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Effect of Herding Behaviour Marred with Irregularities/Illegalities of Individual Investors on Individual Investment Decision at Safaricom Co. Ltd

Annetty V W Angote
Assistant Accountant General, Directorate of National Sub County Treasuries,
Ministry of National Treasury and Planning Development, Kenya

Abstract:
Personal Finance is a broad aspect in the world of finance whereby individuals or groups of persons come together to invest, that is, buy/sell in funds/shares to make profits with considerations of uncertainties (risks). Behavioural Finance is a branch of personal finance whereby individuals are driven by certain behavioural biases while making individual investment decisions which can be both positively/negatively impacted. In this scenario, in the form of audit research, the author has examined a report provided by major stakeholders, the Safaricom Co. Ltd and other subsidiaries such as Cooperative Bank of Kenya and Hazina Sacco Co. Ltd in comparison on how activities were carried out during a five and half years (January 2017-June 2022). The main objective was to establish effect of herding behavior marred with irregularities/illegalities of individual investors on individual investments decision at Safaricom Co. Ltd. Specific objectives: 1. To determine the effect of exaggeration on herding behavior marred with irregularities/illegalities of individual investors on individual investments decision at Safaricom Co. Ltd. 2. To establish the effect of assumption on herding behavior marred with irregularities/illegalities of individual investors on individual investments decision at Safaricom Co. Ltd. 3. To examine the effect of disposition on herding behavior marred with irregularities/illegalities of individual investors on individual investments decision at Safaricom Co. Ltd. 4. To explain the effect of manipulation on herding behavior marred with irregularities/illegalities of individual investors on individual investments decision at Safaricom Co. Ltd. 5. To determine the effect of repetition on herding behavior marred with irregularities/illegalities of individual investors on individual investments decision at Safaricom Co. Ltd. Null Hypotheses tests were: HO1:- Exaggeration, HO2:- Assumption, HO3:- Disposition, HO4:- Manipulation, and HO5:- Repetition, all having no significant effect on herding behavior marred with irregularities/illegalities of individual investors on individual investments decision at Safaricom Co. Ltd. No much of Literature Review was carried out since research project was based on actual raw data provided by the concerned organizations. The target population sample was 337 individuals/transactions and receipts/payments marred with irregularities/illegalities of 2,936,323/1,755,044, respectively. For that fact, Cron Bach Alpha was determined by the average percentage of receipts and payments marred with irregularities/illegalities (74.04%, which is greater than 70%: the normal required %). Several tests were carried out, including central tendency (mean and standard deviation), hypothesis tests, simple regressions/multiple regressions, coefficient of correlations (between positive 1 and negative 1), variances in the determination of VIF (normal being less than 3), using tables and graphs for cross-tabulations. The results showed positive responses: that there was a significant level of herding behavior marred with irregularities/illegalities of individual investors individual investments decision at Safaricom Co. Ltd. All five factors:- exaggerations, assumptions, dispositions, manipulations, and repetitions were massively felt with marred irregularities and illegalities hence interested with the true position carried out during the period. Investigations are recommended to establish these kinds of massive transactions, which are marred with irregularities/ illegalities, and further research to be carried out on similar activities while individual investors are investing using individual investment decisions at NSE or any other Trading Bells Organizations.

Keywords: Individual investor, individual investment decision, personal finance, behavioural finance

1. Introduction

1.1. Background Information: Audit Report (September 2021 to February 2022)
Reference is made to the previous audit report, which cited several anomalies/irregularities in the provided documents for the preparation of the six (6) months (September 2021 to February 2022) financial reporting whereby, in summary, the following important issues were raised:
- The four main categories which were used to present patterns in movement on a curved graph were:
  - ✓ General
  - ✓ Withdrawals

