

RE-DENOMINATION OF THE CEDI: ESSENTIAL ISSUES AND CHALLENGES

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Abstract

In the last quarter of 2006, Ghana decided to re-denominate its currency, the cedi, in July 2007. This generated a lot of arguments and debates in the country. The exercise was seen as waste of scarce resources.

Many people did not even understand the term. It is therefore important to attempt a write up that perhaps will try to answer some of the questions on the re-denomination of the cedi.

The study takes a look at what re-denomination is all about and the extent to which some countries had redenominated their currency over the years. A review was made of similar exercises in Zimbabwe, Turkey and Romania in recent times. The conditions needed for a smooth re-denomination and the prevailing economic conditions in Ghana are analyzed here. The paper also looks at the history of re-denomination in Ghana and the way forward for a smooth exercise.

Introduction

The announcement by the Governor of the Bank of Ghana about the re-denomination of the cedi added another term "re-denomination" to the monetary, business and public domain in the country. Before that announcement, the term was somehow alien to most people in the country. The narrowest definition of re-denomination is, a simple conversion of a value expressed in one currency unit to another using a conversion factor."

In a broader sense, re-denomination is the process whereby a country's currency is recalibrated due to the effects of significant inflation and continued currency devaluation. As prices rise steadily over a long period of time, economic values are expressed in larger figures which move into millions, billions, trillions, quadrillions and so on.

It is therefore evident that, re-denomination is undertaken to address certain economic problems that a country has encountered or encountering.

In the case of Ghana, the **cedi** (currency in circulation prior to July 2007) is the currency unit which will be recalibrated to be equivalent to the **Ghana Cedi** (currency in circulation from July 2007) which will be circulated. Nevertheless, re-denomination exercises go beyond that.

Statement of the Problem

Money, according to Colander (2004), is a highly liquid financial asset that is generally accepted in exchange for other goods, is used as a reference in valuing other goods, and can be stored as wealth. Money makes trade possibly easier and faster. However, in Ghana, the old current notes in circulation place a heavy deadweight burden on the economy in a lot of ways. The associated problems include high transaction costs at all places; general inconvenience; high risks involved in carrying loads of currency for transaction purposes; increased difficulties in maintaining accounts, and statistical records and ensuring compatibility with data processing software; and the strain on the payment system with special reference to ATMs.

There are alternative measures of money which include M_1 , (currency in the hands of the public, checking account balances and traveler's checks), M_2 (M_1 plus savings deposits, small-denomination time deposits, and money market mutual fund shares), and L (beyond M_2), Colander (2004). These definitions of money do not include credit cards because as he puts it, they are essentially pre-arranged loans, but they include financial assets which are also affected by re-denomination in terms of value.

It has been argued by McConnell and Brue (1996) that money, which they called currency and checkable (chequeable) deposits, should have intrinsic characteristics which will give them value if they are not backed by gold or other precious metals. It is these characteristics that make money to function effectively in an economy. It should have some attributes which will enable it to function well so as to avoid the deadweight burden. Some of these characteristics are: money

should be acceptable and durable to reduce printing cost. Apart from these, money should be homogeneous in that the various denominations should only differ with the serial numbering.

Other attributes of money are that it should be highly divisible and portable. Considering its divisibility, while the (old) cedi was divided into various units, the question we should ask ourselves is, are all the units being used? When was the last time anyone used coins such as the 5 cedis, 10 cedis or 50 pesewas? Your guess is as good as mine. On the portability of the cedi, nobody can argue that the cedi is not portable.

McConnel and Brue argued that the value of money, like the economic value of anything else, is a supply and demand phenomenon. They argued that money derives its value from its scarcity relative to its utility. This means that for money to function effectively in an economy, it should be scarce.

There appears to be a problem with scarcity of money. When you cash € 30 million from a bank, is it portable? Can you conveniently check the money at the counter? If all the €30 million is in two thousand cedis denomination, what will be your reaction? What if it is in one thousand cedis denomination? It will be extremely large and the deadweight burden will become so high that it will erode the attributes of money. On the accounting system how can you deal with the following?

