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Transaction Dollarization in Tanzania

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Abstract

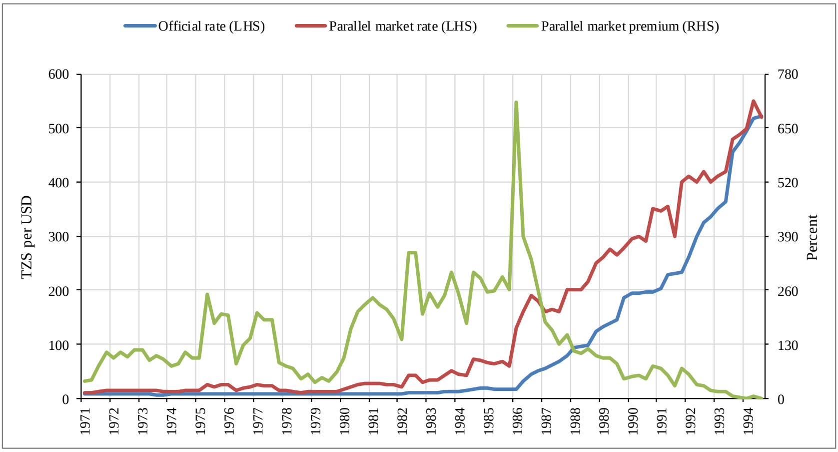
Some observers in Tanzania have suggested that a significant portion of Tanzania's businesses and service providers are using the U.S. dollar for pricing purposes as well as carrying out transactions. However, very little evidence has been put forward to support these claims. This study examines the evidence of dollarization in Tanzania, focusing mainly on the use of U.S. dollar as a medium of exchange and unit of account. The evidence presented in this study suggests that many of the concerns that have been expressed by some observers about significant use of the U.S. dollar as a medium of exchange in Tanzania are not well founded. The findings indicate that about 3.2 percent of the businesses in Mainland Tanzania and 4.5 percent in Zanzibar quote prices in U.S. dollar, but most of these businesses were willing to accept payments in Tanzanian shilling. Only 0.1 percent of the businesses in the Mainland and none in Zanzibar indicated that they would prefer payments exclusively in U.S. dollar. The findings also indicate that quotation of prices in U.S. dollar is limited to specific locations and applies to specific products/services, and in most cases is done for bona fide *reasons. It is important to appreciate the influence of increased trade openness on demand for and attitude towards U.S. dollar, which is the dominant currency of foreign trade. The fact that Tanzanians hold a small portion of their wealth in U.S. dollar and insignificant number of prices are quoted in foreign currency may not be surprising in an economy where foreign goods and services account for a significant portion of what a typical household consumes. This may simply be a natural phenomenon resulting from the fact that Tanzanian economy has become much more open and outward oriented than it was some 20 years ago. In addition, this experience is not unique to Tanzania. Many countries in the region and across the world are experiencing a similar situation. We urge the authorities to avoid the use of direct measures in their quest for limiting dollarization in the economy because international evidence suggests that enforcing de-dollarization can potentially be counter-productive. Instead, we recommend the use of gradual market-oriented measures aimed at enhancing the attractiveness of the domestic currency.*

I. Introduction

Throughout the 1970s and the first half of the 1980s, Tanzania used various foreign exchange controls to support its development priorities. During this period, the exchange rate of the shilling was fixed against the U.S. dollar, but rarely used as a policy tool. Exporters had to obtain a licence for each consignment and were required by law to surrender their foreign exchange earnings to the Central Bank, which retained a virtual monopoly over the holding and allocation of foreign exchange in the country. Similarly, all imports were regulated through administrative allocation of foreign exchange and a very restrictive licensing system.

One of the major outcomes of the fixed exchange rate regime coupled with restrictions in the foreign exchange market was the overvaluation of the official exchange rate and emergence of illegal (black) foreign exchange market in Tanzania. The country also experienced massive capital flight as investors decided to move their capital out to avoid controls (Arne B. et al. (1999)). The premium between the black market and official exchange rates increased from an average of about 100 percent in the 1970s to about 250 percent during 1980 - 85 and by early 1986, the parallel rate exceeded the official rate by more than 700 percent (**Figure 1.1**). The wide gap between the official rate and the black market rate created an incentive for underground economy resulting in substantial declines in the official reserves and severe capacity underutilization in activities that were dependent on imported inputs[1].

Figure 1.1. Tanzania: Official and Parallel Market Exchange Rates, 1971 - 1994



Source: *Bank of Tanzania*

By the mid-1980s, Tanzania's economy was in a deep macroeconomic crisis—manifested by imbalances in the external account, large and unsustainable budget deficits, accelerated rates of inflation, declining growth performance and general deterioration of physical and social infrastructure. In 1986, the Government initiated a comprehensive Economic

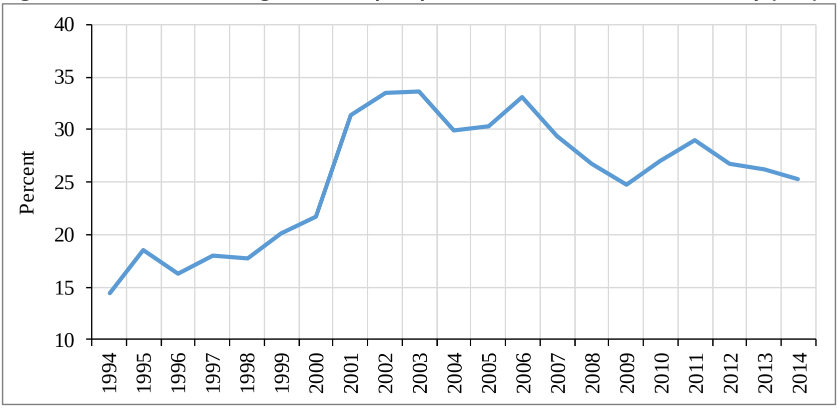
[1] For example, during mid-1980s only about 10 percent of Tanzania's textile firms were operating at more than 40 percent capacity. Explanation for such low capacity utilization was determined to be lack of imported raw materials (Mbelle and Sterner, 1991)

Recovery Program, designed to restore macroeconomic stability and accelerate growth. One of the cornerstones of the policy reforms under this program was the significant adjustments of the exchange rate policy.

