

The Structure of the Forex Bureau Market of Ghana

Kofi Osei, BSc MBA

ABSTRACT

The forex bureau market has been in operation for a while now. But does the public know how much activity is going on in this market? Who buys and sells to this mini financial market? How much do people buy and sell at a time? Which currencies are more easily exchanged on this market? This article tries to answer the above questions as well as others concerning this relatively new market.

Key Words: Structure, Black-marketing, variability, Standard-deviation, speculators, coefficient-of-variation.

INTRODUCTION

At independence in 1957, Ghana's foreign currency reserves was more than US\$ 500 million. Ghana as a young nation was faced with the task of building schools, hospitals, roads, acquiring plant and machinery, modernizing her agriculture and a host of other developmental commitments which all needed foreign exchange. Tremendous pressure was therefore put on the country's reserve position.

It was not therefore surprising when the exchange control Act which sought to regulate the use of foreign exchange was passed in 1961. Despite this act, trade statistics show that Ghana had negative balance of visible trade throughout the 1960's. Again throughout this same decade of the 1960's, government revenue fell short of her expenditure in every year. The fundamental development in the Ghanaian economy was that, it continually deteriorated. With the exchange controls and other rigidities, the "black market" started to develop.

The sharp increases in the price of petroleum products in the early 1970's which resulted in a world-wide recession gave impetus for the further development of the black market. During that period, petroleum products imports took about half the available foreign exchange per year. This situation even put more pressure on the foreign exchange and the subsequent tighter controls meant that foreign currency users had to look elsewhere for their foreign exchange needs.

By the middle of the 1970's, the reserve

position of the country was so precarious that the government introduced the Special Unnumbered Import License (SUL) system. Under this system, importers with their own sources of foreign currency resources were allowed to bring in imports since such imports were not subject to any transfer of money from Ghana. The SUL system was a boost to a faster development of the black market because once importers brought their goods and sold them, they went to the black market to buy foreign currency to repeat the cycle.

Because of the severity of the exchange controls in the 1970's coupled with administrative bottlenecks, by the late 1970's, the black market had developed to such an extent that any amount of the major international currencies could be purchased in a matter of minutes.

In Ghana, it was illegal to do business on the black market. Dealers caught doing business on this market have faced the law. Interestingly, despite the threats, arrests, raids, confiscations, prosecution and brutalities meted out to dealers on this market, the market has flourished. After many years of unsuccessful battling with black marketeers, the government of Ghana announced the establishment of the foreign exchange bureaus in early 1988 as part of Ghana's economic liberalization program. These bureaus are places where the public can buy and sell foreign currencies with rates determined by market forces. The commencement of business by the bureaus began in March 1988. Since that time, various bureaus have opened in almost all the major cities and towns of the country. As at the end of 1989, there were about one hundred and twenty bureaus in the country, with about sixty percent located in Accra and Tema and twenty percent in Kumasi. The remaining twenty percent were found in Takoradi, Elubo, Bolgatanga, Bawku, Aflao, Sampa and Domaa Ahenkro.

The aim of this paper is to analyse the structure of this relatively new market which is part of the financial market of the country. Data are for the period March 1988 to December 1989.

*Kofi Osei
School of Administration
University of Science and Technology
Kumasi, Ghana*



THE MARKET STRUCTURE

Market structure in this paper refers to the number and size distribution of the buyers and sellers as well as the volume and composition of currencies traded on the forex bureau.

Buyers

The major buyers of currencies from the forex bureaus in the country are as summarised in Table 1. It would be seen from table one that traders are the major buyers of currency from the bureaus. Nationwide, about 60 percent of the currency sold by the bureaus are purchased by traders. Companies, organizations etc. purchase about 17 percent, individuals travelling abroad purchase about 11 percent, government officials purchase less than 2 percent and foreigners buy about 7 percent. The remaining 3.64 percent is purchased by people needing small amounts of foreign exchange, for example those registering for examinations, speculators etc.

