

Ghanaians' Perception and Evaluation of the New Ghana Cedi

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Abstract

The current study was conducted 6 months after the New Ghana cedi became the sole legal tender in Ghana. Given that this was 6 months after the dual-currency use period, Ghanaians actually had used the new currency for at least 12 months before our data collection. Our goal was to assess personal experiences using quantitative method. Results revealed both positive and negative consequences of switching the currency. Portability, security and the ease of transactions were some of the reported benefits associated with the currency modification while the fear of misplacement, the possibility of counterfeits, increased cost of living, difficulty in calculating change and the inadequate supply of notes and coins were found to some of the reported downsides of the exercise. We also found that unmet expectations for the currency may explain level of satisfaction with the currency redenomination.

1. Introduction

Currency redenomination is not a new phenomenon. The 1923 redenomination in Germany which led to the cutting of twelve zeros during a period of hyperinflation marked the first documented redenomination in recorded history. Many countries including nineteen developing and transition nations have subsequently used redenomination on an occasion, while ten countries have redenominated twice; sometimes, with many years in between, as in Bolivia, in 1963 and 1987. In other cases, the series of re-denominations followed rather quickly, as in Peru in 1985 and 1991 (Mosley, 2005).

2. Overview of Ghana's Redenomination

In 2007, the Ghanaian government, in consultation with the Bank of Ghana (BOG) overhauled the country's monetary system as part of the strategic economic reform aimed at strengthening the fundamentals of Ghana's economy. The old currency (Cedi) was redenominated in the summer of 2007 with a conversion rate of one Ghana Cedi (new currency) to ten thousand Cedis (old currency). Proponents of the currency redenomination argued that daily transactions using the Cedi (Ghana's old currency) had become difficult and cumbersome due to the devaluation of the Ghanaian currency coupled with a hike in commodity prices.

Additionally, the heightened wave of robbery, fraud and other forms of crime experienced during periods of high consumer spending was attributed to the unwieldy nature of the Cedi. In other words, businesses and consumers were faced with the inconvenience of carrying large sums of money for transactions, which made them susceptible to criminal victimization. Citing the considerable strain on ATM (Automated Teller Machines) payment system as another justification for the financial adjustment, the BOG also contended that the old note regime placed a significant burden on the economy, which reflected in high transactions costs to cashiers, accounting irregularities and incompatibility with data processing software.

3. Adapting to a New Currency

Factors such as anticipation of social change, economic expectations, and national identity have been identified as some of the factors influencing attitude and adaptation to a new currency (Muller-Peters, et al., 1998; Muller-Peters, 1998; Everdingen, and Raaij, 1998; Meier-Pesti and Kircheler, 2003). In preparation for Ghana's redenomination, the government conducted extensive campaigns educating the Ghanaian populace about the proposed ease of transactions and associated economic growth anticipated with the introduction of the new currency. This education no doubt created an expectation for the supposed national and personal benefits of the new currency. Such psychological expectations are said to be attitudes, in of themselves, which shape behavior (Katona, 1951). Expectations for the new currency was heightened and strengthened by the repeated public education on the purported benefits of the redenomination, and this no doubt would influence the perceptions Ghanaians will form of the redenomination. Would the redenomination meet the expectations of Ghanaians and bring them the much touted benefits as claimed by the BOG? In the current study we anticipated that the expectations set forth by the BOG for the redenomination may impact evaluation of the redenomination experience and influence Ghanaian perception of the new currency.

4. Rationale for the Current Study

While there is a span of literature investigating consumer perception and adaptation to a new currency (Lemaire, Lecacheur, & Ferreol-Barby, 2001; Marques & Dehaene, 2004; Lemaire & Lecacheur, 2001; Lemaire, 2007; Marques, 2007; Ranyard et al., 2007), our literature review has revealed an absence of relevant publication on consumer currency perception and adaptation to newly introduced currencies in Sub-Sahara African countries. This study therefore sought to explore the Ghanaian experience focusing on the Ghanaian consumer attitudes toward the new currency post-redenomination. Previous studies (Dzokoto, Mensah, Twum-Asante, & Opare-Henaku, 2010; Dzokoto, Mensah, & Opare-Henaku, 2011) used qualitative analyses to explore the subjective experience of the Ghanaian process of adaptation to the new currency. This present study is a quantitative survey of consumer satisfaction with the new currency. We hypothesized that Ghanaians would find benefits associated with the new currency.