Market and policy distortions in the external sector were gradually eliminated by removing import restrictions, adjusting the exchange rate regularly, and removing the foreign exchange surrender requirement. In 1992, the Foreign Exchange Act was passed by the Parliament to replace the Exchange Control Ordinance which was in place before. The Act legalized the opening of foreign exchange bureaus to buy and sell foreign exchange at market determined rates and also allowed Tanzanian citizens to open and maintain foreign currency accounts in domestic banks and draw any amount of foreign currency for the purpose of making payments within or outside Tanzania (Foreign Exchange Regulations, 1998, part II section 3(5)).

Following the removal of foreign exchange controls, the volume of transactions carried out by foreign exchange bureaus quadrupled within a year from about \$100 million in 1992 to about \$400 million in 1993. Similarly, foreign currency deposits which accounted for about 5 percent of broad money in the third quarter of 1992 rose sharply to about 15 percent in 1993 as foreign currency held by residents in offshore banks found its way back—reflecting increased confidence in the financial sector after the removal of restrictions. This ratio remained on an upward trend for ten more years until it reached a peak of 33.6 percent in December 2003. Ever since, the ratio has fluctuated between 25 percent and 33 percent with a general trend that can be described as downward.

Figure 1.2: Ratio of Foreign Currency Deposits to Extended Broad Money (M3)



Source: *Bank of Tanzania*

Table 1.1 below shows different components of foreign currency deposits namely demand deposits, savings deposits and time deposits. One observation that can be made from the table is that demand deposits constitute the bulk of the total dollar deposits in Tanzania. For example, in 2012, about 61 percent of total foreign currency was held in the form of demand deposits, while 25 and 10 percent were held in time and savings deposits, respectively. This apparent preference for more liquid foreign currency deposits suggests that foreign currency deposits in the country are held to facilitate transactions rather than as an investment or store of value instrument. It is pertinent to mention here that Tanzania's trade openness also increased substantially in the past two decades from under 15 percent of GDP in 1992 to 33.5 percent in 2000 and further to 50.8 percent in 2005. This ratio shot up further to an average of 74 percent for the three years ending 2013. Meanwhile, the shilling depreciation against the U.S. dollar, which averaged 8.3 percent from 1998 to 2006, slowed down to an average of 3.5 percent from 2007 to 2013. While the increase in trade openness is consistent with the observation of preference for transferable foreign currency deposits, the slowing depreciation helps to explain the general downward trend in the ratio of foreign currency deposits to M3, particularly after 2006.

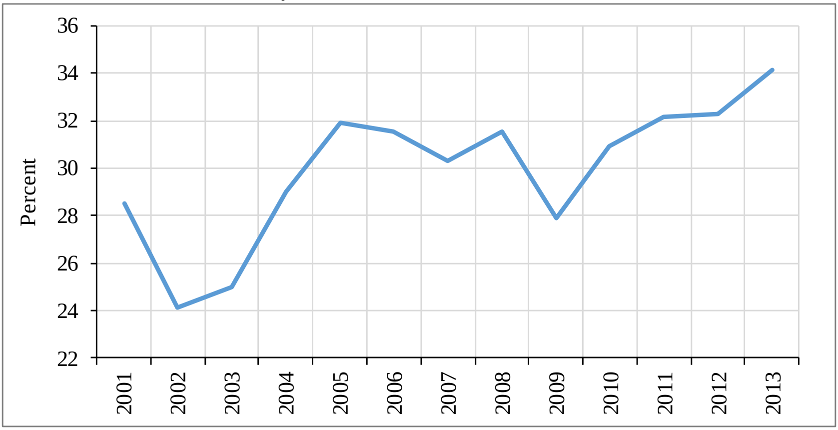
Table 1.1: Components of Foreign Currency Deposits (Percent of Total)

Foreign currency deposits	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Demand	63.6	59.5	63.6	60.0	62.8	58.6	56.7	57.8	59.5	61.1	62.5	61.4	61.3
Time	33.7	37.4	31.4	33.3	30.4	30.9	34.1	32.5	30.5	26.0	24.6	24.3	25.2
Savings	1.0	2.8	4.8	5.8	6.6	7.0	8.0	8.8	8.5	9.8	9.8	9.3	9.8
Government	1.8	0.3	0.2	0.9	0.2	3.5	1.2	0.9	1.6	3.1	3.0	5.1	3.7

Source: *Bank of Tanzania*

The increase in foreign currency deposits have been mirrored by increase in foreign currency denominated loans, albeit not on one to one basis. As **Figure 1.3** shows, the share of foreign currency denominated private sector credit to total credit has ranged between 25 and 35 percent since 2001, indicating that foreign currency deposits have had some impact on the level of domestic financial intermediation.

Figure 1.3: Share of Foreign Currency Credit to the Private Sector (Percent of Total Credit)



Source: *Bank of Tanzania*

Along with these developments in foreign currency deposits and loans, there have been assertions that some businesses in the country quote prices and/or demand payments in U.S. dollar in preference for the Shilling. Some observers have argued that many businesses in Tanzania use the U.S. dollar as their principal medium of exchange and unit of account. This situation—referred to as dollarization—has raised concerns in various circles particularly members of parliament and the general public. Such concerns have also frequently been posted in the front pages of local newspapers, where, in most cases, they have pointed this practice as one of the key factors behind depreciation of the shilling and high inflation, with the Bank of Tanzania being blamed for not having taken appropriate action(s). However, very little evidence has been put forward to support the claims that a significant portion of Tanzania's businesses are using U.S. dollars for pricing purposes as well as carrying out transactions.