- 1,000, 000, 000 - one billion (9 zeros)
- 1,000, 000, 000, 000 - one trillion (12 zeros)
- 1,000, 000, 000, 000, 000 - one quadrillion (15 zeros)
- 1,000, 000, 000, 000, 000, 000 - one quintillion (18 zeros)

The concluding remark here is that, notwithstanding the role that money plays in an economy, people may lose trust in the use of money with time as shown above. In such a situation, re-denomination when undertaken in a timely manner will solve this problem so that people will not lose the trust they have in the currency. These are some of the issues that should be considered before re-denomination is

undertaken and which will be discussed in this write-up.

Style of Presentation

After the introduction in **Section One** and statement of the problem, we will take a look at re-denomination at the international level through the experiences of some countries. **Section Two** takes a critical look at three countries that have redenominated their currency in recent years. The countries are Zimbabwe, Turkey and Romania.

Section 3.0 looks at a brief history of re-denomination in Ghana and attempts to survey the state of the economy by looking at some selected macroeconomic variables which are required to be considered for effective re-denomination. The expected problems and benefits outlined in the conclusion in Section Three. The last section, section four, will look at the way forward for a smooth implementation of the exercise based upon which we will advocate strategies for enabling the success of the exercise.

International Experiences of Re-Denomination

In this section, we look at the re-denomination experiences of some countries around the world. History has shown that world-wide, about 70 operations of re-denomination have been undertaken by other countries since 1960. These operations varied from removing one zero (14 instances) to removing six zeros (9 instances). Nineteen countries have redenominated on one occasion, while ten have redenominated twice. Bolivia, for instance has redenominated twice in 1963 and 1987. In other cases, re-denomination operations followed each other rather quickly, as in the case of Peru in 1985 and 1991 and Brazil in 1993 and 1994, Table 1 shows the countries that have redenominated and the year re-denomination took place as well as the number of zeros that were dropped.

**"There Is No Change In Value
...The Value Is The Same!"**

Table 1: History of Re-denomination

Country	No. of Operations	Years of Operations	No. of Zeros dropped
Brazil	6	1967, 1970, 1986, 1989, 1993, 1994	18
Argentina	4	1970, 1983, 1985, 1992	13
Israel	2	1980, 1985,	9
Bolivia	2	1963, 1987,	9
Peru	2	1985, 1991,	6
Turkey	1	2005	6
Azerbaijan	2	1992, 2006	6
Ukraine	1	1996	5
Poland	1	1995	4
Romania	1	2005	4
Mexico	1	1993	3
Iceland	1	1981	3
Zimbabwe	1	2006	3

Source: Business and Financial Times; Feb. 26, 2007 and Zim Observer, 2nd Aug 2006.

From Table 1, Argentina, for instance, has redenominated four times in 1970, 1983, 1985 and 1992. Perhaps, Brazil has a remarkable experience with re-denomination having redenominated six times in 1967, 1970, 1986, 1989, 1993 and 1994. It will be observed that Brazil undertook a series of re-denominations of her currency within a year; this may be because the problems that were to be solved by the earlier exercise could not be solved. This means that, before the exercise is carried out, some conditions will have to be critically analyzed and met.

Branson (1989) stated that the rate of growth of potential output is related to the rates of growth of labour and of productivity. These growth rates can only be achieved if there is macroeconomic stability in the country. Unstable macroeconomic variables are the result of an unstable economy. Hence, it is the prevalence of such unstable conditions that call for repeated re-denomination, as indicated in the table. It is clear from the above that, in some cases, re-denomination can backfire.

It is at this point that we need to ask ourselves what these unstable factors are, in order to be sure that we will not be involved in repeated re-denomination.

In most cases, the frequent operations of re-denomination exercises mean that there exists high inflation and associated factors such as a high exchange rate regime and a high interest rate that led to an unstable macroeconomic environment. In such cases, the zeros rebuild quickly. In the case of Zimbabwe, the exchange rate for the British pound sterling was Z\$ 105,000,000 to £1 and after the exercise it was reduced to Z\$ 10,000 to £1 while inflation was over 1000%. Romania also redenominated to necessitate a transition phase in preparation for its integration into the European Union. The country eventually adopted the Euro as its domestic currency.

The Zimbabwean Experience

In August 2006, Zimbabwe re-denominated her currency following the Reserve Bank of Zimbabwe's (RBZ) announcement on 26th July 2006 that the country was going to re-denominate her currency.

