they do not apply otherwise. Most questions provide a number of alternative answers and end-up with "others" so that the managers input their own reasoning. In administering questionnaire, data collectors were properly selected in that they all had a minimum of diploma in accounting with very good grade in working capital management. Second, they were given orientation on the objectives and data collection approaches. Third, they were given official letters introducing the researcher and the data collector. Fourth, they contacted each respondent personally or by telephone to fix appointment. On the appointment date the data collector hands over official letters that identify the researcher and data collector. The data collector then explained the objective of the study and how the respondent can fill in and then submit the questionnaires. This may take around 30 minutes. At least one reminder call is made by the data collector a day before the date of the appointment. When collecting the questionnaire about 15 minutes is taken to explain questions that the manager may have and appointment made for the conduct of interview. Upon collection, the questionnaire is imputed to the data summary sheet and notes of inconsistencies or unfilled questionnaires taken. At least one reminder call is made by the data collector a day before the date of appointment for interviewing the same managers who filled the questionnaire. A short interview from 30 minutes to one hour is then taken by the data collector.

FINDINGS

Our findings revealed that the "credit only" option is used by very insignificant number of firms. So, we reframed the description and analysis to include a comparison between the two choices, "cash only" on one hand and "both credit and cash" on the other. If majority of respondents (buyers in this case) are in favor of one choice, then we see which group on the basis of the proxy used to measure is more in percentage.

Table 1: Buying Policy

Buying policy			on proportion of cash and credit			
Cash only	Credit only	Both cash & credit	More cash	More credit	Equal	
34(34%)	2(2%)	64(64%)	47(73%)	11(17%)	6(10%)	

With the objective of finding the firms' buying policy, we collected data from 100 buyer firms. As indicated in table 1, the firms' buying policy is divided into three categories - those firms which (a) buy on cash only (before delivery or on delivery), (b) buy on credit only and (c) buy both on cash and credit. As it can be observed

from the table, 64% buy both on cash and credit, 34% buy only on cash and 2% buy only on credit. However, out of the 64 firms who said they buy both on cash and credit, 73% buy more in cash, 17% buy more on credit and only 10% said they buy equally on cash and credit.

Table 2: Characteristics of suppliers selling on cash

What type of suppliers sell on cash?	Age relation			size		
	new	old	total	small	large	total
Total	41(4%)	51(5%)	92(100%)	30(42%)	42(58%)	72(100%)

The managers were asked "if you buy on cash, what age of relationship (new or old) and size (small or large) of suppliers sell on cash? Taking age of relationship as a proxy to measure trade approaches and as indicated in the table 2,

54% of those who sell on cash are old suppliers (long relational experience), 46% are new. If size is taken as a proxy, 58% are large, 42% are small suppliers.

Table 3: Possible reasons for buying on cash only

Why do you buy on cash only?	Buying on credit is not necessary	Offering credit is not customary	It is difficult to identify trustworthy Supplier	Other
total	17(20%)	17(20%)	2(3%)	47(57%)

The managers were asked "why they buy on cash". As it can be observed in table 3, 20% said because offering credit is not customary, and the same percentage 20% it is because buying on credit is not necessary, only 3% of them said because it is difficult to identify trustworthy suppliers. However, 57% of the respondents said

they buy only on cash because of other reasons such as, supplier sells only on cash and it is difficult to get suppliers who sell on credit, to get lowest price, because of enough cash on hand, because goods are needed urgently, suppliers are small who have shortage of cash.

Table 4: Characteristics of suppliers selling on credit

What type of suppliers sell on credit?	Age relation			size		
	new	old	total	small	large	total
Total	18(28%)	46(72%)	64(100%)	14(31%)	31(69%)	45(100%)

The managers were asked "if you buy on credit, what type (new/old and small, large) of suppliers sell on credit? The result shows that (see also table 4), taking age of relationship as a

proxy to measure trade policy and as indicated in the table, 72% of those who sell on cash are old suppliers (long relational experience), 28% are new. If size is taken as a proxy, 69% are large and 31% are small suppliers.

Table 5: Possible reasons for buying on credit

If you buy on credit, why do you buy on credit?	to increase sales	to create supplier confidence	Both	Other
Number and percentage of respondents	15(21%)	30(42%)	5(7%)	21(30%)

As indicated in the table 5, 42% said they buy on credit to create supplier confidence, 21% of them said to increase their sales, 7% said both to increase sales and create supplier confidence and 30% said because of other reasons including due to buyers having lack of cash and not paying until they check the quality of the products that suppliers sell.