5. Methodology

The current study was conducted 6 months after the New Ghana cedi became the sole legal tender in Ghana. Given that this was 6 months after the dual-currency use period, Ghanaians actually had 12 months to get used to the new currency.

5.1. Questionnaire Development

The study was conducted using closed-ended questions, but participants were given an opportunity to expatiate their views and opinions. Using the themes and experiences related in a previous qualitative studies with the new currency (Dzokoto, et al, 2010; Dzokoto, Mensah, & Opare-Henaku, 2011) and themes in the literature on redenomination, questions were developed covering the following domains: benefits of the re-denomination to the country (macro) and to individuals (micro); preference between the currency; impact of the redenomination on spending behavior; level of adjustment to the new currency (familiarity); and challenges associated with the use or adaptation to the new Ghana Cedi.

Our goal was to assess the subjective experiences of Ghanaians with the redenomination using quantitative methods. We assess personal satisfaction with the redenomination, and national as well as personal benefits of the new currency. Considering the time lapse since the exercise, we wanted to assess whether Ghanaians had started developing preferences between the two currencies as well as note what informed their preferences.

We also wanted to ascertain whether Ghanaians could identify any changes in their lives as regard their spending behavior post-redenomination, and took note of some of the challenges that were being experienced with the new currency. Sample of the closed-ended questions we asked included: “Do you find any benefits associated with the re-denomination?” “Do you prefer the old denomination to the new Ghana Cedi?” “Do you spend more money now than you did before the re-denomination?” and “Have you noticed any changes in your life as a result of the re-denomination?” The responses on the closed ended questions were ranked: yes, partial agreement (or neutral), and no; or yes, no and uncertain (not sure), as and when appropriate. With these questions, we sought to find which of the goals for the redenomination was being met, if any and ascertained level of satisfaction with the redenomination exercise.

5.2. Data Collection Procedure

One hundred and thirty (130) Ghanaian undergraduate students at a University in Ghana were recruited to participate in the study. Questionnaires and informed consent forms were given to students who volunteered to participate in the study, and were collected at a later date. We chose students because unlike students in developed countries who use cards and non-cash forms of money for daily transactions, Ghanaian students are primarily money users. Ghanaian students use money in daily purchases such as buying foods, airtime, and other daily necessities.

6. Results

6.1. Benefits of Redenomination

Over forty percent (40.8%) of the respondents in our study indicated that there were benefits associated with the redenomination. However, 13.8 percent thought that the redenomination was of no benefit to the country, and about 45 percent were uncertain whether there were any benefits associated with the mandatory exercise. Table 2 shows how participants responded to the question, “Do you find any benefits associated with the redenomination?”

Table (2): Do you find any benefits associated with the re-denomination?

	Frequency	%
Yes	53	40.8
No	18	13.8
Uncertain	59	45.4
Total	130	100.0

Of the reported benefits to the country, Figure 1 shows that reduced volume of money to carry (25.2%) and increased value of the currency (23%) were mostly cited as associated benefits. These were followed by the ease of transaction (10.9%).

Other reported benefits of the redenomination to the country include: the contribution to a stabilized economy; increase in safety and reduced cases of robbery; facilitation of exchange; time saved per transaction; reduction in printing costs of new notes; having cleaner notes; reduced dead weight of zeros; reduced volume of currency; reduction and increased value of the Ghana Cedi; increase in foreign investment; easy identification of counterfeit; and reduced inflation.

Participants answered a question on the personal benefits of the redenomination, and 56.2 percent of the respondents believed that the redenomination benefited them personally. About twenty-nine percent (29.2%) indicated partial agreement to the presence of personal benefit due to the difficulty in finding change in the new currency for transactions. The remaining 14.6 percent expressed disagreement to the presence of personal benefits of the redenomination. Figure 2 presents a graph showing the benefits to self, with the portability of the new currency (ease to carry) representing over 50% of the cited personal benefits of the redenomination.

Table (1): Summary of themes in response to: What do you think of the re-denomination?