In an effort to promote a more informed debate on these and related issues, the Bank of Tanzania in collaboration with the International Growth Center conducted a study to assess the extent and impact of dollarization on the Tanzanian economy. The study, which was conducted in 2010, presented some stylized facts of dollarization in EAC countries and assessed the level and determinants of financial dollarization in Tanzania. The study focused mainly on financial dollarization and very little attention was given to transaction dollarization, although in Tanzania, it is the latter form of dollarization that has been a major cause of concern among policy makers and the public at large.

The current study therefore focuses exclusively on transaction dollarization and uses extensive cross-country survey to shed some light on the extent of transaction dollarization in Tanzania. The study specifically attempts to gauge the extent to which the U.S. dollar is used in quoting prices of goods and services (foreign currency functioning as a unit of account) and carrying out transactions (foreign currency functioning as a medium of exchange) in Tanzania.

This report is organized as follows: section II briefly reviews some key definitions of dollarization, while section III describes the methodology of the study. Section IV presents the findings of the survey and section V presents main messages of the study.

II. Dollarization: Definition and Dynamics

Dollarization is a generic term used to characterize the use of any foreign currency instead of the national currency for domestic transactions or store of wealth. It does not refer to the use of United States dollars only. Meyer (2000) distinguishes three types of dollarization. First is ***official dollarization*** which means a complete replacement of the domestic currency by a foreign currency. In this case the chosen foreign currency becomes a legal tender and plays the three fundamental roles of domestic currency, namely, store of value, means of payment and unit of account. Examples of countries which have abandoned their local currency and adopted another currency include Panama and Ecuador in Latin America and Zimbabwe in Africa. Second is ***official semi-dollarization*** which refers to a situation where both domestic and foreign currencies are freely used in the domestic economy – the foreign currency becomes a legal tender but the country also issues its own currency. This is for instance the case with Lesotho, Namibia and Swaziland, where South African Rand is officially accepted as legal tender alongside with domestic currencies. Most countries that opt for official dollarization or official semi-dollarization are either small countries that rely on large neighbouring economies for much of their income and their imports

(Lesotho, Namibia and Swaziland) or countries that suffer from macroeconomic mismanagement leading to hyperinflation rates (Ecuador, Panama and Zimbabwe). There is a consensus in the literature that both official dollarization and official semi-dollarization can succeed in fighting hyperinflation and bring about economic stabilization. For example, in Ecuador annual inflation rate declined from over 90 percent in 2000 when the country officially replaced its currency with the U.S. dollar, to a single digit in 2002. Similarly, following the adoption of South African Rand and the US dollar as a legal tender in Zimbabwe in January 2009, inflation rate declined from hyperinflation in 2008 to a single digit in 2009. In the case where official dollarization occurs, authorities can no longer finance government deficit through money printing (a major source of inflation), while for semi-official dollarization the ability of the monetary authority to print more money is possible, but highly limited. In this later case, domestic monetary authorities can only increase money supply if they generate more foreign exchange by running a balance of payments surplus. With official dollarization, all seigniorage revenue accrues to the country issuing the currency, while official semi-dollarization arrangement allows monetary authorities to earn some seigniorage in addition to interest income on the foreign currency reserves that back the domestic currency issue.

The third form is ***unofficial dollarization*** which means that foreign currency is used in domestic transactions (as a unit of account, a medium of exchange and as a store of value) but the local currency remains the only legal tender. Many countries, including Tanzania, fall into this category. De Nicolo et al. (2005) defined two broad forms of unofficial dollarization based on the functions of money: *i)* ***financial dollarization*** (also referred to as asset substitution) which consists of residents' holdings of financial assets or liabilities in a foreign currency and *ii)* ***transaction dollarization*** (also known as currency substitution) which is the use of foreign currency for transaction purposes.

Cross-country evidence (as presented by Guillermo A. *et. al*. 1992) suggest that in the absence of restrictions on foreign currency holdings, the process of dollarization usually begins with the foreign currency substituting domestic currency as a store of value (financial dollarization) as residents in high-inflation countries attempt to protect the real value of their wealth. In other words, in a free economy where an agent has a choice of holding assets of any currency, expectations of high inflation or depreciation of the local currency would provide incentives for a rational agent to diversify his portfolio of wealth into foreign currencies, which can provide a higher degree of purchasing power in the future. As domestic inflation rate continues to rise, substitution of foreign currency will then spread to the unit of account function of money, i.e. some prices, especially those of big-ticket items, will be quoted in foreign currency to preserve the real value for money. The process completes itself as transactions begin to be conducted in foreign currencies, (medium of exchange) when inflation rate reaches very high levels (hyper-inflation).

The literature identifies various reasons why policy makers may have cause to worry about the increased dollarization of the economy. First is the stability of the financial sector. If a significant part of the financial system is dollarized, there are two major risks to financial sector stability: liquidity risk and solvency risk. The liquidity risk associated with foreign currency deposits is qualitatively different from that of domestic currency deposits. For domestic currency deposits, the central bank can step in as lender of last resort since it can create an unlimited amount of domestic currency in the case of an emergency. For foreign currency deposits, international reserves are the only buffer that exists to address a liquidity crisis, thus limiting the central bank's scope for taking preventative measures. The other risk that policy makers may be concerned about is the solvency risk arising from potential currency mismatch. In the event of a large depreciation of local currency, dollar debtors whose receipts are in local currency may face difficulties in servicing their bank loans which would potentially lead to a banking crisis.

