

The study of effective management transformative strategies on the reduction of banknote printing and publishing costs (Case study: bank staffs and customers of Esfahan city)

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Abstract: This research aims to analyze the study of effective management transformative strategies on reduction of banknote printing and publishing costs. The population includes all staffs and customers of Isfahan city who are 2,500,000 persons. 384 of them were selected as the statistic sample by using of Cochran formula. Research instrumentation is a fulfilled questionnaire. In order to measurement of questionnaire validity, content method has been used and to determine its stability, the value of Cronbach's Alpha has been calculated which equals to 91%. The results shows that Liquidity management and being systematic of monetary policy implement, Our country's grand management attitude change in the result of producing science and developing searches about improving the high quality and durable banknote, culture making in order to keeping the banknote through the mass- media, status of binding rules which are related to the physical protection of banknote and improving the quality and its made of paper are effective on the reduction of banknote printing and publishing costs, but check money printing or printing the banknote with the higher nominal value are not effective on the reduction of banknote printing and publishing costs. Culture- making is the most effectiveness strategies at all and liquidity management is the least effectiveness strategies for the reduction of banknote printing and publishing costs. 384 persons among all staffs and customers were selected as the sample size by using of Cochran formula. Sampling method was sample random sampling. To analyzing data, descriptive and inferential statistics has been accomplished. Considering the measurement level of data and their distributions, parametric and nonparametric statistical tests have been used. One- sampling T-test has been used to test hypothesis, two- sampling T-test and variance analysis have been used to compare the mean of responding the independent groups and Fridman test is applied to ranking variables. At last to analyze data and applying the test, SPSS 20 software has been used.

Key words: Money; Transformative; Culture- making; Banknote

1. Introduction

The revolution of human social life styles lead to change and shift many phenomenon and social matters, as if these changes as an endless procedure have known one of the manifest social phenomenon (Arshadi, 2012). Economic topics are a section of transformative topics which are in relation to people life styles. Since, accomplishing the research has a key importance. Inflation and its consequences are the only sample of the searchable new topics. Every year, a large number of old banknotes have been burned by Central Bank or buries after breaking (Faraji, 2006). But after one year, this same story occurred again and new banknotes have been burned as the old ones. The publishing cost of every banknote in the country is 7.14 Toman during 2005. If this value compare with 48 and 52 Toman which is announced by chairman of the Central Bank in 2012, it is obvious that the cost of publishing banknote has been growing 227 percent during 7 past years. While the inflation rate in the above- mentioned years has

been 110%. In fact, it can be said that growing rate of banknote printing cost has increased twice more than inflation rate in the country (Mojtahedi, 2001). Inflation which government fueled it via borrowing and indiscipline and to solve it, use policies such as targeted ones, although sanctions are current, especially the costs of banknote paper will has the grand financial pressure on government. Therefore by the new management and innovative solutions can help to these goals (Kassam, 2009). In order to achieving these goals, it can be noticeable that management thoughts should not have any limitation in interpreting attitude, because banknote has the same cost nominally, whether it is little and big, or when it is printed. By creating the correct maintain culture and raise the paper quality and improve its durability, by the use of Nano technology, the printed financial costs of banknotes can be decreased (Badarau, 2014).

2. The necessity of money existence in the economy

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Paper money is a cure for all rulers in need. From the point of view of human societies benefits, using of the paper money is more advantage than coins. In the rational trades and exchanges, transporting a lot of coins will be very dangerous (Davoodi & Samsami, 2009).

In the recent centuries, the industrial revolution cause to accelerating increase in overproduction on household consumption and firms. The growing of productions rate were more than the growing of extraction rate and money supply significantly. On the other hand, to prevent the downturn, economic needed more exchange means. While the coins were not sufficient to the exchanges size, these factors cause human to think about the universal equivalent instead of gold and silver coins, as if it doesn't have their disadvantages and pass the human expectations (Tootoonchian, 1996).

The importance of banknote security in every country has a direct relationship with its economic security and it should be considered very much. Generally, today's banknotes produce by the combination of paper, cotton or a combination of paper, cotton yarn and cloth. The reason behind this combination is, enhance the resistance of banknote paper against any kinds of erosions such as humidity. Although in some cases, these materials help security coefficient of banknote paper, but their more helps of them is their helps to banknote useful life (Izadifard, 2008).

3. Security and authenticity of banknotes

The first feature of paper banknote is its security and gentility. Banknote security and gentility will have a direct relationship with national and economical security of every country which produces it. Therefore all producers of paper banknote and exchange papers in the different parts of the world try to consider the fully security of banknote (Dowed, 2000).

Inattention to this topic can follow irreparable damages. For example Germany in the world war 2 tried to harm England economic by distributing fake banknotes. They published fake and fiat banknotes and waste them in the England's market during the war (Izadifard, 2008).