        ✓   Bills/Services
        ✓   Family/Friends

- The information was plotted on curved diagrams, indicating a continuous expenditure increase, which was not the true position. Several names were cited, which were unknown to the holder of the documents hence the expenditure made for kshs. 19,000 was questionable, null/void.
- B2C Payments attached a list of kshs.99,750 and kshs.300,000 on both accounts (Mpesa/Cooperative Bank).
- On 15th April 2021 and 19th 2021, payments were made by Cooperative Bank on account 9401 for kshs. 60,000 and 61,000, respectively, to a contractor. The transactions were not supposed to have emanated directly from this account but were not treated as B2C Payments. No clear answer has been provided so far.
- According to Mpesa link made on account 9401 being direct debits for publishing journals in the month of March 2021, only one was published (Influence of Behavioral Biases on Investment Decisions of Individual Investors in NSE), but the other one, which was published on March 2021 (Factors Affecting Financial Markets in Rural Areas: A Case of Kakamega South District) for kshs. 10,381.50, and also incurred bank charges of kshs. 1,800 were not published even after the IJBM approving and later on adjourning. No refund has been done so far.
- ICPAK accounts opened and maintained at National Bank since 2014 were unable to provide bank statements as requested; hence gave verbal information of the account being non-operational with NIL balance.
- Fosa statements were later on provided on request.
- The over deduction issue on emergency loan interest of kshs. 997.80 has not been resolved even after the request.
- The idea of imposing non-existing loans on customers (kshs. 591,000) on customers without loans has ceased for some time. I hope such kinds of malpractices should be treated with a lot of concern in the future.

     Several recommendations were made to that effect (as per the list attached); hence very little has been adhered to, which has called for a comprehensive audit review covering the period from 2017 to June 2022, which is five years and six months.

1.2. Recommendations

- Safaricom Company Ltd should provide information on the dubious individuals who claimed to have transacted business with the owner's mobile number to identify the nature of the transaction.
- Cooperative Bank should give a substantive reason why they directly transacted business on the owners' account without the permission of the owner.
- Evidence of cash received by the member staff should be provided for proof of recipient.
- The Cooperative Bank should have detailed information on how payments that were supposed to be channeled through B2C happened to be paid directly.
- Customer needs to liaise with the bank which did the transaction for recovery of the same with explanations for why services were not rendered as stipulated much earlier in the agreement.
- When National Bank declines to produce the documents as required, there is a limitation of scope whereby results may not reflect the true picture of the events that took place during the period; hence for any loss of information both in quantity and quality, they stand the liability.
- Providing wrong information, for example, statements from Fosa, may give wrong results, which they will bear the loss if incurred.
- The over deduction for kshs. 997.80 on an emergency loan should be credited back to the customer's account since the customer does not have any other loan for the same to be compensated.
- Direct transfer of shares from shareholder's deposit is not in order. What normally forms share reserve is surplus dividends which are well communicated to the shareholder. It is unfair when a shareholder's contributions are transferred to the share reserve without her consent.

     Those are some of the critical issues cited, but more suggestions are welcomed for better analysis.

     A sample size will comprise total receipts and payments (excluding airtime and general charges) marred with irregularities/illegalities/anomalies against total receipts and payments (excluding airtime and general charges) as follows:

TOTAL RECEIPTS
$\frac{3,518,522.00}{5,566,391.00}$ =63.21%

TOTAL PAYMENTS
$\frac{2,817,904.00}{5,414,964.00}$ =52.04%

N/B Attached Is a Separate List Showing the Above Information

     A stratified sample size of receipts (marred with irregularities/illegalities) over total receipts (marred with irregularities/illegalities) was considered and as well as that of payments (marred with irregularities/illegalities) over total payments (marred with irregularities/illegalities) which formed the data used in the entire research from Safaricom Co. Ltd. as shown in the table below:

RECEIPTS
2,936,323.00   =83.45%
3,518,522.00

PAYMENTS
1,755,044.00   =62.28%
2,817,904.00

An average of 74.04% was considered adequate for the purpose of data analyses. Hence, the author did not perform reliability/validity tests to come up with Cronbach Alpha since the information provided was enough evidence to rely on (Lee et al., 2013).

In economy, major determinants include investment decisions. The kind of decisions made before investing is what makes the economy of that particular country/sector depend on what an investor is looking for. Various authors have a proof for them:-Khawaja, Bhutto, and Naz (2013). Apart from decision-making, one must consider several underlying factors, including adopting certain behaviors which cut across. For this particular issue, certain important factors were considered including:

- Exaggeration: Putting over-emphasis on an issue of oversell or overdraw and even consideration of size being bigger, larger or worse.
- Assumption: Guesswork, guess reckoning, and speculation, among others.
- Dispositioning: The power to deal with something as one pleases, is a way of placing or arranging something in relation to other things.
- Manipulation: A rise of controls and harmful behavior causing doubt and confusion, doing something without someone's knowledge.
- Repetition: Persistence in character, recurrence of an action or event with its effect on marred irregularities/illegalities of individual investors while making individual investment decisions of the individual investor at Safaricom Co. Ltd.