Theme	Positive	Negative
Security	New currency safer to carry around: you don't have to look for somewhere to hide bundles of cash anymore.	You lose more money if you lose one note of the new currency (or if it gets stolen) compared to one note of the old currency. For that reason, I do not like the 50 new Ghana cedi note.
Portability	Easier to carry: you can keep all the money you need to go out in a wallet.	Feels as if I do not have enough money on me
Convertibility	The new currency is good for tourists coming into Ghana: they understand prices better. It is also easier to see how the cedi is performing compared to the Euro and the dollar.	It's confusing sometimes if you are buying something from the market (unmarked prices, bargaining expected): you do not know if the prices are being quoted in the old or new currency. For example, if a vendor says 20, do they mean 20,000 in the old currency (equivalent to 2 new Ghana cedis) or 20 in the new currency? You have to be smart about it, or inquire elsewhere about the price first; otherwise you will end up getting cheated and pay ten times the cost.
Unavailability of Change	Offertory (donations at churches) have gone up because people do not want to put coins in the offertory bags when they come around: it is not considered cool.	The new currency is frustrating when you want to buy something and the seller has no change. You either have to change your mind about buying the item, or buy more than you need to, or dash them the change. Also sellers have increased prices because there is no change. It's a cheat!

Table (2): Do you find any benefits associated with the re-denomination?

	Frequency	%
Yes	53	40.8
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Total	130	100.0

A majority of the respondents (57.7 %) indicated that they preferred the old denomination to the new Ghana cedi. Only thirty percent (30%) of the participants liked the new Ghana Cedi with about 12% being indifferent about the two currencies (fig. 3). Some of the other reasons given for the revealed preference for the old Cedi included: the possibility of being cheated in the new currency; increase in spending; and difficulty in handling the new currency.

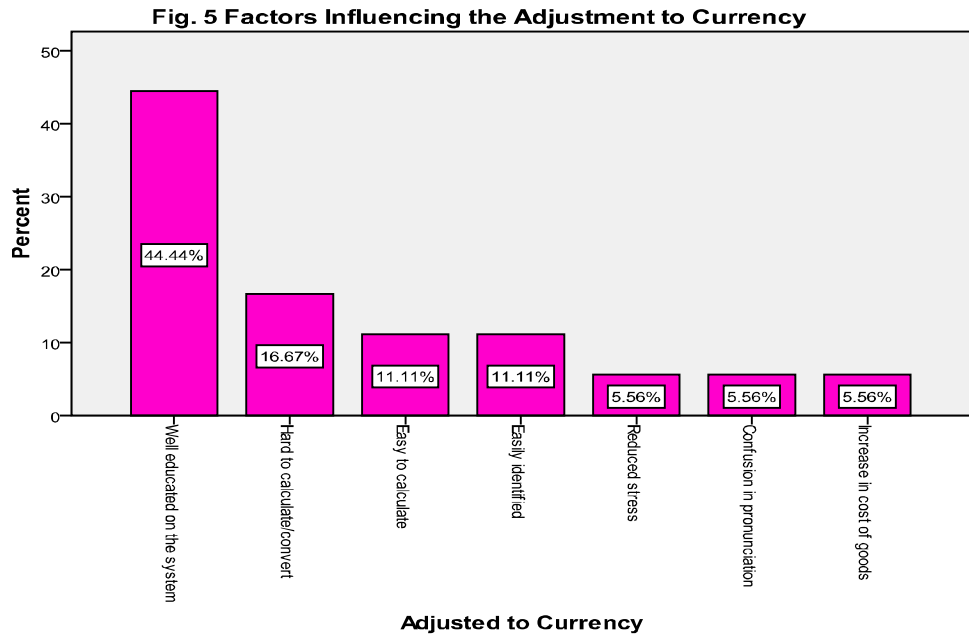
Table (3) : Have you adjusted to the new Ghana Cedi?

	Frequency	%
Yes	83	72.81
No	25	21.93
Not Sure	6	5.26
Total	114	100

The single most prominent factor cited for preference for the new Ghana cedi hinged on its portability—the ease of carrying, as depicted in figure 4. This is an important feature of the new currency, an obvious deficit in the old currency. The biggest denomination of the old currency was 5, 000 cedis making larger sums of money bulky and clumsy to carry. The new currency however makes room for this obvious disadvantage in the old cedis with its largest denomination being 20 cedis (equivalent to 200, 000 old Ghana cedis).

