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Use of Financial Derivatives for Risk Hedging (Currency Risk) By Companies in The Gambia

Baboucarr Mbowe

School of Social Sciences, Istanbul Sabahattin Zaim University, Istanbul, Turkey

Abstract
The aim of this research is to find out if financial derivatives (Futures, Forwards, Options, and SWAPS) are used by company (ies) in The Gambia to hedge against forex risk. From a sample of 3 commercial banks and 1 Islamic Bank, their Income Statements, as well as Balance Sheets for the year ended 2016, was examined. Findings from the research revealed none usage of any of the above-named derivatives, with forex dealings being carried out over-the-counter and on a spot basis. The government Treasury securities (T-bills and Sukuk Al- Salam) was found to be the only available financial instrument in The Gambia; an economy with only a money market (the market for securities whose lifespan within a year- The Gambia government bills).

Keywords: The Gambia, Financial Derivatives, and Currency Risk hedging

1. Introduction

While there can be many and different definitions of risk in different fields, a reasonable basis of understanding risk is a measure of uncertainties. Risk is a measure of the probability of an undesirable event happening and it is a value between 0 and 1. Companies all over the world are subjected to various types of risk as they conduct business on a daily basis and Gambian companies, though in a small and fairly undeveloped economy are not exempted. The world has moved to be a highly interconnected environment in terms of business. Companies all over the world in a drive to increase the supply of cheap inputs, better technology, bigger markets as well as higher profitability are looking beyond their national borders. This has brought both opportunities and threats.

Though there can be many types of risks that can affect a company's profitability, foreign exchange risk is of a primary concern to firms and agents operating in the Gambian business arena especially those involved in international trade. Foreign exchange risk is the risk of a local currency appreciating (depreciating) when a local firm or agent is supposed to receive (pay) an already determined (fixed) amount of foreign currency. The Gambia uses a unique local currency; the Dalasi and a fluctuating exchange rate system. With a current official rate of approximately 47 to the US Dollar, 58 against the Euro, and 421 for every 500 of CFA[1] (Central Bank of The Gambia, 2018), the dalasi has been depreciating over time; from a height of 19.20 to the dollar as at April 2008, the Dalasi exchange rate to the Dollar reached a low of 47.39 as at March 2018 (xe, 2018). This is a depreciation of 146.39 percent over a ten year period.

Local foreign exchange Bureaus in addition to the commercial banks are highly involved in the day-to-day trading of foreign currencies. As at December 2017, the total volume of trade in foreign currency reached a staggering amount of 171.49 m US Dollars (Central Bank of The Gambia, 2018).

International trade, the import, in particular, has gained a lot of momentum in recent years. The Gambia depends wholly on the availability of these foreign currencies and at a competitive rate. Arranged in terms of volume, the following are the countries from which The Gambia mostly imports: Ivory Coast (from $6.6 m in 1994 to $58 m in 2016), Brazil (from $9.8 m in 2009 to $39.9 m in 2016) and China (from $2.2 m in 1994 to $24.4 m in 2016) (Central Bank of The Gambia, 2018) are the most important trading partners for Gambia according to the Statista, (2017).

[1] These three currencies are the most used currencies for international trade in Gambia.

As noted by Rehman (2015) financial risks cannot be eliminated but can be reduced up to a great extent with the use of financial derivatives. Since their inception, Futures, Forwards, Options, and Swaps have been used by companies to hedge against forex risks which arise in the normal course of doing business.

However, my task in this paper is to examine the extent to which entities in The Gambia are using these derivatives in hedging their foreign exchange risk. Moreover, if they are not in use, the researcher wishes to examine and explain how they can use them to their advantage.

The remaining sections of this paper is arranged in the following manner: section 2 comprises of a review of the available literature of foreign exchange derivatives, section 3 explains the methodology used where the researcher shall look at the content of the financial statement of selected Banks in The Gambia, section 4 contains the findings, suggestions, and recommendations.

1.1 Limitations of the research

Most banks did not publish their final accounts on their website and this limited my research scope to only the 4 banks that did publish. This was a major limitation as the researcher wanted to include at least half of the 14 banks in The Gambia.

In addition, the limitation of time as any other research played its part in the study. This research was only for a semester seminar course.

2. Literature Review

"A currency derivative is a contract whose price is partially derived from the value of the underlying currency that it represents" (Madura, 2012). Companies and individuals especially those in emerging economies whose currencies are subjected to the risk of depreciation and in extreme cases devaluation are favorite candidates to opt for currency derivative contracts. Currency derivatives as highlighted earlier exist in the form of Forward, Futures, Option, and SWAP contracts.