It may be inferred that since traders are the major purchasers, the forex bureaus have helped trading activities in the country considerably. Again, industrialists or businesses have also benefited from the bureaus since they are the second major users of foreign money sold by the bureaus. The smaller ratio of purchases by government officials is expected since by virtue of their work, they easily buy from the auction market, where foreign currency sells at a discount.

With the exception of Greater Accra, the proportion of foreign currency purchased by traders in the regions is much higher than the national average. This situation may be due to the fact that these regions are situated next to neighbouring countries and there is a lot of trading activities going on across frontiers in these centres. For example, Western, Ashanti and Brong Ahafo regions trade with Ivory Coast, Upper East with Burkina Faso whilst Volta Region trades with the Republic of Togo.

The higher percentage of 31.3 percent of businesses participating in the purchase of foreign currency in Greater Accra is expected since the Greater Accra region has most of the industries or businesses in the country.

Sellers

Table 2 which shows the categorization of currency sellers to the forex bureau market indicates that generally there is no dominant group selling foreign exchange to the forex bureaus. The main sources of money sold to the forex bureaus come from tourists, traders and remittances from

Table 1: Major currency buyers from the forex bureaus (%)

Type of Buyer	Nation wide	*Volta Region	Upper East	Ashanti Region	Greater Accra	Brong Ahafo	West Region
Traders	59.36	80	60	81.6	37.7	85	70.33
Business/ Companies	16.73	-	10	3	31.3	-	10
Individuals Traveling Abroad	11.45	20	15	11	12.1	2.5	12
Govt. Officials	1.68	-	10	1	2	-	0.67
Expatriates/ Foreigners	7.14	-	5	1	13.1	0.5	5
Others	3.64	-	-	2.4	3.8	12	2
Total	100.00	100.00	100.00	100.00	100.00	100.00	100

Source: Survey

* Analysis based on response of only one bureau.

Table 2: Currency sellers to the Forex Bureau (%)

Type of Seller	Nation wide	Volta Region	Upper East	Ashanti Region	Greater Accra	Brong Ahafo	West Region
Tourists/ Foreigners	26.14	-	20	25	25.5	30	40
Ghanaians with relatives Abroad	27.5	20	40	43	20.5	7.5	30
Traders	20.68	80	10	22	22.5	10	5
Organizations/Co./ Departments	9.32	-	20	-	18.5	-	-
Others	16.36	-	10	10	13	52.5	25
Total	100	100	100	100	100	100	100

Source: Survey

Others include, speculators, export retention account, holiday makers.

*Table 3: Categorization of Buyers from the Forex Bureaus by volume of purchases.

% of Customers Buying Between	Nation wide	Volta Region	Upper East	Ashanti Region	Greater Accra	Brong Ahafo	West Region
\$1-\$100 (or equiv.)	30.95	100	55	19.8	27.7	7.5	45
\$101-\$500 (or equiv.)	31.67	31.8	-	45	39.8	27.7	35
\$501-\$1000 (or equiv.)	26.55	-	-	29.4	29.8	35	23
\$1001-\$5000 (or equiv.)	8.48	-	-	8.1	10.5	20	33
\$5001-\$10,000 (or equiv.)	1.66	-	-	2.1	2.1	2.5	-
Over \$10,000 (or equiv.)	1.18	-	-	.8	2.2	-	-
Total	100	100	100	100	100	100	100

Source: Survey

*The empty spaces in this table may be interpreted as negligible and not zero.

Ghanaians living outside the country. Organizations or companies sell to forex bureaus mainly in the form of money repatriated as retention accounts on exports.

Sources labelled others include money brought in by Ghanaian students as well as other Ghanaians coming on holidays, farmers etc. Farmers sell a lot to the forex bureaus in the cocoa growing areas. For example, the high figure of 52.5 under others for Brong Ahafo is mainly contributed by farmers who live near the borders.