6.3. Familiarity with the New Currency

More than 70 percent of the respondents specified that they were quite familiar with the new currency. Another 21.9% percent indicated that they were not well adjusted to the currency, and 6% were undecided regarding their adjustment to the Ghana Cedi. (See Table 3). Figure 5 reveals that about 44% of the study participants thought the effort to educate the public paid off helping them adjust to the new currency. One key issue noted to have impacted negatively on the adjustment to the new currency related to the ease of calculating prices in the old versus the new currency. During the 12 months transitory period of the new currency usage, there were notable difficulties in converting the prices quoted in the old currency into the new one which some participants alluded to. They further noted confusion in pronouncing the new currency. Some other notable influential factors in adjusting to the new Ghana Cedi included a reduction in stress from using the new currency probably due to its portability, and a possible increase in the cost of goods and services.



6.4. Problems Related to the Redenomination

In spite of the adjustments and benefits discussed earlier, 67.7 percent of respondents reported that they had problems and challenges with the redenomination. Some of the problems included: the difficulty in calculation and exchange, inadequate supply of notes and coins, counterfeit possibilities, increased cost of living and goods, confusion in pronunciation, and fear of misplacement (figure 6). Only 5% reported having no difficulty with the process.

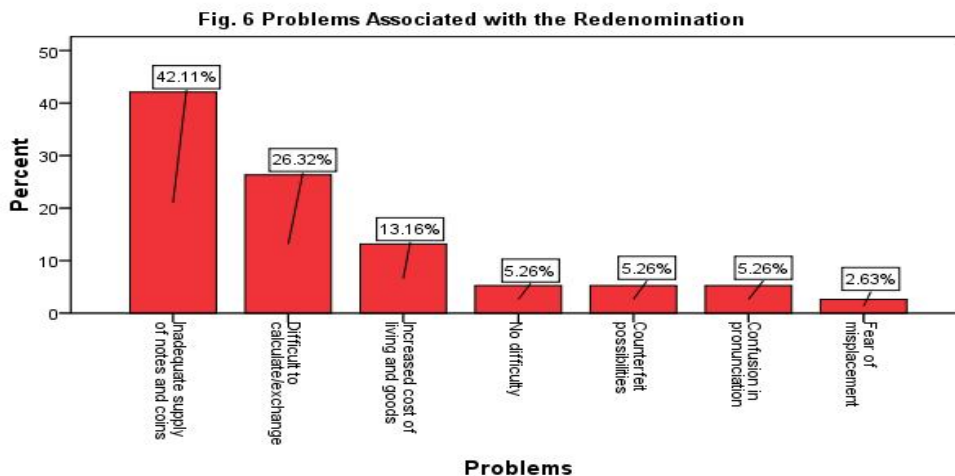
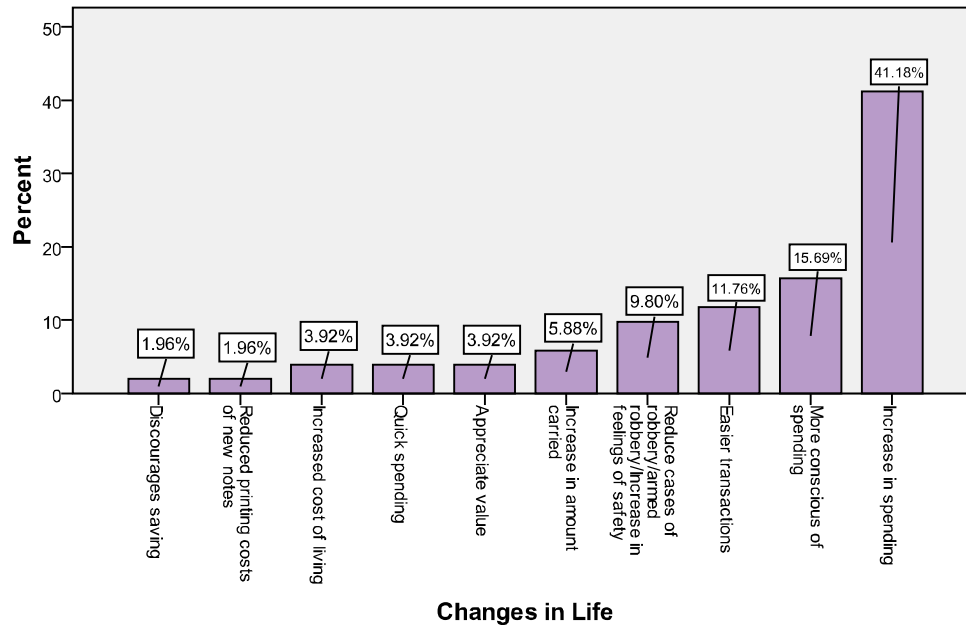