2.1 Currency Forward Contracts

A forward contract is an agreement by an individual or a corporation and a commercial bank to exchange a specific amount of foreign currency at a specific rate at a future date (Madura, 2012). A key feature of Forward contracts is their none standardization and the freedom on both parties to tailor the amounts to their need. This is a key advantage of using currency forward contracts as corporations and individuals can negotiate with their respective banks the optimum amount of a forward contract that suits their need.

2.2 Currency Future Contracts

Although similar to a currency forward contract in the sense that they are both contract agreements to exchange a specific amount of currency at a specific rate at a future date, a Currency Future contract is a standardized currency contract. Furthermore, future contracts are not negotiated between an individual and his or her bank but they occur in central exchange floors such as the Chicago Mercantile Exchange where participants are connected worldwide via computers and telecommunication networks (Madura, 2012).

2.3 Currency Option Contracts

Also, a standardized currency contract but a currency option gives a buyer the right but not the obligation to execute the contract at the expiration date (agreed date). This is an added advantage of currency option contracts over the above-mentioned derivatives. However, this advantage comes at a cost in the form of a premium paid by the purchaser of such a contract. A currency option contract gives the option to just walk away from the contract if rates move against ones favor bearing fully in mind the fact that the paid commission will be lost (Madura, 2012).

2.4 Currency SWAP Contracts

In a drive to reduce forex risk, companies can engage in a foreign exchange swap when the two parties with an acquired advantage over their local currency are in need of each other's corresponding local currency. Swap contracts can be principles (nominal) amounts as well as both principal and interest rate swaps. Companies that engage in currency swaps are immune from converting currencies from one type to the other as well as higher

interest rates due to being fairly unknown in a new market but can directly enter into a swap contract with a local firm for the interest of both parties.

In a study of 50 UK firms, Nguyen (2012) examined the use of Currency derivatives to hedge forex risk by medium and large scale size firms in the UK. His research showed Currency Forward Contracts to be the most favored derivative followed by SWAPS. Companies, where hedging policies are available, were found to be quite comfortable with derivative use and these were mainly the large size firms with overseas subsidiaries as well as invoices denominated in currencies other than Pound Sterling. In addition, the company`s hedging policy and the size of the firm were the main determinants if hedging was used to minimize both transaction and translation risk.

"The sensitivity of a firm's contractual transactions in foreign currencies to exchange rate movements is referred to as transaction risk or exposure" (Madura, 2012). A depreciation of the local currency when a local firm already has invoices (contractual transaction) in a foreign currency to pay is an example. Likewise, firms involved in international trade are exposed to sensitivities in their cash flows. This is called Economic exposure. Economic exposure which encompasses transaction risk occurs not only because of foreign exchange risk but the risk of losing customers to competitors (competition risk) when a firm's products are less price competitive when exchange rates move against its favor. For example, an appreciation of a local currency might cause customers to switch to a foreign competitor. In this example, the local firm is not exposed to transaction risk but to Economic risk. Furthermore, translation is also known as accounting exposure occurs when the books (financial statement) of a subsidiary in a foreign currency are translated (converted) into the local (parent company's) currency (Borad, 2017). In other instances, translation risks occur in debts denominated in foreign currencies which can increase or decrease in value when converted to a local currency.

A survey of 119 small and medium-sized enterprises (SMEs) conducted in 2012, Kantox Peer FX (2013) provided an interesting figure on their use of financial derivative for the purpose of forex risk hedging. These enterprises selected from 15 different countries had an annual forex transaction just under $40 million. The report concluded a 14 percent none usage of any form of forex risk hedging and forward contracts remains to be the preferred choice (25 percent) among those firms that actually hedge against forex risk. High cost, the complexity of developing hedging strategies and collateral requirements being the deterrent factors against such an important tool for forex risk minimization.

The South African Johannesburg Stock Exchange (JSE): a stock market capitalization to GDP ratio of 280.8, the Egyptian Cairo Alexandre 91.2 and the Nigerian Stock Exchange 35.9 are the biggest in Africa (Andrianaivo and Yartey, 2019). The availability of currency futures between the South African Rand and the Nigerian Naira, Kenyan Shillings, and the Zambian Kwacha in the JSE provide excellent tools for currency risk hedging among these economic powers of Africa. A complement to the already existing forward between the South African Rand and the US Dollar, EUR, Sterling etc.

The prospect of linking the stock exchange of Nigeria, Ghana, Sierra Leon, Cape Verde, and the BRVM[1] will make such an exchange second only to the JSE in Africa with a market capitalization of $76 billion (Bloomberg Professional, 2015). This hopefully shall provide companies in West Africa with the needed liquidity and tool for better forex risk hedging.