The announcement continued that the Reserve Bank of Zimbabwe (RBZ) was considering dropping three zeros from the nominal value of the Zimbabwean dollar and would eventually issue a new currency to ease some of the calculation and accounting problems created by hyperinflation. The inflation rate in the country as at July 2006 was about 1,200%.

Some of the problems Zimbabweans were facing at the time included lengthy strings of zeros that clogged software, hand-held calculators, cash registers, and gas pump meters as Zimbabwe's annual inflation rate neared 1,200%. Businesses had to routinely deal with sums in hundreds of millions or billions, while corporate investments and national budgetary accounts were measured in the trillions. Taking a cue from similar operations carried out in recent years in Argentina and Brazil in their successful battles against inflation, Zimbabwe thought they could also be successful.

After the announcement, Harare Economist James Iwona warned that eliminating zeros would not eliminate underlying macro-economic problems or issues, such as massive budget overruns, that drove Zimbabwe's high inflation. James Iwona studied the requirement of the stability of macro-economic variables such as inflation that is a necessary condition for an effective re-denomination. Rapid inflation is the result of money growth. This had been the view of Dhliwayo (1996) when he said that, in terms of monetary developments, Zimbabwe, over the years 1980-1991 (over a decade after independence), adopted a cautious monetary policy which was a contributing factor to keep the economy fairly stable and keeping inflation low (Jebuni et al. (1991) and Sowa and Kwakye (1993). Dhliwayo's view had been confirmed by Dornbusch et al (2001) who argued that inflation is a monetary phenomenon in the long run. They cautioned that no major inflation can take place without rapid money growth but rapid money growth will cause rapid inflation.

Despite the short notice given, the policy was carried out as scheduled on the 1st day of August 2006. The following is an extract from the *Zim Observer* on Wednesday, 2nd August 2006, a day after the re-denomination started:

"Zimbabwe was plunged into complete pandemonium on Tuesday, (1/8/06) a day after the Zimbabwean Reserve Bank Governor, Gideon Gono, rolled out new financial measures in response to the country's record inflation. Gono devalued Zimbabwe's currency by 60 percent and rolled out an ambitious plan to slash three zeros from the currency. New bank notes were released which traded for the next three weeks alongside the existing bearer cheques which were being phased out by August 21. The re-denomination of old notes, carried out more simultaneously with the introduction of a new array of 13 bank notes ranging from one cent to Z\$100,000, closely following a major devaluation, left consumers, businesses, and bankers alike in confusion."

It is worth noting that, in the Zimbabwean case, Economists downplayed the benefit of the currency

re-denomination, saying it would merely make life a bit easier for consumers over-burdened with banknotes. There was widespread criticism of the RBZ for failing to plan and consult widely on the new measures. Some banks closed down as Zimbabweans hurried to trade the old currency.

There were several reports of scenes of "complete pandemonium" across the country. Politicians and businessmen alike said that, these scenes were a clear indication that there was very little consultation and planning for this huge exercise. Major firms closed for the day to sort themselves out before reopening. Others refused to accept cheques and the "old currency" which technically then became illegal tender. Others simply continued trading as if nothing had happened.

Everywhere, the business community was trying to sort out what to do - close their accounts, take stock, get balances from the bank and then reopen with a new set of accounts and data on their computers. It must be noted that it took only three weeks (1st to 21st August) for the exercise to be carried out.

From the above, it was expected that, the exercise was going to make it easier for the prevailing problems to be managed. However, with unstable macroeconomic conditions, it was very difficult to carry out the re-denomination exercise. The reason was that, it would take a short time for the economy to slip back to the old problem since the previous conditions persisted. In the case of Zimbabwe, we could conclude that there was little or no consultation and education on the exercise. As such, when it was going on, people did not know what to do and there was widespread confusion. In May 2007, inflation in Zimbabwe was between around 2000%. However, by July 2007, the inflation in Zimbabwe had reportedly shot to around 7,700 percent. Another re-denomination of the Zim dollar may be required; however it will not yield conclusive results unless the underlying macroeconomic conditions are stable.

The Turkish Experience

In the case of Turkey, as at December 2004, it was expected that effective 1 January 2005, the Republic of Turkey would re-denominate its currency by dropping six zeros. Turkey's currency was to be renamed the "New Turkish Lira" and "New Kuruş", with one hundred New Kuruş equal to one New Lira. The intention of the authorities was that the term "New" would eventually be dropped. Turkey also made announcements concerning rounding, references to old lira in legal documents, and Turkish tax. Information about the re-denomination was published by the Central Bank of the Republic of Turkey and was made available in English ahead of time.