Fig. 7 Reported Changes in Life Post Redenomination



6.5. Change in Life Post-redenomination

The redenomination process was noted to have introduced changes in the lives of the respondents. About sixty-three percent (63.8%) of the respondents agreed that they have experienced changes in their lives as a result of the introduction of the new currency. Figure 7 displays a graph of the changes in life of the average Ghanaian as a result of the re-denomination exercise. As can be seen in Figures 8a and 8b, majority of the respondents indicated that there had been changes in their spending and reported an increase in the amount of money held daily post-redenomination. A few of the respondents however reported having a better appreciation for the value of the new currency and being more conscious with their spending. Less than 4% of the respondents reported that they do not feel inclined to save which is possibly due to the low real earnings on each Ghana Cedi saved as opposed to the higher nominal value they would have earned in the old currency.

Fig. 8a Changes in Spending since Redenomination

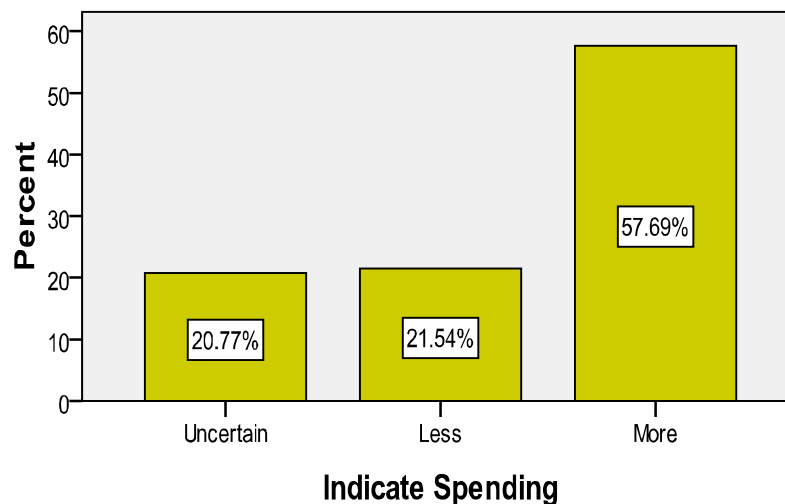
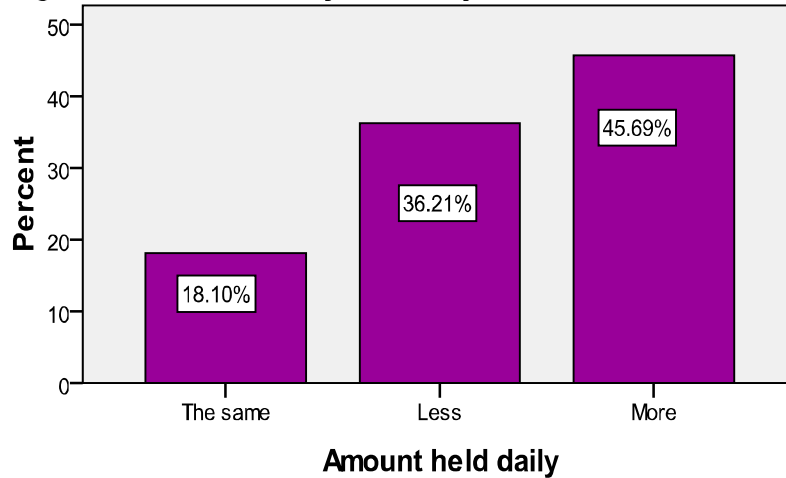