In addition, dollarization reduces the ability of central banks to raise revenue from money creation. Full dollarization eliminates the possibility of governments to finance fiscal deficit with seigniorage - the revenue associated with the issue of domestic currency. Since the country eliminates its currency and adopts foreign currency as legal tender, the central bank can no longer print units of domestic currency at a minimum cost and use it to finance public spending. Under partial dollarization, Government faces loss of seigniorage but in smaller magnitude than in the case of full dollarization.

Also dollarization can make the conduct of monetary policy more challenging and less effective. The first challenge that policy makers have to resolve relates to the choice of intermediate target of monetary policy, particularly in the case of reserve money targeting framework. The key issue here is whether central banks should choose monetary aggregates that include or exclude foreign currency component. While the literature does not offer a reliable answer to this question, Balino et.al (1999) argue that the suitability of an intermediate target depends on its influence on the final target (price level) which is essentially an empirical matter.

Furthermore, empirical evidence suggests that the exchange rate movements in dollarized economies feed through domestic inflation more rapidly compared to the exchange rate movements in non-dollarized economies. The argument is that exchange rate movements in economies where non-tradable goods and services are priced in foreign currency will be passed to domestic prices through a broader set of goods and services than in a non-dollarized economy where the pass-through is limited to the tradable sector only. This is because the local price of goods and services quoted in foreign currency changes immediately even for a small change in exchange rate. In addition, transaction dollarization creates some inconvenience to residents whose stream of income is in domestic currency, and have to incur *shoe leather* cost of converting their income in to foreign currency before they can use it.

III. Methodology

The Survey

The survey used in this study included a sample of about 3945 respondents from Tanzania mainland and 290 respondents from Zanzibar. In the Mainland the sample was taken from six administrative regions, namely, Dar es Salaam, Arusha, Dodoma, Mbeya, Morogoro and Mwanza, while in Zanzibar the sample was taken from three regions: Mjini Magharibi, Pemba North and Pemba South. These regions were selected to create a fair representative sample of the Tanzanian population and the country's economic activities because contained within these nine regions is about 40 percent of total population, more than 50 percent of retail trade, and about 75 percent of manufacturing establishments. For each of the selected regions, the survey covered major shopping centres and a diverse number of businesses and service providers such as retail shops, super markets, hotels, restaurants, private schools, and real estate agencies. To assess the degree of transaction dollarization in the Tanzanian economy, two questionnaires were administered: The first questionnaire was administered to a total of 2,740 merchants and service providers, and the second questionnaire was administered to a total of 1,495 consumers. In-depth interviews were also conducted to some merchants and service providers of particular interest.

Merchants and Service Providers' Questionnaire

The merchants and service providers' questionnaires were designed to investigate whether or not businesses quote prices or demand payment in foreign or local currency. The questionnaires were administered by *mystery shoppers*[2] or undercover enumerators. To obtain accurate and reliable responses, the mystery shoppers did not directly ask merchants to disclose whether they quote prices or demand payments in foreign currency. Instead, they visited randomly selected businesses posing as potential buyers and for each business they inquired about a specific product or service and in the process, they gained insights on dollarization practices through a range of customer scenarios. Specifically, the mystery shoppers observed the currency in which prices or service fees were quoted. If prices or service fees were quoted in U.S. dollars, the mystery shopper would request to pay in Shillings on the grounds that he/she had no US dollars. If the merchant would accept this request, then it would be recorded as evidence of unit of account dollarization. If the

[2] Mystery shoppers are undercover field researchers who played the role of potential customers and reported their experience regarding dollarization practices

merchant or service provider was not willing to accept payments in Tanzanian Shillings, it would be recorded as evidence of medium of exchange dollarization. If, on the other hand, prices were quoted in Shillings, the conclusion would be that there was no evidence of any forms of dollarization (neither unit of account nor medium of exchange). See **Appendix 1** for full list of questions in the questionnaire.

Consumer Questionnaire

This questionnaire was designed to collect evidence of the extent to which consumers of goods and services in Tanzania encounter cases of being requested or required to pay in foreign currency in their regular purchases. Respondents were randomly selected and face-to-face interviews were conducted by well-trained field researchers. To get adequate number of respondents, some enumerators were positioned at various commercial bank halls to conduct interviews with bank customers while queuing for services. Other enumerators conducted interviews at the Bank of Tanzania Pavilion at "Nane-Nane" exhibition grounds in Dodoma, Arusha and Mbeya regions. Some respondents were also picked-up from randomly selected locations including market places, super markets and streets.

Respondents were asked to indicate whether or not and how often they have been asked by merchants or service providers to make payments in foreign currency. Those respondents, who indicated that they have encountered such a situation at least once, were asked to identify the name or location of the shop or service provider in question. For the respondents who indicated that they have never been asked to make payments in foreign currency, they were asked whether they knew of any business where prices were quoted or transactions were carried out in foreign currency see **Appendix 2** for full list of questions in the consumer questionnaire.

In Depth Interviews

In addition to the survey questionnaires, qualitative research was conducted to provide additional insights to the survey findings. The qualitative component of the study was basically a follow-up on the survey findings of the businesses identified to be quoting prices in foreign currency. These businesses were approached for in-depth interviews to establish factors behind such practices. Information relating to the cost structure, major customers etc. were also collected during the interviews. The in-depth interviews were guided by a semi-structured questionnaire and were conducted by principal investigators.