According to the Economist (26 August 2004), Turkey was the 50th country to pursue re-denomination in recent years. It was argued that the move would make accounting or financial calculations easier. The reason for the exercise included the country's ability to lower inflation to 11% in 2004, from 53% in 2001.

Following consultations with the Turkish counsel, Ahmed Pekin of Pekin & Pekin, and their New York and English counsel at Allen & Overy LLP, the International Swaps Derivatives Association (ISDA) understood the following:

- No plans existed to eliminate any Turkish lira rates or rate panels.
- No changes were to be made to the days on which Turkish banks and settlement systems were scheduled to be open.
- No plans existed to re-denominate any outstanding Turkish bonds.

At the time, it was clear that many ISDA members had already begun taking steps to prepare their systems to receive New Turkish Lira, and, in the case of outstanding trades, to adjust for the re-denomination. Other members could take similar steps in this regard and notify their counterparts to inform them of the re-denomination, if they had not already done so.

It is seen here that Turkey planned long ahead of time; as such there were no scenes of pandemonium as was in the Zimbabwean case. There was sufficient planning period for all stakeholders to make inputs into the policy.

The Romanian Experience

It was announced ahead of time that starting 1 July 2005, Romania would "revalue" its legal tender, the *leu* (plural "*lei*"). The fixed conversion rate between the old *leu* (ISO code ROL) and the new *leu* (ISO code RON) was 10,000 ROL to 1 RON, rounding up or down to the nearest hundred ROL (RON second decimal). This shows that long term preparations were made to give a smooth transition to the re-denomination exercise.

In the Romanian example, the term "revalue" of the *leu* was used interchangeably with re-denomination. Nonetheless, a careful study of the exercise shows that it was a re-denomination, for the RON 1 (new currency) = ROL 10,000 (old currency).

One new *leu* was divided into 100 subunits named *bani*. The re-denomination laws were made available in English on the official website of the National Bank of Romania.

Implementation of the new currency was done according to the following schedule:

- July 1, 2005: on introduction of the new *leu* (RON), all account balances, credit and debit, were converted to RON and all banking transfers, accounting documents and supporting payment instruments, starting on this date, were performed and drawn up only in RON;
- July 1, 2005 – June 30, 2006: Double posting of prices, both in old and new *leu*, including forex exchange rates were allowed. The exchange rates were expressed with four decimals, without any rounding;
- December 31, 2006: Until that date both the

old and new *leu* were accepted for cash payments. There was no time limit for exchanging ROL notes and coins for RON notes and coins at the National Bank of Romania branches performing cash operations and at the credit institutions authorized to perform such operations by order of the National Bank of Romania Governor (par. 4, article 2 of Law no. 348/2004 as amended).

The re-denomination was not to eliminate current Romanian legal tender but was instead designed to simplify domestic monetary transfers and calculations. Furthermore, the re-denomination was seen to be a necessary transition phase in preparation for Romania's integration into the European Union and the country's eventual adoption of the Euro as its domestic currency.

The re-denomination was not to affect outstanding money market transactions involving the old ROL. In order to ensure legal certainty and continuity of outstanding contracts, the re-denomination laws provided that the conversion should take place automatically by virtue of law, *i.e.* without the need for agreements or contractual amendments to existing documentation. As regards payment instruments and trade bills issued before July 1, 2005 in old currency and payable after this date, the conversion was made on the settlement date, at the same fixed conversion rate. The principle, as stipulated in the re-denomination laws, may be applied by counterparts to any other outstanding transactions.

It should be noted that on June 30, and July 1, 2005 banks, credit institutions and State treasury units were closed for business in Romania in order to permit them to reconfigure their systems for the re-denomination. In accordance with the law, re-denomination had to conform to the laws of the land. Hence, there was a change of Section 4.3. of Annex A to the 1998 FX and Currency Options Definitions (September 25, 2000 version) stating the national currency of Romania which was to be changed to RON effective July 1, 2005.