The above factors were considered as independent variables while investment decisions were considered as dependent variables whereby measurable indices (size, value, and volatility) were looked into critically to determine their influence on independence variables which might have caused or resulted in massive irregularities/illegalities.
The objectives of the study were to establish whether herding behavior had an effect on marred irregularities/illegalities of individual investors on individual investment decisions at Safaricom Co. Ltd. Hence, through the factors which were considered (exaggerations, assumptions, dispositions, manipulations, and repetitions) indicated a massive effect on marred irregularities/illegalities which varied from one independent variable to the other.

1.3. Behavioural Factors
- Exaggerations in both activities and values were rampant, whereby it was discovered that despite certain activities being performed, they ended up being exaggerated both in amount and the transactions performed, which indicated overemphasizing, overselling/overdrew, which ended up with marred irregularities/illegalities.
- Assumptions with the use of guesswork and guess reckoning, that is, calculations of estimates to arrive at a desired result, were massive, which rendered the whole exercise irregular/illegal.
- Dispositioning is having the power to deal with other transactions and also arrangements in the desired all causing an element of irregularities/illegalities.
- Manipulations of transactions by use of controls and harmful behavior and without knowledge of the whole transactions, which ended up being marred with irregularities/illegalities.

Repetitions of an idea of being persistent in nature or having a recurrence of an action or event to this effect also caused a lot of marred activities (irregularities/illegalities).

1.3.1. Individual Investment Decisions

The measurable indices desired in this kind of decision-making were the size of the transaction carried out, the quality of the transaction, the momentum, and last but not least, the volatility (which was based on prices/values fluctuations). Much was deduced from this, and hence due to persistence and high volatility, it was deduced that the entire exercise was marred with irregularities/illegalities.

1.3.2. Safaricom Co. Ltd

Safaricom Co. Ltd was formed in 1997 as fully owned by a subsidiary of telecom Kenya. Michael Joseph was the founder and CEO and hence held office from 2000 to 2010. Bob Collymore took over from Michael Joseph and held office from November 2010 to April 2020. After him, the Office was held by the first African from Kenya, Peter Ndegwa, who took over after the death of his predecessor in April 2020 to date. It is one of the companies which offer various services cutting across (mobile money banking/transfers, consumer electronics, and cloud computing data, just to name a few). It also trades with NSE as Safaricom Co. Ltd, whereby its revenue in 2021 was 264.02 billion Kenya Shillings. Its operating income was 96.16 billion Kenya Shillings; hence its net income was 68.6 billion Kenya Shillings. Currently, its number of employees is 6230 (all the information is according to source data from Safaricom Co. Ltd 2021.

Apart from the above short history of Safaricom Co. Ltd., the company has grown very fast and has roots outside Kenya, including other continents. It is considered the main income revenue earner when it comes to the communication sector with highly advanced technology that is well-impressed worldwide. The logos such as Safaricom is 'better option,' and now Safaricom is 'Simple, Transparent and Honest' for you have done business in the world by enhancing its trust through simple, transparent, and honest manner in service delivery.

1.3.3. Statement of the Problem

Reference is made to the above (1.1.3) description of Safaricom Co. Ltd with its beautiful encounters and its enrichment to the economy not only Kenya but countries linked to Kenya through high diversification of products both in technology and good reputation from the logo (simple, transparent and honest, for you) and lucrative revenue income and purported lenient staff together with quality administration and leadership/governance compared to the research title.

The problem lies between the two: How can an organization have good incentive features, as narrated above, and at the same time experience acute shortfalls, as the topic/title of the research suggests:

- Effect of herding behavior marred with irregularities/illegalities of individual investors on individual investment decisions?
- Where does the problem lie?
- Is it with the company as a legal entity/person, or is it with the members of staff as independent individuals?
- Who is to blame for exaggerations, assumptions, dispositioning, manipulation, and repetition of activities carried out on individual investment decisions?

This is according to source data provided by Safaricom Co. Ltd (2017-2021). These are questions that need answers for future decision-making using herding behavior biases.

1.4. Research Objectives

1.4.1. General Objective

To establish the effect of herding behavior marred with irregularities/illegalities of individual investors on individual investment decisions as Safaricom Co. Ltd.