IV. Discussion of the Survey Findings

For the purpose of clarity, we make a distinction between (i) medium of exchange dollarization, in which foreign currency is used for domestic transactions and (ii) unit of account dollarization, in which domestic prices are quoted in foreign currency. It is important to keep this distinction in mind because the unit of account function of money is probably the one in which domestic currency is more vulnerable i.e. even a modest rate of inflation or exchange rate instability, businesses can easily start quoting prices in foreign currency but stand ready to accept payments in equivalent domestic currency. Medium of exchange is the last stage of dollarization process when businesses completely lose confidence on domestic currency and would not accept it particularly for big-ticket items.

The U.S Dollar as a Unit of Account

To investigate the extent to which businesses and service providers in Tanzania use the U.S. dollar as a unit of account, respondents were asked to indicate the currency for which they quote prices of their products. The results are shown in **Table 1.2.** As can be seen from the Table, only 3.2 percent of respondents in Tanzania Mainland and 4.5 percent in

Zanzibar quoted at least some of their prices in U.S Dollar[3]. Majority of these cases were found in areas mostly visited by foreigners and/or in close proximity of foreign exchange bureaus.

Overwhelming majority of the respondents (96.8 percent and 95.5 percent for the Mainland and Zanzibar respectively) reported that they quote all of their prices exclusively in Tanzanian Shilling. **Table 1.2** also decomposes the percentage of respondents who quoted their prices in U.S Dollar for each of the surveyed regions. Consistent with our expectation, price quotation in U.S Dollars is more pronounced in Dar es Salaam and Arusha in the case of Mainland and Mjini Magharibi for the case of Zanzibar, compared with other regions in the country. This is partly a reflection of the presence of more foreigners in these three regions – either working for international organizations (such as the IMF, the World Bank, UN, and embassies) or visiting as tourists. During the survey, some businesses indicated that they quote prices in both U.S Dollar and Tanzanian Shilling for convenience because a large proportion of their customer base is foreigners. This was particularly the case with office spaces and rental apartments in some prime

[3] Note that this number includes even those businesses which had their prices quoted in both the U.S dollar and the Shilling

areas of urban centers (such as in the city center, Masaki, Mikocheni, Upanga and Mbweni area in Zanzibar) and some souvenir retail shops in Stone Town–Zanzibar and around Kilombero area in Arusha and the road that leads to the major tourist attractions.

Table 1.2: Denomination of Price Quotation

	USD		TZS		
Region	Number of respondents	Percent of total respondents	Number of respondents	Percent of total respondents	Total respondents
Tanzania-Mainland	79	3.2	2,371	96.8	2,450
Dar es salaam	48	4.2	1,008	95.8	1,052
Arusha	19	3.9	465	96.1	484
Mwanza	8	1.8	436	98.2	444
Mbeya	2	1.5	129	98.5	131
Dodoma	0	0.0	228	100.0	228
Morogoro	2	1.9	105	98.1	107
Tanzania-Zanzibar	13	4.5	277	95.5	290
Mjini Magharibi	11	7.6	134	92.4	145
Pemba North	0	0.0	45	100.0	45
Pemba South	2	2.0	98	98.0	100

Source: *Findings from the Survey*

The U.S Dollar as a Medium of Exchange

Probably the most important use of any currency is medium of exchange – i.e. payment for goods and services. Everyday experience in Tanzania would suggest that the use of U.S Dollar (or any other foreign currency) in carrying out domestic transactions is rare. Typically, while shopping for goods and services, Tanzanians do not carry foreign currencies in their wallets to hedge against a situation where they would fail to perform a transaction using the domestic currency. This provides some anecdotal evidence that the degree to which foreign currencies are used as a medium of exchange is not significant. In an effort to provide a reliable evidence on this, the survey sought to identify the currency for which businesses in Tanzania would prefer (or would be willing) to receive as payment for the goods and services they sell. As explained above, this exercise was performed by mystery shoppers. The results indicate that the use of U.S Dollar for purely domestic transactions is not significant. Only 0.1 percent of the respondents in the Mainland preferred payments exclusively in U.S Dollars, while all respondents in Zanzibar were willing to accept payments in Tanzanian Shillings, even if prices were quoted in U.S. dollars (**Table 1.3**). About 3.1 percent of the respondents in the Mainland and 4.5 in Zanzibar were willing to accept payments in both the U.S Dollar and Tanzanian Shillings, while 96.8 percent of respondents (Mainland) and 95.5 percent (Zanzibar) prefer payment exclusively in Tanzanian Shilling. It was surprising that even some businesses, which quoted prices in U.S Dollar were not willing to accept payments in the U.S Dollar. Instead, they would request the buyer to pay in Tanzanian Shillings equivalent using the prevailing exchange rate[4].

Accepting USD was deemed risky by most sellers for a number of reasons. First, the value of TZS against the USD fluctuates up and down meaning that they would need to change the USD to TZS as soon as possible to make sure that their TZS value (as quoted in the price) is preserved. This would require them to be in close proximity of a foreign exchange bureau. In Arusha for instance most of those willing to accept USD were located in the central part of the city where most of the foreign exchange bureaus were located. Second, most sellers consider themselves incompetent in determining the genuineness of dollars because they see and deal in dollars rarely. This risk is accentuated by the fact that the value of USD currency units is much higher than that of TZS units, meaning that failure to detect a fake dollar unit will on average result into a much larger loss than failure to detect a fake shilling unit. For instance, a failure to detect a fake 10 USD bill will cost the seller more than failure to detect a fake 10,000 TZS bill, which makes it riskier for sellers to accept dollars in normal

[4] For example, overload penalties imposed by TANROADS in weighing bridges across the country are quoted in U.S Dollar, but actual payment must be made in Tanzanian Shilling. Also some businesses noted that they do not prefer payments in U.S Dollar for fear of fake Dollars

street business. Foreign Exchange Bureaus on the contrary have currency authentication instruments and more competent staff.