Volume of transactions

Do the customers of forex bureaus buy in large quantities? Similarly, do the sellers to the forex bureaus more often sell in large quantities? Tables 3 and 4 show the category of customers who buy from and sell to the forex bureaus.

Table 3 shows that generally there are small volume currency buyers from the forex bureaus. In all the regions, more than 80 percent of the customers purchasing foreign currency buy less than \$1000 at a time. In the Volta Region, the response shows that everyone buys \$100 or less. In the Upper East Region, almost all customers buy between \$1 - \$500 or its equivalent.

With the exception of Ashanti and Greater Accra, purchases beyond \$10,000 are rarely recorded. Since most of the buyers are traders, one can infer that the trading activities are mainly small scale trading, i.e. those trading activities requiring less than \$1000. (This may not hold if customers buy in bits at a time).

Table 4 shows a similar trend as Table 3. There are more small volume sellers of foreign currency to the forex bureaus than large ones. All around the country, more than 80 percent of the people selling foreign currency to the forex bureaus sell amounts not exceeding \$500. In the Volta, Western, Upper East and Brong Ahafo Regions more than 80 percent of the sellers of foreign exchange is made up of those selling amounts between \$1-\$100. From the above analysis, it may be inferred generally that participants in the forex bureau market are small volume sellers. It may be noted that Tables 3 and 4 indicate that there have not been any cases of buyers or sellers buying or selling in volumes exceeding \$10,000. It is possible however that such large volume transactions might have taken place before in all the regions except that the frequency is too low to be recorded (see table 5).

Largest Orders

Table 5 shows that orders as large as US\$500,000 have been executed by some of the bureaus.

Table 4: Categorization of currency sellers to the bureaus by volume of sales.

% of Customers Selling Between	Nation wide	Volta Region	Upper East	Ashanti Region	Greater Accra	Brong Ahafo	West. Region
\$1-\$100 (or equiv.)	56.45	95	100	57	34.5	85	82.3
\$101-\$500 (or equiv.)	11.7	26.68	5	-	27	30	11
\$501-\$1000 (or equiv.)	9.05	-	-	7	14.4	2.5	5
\$1001-\$5000 (or equiv.)	4.27	-	-	7.58	5.1	1	1
\$5001-\$10,000 (or equiv.)	2.69	-	-	1.42	5.1	5	-
Over \$10,000	.86	-	-	-	1.9	-	-
Total	100	100	100	100	100	100	100

Source: Survey

Table 5: Largest orders received by some Forex Bureaus

Region of Bureau	Type of F/Bureau	Largest Order Received (US\$)	Portion Executed
Volta	Non-Banking	*31,250	all
		*9375	*4688
Upper East		*3750	*2500
Ashanti		*1563	*938
		*15,625	all
		7,606	all
		8,000	2000
		10,000	all
		*3,750	all
Greater Accra		*4,638	all
		100,000	10,000
		1,200	all
		10,000	6,000
		10,000	all
		6,000	all
	Banking	500,000	all
		500,000	all
		100,000	all
		100,000	all
Brong Ahafo	Non-Banking	*2,563	all
		*2,188	all
Western		2,000	all

Source: Survey

* Originally Quoted in CFA. Converted at CFA 320 = 1 US\$

Generally, the banks in Accra have executed relatively larger orders. This is expected since the banks have ready access to money than the non-banking bureaus.

Also generally, bureaus in Accra have executed much larger orders than the regional bureaus. This is again expected since Accra is the capital and commercial city of Ghana. The last column of table 5 shows that some of the bureaus are faced with liquidity problems since they are only able to buy portions of foreign currencies sent to their bureaus. In relating figures of Table 5 to Tables 3 and 4, the

empty spaces in Tables 3 and 4 can be explained by the fact that large orders are too few that compared with the smaller transactions, the frequency of transactions in excess of \$10,000 is negligible.