Fig. 8b Amount of Money Held Daily Post Redenomination



Over fifty-seven percent (57.69%) of the respondents specified that they were spending more money now than they did before the redenomination, and 45.7% percent of respondents noted that they carry more amount of money for their daily transactions (figures 8a & 8b). A one-way analysis of variance (ANOVA) was used to evaluate the significance of the differences in the assessment of the benefits and currency preferences across groups. Post hoc analysis (LSD and Scheffe) were conducted as follow-up tests for the differences between the mean responses. The assumption of homogeneity was met since the Levene’s test of homogeneity of variance was not significant. The three responses to questions regarding preferences between the two currencies and the benefits associated with the Ghana Cedi were: yes, no and uncertain (not sure). The ANOVA results showed significant differences in the responses for the preference of currency $F(2, 97) = 8.67, p < 0.001$. Affirmative responses in favor of the new currency had a significantly higher mean ratings ($M = 7.6$) than the negative ratings ($M = 5.7$). The Ghana Cedi ($M = 1.98$) received a significantly higher favorability rating than the Cedi ($M = 1.50$) with respect to the presence of benefits $F(2, 127) = 4.42, p < 0.05$. The mean difference between the yes ($M = 8.2$) and no ($M = 4.0$) responses for the presence of benefits to the country due to the redenomination was found to be significant per our ANOVA results $F(2, 127) = 7.96, p < 0.005$.

Similarly, our inferential result $F(2, 127) = 7.52, p < 0.005$, indicates a significant difference in the mean ratings for benefit to self ($M = 5.62$) as opposed to the lack thereof ($M = 3.05$). Both LSD and Scheffe comparisons revealed that there were significant differences between the mean responses for “Yes” and “No” in all cases but no significant differences were exhibited when “Uncertainty/Not Sure” was introduced into the paired comparisons.

7. Discussion and Conclusion

In a recent BOG (2009) poll of 8041 Ghanaians, 85.90% indicated that the Ghana Cedi had met their expectations while only 9% opposed this notion with about 4% reporting uncertainty about the claim. The respondents in our study seem to share the view of the participants of the BOG poll. The questionnaires and open-ended investigations of the process of adjustment revealed both positive and negative consequences of switching currencies. While some of the experiences were similar to those covered in the media during the public education campaign, there were some unanticipated consequences as well, and these were a mixture of positives and negatives.

On the positive side, the portability, security, ease of transactions associated with the new currency particularly makes it more attractive to the consumer. However, despite the reported, perceived benefits of the redenomination exercise, the survey suggests that there have been some life changing experiences since the mandatory adoption of the Ghana Cedi. These lifestyle adjustments needed for the adoption of the currency has not been without encumbrances. A number of problems plaguing this process have been noted. These include; the fear of misplacement, the possibility of counterfeits, confusion in pronunciation, increased cost of living, difficulty in calculating change and the inadequate supply of notes and coins.

In spite of the extensive campaigns conducted by the government in educating the Ghanaian populace about the proposed ease of transactions and associated economic growth anticipated with the introduction of the new currency, Ghanaians were yet to fully adapt themselves to the new currency at the time of this study. This assertion is based on the fact that the price of goods and services were still quoted in old currency values (Cedi equivalent) in most market transactions while only good fortune would make you encounter a seller who has provided price quotations in both old and new Ghana Cedi equivalent.

7.1. Psychology of Expectations: Implications for Adjusting to a New Currency

A significant issue with expectations, as noted by Kantona (1951), is that they do get revised and changed over time. The emergence of the new currency could have been coupled with new expectations that were not set out by the BOG. These changes could happen both at the national and the individual level. For instance, individuals needed to form new expectation of their spending behavior. Muller-Peters and others (1998) note that both individual and national expectations were important in determining attitudes towards the Euro. They further documented fears about losing the reference to the old monetary system, which is also seen in the Ghanaian experience, which makes it difficult for people to adapt to the new currency. The subjective feeling of change in the monetary is calls for reorientation. Thus Ghanaians had to find new reasons for accepting or rejecting the new currency. Satisfaction with the new currency will depend on whether people are able to reorient themselves to the new experience or not (Kantona, 1951).