In-depth interview findings suggest that those businesses which quote prices in U.S Dollar do so mainly for two reasons: First, the U.S Dollar is used as a convenient way of expressing the value of goods and services in order to facilitate transactions with foreign clients/customers. This applies especially to those businesses and services for which a large portion of clientele is foreigners, such as tourist hotels, souvenir shops, airlines, international schools, and rental apartments in some parts of urban centers. Due to the dominance of the U.S Dollar in World trade, the Dollar has become widely accepted as an international standard of value. So it makes it easier for Nationals of other countries to put things into perspective when prices are quoted in U.S. dollar. The second factor which explains some businesses' preference to quote prices in the U.S. dollar is to hedge against the depreciation of domestic currency. The U.S. dollar is perceived to be a stable currency, and therefore it makes it easier for businesses to predict their profits with greater degree of certainty.

Table 1.3: Percent of Transactions Carried Out Exclusively in US Dollar

Region	USD only		Both TZS and USD		TZS only	
	Number of respondents	Percent of total respondents	Number of respondents	Percent of total respondents	Number of respondents	Percent of total respondents
Tanzania Mainland	3	0.1	75	3.1	2,372	96.8
Daressalaam	2	0.2	47	4.5	1,007	95.4
Arusha	0	0.0	18	3.7	466	96.3
Mwanza	1	0.2	7	1.6	436	98.2
Mbeya	0	0.0	1	0.8	131	99.2
Dodoma	0	0.0	0	0.0	228	100.0
Morogoro	0	0.0	2	1.9	107	98.1
TanzaniaZanzibar	0	0.0	13	4.5	277	95.5
MjiniMagharibi	0	0.0	11	7.6	134	92.4
PembaNorth	0	0.0	0	0.0	45	100.0
PembaSouth	0	0.0	2	2.0	98	98.0

Source: *Findings from the Survey*

V. Lessons and Policy Options

Evidence presented in this study, suggests that the Tanzanian shilling is used as the principal unit of account and medium of exchange in most of domestic transactions in the country. Most goods and services in the country are priced exclusively in Tanzanian shilling, with a few exceptions in those businesses where a large share of customer base comes from outside the country, such as tourist hotels, souvenirs shops, Airlines, tour operators, rental apartments in some parts of urban centres, international schools etc. In these cases, both Tanzanian shilling and the U.S. dollar are often used. The findings indicate that about 3.2 percent of the businesses in the Mainland Tanzania and 4.5 percent in Zanzibar, quote prices in U.S Dollar, but most of these businesses were willing to accept payments in Tanzanian shilling. Only 0.1 percent of the businesses in the Mainland and none in Zanzibar indicated that they would prefer payments exclusively in the U.S. dollar.

It was also noted that the share of dollar deposits has remained in the range of 25 to 30 percent of broad money during the past 8 years. This ratio is quite moderate by International standards. Many countries in Africa including Zambia, Angola, Liberia and Mozambique have their ratios in excess of 30 percent, a threshold for highly dollarized countries according to Balino, Bennett, and Borensztein (1999).

Our general conclusion is that there is no evidence that Tanzanians have shifted to foreign currencies as a medium of exchange. The scant evidence of the use of U.S. dollar in quoting prices is limited to specific locations and applies to specific products, and in most cases is done for *bona fide* reasons. In addition, this experience is not unique to Tanzania. Many countries in the region and across the world are experiencing a similar situation.

It is important to appreciate the influence of increased trade openness on demand for and attitude towards U.S. dollar, which is the dominant currency of foreign trade. The fact that Tanzanians hold a small portion of their wealth in U.S. dollar and insignificant number of prices are quoted in foreign currencies may not be surprising in an economy where foreign goods and services account for a significant portion of what a typical household consumes. This may simply be a reflection of extensive economic reforms implemented since early 1990s which transformed Tanzania from centrally planned to market oriented economy. In this case, the increase in dollar inflow to the economy may just be a natural phenomenon resulting from the fact that

Tanzanian economy has become much more open and outward oriented than it was some 20 years ago.

In view of these findings it is not advisable to resort to the use of disproportionate measures in the name of addressing dollarization in Tanzania. In particular the use of direct measures would be highly discouraged because international evidence suggests that enforcing de-dollarization can potentially be counter-productive. Galindo and Leiderman (2005) present evidence of unsuccessful forced de-dollarization in some Latin American countries. For example, they show that in 1982 the Bolivian authorities forced all dollar deposits in the banking system to be converted to domestic currency deposits at an exchange rate below the market rate and subsequently prohibited holding of dollar deposits. In response to this (and the high rates of inflation prevailing at the time) off-shore deposits grew significantly and financial intermediation declined sharply. Peru experienced a similar incidence. In 1985 dollar deposits in the banking sector were forcefully converted to domestic currency deposits but two years later the ban on foreign currency holding was lifted, largely due to substantial decline in the domestic financial intermediation and capital flight. Other countries that have gone the route of forced de-dollarization with little success include Pakistan (1998) and

Argentina (2001). The most recent evidence of failed direct de-dollarization measures is that of Zambia. In March 2012, the Zambian Authorities passed a new Law to ban the use of foreign currencies in domestic transactions, with a threat of up to 10 years imprisonment. In particular, the Law prohibited the quoting, paying or demanding to be paid or receiving payments in foreign currency for goods, services or any other domestic transactions. Although the Zambian authorities insisted that this law was passed to heighten the use of domestic currency and support the conduct of monetary policy, the implementation of this law was interpreted by many as re-introduction of exchange controls and apparently created a sense of panic in the financial markets, partly reflected in the rapid depreciation of Kwacha accompanied with uncertainty about future economic policies and direction. In order to salvage public confidence in policy making, the Zambian Government in March 2014 decided to revoke this law, with immediate effect.