Direction of trade

Having established that traders are the major purchasers from the forex bureaus, the study attempts to find out whether the traders' business activities are mainly along the West Coast of Africa or are beyond in markets such as Western Europe, North America, Asia etc. This analysis is summarised in Table 6 below.

Table 6 shows that, most of the traders who buy foreign exchange from the forex bureaus trade mainly along the West Coast of Africa. Nationwide, less than 25 percent of the traders foreign currency purchases are for business in Europe and other markets. Ashanti and Western Regions have very similar ratios. Greater Accra has the lowest proportion of traders doing business along the West Coast. The West Coast traders for the regions are high because the major trading centres are quite close to the borders as indicated earlier and therefore much trading activities go on between the neighbouring countries.

MARKET SIZE AND VARIABILITY

The analysis here shows the size of the forex bureau activity in terms of the amount of various currencies traded in the country. The variability of currency supply and demand is also analysed.

Market Size

Tables 7 and 8 show the official foreign exchange bought and sold by the bureaus around the country. The rankings as indicated in the two tables show that the four dominant currencies in both 1988 and 1989 are the dollar, the CFA, the pound sterling and the deutsche mark in that order. It may be noted that whereas the level of sale of the Canadian dollar was insignificant in 1988, its volume of sale increased about 130 fold in 1989. Thus the sale of the Canadian dollar was quite significant in 1989. It may also be noted that currencies like the Japanese Yen, the Italian lire, the Dutch guilder and the Belgium franc played very little role on the forex bureau market as at the end of 1989.

Table 6: Distribution of traders between West African, European and other markets.

Market	Nation wide	Volta Region	Upper East	Ashanti Region	Greater Accra	Brong Ahafo
West Africa	76.72	100	95	74	60	96.67
Europe etc	23.28		5	26	40	3.33

Source: Survey

Table 7: Foreign Exchange Purchases and Sales at the Bureaus in 1988.

Currency	Rank Dollar	Equivalent Dollar of Purchases	Equivalent of Sales
Belgium Franc	11	325	311
Canadian dollar	8	19,822	21,732
CFA franc	2	6,193,149	16,288,266
Deutsche Mark	4	2,772,121	2,379,748
Deutsche Guilder	7	45,850	44,182
French franc	5	668,851	631,523
Italian lira	10	992	975
Japanese Yen	9	2,961	2,260
Pound Sterling	3	11,302,057	11,730,127
Swiss franc	6	55,995	57,833
US Dollar	1	21,229,857	19,818,859
TOTAL		52,291,180	50,975,816

Source: Research Department Bank of Ghana.

Fig. 8: Foreign Exchange Purchases and Sales at the Bureaus in 1988

Currency	Rank Dollar	Equivalent Dollar of Purchases	Equivalent of Sales
Canadian dollar	5	2,606,447	2,616,501
CFA franc	2	29,358,265	29,843,349
Deutsche mark	4	5,987,517	4,584,715
Dutch Guilder	8	204,617	194,516
French franc	7	779,475	688,721
Italian lira	10	252	228
Japanese Yen	9	14,016	13,777
Pound Sterling	3	22,783,252	20,389,636
Swiss franc	6	1,046,006	1,481,384
US dollar	1	51,969,347	49,047,841
TOTAL		114,749,194	108,860,668

Source: Research Department Bank of Ghana

Table 9: Monthly Variability of Currency Purchases by Forex Bureaus - April 1988 through December 1989

Currency	Mean Monthly Sales by Bureaus	Std deviation of Monthly Purchases	Coef of Variation
Canadian dollar	125,060.4	537,097	4.2947
CFA	2,169,114	1,014,010	0.4675
Deutsche Mark	417,126	197,709	0.4740
French Franc	68,968	48,520	0.7035
Pound Sterling	1,523,102	746,331	0.4898
Swiss Franc	55,100	191,874	3.4923
US Dollar	3,485,674	1,652,454	0.4741

Source: Calculated from Bank of Ghana Data.