Table 6: Incentives provided to encourage early payment

	Credit period in days	10	30	60	90	Other	total
	Number of firms and %	31(44%)					
		14(20%)		2(3%)	10(14%)	13(19%)	70(100%)
	Discount period in days	5	10	15	-	Other	
Discount period allowed in days	Number of firms and %	4(29%)	2(14%)	4(29%)	-	4(29%)	14(100%)
	Credit discount rate	1%	2%	3%	-	other	
Discount rate allowed	Number of firms and %	3(20%)		1(7%)	-	8(53%)	
			3(20%)				15(100%)

The managers were asked “whether they are provided with incentives for early payment by their suppliers”). The result reveals that while 13% said that they get some kind of incentive to motivate them to pay early, the vast majority, that is, 87% said “no” they do not get any incentive at all. Regarding the **credit period** offered by suppliers (see also table 6), 44% said that it was 30 days, 20% said 10 days, 14% said 90 days, 3% said 60 days and 19% said others, such as by agreement, for unlimited period and it depends on the agreement and kind of the goods purchased. On **discount period** (see table 6), about 29% of the buyers said it was 5 days, another 29% said 15 days, 14% said 10 days, and 29% said others. As for the **discount rate** 20% of the buyers said it was 1%, another 20% said 2%, 7% of them said 3%, and 54% said others.

Table 7: Actions taken - if buyers do not pay within agreed credit period

Give more time	Communicate orally, written, in person.	Stop selling on credit until the debt is paid	Solve the case amicably	Take the case to the court	Other
24(27%)	8(9%)	10(11%)	34(38%)	1(1%)	13(14%)

As for the actions taken - if buyers do not pay within agreed credit period, as shown in table 7, only 1% said that their suppliers take the case to court. Moreover, 38% solve the case amicably, 11% said their suppliers will stop selling on credit until the debt is paid, 27% said they get more time and 14% said that their suppliers use other mechanisms.

Table 8: Size in terms of number of employee vs trade approach

Number of Employees	No of firms	Cash	Credit	Both
Big = more than 50 Employees-	5(5%)	4(80%)	0	1(20%)
Average = b/n 11-50 Employees-	11(11%)	3(27%)	1(9%)	7(64%)
Small = Less than 10 Employees	84(84%)	27(24%)	1 (1%)	56(66%)
Total	100(100%)	34(34%)	2 (2%)	64(64%)

As indicated in table 8, on the basis of the number of employees as a measure of size, our findings indicate that, out of the 100 firms, 5% were big firms, 11% were average sized firms and 84% were small. Overall, 64% buy both on cash and credit, 34% buy only on cash and the remaining 2% buy only on credit. Out of the 5

big firms, 20% buy both on cash and credit and the remaining 80% buy only on cash. From the 11 average in sized firms, 64% buy both on cash and credit, 27% buy only on cash and the remaining 9% buy only on credit. 84 firms were categorized as small in size out of which 66% buy both on cash and credit, 33% buy only on cash and the remaining 1% buy only on credit.

Table 9: Size in terms of Sales vs trade approach

Average sales (in '000)	No of firms	Cash	Credit	Both
Big = more than 67,432.5	6(10%)	0	1(17%)	5(83%)
Average = b/n 22,477.5 & 67,432.5	12(20%)	5(32%)	0	7(58%)
Small = Less than 22,477.5	42 (70%)	16(38%)	1(2%)	25(60%)
Percentage (%)	60(100%)	21(35%)	2(3%)	37(62%)

As indicated in table 9, on the basis of the five year average sales as a measure of firms' size, our findings indicate that, 60 firms had financial statement that we can use for our purpose. Out of the 60 firms, 10% were big sized firms, 20% were average, and 70% were small firms. Overall, 62% buy both on cash and credit, 35% buy only on cash and only 3% buy "only on

credit". Out of the 6 big firms 83% buy both on cash and credit and the remaining 17% buy only on cash. 12 firms were average in size out of which 58% buy both on cash and credit, and the remaining 32% buy only on cash. 42 firms were categorized as small in size out of which 60% buy both on cash and credit, 38% buy only on cash and 2% buy on credit only.

Table 10: Size- investment in total Assets ('000) vs trade approach

Average investment in total Assets (in '000)	No of firms	Cash	Credit	Both
Big = more than 63,648 (10)	5(11%)	0(0%)	1(20%)	4(80%)
Average = b/n 21,216 & 63,648	11(23%)	4(36%)	0	7(64%)
Small = Less than 21,216	31(66%)	14(48%)	1(4%)	16(52%)
Investment (Tot. Assets)	47(100%)	18(38%)	2(4%)	27(57%)

As table 10 shows, on the basis of the five year average total investment in assets, as a measure of firms' size, our findings indicate that, 47 firms had financial statement that we can use for our purpose. Out of the 47 firms 66% were small, 23% were average and 11% were big. Overall, out of 47 firms only 4% buy on "credit only", while 57% buy both on cash and credit and

38% buy only on cash. Out of the 5 big firms, 80% buy both on cash and credit and the remaining 20% buy only on credit and none buys only on only cash. 11 firms are average in size out of which 64% buy both on cash and credit and the remaining 36% buy only on cash. 31 firms were small in size, 52% of which buy both on cash and credit, 44% buy only on cash and 4% on credit.