1.4.2. Specific Objectives

- To determine the effect of exaggerations on herding behavior marred with irregularities/illegalities of individual investors on individual investment decisions as Safaricom Co. Ltd.
- To establish the effect of assumptions on herding behavior marred with irregularities/illegalities of individual investors on individual investment decisions as Safaricom Co. Ltd.
- To examine the effect of dispositioning on herding behavior marred with irregularities/illegalities of individual investors on individual investment decisions as Safaricom Co. Ltd.
- To explain the effect of manipulation on herding behavior marred with irregularities/illegalities of individual investors on individual investment decisions as Safaricom Co. Ltd.
- To determine the effect of repetition on herding behavior marred with irregularities/illegalities of individual investors on individual investment decisions as Safaricom Co. Ltd.

1.5. Research Hypotheses

- HO1: Exaggerations have no significant influence on herding behavior marred with irregularities/illegalities of individual investors on individual investment decisions as Safaricom Co. Ltd.
- HO2: Assumptions have no significant influence on herding behavior marred with irregularities/illegalities of individual investors on individual investment decisions as Safaricom Co. Ltd.
- HO3: Dispositions have no significant influence on herding behavior marred with irregularities/illegalities of individual investors on individual investment decisions as Safaricom Co. Ltd.
- HO4: Manipulations have no significant influence on herding behavior marred with irregularities/illegalities of individual investors on individual investment decisions as Safaricom Co. Ltd.
- HO5: Repetitions have no significant influence on herding behavior marred with irregularities/illegalities of individual investors on individual investment decisions as Safaricom Co. Ltd.

1.5.1. Justification of the Study

The research study was based on the factors affected by herding behavior marred with irregularities/illegalities of individual investors on individual investment decisions as Safaricom Co. Ltd. A number of these factors, both independent (exaggerations, assumptions, dispositioning, manipulations, and repetitions) and how individual investors basing on individual investment decisions were made hence there was a clear indication that the activities were marred with irregularities/illegalities of individual investors on individual investment decisions as Safaricom Co. Ltd negating research hypotheses (HO1, HO2, HO3, HO4, and HO5) and agreeing with alternatives (H1, H2, H3, H4, and H5).

1.5.2. Scope of the Study

The research project aimed at finding how the effect of herding behavior marred with irregularities/illegalities of individual investors on individual investment decisions as Safaricom Co. Ltd. Exaggerations, assumptions, dispositions,

and repetitions, factors were examined as independent variables and individual investment decisions as the dependent variable. A target population of 337 individuals/transactions was considered (Data Source 2017- June 2022, Safaricom Co. Ltd).

2. Empirical Literature

Nothing was reviewed from previous literature, that is, literature review since everything was based on the data collected from the source and analyzed as continuous data (empirical literature) for future use. A Conceptual Framework was used as a structure of concepts that were pulled together as a map for the study. Researchers use conceptual frameworks to guide their studies; you can expect to find a system of ideas synthesized for the purpose of organizing, thinking, and providing study directions (Chinn & Kramer, 1999). This study aimed to identify the effect of herding behavior marred with irregularities/illegalities of individual investors on individual investment decisions as Safaricom Co. Ltd. Several independent variables were measured using a number of indices indicating areas where massive activities were felt.

These were as follows:

- Exaggerations which were measured with indices such as over-emphasizing, overselling, and overdraw, which denoted and payments, respectively.
- Assumptions that were measured using indices such as guesswork, guess reckoning, that is, calculations/estimates, and expectations.
- Dispositions which were measured using indices such as inherent qualities of mind, way of placing or arrangement of something, and power to deal with something as pleased.
- Manipulations which were measured using indices such as the use of controls and harmful behavior, cause of doubt and confusion, and without knowledge of recipient/affected individual.
- Repetitions which were measured using several indices such as action or instance of repeating activity, spelling out stupidity, and persistence in nature and recurring of an action/event/transaction. All these had a corresponding dependent factor, individual investment decisions at Safaricom Co. ltd, which in turn were measured using indices such as size, value, quality, and volatility.
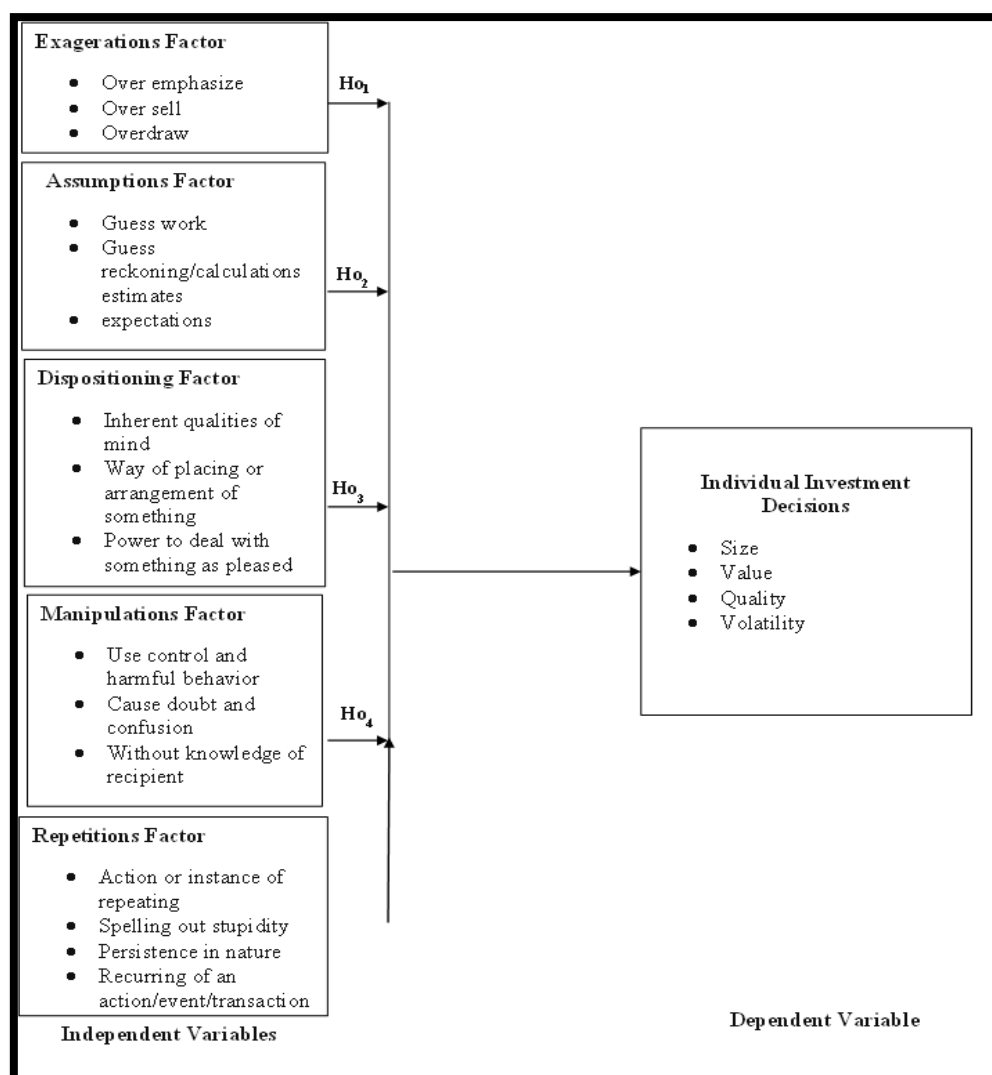

Figure 1: Conceptual Framework

Mean and standard deviations were calculated for fifteen categories versus receipts/payments as follows:

- Fourteen Civil servants versus receipts/payments at Wareng/ Kapseret Sub-County (2017-Dec 2018)
- The mean amount for the 14 individuals was receipts 1,103,333/14=78,809.50 and payments 221,880/14=15,848.57 and the standard deviation (average) for receipts 190,243.57/14=13,588.83 and payments 35,949.82/14=2,567.84.
- Thirteen civil servants' receipts/payments at Transnzoia West Sub-County (2019-March 2021). The mean and standard deviation of 13 individuals was receipts (mean=915,167/13=70,397.46) and payments (mean=130,100/13=10,007.69).hence standard deviation (average) receipts (155,575.57/13=11,967.35)and payments (26,240.57/13=2,018.51).
- Eight Contractors versus receipts/payments. The mean for receipts (51,000/8=6,375) and payments (446,100/8=55,762.50) and average standard deviation for receipts (16,866.61/8=2,108.33) and for payments (170,480.88/8=21,310.11).
- Two Landlords (unknown)/four tenants (known) versus receipts/payments.
- The mean of the receipts (10,670/6=1,778.33) and payments (175,020/6=29,170) while the average standard deviation of receipts (2,527.50/6=421.25) and payments (80,462.67/6=13,410.45).
- Six transactions at Hazina Sacco /Kobil Ltd on 20.04.2017 versus receipts/payments. Mean of receipts (119,617/6=19,936.17) and payments (60,500/6=10,083.33). The standard deviation of receipts (34,744.33/6=5,790.72) and payments (18,037/6=3,006.27).
- Eleven colleagues (2017) versus receipts/payments. Mean of receipts (50,630/11=4,602.73) and payments (32,350/11=2,940.91) and average standard deviation of receipts (12,637.90/11=1,148.90) and payments (7,201.38/6=1,200.23).
- Seventeen colleagues (2018) versus receipts and payments. Mean of receipts (67,860/17=3,991.76) and payments (4,080/17=238.24) and average standard deviation receipts (9,872.64/17=580.74) and payments (893.38/17=52.55).
- Seven colleagues (2019) versus receipts/payments. Mean of receipts (4,180/7=597.14) and payments (15,050/7=2,150). The average standard deviation of receipts (975.13/7=139.30) and payments (3,653.83/7=521.98).
- Five colleagues in 2020.versus receipts/payments. Mean of receipts (0) and payments (29,100/5=5,820) and average standard deviation of receipts (0) and payments (12,460/5=2,492).
- Four Other individuals' known/unknown transactions (2017) versus receipts/payments. Mean of receipts (29,000/4=7,250) and payments (11,925/4=2,981.25). The average standard deviation of receipts (8,371.58/4=2,092.90) and payments (3,442.45/4=860.61).
- Nine Other individuals' known/unknown transactions (2018) versus receipts/payments. Mean of receipts (5550/9=616.67) and payments (14,780/9=1,638.89). The average standard deviation of receipts (1,308.14/9=145.35) and payments (1,738.31/9=193.15).
- Twelve Other individuals' known/unknown transactions (2019) versus receipts/payments. Mean of receipts (85,100/12=7,091.67) and payments (39,150/12=3,262.50). The average standard deviation of receipts (22,912.34/12=1,909.36) and payments (8,408/12=700.70).
- Five Other individuals' known/unknown transactions (2020) versus receipts/payments. Mean of receipts (0) and payments (11,800/5=2,360). The average standard deviation of receipts (0) and payments (2,455/5=491).
- Eight Relatives/unknown transactions versus receipts/payments. Mean of receipts (16,300/8=2,041.25) and payments (38,230/8=4,778.75). The average standard deviation of receipts (4,184.07/8=523.01) and payments (10,586/8=1,323.27).
- Six transactions (2017- June 2022) Unknown individuals/unknown transactions versus receipts/payments. Mean of receipts (477,886/6=79,647.67) and payments (525,039/6=87,506.50). The average standard deviation of receipts (115,192.53/6=19,198.76) and payments (144,351.16/6=24,058.53).

3. Methodology

3.1. Introduction
The chapter deals with the kind of methodology applied, including researched philosophy, research design, and targeted population. Sapling designed reliability tests and diagnostic tests. An overview of data sources, the procedure of analyzing and how it was presented, and operationalizing of the research variables.

3.2. Research Philosophy
It involves drawing conclusions and considering researched issues in a qualitative manner. Other statistical procedures were approved and analyzed (Saunders & ThornHill, 2007) and (Koshan, 2009) how information was presented logically and the language used as simple and clear to be understood.

3.3. Research Design
The research design used for the study was a descriptive and cross-sectional tabulation (in comparison with two more factors). According to Saunders et al. (2009) and Sekran and Bouie (2011), Descriptive survey covers a large area of the topic concern (major view), and the interpretation of data is made in a generalized manner (Neru, 2012).

3.3.1. Target Population

This is the entire population that is covering the research work Mugenda & Mugenda (2003). According to source data 2017-June, 2022 provided by Safaricom Co. Ltd., the target population included individuals/transactions of 337, all marred with irregularities/illegalities having a total of receipts/payments of 2,936,323 and 1,755,044 respectively.

3.3.2. Sampling Frame

Receipts marred with irregularities/illegalities which are receipts marred with irregularities/illegalities (2,936,323) over the total receipts (3,518,522) for the period (2017-June, 2022). 2,936,323/3,518,522=83.48% of total receipts for the prescribed period. Payments marred with irregularities/illegalities, which are payments marred with irregularities/illegalities (1,755,044) over the total payments (2,817,904) for the period (2017-June, 2022). 1,755,044/2,817,904=62.25% of total payments for the prescribed period. Total receipts/total payments (marred with irregularities/illegalities for the stipulated period as a percentage of total receipts/total payments for the same period (4,691,367/6,336,426=74.04%).

3.4. Sampling Size & Sampling Techniques

$$N=\frac{Z2pq}{D2}$$

The above method was not applicable because the sample size of the individuals/transactions covering the period was 337which was less than 10,000.