As noted above, the extent of transaction dollarization in Tanzania is very small and we believe that there is no urgent need for authorities to directly intervene at this stage. Our opinion is that this small amount of price quotation in foreign currency may be tolerated, particularly because it involves goods and services, which are mostly consumed by foreign citizens. For example, in the hospitality industry, it is a common practice in many countries to quote prices in dollars and even receive payments in dollars as this is the commonly used currency worldwide. The use of common denominator helps foreign clients to compare prices across countries. In conjunction with this line of reasoning, the Government issued a statement in August 2007 directing the business community to quote prices of goods and services in Tanzanian shilling, and where necessary, use both Tanzanian Shilling and the U.S. dollar. Specifically, the Government directed that all commercial transactions in the country should be priced in Tanzanian shilling, but for goods and services whose main consumers are foreigners, prices could be quoted in both local and foreign currencies using the prevailing market exchange rate[5].

To supplement these directives, selective interventions could be applied on a case-by-case basis once established that the use of foreign currency for domestic transaction is not being done for *bona fide* reasons. For example, this kind of targeted intervention was successfully implemented in 2000s to ban the use of foreign currency in pricing mobile phone

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http://parliament.go.tz/bunge/parlanswer.php?pageNumquest=19&totalRowsquest=59&memberid=1343

airtime cards. Also in 2012, the Government intervened to ban the use of foreign currency in quoting school fees by a Dar Es Salaam-based private university after establishing that price quotation in U.S. dollar was not justifiable. In the same spirit, moral suasion could be used to encourage Government Ministries, Department and Agencies (MDAs) to use local currency in quoting prices and making payments to supplies of all goods and services, including consultancy fees sourced from local suppliers[6].

Regarding financial dollarization, the first order policy priority could be directed towards putting in place proper policies necessary to mitigate the potential risks to the financial sector that may be associated with dollarization. For example, it is noted that there is no provisions that deal with possible solvency risks that may emanate from un-hedged foreign exchange borrowers in the non-tradable sector. To deal with this kind of risk, authorities could

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[6] It has been noted that some Government ministries and Agencies quote or accept price quotation in foreign currency for goods and services sourced or supplied to local clients. For example, most consultancy fees are quoted in the U.S Dollar even when dealing with a local consulting firm. Also fees for getting access to the mineral database at the Ministry of Energy and Minerals are quoted in dollar even for residents. Furthermore, overload penalties imposed by TANROADS in weighing bridges are quoted in dollar, although the actual payment has to be made in Shillings.

encourage banks to extend foreign exchange denominated loans mostly to the tradable sector. For the non-tradable sector, banks could be asked to require foreign currency borrowers to actively hedge their loans against exchange rate risk—instance by buying forward. Alternatively, commercial banks could implement a more rigid set of collateral requirement on foreign currency denominated loans to their non-exporting borrowers. The experience of Peru for example, indicates that in order to mitigate risks associated with lending in foreign currency, the authorities have put in place a higher supervision provisions for foreign currency loans relative to domestic loans. For example, banks are required to carry out a routine evaluation of currency mismatch risks or alternatively set up a reserve of between 0.25 to 1 percent of the credit in foreign currency that has not been evaluated (Mercedes, 2010)

It was also noted that liquidity risk emanating from bank runs on foreign currency deposits may potentially result to a financial crisis because monetary authorities may not be able to play their traditional role of lender of last resort. To mitigate this potential risk, the Tanzanian authorities could ensure that commercial banks are keeping adequate levels of foreign currency liquid assets (in cash or reserves) in order to serve as a buffer in the event of a bank run. Policies aimed at mitigating the impact of foreign currency liquidity risks are common in other dollarized countries, and have in most cases taken a form of higher reserve requirement. For example, Galindo and Leiderman (2005) show that in Bolivia, all foreign currency deposits have a 10 percent reserve requirement while fixed-term domestic currency deposits have zero reserve requirement. Also in Peru, differential reserve requirement between foreign and domestic currency deposits have been applied as a policy measure to reduce liquidity risks (for example as of 1998 the domestic currency reserve requirement was 8 percent while that on foreign currency deposits was 20 percent). For similar reasons, Paraguay maintains relatively high levels of reserve requirement on foreign currency deposits. Tanzania maintains same required reserve ratio for both domestic and foreign currency deposits and they are all held in domestic currency.

Finally, the Bank of Tanzania should remain focused on maintaining long-term macroeconomic stability. There is substantial evidence which suggests that dollarization in general is driven by a desire by firms and households to hedge against inflation and exchange rate risks. As such, macroeconomic policies that ensure long periods of low inflation rate and stable exchange rate could go a long way towards reducing demand for foreign currency deposits. Also concerted efforts could be directed towards developing a vibrant financial market with increased range of investment outlets in the form of local currency denominated interest bearing assets. Such a move could provide alternative investment opportunities to foreign currency deposits. Available evidence suggests that dollarization of deposits tend to be higher in countries with limited capital markets and lack of competing investment instruments. Therefore additional financial and banking sector reforms aimed at deepening and broadening the domestic financial markets would be a worthwhile endeavor to pursue.

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Appendix 1: Mystery Shopper's Guidelines

Please approach the vendor/service provider posing as a potential customer and assess dollarization practices in line with the questions below. Record your observations in this questionnaire immediately after you leave the vendor/service provider. ***You should have an exit strategy.***

Name of the Enumerator…………………………………………………………

Date of Interview……………………………………………………

1. Region
   (a) Dar es Salaam
   (b) Arusha
   (c) Mwanza
   (d) Dodoma
   (e) Mbeya

2. District……………………………………………………….

3. Location ………………………………………………………

4. Product/service category
   (a) Retail shop
   (b) Supermarket
   (c) School
   (d) Restaurant and bar
   (e) Housing (including apartment, plots)
   (f) Other (Specify)……………………………………………………..