A major implication of the features of expectation and the currency redenomination is that people who fail to reorient themselves may become frustrated with the currency, and register dissatisfaction with the process. The fact that Ghanaians had definite expectations was good, because it gave them a frame of reference. However, when some of the expectations were not met, people had to adjust or even create new expectations. This reorientation and adjustment may create the difference between those who are well-adjusted to the new currency and who are not. Future redenomination could take into account how the consumer expectations and prepare them to adapt their views and hopes in the event that their expectations are not met.

References

- Bank of Ghana (2009). Ghana Cedi Quick Survey. <http://www.ghanacedi.gov.gh/>
- Dzokoto, V., Mensah, E., Twum-Asante, M., & Opere-Henaku, A., (2010). Deceiving our minds: A qualitative exploration of the money illusion in post-redenomination Ghana. *Journal of Consumer Policy*, 33, 4, p339-353.
- Dzokoto, V. A. A. Mensah, E. C., & Opere-Henaku, A., (2011). A bird, a crocodile, and the 21st century cowrie shell: Analyzing Ghana's currency change. *Journal of Black Studies*, 42, 715-736.
- Gamble, A., Gärling, T., Charlton, J., & Ranyard, R. (2002). Euro illusion: Psychological insights into price evaluations with a unitary currency. *European Psychologist*, 7(4), 302-311.
- Katona, G. (1951). *Psychological analysis of economic behavior*. New York: McGraw-Hill.
- Lemaire, P. (2007). The impact of the euro changeover on between-currency conversions. *Journal of Consumer Policy*, 30:4, 383-391. DOI 10.1007/s10603-007-9045-2.
- Lemaire, P., & Lecacheur, M. (2001). Older and younger adults' strategy use and execution in currency conversion tasks: Insights from French franc to Euro and Euro to French franc conversions. *Journal of Experimental Psychology: Applied*, 3, 195-206.
- Lemaire, P., Lecacheur, M., & Ferreol-Barby, M. (2001). Strategy use in currency conversion tasks: The example of Euro into French Franc and French Franc into Euro conversions. *Current Psychology Letters: Behaviour, Brain and Cognition*, 4, 39-50.
- Marques, J. F. (2007). The euro changeover and numerical intuition for prices in the old and new currencies. *Journal of Consumer Policy*, 30:4, (in print). DOI 10.1007/s10603-007-9043-4.
- Marques, J. F., & Dehaene, S. (2004). Developing intuition for prices in Euro: Rescaling or relearning prices? *Journal of Experimental Psychology: Applied*, 10, 148-155.
- Mas, Ignacio. 1995. Things Governments do to Money: A Recent History of Currency Reform Schemes and Scams. *Kyklos* 48: 483-512.
- Meier-Pesti, K., & Kirchler, E. (2003). Nationalism and patriotism as determinants of European identity and attitudes towards the Euro. *Journal of Socio- Economics*, 32, 685-700.
- Mosely, L. (2005). Dropping Zeros, Gaining Credibility? Currency Re-denomination in Developing Nations." Presented at the 2005 annual meeting of the American Political Science Association.
- Muller-Peters, A. (1998). The significance of national identity to the attitude toward the single European Currency: A Europe-wide comparison. *Journal of Economic Psychology*, 19, 701-19.
- Müller-Peters, A., Pepermans, R., Kiell, G., Battaglia, N., Beckmann, S., Burgoyne, C. B., et al. (1998). Explaining attitudes towards the euro: Design of a cross-national study. *Journal of Economic Psychology*, 19, 663-680.
- Ranyard, R., Routh, D. A., Burgoyne, C. B., Saldanha, G. (2007). A qualitative study of adaptation to the Euro in the Republic of Ireland: II: Errors, strategies, and making sense of the new currency. *European Psychologist*, 12, 139-146.
- Van Everdingen, Y. M., and Van Raaij, W. F. (1998) The Dutch people and the euro: A structural equations analysis relating national identity and economic expectations to attitude towards the euro. *Journal of Economic Psychology*, 19, 6, 721-740.