History of Re-Denomination in Ghana

One question we need to ask ourselves is whether or not Ghana has ever re-denominated her currency? The answer is yes. We may say the currency was redenominated in some time past. Briefly, it can be stated that there have been previous re-denomination exercises. We should also be clear in our minds that, as the Governor of the Bank of Ghana (BoG) said, this new policy is neither a "revaluation" nor a "devaluation", but people may decide to subjectively label it. However, re-denominations the world over have been branded as just technical, since it is just the issuance of new currency in the form of decimalization as it occurred in Ghana in 1965. This was the change of currency from the pound, shilling, and pence (penny) to the cedi and pesewa.

There was a second "change of money" after the change from pounds to cedis after two years. The only reason for the second money change was just to remove Dr Kwame Nkrumah's portrait from the Ghana currency in 1967. After this, the Bank of Ghana also issued additions to the old currency in 1972 and 1973. There was issuance of new currency notes in 1978 (100 cedis was exchanged for 70 cedis) up to 50 cedis. Between 1983 and 1991 the highest currency note had reached 5,000 cedis under the PNDC and later the NDC regimes. Significantly it was in 2002, when the ruling NPP government introduced the 10,000 cedi note with portraits of the "Big Six", while the 20,000 cedi note bore the portrait of Dr. Ephraim Amo a respected musicologist.

State of the Economy and Conditions for Successful Re-Denomination

There are a lot of gains that accrue to a country which undertakes a re-denomination of its currency in the context of strong economic foundations of stable macroeconomic variables. Contrary to this, the result is failure when it is implemented under a high inflation regime and unstable macroeconomic variables. In such situations the zeros will rebuild very fast and it will require another re-denomination exercise which will be another cost to the nation.

The 2002 edition of "The State of the Ghanaian Economy", the University of Ghana's Institute of Statistical and Social Research's (ISSER) annual publication stated among others that:

"The year 2002 saw a mixed performance from the economy of Ghana. Indeed, a number of macroeconomic targets-set at lower levels than in previous years - were attained. Thus, while overall growth was as programmed and sectoral growth targets were nearly all on target, a number of unstable underlying conditions were also observed. The most disturbing was the slippage in the fiscal sector, leading to significant increases in domestic borrowing. Furthermore, while inflation was lower than what the economy was used to, it went above the target rate, largely in the last quarter of the year. The most important achievements in the management of the economy came in the area of tax administration".

This gives ample indication of the state in which the economy was. After that year, there was an improvement in the economy so far as the macroeconomic indicators were concerned. For instance, inflation was about 10.5% by December 2006 from 40.5% at the end of 2002. It would not be wrong to conclude that a solid foundation had been laid for further improvements. The Table 2 below depicts selected macroeconomic variables of Ghana from 2000 to 2006.

Table 2: Selected Macroeconomic Indicators of Ghana from 2000 to 2006

	2000	2001	2002	2003	2004	2005	2006
Inflation	40.5	21.3	15.2	23.6	11.8	14.9	10.5
Exchange rate charges*	49.2	5.4	13.9	5.2	2.2	2	3.7
Interest rate	38.8	27.0	24.8	18.1	16.4	-	-
GDP Growth	3.7	4.2	4.5	5.2	5.8	5.8	6.0
Minimum Wage**	4.2	5.5	7.15	9.2	11.2	13.4	16.0

Source: Budget Statements of 2006 and 2007

* % appreciation against the US dollar
(The cedi was devalued against the US\$)

**the minimum wage is in '000 cedis per day. It is now 19,000 cedis per day.

All other figures are in percentages.

It could be seen that in 2000, all the selected indicators were not development friendly. Inflation was at 40.5% which made planning a problem. There had been a rise and fall in the rate of inflation every other year. Generally, the rate of inflation has fallen over the 2000-2006 period. The lowest rate experienced was 10.5 percent 2006 in December. The declining rate of inflation is also confirmed by Jackson and Amuzu (2005). Perhaps we need to control inflation as was the case before 1964 as reported by Jebuni et al (1994).

A critical analysis of the above variables shows that, there is currently a relatively stable macroeconomic environment and this suggests that the re-denomination of the cedi within this environment will have a lot of benefits to the economy as a whole. The following are the perceived benefits for the Ghanaian economy:

- Simplification of financial transactions and arithmetic calculations
- Making efficient use of computer and accounting systems and software
- Reduction of the costs and overall risks of carrying large volumes of notes
- Re-introduction of the culture of using coins in Ghana
- Preparation of Ghana to join the West Africa Monetary Union as in the Romanian example
- Reduction of money (supply) circulating outside the banking system
- New business developments, e.g. vendor machines, unmanned automatic toll gates, etc.