5. Type of product/service
    (a) Education:
        (i) Nursery school
        (ii) Secondary school
        (iii) Training institute/college
        (iv) University
    (b) Housing
    (c) Hospital/health center/dispensary
    (d) TV services
    (e) Clothing and footwear
    (f) Electronics including computers and musical instruments
    (g) Building material
    (h) Vehicles
    (i) Restaurant
    (j) Bar
    (k) Plots
    (l) Cosmetics
    (m) Transportation
    (n) Food and drinks
    (o) Others
        (Specify)………………………………………………………….

6. Were all or some of the products quoted in USD?
    (a) Yes
    (b) No

IF YES TO QN 6, GO TO QUESTION NO. 12

7. Was the vendor/service provider willing to accept USD in case the customer has no TZS and is willing to pay in USD?
    (a) Yes
    (b) No

8. If YES, to (7), was the quoted exchange rate:
   (a) Equal to market rate
   (b) Below market rate
   (c) Above market rate

   If known, mention the exchange rate used……………………………………

9. Would the vendor return a change in USD?
   (a) Yes
   (b) No

10. If NO to (7), give reasons
    ……………………………………………………………………………………
    ……………………………………………………………………………………
    ……………………………………………………………………………………..

11. Is the vendor aware of any shop nearby selling the same product, but quoting in dollars?
    (a) Yes
    (b) No

12. For the items quoted in USD, would the vendor be willing to accept TZS if the customer has no USD and requests to pay in TZS?
    (a) Yes
    (b) No

13. If NO to (12), give reasons
    ……………………………………………………………………………………
    ……………………………………………………………………………………
    ……………………………………………………………………………………

14. If YES, to (12), was the quoted exchange rate above/below the market rate?

    (a) Equal to the market rate
    (b) Below market rate
    (c) Above market rate

    If known, mention the exchange rate used……………………………………………

15. Would the vendor return any change in USD?
    (a) Yes
    (b) No

Appendix 2: Customer's Questionnaire

Introduction

The Bank of Tanzania is conducting a study to measure the degree of dollarization in the country and its implications to the Tanzanian economy. In order to facilitate this study, we kindly request you to complete this questionnaire as objectively as possible. Any information provided will be treated confidentially and will not be shared with any third part without your written consent.

Thank you in advance for your cooperation

Name of Enumerator…………………………………….
Date of interview………………………………………….

1. Location
   a. Region ……………………………………
   b. District ....
   c. Town/City ....
2. Gender
   (a) Male
   (b) Female

3. Occupation of the respondent……………………….

4. Residence
   (a) Tanzanian
   (b) Foreigner - easily identifiable e.g. by colour, language or accent

(c) Foreigner – not easily identifiable e.g. by colour, language or accent

5. Where do you mostly do your shopping?
   (a) Super markets
   (b) Retail stores
   (c) Street vendors
   (d) All the above
   (e) Others (please specify)...................................

6. While purchasing goods and services, has any vendor/service provider demanded payments or quoted prices/fees in USD?
   (a) Yes
   (b) No

IF NO PLEASE GO TO QUESTION 19

7. If YES, how often did this happen in the last 12 months?
   (a) Very Frequently
   (b) Frequently
   (c) Sometimes
   (d) A Few Times
   (e) Rarely

8. Please identify name of the shop/service provider and the location where this happened
   (a) Name of the shop--------------------------------------
   (b) Location---

9. What were the goods/services involved?
   (a) Food and drinks

(b) clothing
(c) school fees
(d) house rent
(e) Utilities
(f) Pay TV services
(g) Vehicle(s)
(h) Computer and accessories
(i) Transportation
(j) Plots
(k) Medical fees
(l) Government taxes
(m) Other specify ....

10. Were the goods locally produced or imported?
    (a) Imported
    (b) Locally produced
    (c) Both

11. In any of these cases, did you request to make payments in Tanzania Shillings instead of US Dollar?
    (a) Yes
    (b) No

IF NO GO TO QUESTION 14

12. If YES, did the vendor/service provider accept payments in Tanzanian Shillings?
    (a) Yes
    (b) No

IF NO GO TO QUESTION 14

13. If YES, what exchange rate was used?
    a. Market rate
    b. Above market rate
    c. Below market rate
    d. Don't Know
14. If paid in USD, where did you obtain the dollars from?

    a. Purchased from a foreign exchange bureau
    b. Drew from foreign currency account
    c. Own foreign cash holding
    d. Other, specify ....

15. How long did it take you to obtain the Dollars?
    (a) Within an hour
    (b) More than an hour but within one day
    (c) More than a day,
    specify...

16. Was the vendor/service provider a sole supplier

    (a) Yes
    (b) No

IF YES, GO TO QUESTION 23

17. If NO, do all the suppliers of similar products/services quote prices in US Dollar?

(a) Yes
(b) No

18. Why do you prefer this supplier over others?

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19. Do you know any service provider (or a shop/store) who (or where) prices or fees are quoted in US Dollars (or any other foreign currency)
    (a) Yes
    (b) No

IF NO, GO TO QUESTION 23

20. If YES, please specify the currency used………...........................

21. Please specify name and the location

(a) Name of the shop---
(b) Location --

22. What kind of products (or services) are involved?
(c) Educational
(d) Medical
(e) Electronic products (please specify) ....
(f) Normal merchandise
(g) Apartments
(h) Plots
(i) Other (specify) ....

23. Please give your opinion regarding dollarization practices in Tanzania

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