Abstract—This study aims to explore if there is fraud in the company’s financial report distribution using the number first digit Lucas, Fibonacci and Benford. In this study, the author uses a number model contained in the first digit of the model Lucas, Fibonacci and Benford, to make a distinction between implementation by using the scale above and below 5%, the different rate of occurrence to the digit contained on Lucas, Fibonacci and Benford. If there is a significant difference above and below 5%, then the process of follow-up and detection of occurrence of fraud against the financial statements can be made. From research that has been done can be concluded that the number of frequency levels contained in the financial statements of PT Bank BRI Tbk in a year in the same conscientious results for model Lucas, Fibonacci and Benford.

Keywords—Lucas; Fibonacci; Benford; First digit; Financial reporting fraud

I. INTRODUCTION

He publication of a study performed by Nigrini (1992, 1996, 1999)[1]-[3] explains how the existence of a fairly strong influence in benford's law on the application of data analysis is performed. In a study of the use of accounting data and, Nigrini conducted a study on financial transactions in tax payments made by the company Nigrini concluded that the average taxpayer in the United States is more likely to commit fraud in the field of taxation, in the sense that they prefer to report their income tax as low as possible, so that the taxes will be paid later. In his study Nigrini explain how the policies that should be taken by the taxpayer, where by doing the understatement, thus can reduce the amount of tax to be paid significantly. In a similar study by Quick and Wolz (2005) [4] and Nigrini (1996 & 2000) [2] [12] in economic and taxation data in Germany, USA and Switzerland. It needs to be underlined by the author in the line, later we can see how the model from analysis of benford's law with model numbers that once given, can explain all phenomena number figures in the financial statements of the company, help scale the upper limit and lower limit are certainly in use by the author, benford's law makes it increasingly became firmly according to the author. Anomalies of the case studies given by the author in the form of the financial statements of the company, could later be able to add science vocabulary analysis at the level of cheating in viewing numbers learn by use of benford's law.
A. Data and time of research

In this study Authors using financial statement (Balance sheet & Profit and loss) data of PT BRI Tbk listed on the Indonesia Stock Exchange started quarter March-Dec for the year 2010-2015. The author conducting this study in July-Sept 2016.

B. Analysis data technique

In this study the author uses techniques of data analysis the first digit of the model Lucas, Fibonacci and Benford. The third model analysis tools from the first number digits, will see the difference in the results obtained, but the author retains the upper limit and lower limit of 5% of the final analysis as a tool in determining whether a company’s financial statements in carefully non-food and non-food material in the financial statements over the impact of cheating.

C. Result and discussion

With this background, the author makes the financial reports of a company as an example to see how the results of the use of the same formula, however in a different place. Armed with 3 model analysis that has been in use as the guidelines seek a conclusion about the digit number found on the financial reports of companies that comprise the model Fibonacci and Lucas, Benford. The writer is intentionally not used many examples of companies, because the want to get results in maximum deem by using samples of one company only. Here you can see how the results of the analysis of the rate of occurrence of numbers of model Lucas, Fibonacci and Benford.
Of results [Table 2, Table 3, Table 4], By Financial statement PT Bank BRI Tbk 2015, 2014, 2013 and 2012 for the digits 3, 4, 5, and 6 which exceeds the upper limit and lower limit of 5%. As for the rate of appearance of the first digit of the number and other years following the model numbers, Fibonacci and Lucas Benford. According to the author of the results of this analysis, it has been demonstrated that it is indeed a level of truth of a financial report that, with the level of occurrence number that should follow the flow rate of the appearance of the numbers on the analysis model of the first digit on Lucas, fibonacci and benford. Thereby, a true financial reports, without a process engineering numbers according to authors should follow the numeric level of frequencies on the formula of lucas, fibonacci and benford.

IV. CONCLUSION

For this study do tests with model Lucas numbers, fibonacci numbers and benford to detect the frequency numbers that appear in the financial statements of PT Bank BRI Tbk for years ending in 2010-2015. From the results of research that has been done, you can conclude that the rate of occurrence of the figures in the financial statements of PT Bank BRI Tbk years analyzed 2010-2015, the frequency rate of the appearance of the number following the model of the frequency of Lucas, fibonacci and Benford. But from the results of the analysis as a whole there are several numbers that year in analysis, the number of occurrences of the number levels exceed the upper limit and lower limit which has been specified in the author's 5%. Thus it is necessary to observe the follow-up digit year that exceed the threshold and the lower limit. The author argues that the presence of Lucas, fibonacci and benford's law shows benefits in the context of "accounting, finance and audit", which in a sense there is less difference than the application instance or an earlier study, the author also considers that the results of this research can be set as the next step. The authors of this study's results argue is something valuable especially related to advances in methods of investigation, associated psychological barriers of the financial statements of the company for the next time.

REFERENCES