These directly and indirectly are in line with the examples we discussed above.

Arguments against Re-Denomination

Ever since the announcement to re-denominate the cedi came, people have raised a lot of arguments against the policy. Some of these arguments are that it is a waste of resources and time; that is, why waste a lot of money on a process that could alternatively be used for other development projects. What even gave such argument-credence was the inability of the Governor of the Central Bank to immediately articulate the cost of the exercise when he was being questioned in Parliament. It was assumed that the re-denomination would cost the country huge sums of money and so people were of the view that the money could be used for something else. However, it must be noted that, there is a cost involved in doing anything under the sun. Later, the Governor informed the nation that the exercise will not cost beyond the past routine replacement costs of damaged old cedis.

The country will be joining the West Africa Monetary Zone (WAMZ) and will be using the ECO soon, this may cost us. So, in this case, why do we spend money on re-denomination for us to join the WAMZ a short time later? On this argument, the experience of Romania shows that it will be better for the currency to be redenominated to become stronger and stable among our partners.

Another argument is that the economy is stable and the re-denomination exercise need not be undertaken. The stable economy in the view of such people does not require the re-denomination of the currency. What they have forgotten is that, there is a huge transaction cost involved in doing business with the banks at the counter.

There is also the conversion problem argument. Here the argument is that how are we going to take care of debts, dues, donations, utility bills (already most people do not understand how they are billed- with a lot of inconsistencies), agreed prices and others. This is an argument that all and sundry need to take a second look at especially where there may be rounding off of decimals. We will present re-denomination of bonds later and this should address these fears.

Arguments for Re-Denomination

Despite the above criticisms, others think that the re-denomination is a good decision since the time spent at the bank when withdrawing or depositing huge sums of money will reduce nationwide. This will go a long way to reduce transaction costs at the banks.

There is also the case where large sums of money are needed to buy a little thing; this is going to be a thing of the past. The exercise is also going to ease all calculation problems of financial figures and the use of ATM cards will be enhanced. The "pulling of notes by cheats" when dealing with large sums of money will be reduced. Previously, it was difficult to accurately check such huge sums. We will all agree that it will be easier and more convenient to use the new currency; this is fairly obvious.

The argument that quoting prices in foreign currencies will cease to continue is a laudable one. We are all witnesses to instances where prices of items in the country are quoted in US dollars. Even house rents are quoted in dollars depending upon where the house is located in the city. The reason given is that the cedi continues to devalue day in day out. If the economy is now stable and for that matter the cedi is stable, then there will be no need to quote local prices in dollars. This however may not be attributable to re-denomination, but rather to sustainable sound macro-economic policies.

The Way Forward

We will now attempt to discuss the steps to be taken for a smooth re-denomination. The following will be discussed: the re-denomination Act and how to treat bonds and debts. The issue of public education on the re-denomination exercise will also be considered.

Re-Denomination Law (Act)

The first thing we needed to do is to pass a bill into law in Parliament so that the re-denomination exercise will have a legal backing. This was work required of the legislature. Parliament has the appropriate competence and handled the process very well.

Bonds and Debts

The narrowest definition of re-denomination is a simple conversion of a value expressed in one currency unit to another, using a conversion factor. For example, a bond with a national currency (cedi) unit value of 29,890 could be re-denominated as a bond with a Ghana cedi (GH ¢) value of GH¢ 2.98 (i.e. 29,890/10,000) where the conversion factor = 10,000. Holding values of too many decimals might prove technically difficult. It is, therefore proposed that the re-denominated amount be rounded to the nearest two decimal places, thus the original 29,890 would become GH¢ 2.98. This kind of re-denomination will be made possible by the regulation enacted.

One likely consequence of re-denominating debt is that the amount of outstanding debt in the new GH cedi will not be a whole number. Whilst redenominated debt should be fungible with new GH cedi issues, its non-round form could present difficulties for trading and settlement. Clearly there will be costs for traders and settlement providers; however, the international and national clearing systems should be prepared to meet the requirements of any re-denomination process selected by the government, and the markets are more than capable of rising to the challenge of trading in non-round lots.