3.4.1. Data Processing & Analysis

Both linear and multiple regressions were retraced to see how they regress singly or multiply within independent variables. Scalar diagrams were drawn to indicate how the regression was (regressing), and the closeness of the values along the linear line drawn. The format for multiple regression analysis (which was a standard model) was expressed as:

$Y=B0+B1X1+B2X2+B3X3+B4X4+B5X5+e$

Where Y was the individual investment decisions of the dependent investor

X1, X2, X3, X4 & X5 (independent variables/behavioural factors)

Where:

- X1 is Exaggerations Factor
- X2 is Assumptions Factor
- X3 is Dispositions Factor
- X4 is Manipulations Factor
- X5 is Repetitions Factor

3.5. Data Collection Instruments

1. Safaricom Co. Ltd.

Cooperative Bank of Kenya

Source Data: 2017-June, 2022

N/B: Validity tests and Reliability tests were not carried out since the source data originated from original data entities by the author.

3.5.1. Diagnostic Tests

Simple illustrations/calculations on data analysis were applied (normality tests, linearity tests, hypotheses tests, mean, standard deviations, correlation of coefficient, and variance inflation factors).

3.5.2. Linearity Tests

To determine the correlation of coefficients, Cohen, west, and Ailan (2003) in summary form was extracted.

3.6. Multi-Collinearity Checks

For the determination of variance Inflation Factor (VIF), according to Sosa-Eacudero (2009), if VIF =1, it indicates that there is no correlation, and if VIF is greater than 5 and less than 10, there is a high correlation between the factors, common rule thumb VIF should be less than 3. That is according to (Kuther, Nachtsheim & Neter, 2004). More than the required standard call for a drop of the same because of unrealistic conclusions.

4. Findings and Discussions

4.1. Introduction

This study, or rather survey, was prompted after the shortage of responses to the previous audit queries, which covered a period of six (6) months, that is, from September 2021 to February 2022, using the same source data from Safaricom Co. Ltd and Cooperative Bank of Kenya statements covering the prescribed period. The audit report was concerned with the following items:

- The effect of figures in amounts is exaggerated.
- The effect of unknown transactions/unknown individuals.

- The effect of unknown transactions/known individuals
- The effect of double entries of activities transacted.
- The effect of dispositioning activities to balance off irregularities/illegalities created.
- The effect of using a certain pattern to arrive at imaginable results.

Even though this chapter requires several tests on the research data, the author was limited to carrying out the most obvious preliminary tests, which included simple linear, multiple, and hierarchical regression analyses. Later on, there was a comparison and contrast of the study/others that might have been carried out.

Description	Amount in Value	Rate %
Receipts with irregularities/illegalities/Total Receipts	2,936,323/3,518,522	83.45
Payments with irregularities/illegalities/Total Payments	1,755,044/2,817,904	62.28
Mean Average	4,691,367/6,336,426	74.04

Table 1: Respondents' Rate
Total Receipts/Total Payments Excluding Purchase of Airtime and General Charges (VAT)
(2017-June 2022)
Source Data: 1. Safaricom Co. Ltd. 2. Cooperative Bank of Kenya

The summary of the above receipts and payments marred with irregularities/illegalities against receipts/payments is shown above. The idea of sampling was inadequate due to the massiveness of activities marred with both irregularities/illegalities. Hence, it required further investigation to come up with a true and fair judgement. Cross-tabulations of selected variables were carried out to understand the relationship between them.

S/No	Individual	Rate %	Receipts in Value	Rate %	Payments in Value
1.	Eliud Chirchir	13.38	147,614.00	19.22	42,650.00
2.	Fiedory Onyango	14.71	162,270.00	18.15	40,280.00
3.	Wesley Maina	12.94	142,769.00	Nil	Nil
4.	Jackline Sainare	9.20	101,500.00	Nil	Nil
5.	Joseph Obwocha	3.31	36,550.00	5.43	12,050.00
6.	George Obago	4.29	47,280.00	Nil	Nil
7.	Martin Cheruiyot	6.46	71,250.00	Nil	Nil
8.	Sharon Okweno	13.51	149,100.00	Nil	Nil
9.	Simiyu Munoko	17.35	191,380.00	21.63	4,800.00
10.	Thomas Keitany	3.95	43,620.00	Nil	Nil
11.	Consolata Omondi	Nil	Nil	8.38	18,600.00
12.	Noellyne M	0.48	5,000.00	18.95	42,050.00
13.	Jepkosgei Katwa	0.48	5,000.00	2.77	6,150.00
14.	John Sang'anyi	Nil	Nil	5.45	12,100.00
	TOTAL	100.00	1,103,333.00	100.00	221,880.00

Table 2: Civil Servants (known) versus Receipts/Payments from Wareng/Kapseret
Sub-County (January 2017-December 2018)
Source Data: Safaricom Co. Ltd.