3. Methodology

The research is based on the determination of currency derivatives used in The Gambia. The researcher took a sample of four Gambia based Commercial banks and one Islamic Bank (the only Islamic bank in The Gambia). The technique involves a quantitative approach in which the Financial statements of these selected banks for the year ending 2016 was examined. The choice and scope of sample space was limited to five due to the difficulty in accessing the Financial statements of banks in The Gambia.

3.1 Income statement items

An examination of the Income Statements of these banks reveals only one income line that has to do with foreign exchange. The income line named "Net income trading" was descrıbed in the notes to the accounts as the income

[1] The stock exchange of the French speaking West African countries using the CFA currency.

line for reporting incomes or gains arising from the daily sale and purchase of foreign exchange. The table below shows the amounts in thousands of Gambian Dalasis (GMD)

Table 12: Net Trading Income

BANK NAME	AMOUNT D`000
AGIB Bank (Gambia) Limited	8,372
Ecobank (Gambia) Limited	86,586
Guaranty Trust Bank (Gambia) Limited	0
Trust Bank (Gambia) Limited	32,198

Source: Income Statements of the above banks.

Table 13: Significance of forex trading to banks` profitability

BANK NAME	Net Trading Income (A) D`000	Total Comprehensive Income (B) D`000	The ratio of A to B
AGIB Bank (Gambia) Limited	8,372	47,338	0.18
Ecobank (Gambia) Limited	86,586	161,175	0.54
Guaranty Trust Bank (Gambia) Limited	0	0	0
Trust Bank (Gambia) Limited	32,198	107,022	30

Source: Income Statements of the above banks.

A mere look at table 1 might not reveal many details but table 2 provides a measure of the importance of currency trading to the above banks. Contributing as much as 54% of net income for Ecobank is quite a significant figure. These tradings in forex as we can understand occurs over the counter as against a centralized exchanged. This is a feature of a currency forward contract. Customers either retail or corporate make requests on a daily basis to these banks for foreign currencies. However, I would note the fact that banks don't take positions on forex over a long period of time but rather execute their commitments on a day-to-day basis. This is mainly to reduce their exposures to forex risk.

In The Gambia, treasury departments of these banks source forex basically from two sources: settlements in the form of US Dollars or Euros from money transfer services such as Western Union, RIA, Money Gram etc and direct purchase of forex between banks or from other agents in the local market such as private currency traders or local money transfer companies.

3.2 Balance Sheet Items

The treasury bills common known as T-bills and the Islamic version Sukuk Al-Salam is the only item in the balance sheet of these banks that reflects a financial asset or instruments. These instruments issued on tender on a weekly basis by the Central Bank of The Gambia ranges from 3 months, 6 months, to 12 months in maturity. Derivatives such as options, futures, or swaps form no part of the balance sheets of these banks. The magnitude of these money market securities in the balance sheets of these banks is shown below:

BANK NAME	T-bill/Sukuk Al- Salam (A) D`000	Total Assets (B) D`000	The ratio of A to B
AGIB Bank (Gambia) Limited	315,597	1,369,887	0.23
Ecobank (Gambia) Limited	2,463,952	5,057,529	0.49
Guaranty Trust Bank (Gambia) Limited	2,481,367	5,640,572	0.44
Trust Bank (Gambia) Limited	1,872,233	5,208,072	0.36

Source: Balance Sheets of the above banks.

4. Findings and Recommendations

The findings of the research reveal not only the absence of currency derivatives and their use but it will worth mentioning the absence of any form of capital market where such instruments can be traded in The Gambia. Over-the-counter foreign exchange trading tends to be common and spot rates codes used. The Gambian financial system is still in its infant stage. On a primary basis, the government T-bills or Sukuk Al- Salam are the only instruments available for investments for both banks as well as private entities or individuals.

A glance of the nearby capital markets in the West African region; the Ghanaian Stock Exchange and the Nigerian Stock Exchange to be specific reveals the following: Among the companies listed on the Nigerian Stock Exchange, none was Gambian owned or based signifying their none participation in that exchange. The Ghanaian Stock Exchange contains Trust Bank among their listings. In other words, the Ghanaian stock Exchange was discovered to be the only one with a Gambian Bank.

In addition, the two mentioned capital markets` products did not involve any form of derivative. These markets also tend to be mainly active on stock trading and did not provide derivatives for currency hedging.

In order to reduce exposure to currency risks, the writer would recommend companies not to take positions on forex over a long period of time. Banks should work on a real-time basis as there is no instrument available to fix the rates of forex in the future.

For the purpose of promoting the financial sector of The Gambia, the researcher believes the introduction of a capital market shall be beneficial. This shall provide a platform for companies to raise capital as well be an interesting arena for those looking for vehicles to hedge against various types of risks.

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