Because the fiat money leads to help increasing procedures of inflation and economic downturn, the fake banknotes in England's market created various problems. At last England government understood the problem and prevented it (Farhang, 1924).

4. The triple jumps at management strategies to control inflation by banknotes

Tax project of banknote exchange cost and apply the parallel sub- structured policies can help our country's inflation (Faridi, 2014). Classic school's economists believe that inflation was a monetary phenomenon and growing liquidity is the main factor of its appearance. But the reasons of inflation in our country have been considered by 3 aspects:

- 1) Demand pressure: like increasing the money supply and financial expansion policies especially the reduction of government's budget.
- 2) Cost demand: such as supply companies, increasing the wage rate and the price of the other production institutes especially energy carriers, the reduction of money value and efficiency.
- 3) Economic structure factors: such as unbalanced growth of economic sections, government outcomes dependence to outcomes originated from oil and integral traction supply.

In fact, government spends the outcome revenue from oil sales or imports it or gives it to Central Bank as currency and tale Rial instead of. Dependent Central Bank, to supply its considerable Rial whether sells the currency or gave Rial to the government and increases the monetary base (Katoozian, 2013).

5. The study of the central bank performance about publishing the banknotes

By look at banknotes publishing in the recent years, it is clear that the published banknotes and coins by Central Bank from 4. 8000 Milliard Toman in 1383 reaches to 8.33000 milliard Toman. It shows that it has grown up 570% in printing banknotes except the information of 1391 statistics which are not published by Central Bank yet.

While between 1999 and 2004, all published coins were 8.2000 milliard. It means that we face to the 900% mutation in the publishing of banknotes in the situation that the economic growth between 1997 and 2004 was equal to 9.4%, while the economic growth between 2005 and 2012 have been 6.3%. (Dowd, 2000).

Publishing the fiat banknote has not been the only reason of inflation in our country. The biggest mistake has been play with nation money, currency of money trade instead of supporting the productions. Money business growth in increasing the size of quasi money comparison with money and liquidity is recognizable. Liquidity changes show that during 1384 to 1391, the ratio of money to quasi money from 53% reach to 29%. It presents that the size of liquidity by financial system of the country such as; banks, financial institutes, loan fund and leasing companies increase strongly. It causes to create the business money (Fardro, 2001).

At present the number of bank branches in some areas of retail trade units accelerates. It presents the high profitability of brokerage. Ultimately, what is observable in statistics is the play with nation money value. It cause economic base to challenge seriously and its social consequences is tangible like expanding spoil from public offices to class gap growth (Cabrero, 2002).

Liquidity in our country reach to 1 million toman in 1997 to 6 million in 2012, The six-fold increase in liquidity (at best) along with half of the combined purchasing power of the currency, So the remaining half thanks to massive oil revenues and overflow cheap Chinese imports remains. If damage is slightly more heavily on oil revenues will fall, the same cliff

that Keynes pointed out, and today people have touched I (Bouhdaoui, 2012).

One of the biggest mistakes of Central Bank in the recent years is acquiescence to increasing the liquidity size and strongly growth of banknotes and coins. Of course, we cannot study the fully period of money publishing situation during the activity period of 9 and 10th governments. But the last published report which inserted the amount of published banknote in it, belongs to the 3 primitive months of 2012. By accounting the inserted digits in this report during 2005 to spring of 2012, the value of published banknotes have been over than 28.000 milliard Toman.

It is noticeable that, the size of banknote and coins in 2005 (the beginning of preview period) has been 6.5, 000 milliard Toman which increase to 8.33, 000 milliard Toman in 2012. In the other words, during the recent decade, the printing of banknotes has been 5 times more than the previous years. This situation comparison to the low speed of economic growth in the country shows well that the high velum of liquidity is one of the main reasons of downturn inflation which is dominant on country economic (Katoozian, 2013).

It is mentionable that according to available statistics, two tangible occurrences are located in the country in the combination of banknote and coins distribution. The first one is the increase of Bank system share and Central Bank of banknote which is in the circulation. The portion of bank system from the circulating banknotes during 1384 was 10% of all published banknotes, this portion reached to 7.31 percent in spring of 2012. on the other hand, the ratio of banknote rather all liquidity from 6% in 2005 reached to 11% in the spring of 2012. The reason behind it, is that the increase of electric exchanges cause to decrease the circulation of coin and banknotes. Seyyed Ahmad Mirmotahari, teacher of economic, believes that by the change of check law, the reduction of its using happen in exchanges. This problem has been effective on the portion of quasi money and cause to increase the displacement of cash.