In addition to re-denomination, it is open to issuers to consider re-nominalisation mechanisms to change the nominal value of their bonds to round GH cedi values. The advantage would be a homogeneous pool of GH cedi securities delivering enhanced liquidity. Moreover, the trading and settlement inconvenience that bonds with non-round nominal values would generate should be avoided. However, re-nominalisation would materially change the economic value of a bond and therefore would require the agreement of bondholders, and possibly some form of compensatory payment, which could have tax and reinvestment risk implications. It might also be necessary to issue new bond certificates or amend existing ones. In either case the issuer would have to absorb significant costs, in addition to the logistical problems or managing such operation.

Another option for issuers might be to make exchange offers. To guarantee success, investors would require incentives to take up such offers. Thus the advantages to issuers of increased liquidity and reduced funding costs would be balanced against the administrative costs, which could be large, and the need to provide investors with a financial incentive to take up the offer.

Choice of Re-Denomination Method in the Security Market

There are various ways to re-denominate bonds in circulation. To a great extent, the choice of method depends on practical issues concerning securities registration and settlement in connection with trading. Apart from the technical considerations, other criteria for the choice of method need to be considered by bond holders. Additional factors are the methods chosen by bondholders based on the experience from the present euro area member states. The experience from the present euro area member states shows that it is important to make a decision on the re-denomination method as early as possible in order to provide a firm basis for subsequent preparations.

The Various Methods

Overall, the following options may apply to conversion from the cedi units to GH cedis and the subsequent rounding of the resulting figure.

Conversion:

The "bottom-up" method – For each security code each investor's bond holdings per safekeeping account are converted from old cedi to GH cedi. The "top-down" method involves conversion from cedis to GH cedis on the basis of the minimum denomination of the individual bonds.

Rounding:

The following will be how the rounding up is expected to be done: Rounding should be done to the nearest GH cedi, or possibly for larger amounts, decimals beyond two decimal places should be to the nearest GH pesewas. According to the "bottom-up" method, conversion from cedi to

GH cedi will be made on the basis of each investor's total holdings of a given bond.

Using the "top-down" method, the total outstanding in the individual bond series are broken down by the number of bonds based on their minimum denomination. Each bond is re-denominated and the resulting amount in GH cedi is rounded either to whole cedi or pesewa units.

Risks

In addition to the above issues, the following are also to be seriously taken account of by the authorities for a smooth exercise. They are risk issues that merit serious consideration.

1. **Macroeconomic slippages** – The success of the exercise and its sustainability depends on the maintenance of macroeconomic stability through prudent monetary and fiscal policies. Slippages in three policies could derail the process and depreciate the currency. In association with these policies, the authorities need to put in place measures that improve production, income, and employment.
2. **Dollar Equalization Effect** – At the time that the exercise takes place, it is expected that the GH cedi will be stronger than the US dollar in terms of exchange rate. There may be a tendency towards the equalization of the two currencies on a par basis and this could easily place an upward pressure on prices.
3. **Money (supply) Outside the Banking System** – The monetary authorities should take advantage of the exercise to reduce the amount of currency circulating outside the banking system by encouraging the public to open accounts at the banks. Information on the accounts should not be used for other purposes, such as tax assessment; else it will cause a reduction in confidence and encourage people to keep money outside the banking system.
4. **Stocks of Cedis held Externally** – Already

the news of the exercise has had an impact across Ghana's borders where traders are changing the existing old currency into foreign exchange, thereby causing the cedi to depreciate against some other currencies. The monetary authorities may choose to ignore this phenomenon as it should be temporal, because there is likely to be a reverse flow into holding the new currency. This could cause the new currency to appreciate against the corresponding foreign currency.

Operational Measures during the Exercise

The following are also suggested measures that could be operational to ensure a successful re-denomination exercise.

1. **Opening of Accounts** – The public should be encouraged to open bank accounts to facilitate the process of physical and numerical conversion, as well as mop money circulating outside the banking system.
2. **Support to Rural Communities** – Special measures should be taken to facilitate outreach to remote rural communities and also help them to convert the old to the new currency. This will help reduce fears of people taking advantage of the exercise to cheat rural communities.
3. **Debit Cards** – The banks should be encouraged to issue electronic debit cards that could facilitate transactions and help reduce the pressure on handling physical cash.
4. **Advocacy regarding Money and Security Markets** – The public should be encouraged to hold and trade in bonds and financial securities in order to increase the financial depth of the monetary system.