Table 11: Age (years since establishment) vs Trade approach

Age - years since establishment	No of firms	Cash only	Credit only	Both cash & credit
Old- more than 50 years old	37(37%)	15(40%)	1(3%)	21(57%)
Average - 11 to 50 years old	54(54%)	16(30%)	0	38(70%)
Young - less than 10 years old	9(9%)	3(33%)	1(11%)	5(56%)
Total	100(100%)	34(34%)	2(2%)	64(64%)

Table 11 reveals, on the basis of years the firms were in business, out of the 100 firms, 37% were old, 54% were average and 9% were young. Overall, 64% of the firms buy both on cash and credit, 38% buy only on cash and the remaining 2% buy only on credit. Out of the 37 oldest firms, 57% buy both on cash and credit, 40% buy only on cash and 3% buy only on credit. From the average aged firms, 71% buy both on cash and credit and the remaining 39% buy only on cash. From the 9 young firms, 60% buy both on cash and credit, 33% buy only on cash and 11% buy only on credit.

DISCUSSION

From a developing economy perspective, the study shows that most firms buy both on cash and credit but proportionally more on cash. They neither buy only on credit nor get any incentive for early payment from suppliers. The opinion of the buying firms’ managers and supported by the analysis of data obtained from the financial statements, as conceptually expected clearly indicated that the old and large suppliers sell more on cash compared to the new and small suppliers. The main reasons for buying on cash are that trade credit is not customary, it is not necessary, buying on cash enables a buyer to get lower price and smaller suppliers need cash therefore they do not sell on credit. Regarding the characteristics of suppliers selling on credit, buyers believe that old and large suppliers sell more on credit compared to the new and small suppliers. The reason why buyers buy on credit is to increase sales and create supplier confidence. Lack of cash and checking the quality of the products before pay are also additional reasons. Our findings also show that the vast

majority of suppliers do not give any incentive to their customers for early payment. However, from the very few suppliers who provide incentives, the most frequent credit period and discount period allowed were 30 days and 5 days respectively. The discount rates provided were 1% and 2%. If buyers do not pay within agreed credit period, suppliers rarely take the case to the court but solve the case amicably.

Regarding the determinants of trading approaches, this study suggest that, majority of its findings were in line with previous studies, for example on firm size, Danielson and Scott, 2004, Summers and Wilson, 2002. We found that, though most of the oldest and youngest firms buy more on both credit and cash (see table 4), the percentage of the oldest firms buying on both credit and cash is greater than that of the youngest firms. We expected that larger firms can buy more on credit because they have the asset base for collateral. They have the experience and the reputation in the business and therefore the trust by sellers (Brenan et al., 1998, Coleman, 2003).

As the literature predicts, this study also finds that firm size influences the trade approaches used by buyer firms. When size is measured in terms of five year average sales (see table 9) and five year average investment in assets (see table 10), in line with previous researches (e.g. see Brenan et al., 1998 and Coleman, 2003, Danielson and Scott, 2004, Summers and Wilson, 2002), most of the largest firms buy more on both credit and cash compared to the smaller firms. However, when number of employees is taken as a measure of size, the finding revealed that the largest firms buy less on both credit and cash compared to the smaller firms.

CONCLUSIONS, LIMITATIONS, AND FUTURE RESEARCH

The aim of this study was to examine the trade approaches (cash, credit, and/or both) buyer firms use, the reason why (to create customer confidence, to increase sales or both) they choose those approaches and the influences of size and age on the firms to choose those approaches. We have used the opinions of the firms' managers on the trade approaches and the reasons for choosing those approaches. Three proxies were used to measure the size of firms including- number of employees, five years' average total sales and five years' average total investment in assets.

Little is empirically known about the trade approaches that firms in developing countries use, how they apply their approaches and why they opt for those approaches. Thus, this study empirically examined the trade approaches firms use in one developing country, Eritrea and if size measured in number of employees, five year average sales and investment in assets as well as age of the firms (years since establishment) affect the trade approaches. Although the degree to which firms use the trade approaches (cash, credit, and/or both) may be influenced by a number of factors (e.g., economic development, legal, political, technological, and socio-cultural), the characteristics of the firms such as size, and age do affect the use of cash or credit and their proportion.

First, this study was conducted in only one developing country (Eritrea) and that restricts the generalization of the findings to other developing countries. Thus, in order to generalize and validate the findings of this study, we suggest that a similar study be conducted in other developing countries. In spite of the above limitations, however, this study addresses several gaps [literature] in trade approaches firms use in developing countries, like Eritrea. First, this study uses data from managers' opinions and from the

financial statements of the buyer firms in order to check the consistency of the findings. In a developing economic set up like that in Eritrea, where there is acute deficiency of information from secondary sources, the approach used is the only way out. Second, this study has examined buyer firms' trade approaches the reason for choosing those approaches and the influences of size and age on the firms to choose those approaches in Eritrea. This to our knowledge has not been studied before and thus can be seen as an important addition to the literature in developing countries.

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