According to Central Bank reports at the end of Azar 2012, the amount of circulated coins and banknotes has reached to 3.32, 000 milliard Toman. While at the end of 2004, total size of circulated coins and banknotes has been 84, 000 milliard Toman. In the activity period of 9th and 10th government, this digit has been more than 7.26, 000 milliard Toman. Comparison to total circulated banknotes and coins during the previous 3 decades, it has been 5.5 more than before.

The increase of oil revenues, when it be investing correctly, it leads to increase the economic power of country in a short- term long which its reflex be emerged in the sever growth of the imports. The government injected windfall oil revenue by publishing banknote to economic of the country without any financial discipline. The result of this oil trap which well known as Dutch illness cause to

create the present distraught situation (Katoozian, 2013).

Monetary inflation against producing contraction originated from excessive imports undermine all the economic power of the country in creating the value added. Liquidity Confusion increases for the reason of the lake of absorb power in country economic productive space to economic unproductive space such as dealer of currency, house and gold.

6. Background

Izadifard et al (2013) in a research entitled "banknote mortgage" study the mortgage of banknote. Validity and invalidity of banknote mortgage has disagreements. Some experts believe that it is invalid and the others think that is valid. The authors of the present paper claim that because the poverty and investment are common concept and the definition of them has not presented in texts, therefore in order to detect their meaning, it can be referred to the common sources. Available evidences and documents in common show that custom believes that banknote belongs to poverty not the document. Since the banknote is tangible, therefore it is material ones. The selected idea in this paper is that there is an equal relationship between the material and abstract definition. Hence, banknote is abstract ones and it doesn't have any problem on the mortgage of banknote. If banknote mortgage has the rational non- observance which can be found it in some cases, its mortgage is valid and in otherwise it is invalid (Izadifard & Bahrami, 2013).

Badara, Cristina (2014) in his article claims that considering the recent economic crisis (in Europe), it has been found many problems between monetary and economic rules. Unlike believes, stability of values has not a desirable condition. In his research, the aim is that during an practical analyze, what kinds of reactions have been carried out by Central Bank (in Europe) against economic bubbles. Likely according to the above- mentioned article, the strategy which can opposite with economic crisis, is not printing banknote without fiat.

Cabero, Albetho & Camba, Gotralo (2002) by the study of liquidity management in the area of Euro, presents some models that how manage banknote by European Central international Bank in the Euro area. Sum of banknotes which are in circulation are valuable weekly, monthly, seasonal and annual. One of them is STS (Structure Time Serious).

7. Research method

The research method of this study is descriptive-survey from applied and sectional one. The data has been collected through survey method. It can be considered as a field method. The population of this research composed of all staffs and customers of active banks in Isfahan city. Research instrumentation is a fulfilled questionnaire and taking- notes. In order to confirm the validity of questionnaire, it was given to experts of

management science to apply their expert comments about questions, the number of them, the content of the questionnaire, the relationship between questions and candidates and coordination of questions with research aims. To determine the stability of the questionnaire, in a primitive study, 30 questionnaires have been distributed among the sample size. At last, its value has been calculated by Cronbach's Alpha coefficient using of SPSS which was 91%. This value represent that the questionnaire has stability. After applying the proposals and ideas, the final questionnaire was fixed and given to the sample size. Cronbach's Alpha method has been used to calculate the stability of instrumentations such as questionnaires or the other tests.

8. Findings

8.1. Descriptive statistics

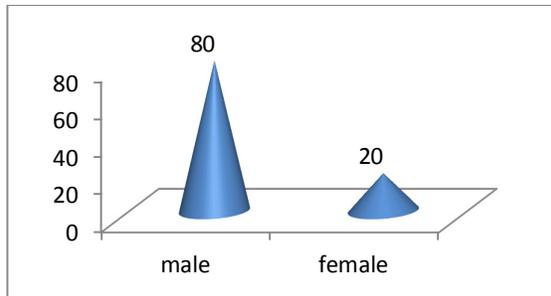


Fig. 1: Sex

According to Fig.1, 80% of responders are male and 20% are female.

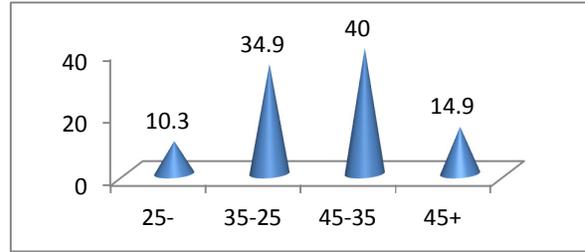


Fig. 2: Age

Fig.2 shows that the percent of responders who are below 25 years old are 10.3. 34.9% of them are between 25 and 35 years old and 40% are between 35% and 45%. The percent of responders who are over 45 years old are 14.9.

9. Inferential statistics

9.1. Testing hypothesis

9.1.1. The main hypothesis

Management transformative strategies are effective on the reduction of banknote printing and publishing costs.