Educating the People – Public Education

The most important thing to do to avoid problems in the pending re-denomination exercise is educating the people. All segments of the

population (more especially in the rural communities) need to be educated on the way the exercise will be carried out. If the people do not understand the policy, this could easily lead to confusion as was the case of Zimbabwe. The Central Bank Officials have to come out with relevant educative materials that will help people understand the process to the end. This should be done in such a way that both illiterates and literates will have no problem in understanding the conversion factor. This will go a long way to help the re-denomination exercise to be smooth and avoid problems.

Conclusion

From the examples of the countries that we have discussed above, we can conclude that various reasons were given for the re-denomination of the currencies of these countries. Zimbabwe for instance was trying to win a battle against inflation and to ease some of the calculations and accounting problems created by the hyperinflation. There was little consultation and education, which could be argued, contributed to the confusion that erupted after the re-denomination.

The Turkish experience suggested that the move made calculations easier while it was based on the condition of a successful management of inflation from 53 percent in 2001 to 11 percent in 2004. There were a series of consultations and education to the extent that the exercise was translated into even English for people to understand the exercise ahead of time. This led to a smooth re-denomination of the Turkish currency.

In the case of the Romanians, there was also information ahead of time with the necessary translation made in English for non-Romanians to understand the exercise. The reasons given for the re-denomination were designed to simplify domestic monetary transfers and calculations. Furthermore, it was seen to be a necessary transition phase in preparation for Romania's integration into the European Union and the country's eventual adoption of the Euro as its domestic currency.

From the above, the conclusion for re-denomination processes by these countries yielded the control of inflation, the ease of calculations and accounting problems, and in one case, preparation for monetary integration. Howe and Rasmussen (1982) have agreed that with rising inflation the cost of capital for utilities has increased significantly and that this is not unique to public utilities. Inflation affects capital budgeting as well. This has been proved by Baah-Nuakoh (2003). In his studies of the Ghanaian economy, he found out that the declining growth rate of the manufacturing sub-sector is an obvious manifestation of the problems which accompanied the rapid liberalization of trade and exchange rate coupled with financial reform and its attendant high interest rate hence high cost of capital.

It must be noted that many enterprises have in the past suffered from lack of credit, resulting from high interest rates, leading to their collapse (Jackson and Amuzu (2005). High inflation leads to high cost of capital and slows down growth in the economy.

This means that rising inflation has a series of consequences for a country. In the light of these facts, we have shown how these reasons as given above are applicable to Ghana in our attempt to re-denominate the cedi.

We have discussed how re-denomination was undertaken in some countries, and how it was carried out. We have also seen how if the policy is not implemented well, it could result in problems which could defeat the laudable, aim of the exercise. ■

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STRATEGIC PLANNING AND SMEs

Captain Sam Addaih (Rtd.)

Abstract

Do small enterprises need strategic planning? What should be the horizon of such a plan, given the high mortality rate of new ventures often postulated in the literature?

A small business is not necessarily a little big business, so the elaborate corporate strategic planning process may not be strictly applicable to small enterprises. Consequently, within the constraints of their "smallness" what approaches to strategic planning can entrepreneurs use that will represent a middle ground of planning paralysis and no planning at all?

This paper critically evaluates the importance and benefits of strategic planning to SMEs. It suggests that if planning is tailored to the appropriate stage of development of a typical small enterprise, then the few that may evolve as they grow could be developed into a strategic plan that provides direction for future growth.

Introduction: The Value of a Strategy

Many owners and managers of businesses routinely plan their personal day-to-day operations, but do not believe that strategic planning applies to them. "Mention strategic planning, and they think of elaborate, bound documents resting on bookshelves in the offices of large companies, or of detailed plans used in project management" (Sandberg, Robinson, and Pearce, 2001:13). That is the fallacy. No business is too small to require sound strategy, and few strategies are so simple that they need not be developed into a strategic plan.

According to Robinson and Pearce (2003), a strategy spells out three elements that are essential to any business:

1. Goals it intends to accomplish