Table 10: Monthly variation of currency sales on the Forex Bureau Market. April 1988 to December 1989.

Currency	Mean Monthly Sales by Bureaus	Std deviation of Monthly Purchases	Coef of Variation
Canadian Dollar	125,630	543,546	4.3266
CFA	2,196,743	977,759	0.4451
Deutsche Mark	331,546	145,217	0.438
French Franc	62,869	49,952	0.7945
Pound Sterling	1,529,511	690,641	0.4546
Swiss Franc	76,961	274,521	3.5670
US Dollar	3,279,366	1,490,791	0.4546

Source: Calculated from Bank of Ghana Data.

Variability of Currencies

Tables 9 and 10 show the variability in the demand and supply of foreign exchange on the Forex Bureau Market. Table 9 shows that the five currencies which carry the minimum risk as a source of supply (purchases) as measured by the coefficient of variation over the period April 1988 to December 1989 are the pound sterling, the CFA, the deutsche mark, the United States dollar and the French franc. It may be noted that the lower the coefficient of variation, the better the currency is as a source of supply to the forex bureau market. The variation in the supply of the Canadian dollar and the Swiss Franc is so high that the two currencies are not a reliable source of supply to the forex bureau market.

The demand side (sales) as depicted by table 10 shows the same trend shown in table 9. Again, the pound sterling, the CFA the deutsche mark, the dollar and the French franc showed the minimum variation and therefore the least risky. The Swiss franc and the Canadian dollar again showed wider variation. It may be interesting to note that, the currencies which showed minimum variation, with the exception of the CFA are all the major international currencies. There is security in holding these currencies in the sense that they are acceptable everywhere. The CFA's high demand and hence its minimum variation reinforces the point that most of the trading goes on along the West African Coast.

Implications to Bureau Operators

The analyses of Tables 9 and 10 show that the supply and demand of the pound sterling, CFA, deutsche mark and the dollar are reliable. They carry the minimum variation in their supply and demand over time and therefore carry minimum risk by dealing more in the above four currencies. On the other hand, bureau operators carry high risk of losing money by dealing more in the Canadian dollar, the Swiss franc and the French franc since their supply and demand over a given period of time cannot be easily predicted.

CONCLUSION

In conclusion this paper has shown that forex bureaus have traders, businesses, tourists, travellers, and government officials as customers. Traders are by far the major buyers of currency from the bureaus. On the other hand, the major sellers of currency to the bureaus are Ghanaians who receive monies from their relatives abroad. There are by far more small volume currency buyers and sellers than large volume participants. About eighty percent of the market dealings are below one thousand dollars. Amounts exceeding ten thousand dollars are rarely exchanged on this market. Bank bureaus have generally executed larger orders than non-bank bureaus obviously because of the ease of accessibility to money.

By far the most reliable currencies of the forex bureaus are the pound sterling, the US dollar, the deutsche mark, and the French franc. The CFA which is used by the French West African countries is about the second reliable source of currency to the forex bureau market.

REFERENCES

1. *Henry H.K. and Wallace E.O., Introduction to Econometrics-Principles and applications*
2. *John E.F., and Frank J.W., -Elementary Business Statistics-the modern approach*
3. *Levy H. and Samat M., Capital Investment and Financial Decisions, 3rd edn, Prentice-Hall International, Inglewood Cliffs, New Jersey, 1986 pp. 199-202.*

JOURNALS

4. *Fremgren J.A., "Capital Budgeting Practices: A survey," Management Accounting (May 1973) pp. 19-25*
5. *McMahon R.G.P., 'Determination and Use of Investment Hurdle Rates in Capital Budgeting: A Survey of Australian Practice,' Accounting and Finance, May 1981 pp. 15-25.*
6. *Schall L.D., Sundem G. L., and Geijsbeck W. R., Jr.: 'Survey and Analysis of Capital Budgeting Methods,' Journal of Finance, March 1978 pp. 281-287.*