H0: Management transformative strategies are not effective on the reduction of banknote printing and publishing costs.

H1: Management transformative strategies are effective on the reduction of banknote printing and publishing costs.

One-sided T-test has been used in order to study the effect of Management transformative strategies on the reduction of banknote printing and publishing costs. At first, the descriptive statistic is studied according to Table 1.

Table 1: The mean and standard deviation of the strategies of management transformative

	Number	Mean	Standard deviation
The strategies of management transformative	370	3.3723	0.67176

The mean of this variable is 3.3723 and Standard deviation is 0.67176. T-test statistic is analyzed in Table 2:

Table 2: T- test statistic for the main hypothesis

One- sided T-test					
The value of test = 3					
	T	Freedom degree	P- value	Confidence limit	
				Low limit	Upper limit
Management transformative strategies	10.660	369	0.004	0.3036	0.4409

According to Table 2, the value of T-test statistics is 10.660 and the P-value is 0.004. Therefore H0 is rejected. It means that Management transformative strategies are effective on the reduction of banknote printing and publishing costs. Also by 95%

Confidence limit can be said that mean of the population for responding to the effect of Management transformative strategies on the reduction of banknote printing and publishing costs are between 3.0687 and 3.8132.

9.2. Secondary hypothesis

H1: Liquidity management is effective on the reduction of banknote printing and publishing costs.

9.2.1 The first hypothesis

To analyze the impact of Liquidity management over the reduction of banknote printing and publishing costs, One- sided T-test has been used. The descriptive statistic is studied according to Table 3.

Liquidity management and being systematic of monetary policy implement is effective on the reduction of banknote printing and publishing costs.

H0: Liquidity management is not effective on the reduction of banknote printing and publishing costs.

Table 3: The mean and standard deviation of the liquidity management

	Number	Mean	Standard deviation
The strategies of management transformative	370	3.3671	0.72697

As it has shown in table (3), mean of these two variables in sample is **3. 3671** and Standard

deviation is **0.72697**. T-test statistic is analyzed in Table 4:

Table 4: T- test statistic for the first hypothesis

One- sided T-test					
	The value of test = 3				
	T	Freedom degree	P- value	Confidence limit	
				Low limit	Upper limit
Management transformative strategies	9.714	369	0.001	0.29028	0.4414

According to Table 4, the value of T-test statistics is **9.714** and the P-value is **0.001**. Therefore H0 is rejected. It means that liquidity management is effective on the reduction of banknote printing and publishing costs significantly. Also by 95% Confidence limit can be said that mean of the population for responding to the effect of liquidity management on the reduction of banknote printing and publishing costs are between 3.0743 and 3.8085.

durable banknote is effective on the reduction of banknote printing and publishing costs.

H0: management attitude change is not effective on the reduction of banknote printing and publishing costs.

H1: management attitude change is effective on the reduction of banknote printing and publishing costs.

To analyze the impact of management attitude change over the reduction of banknote printing and publishing costs, one- sided T-test has been used. The descriptive statistic is studied according to Table 5.

9.2.2. The second hypothesis

Our country's grand management attitude change in the result of producing science and developing searches about improving the high quality and

Table5: The mean and standard deviation of the management attitude change

	Number	Mean	Standard deviation
The strategies of management transformative	370	3.3366	0.79324

As it has shown in Table 5, mean of these two variables in sample is **3.3366** and Standard

deviation is **0.79324**. T-test statistic is analyzed in Table 4:

Table 6: T- test statistic for the second hypothesis

One- sided T-test					
	The value of test = 3				
	T	Freedom degree	P- value	Confidence limit	
				Low limit	Upper limit
Management transformative strategies	8.161	369	0.001	0.2555	0.4177

According to Table 4, the value of T-test statistics is **8.161** and the P-value is **0.001**. Therefore H0 is rejected. It means that management attitude change is effective on the reduction of banknote printing and publishing costs significantly. Also by 95% Confidence limit can be said that mean of the population for responding to the effect of management attitude change on the reduction of banknote printing and publishing costs are between 3.8113 and 3.7543.

10. Conclusion

Regarding the findings, the below conclusions have been obtained:

- 1- 80% of responders are male and 20% are female
- 2- The percent of responders who are below 25 years old are 10.3. 34.9% of them are between 25 and 35 years old and 40% are between 35% and 45%. The percent of responders who are over 45 years old are 14.9
- 3- Liquidity management and being systematic of monetary policy implement is effective on the reduction of banknote printing and publishing costs.
- 4- Our country's grand management attitude change in the result of producing science and developing searches about improving the high quality and durable banknote is effective on the reduction of banknote printing and publishing costs.
- 5- culture making is effective on the reduction of banknote printing and publishing costs significantly.
- 6- Management transformative strategies are effective on the reduction of banknote printing and publishing costs.

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