S/No	Individual	Rate %	Receipts in value	Rate %	Payments in value
1.	Zaitun Ndukuyu	8.82	80,700.00	Nil	Nil
2.	Raphael Mutiti	2.95	27,000.00	Nil	Nil
3.	Rose Maleya	4.05	37,090.00	Nil	Nil
4.	Francis Waguchu	16.07	147,100.00	53.80	70,000.00
5.	John Wambui	12.18	111,500.00	Nil	Nil
6.	Catherine Chemaiti	7.65	70,000.00	1.92	2,500.00
7.	Carolyne Murunga	1.54	14,100.00	5.46	7,100.00
8.	Kennedy Simbauni	6.36	58,200.00	Nil	Nil
9.	Samwel Motari	6.01	55,000.00	8.07	10,500.00
10.	Peter Kuya	23.14	211,765.00	Nil	Nil
11.	Kevin Wakhanya	7.61	69,600.00	23.06	30,000.00
12.	Johnstone Soita	1.86	17,000.00	7.69	10,000.00
13.	Irene Omukata	1.76	16,112.00	Nil	Nil
	TOTAL	100.00	899,055.00	100.00	130,100.00

Table 3: Civil Servants (known) versus Receipts/Payments from
Transnzoia West Sub County (December 2018-February 2021)
Source Data: Safaricom Co. Ltd.

S/No	Individual	Rate %	Receipts in Value	Rate %	Payments in Value
1.	Jackson Lung'anyi	Nil	Nil	23.78	106,100.00
2.	Jackson Khavwanditsa	Nil	Nil	2.80	12,500.00
3.	Hassan Omar	Nil	Nil	4.09	18,250.00
4.	Boniface Okello	Nil	Nil	3.59	16,000.00
5.	Francis Lutta	100	51,000.00	51.77	230,950.00
6.	Fanuel Okaya	Nil	Nil	1.52	6,800.00
7.	Jackton Kombo	Nil	Nil	5.69	25,400.00
8.	Omulando Mandela	Nil	Nil	6.75	30,100.00
	TOTAL	100.00	51,000.00	100.00	446,100.00

Table 4: Contractors versus Receipts/Payments (2017-June, 2022)
Source Data: Safaricom Co. Ltd.

S/No	Individual	Rate %	Receipts in Value	Rate %	Payments in Value
1.	Stephen Kimuge	66.07	7,050.00	10.40	18,200.00
2.	Eunice Okal	Nil	Nil	3.91	6,850.00
3.	Peter Waswa	Nil	Nil	0.95	1,670.00
4.	Ecans Onchiri	Nil	Nil	84.73	148,300.00
5.	Javan Shibonje	18.74	2,000.00	Nil	Nil
6.	Adams Kwaloto	15.18	1,620.00	Nil	Nil
	TOTAL	100.00	10,670.00	100.00	175,020.00

Table 5: Landlords Tenants (known/unknown) versus
Receipts/Payments (2017-June 2022)
Source Data: Safaricom Co. Ltd.

S/No	Individual	Rate %	Receipts in Value	Rate %	Payments in Value
1.	Cash Deposit	23.90	28,590.00	Nil	Nil
2.	Cash Deposit	58.52	70,000.00	Nil	Nil
3.	Cash Deposit	0.86	1,027.00	Nil	Nil
4.	Cash Withdrawal	Nil	Nil	66.12	40,000.00
5.	Cash Deposit	16.72	20,000.00	Nil	Nil
6.	Payments	Nil	Nil	33.88	20,500.00
	TOTAL	100.00	119,617.00	100.00	60,500.00

Table 6: Hazina Sacco Ltd/Kobil versus Receipts/Payments on 20/04/2017 (Eliud Chirchir)
Source Data: Safaricom Co. Ltd.

S/No	Individual	Rate %	Receipts in Value	Rate %	Payments in Value
1.	Chrispinus Mandare	Nil	Nil	9.43	3,050.00
2.	Winston Kalema	19.95	10,100.00	Nil	Nil
3.	Richard Miima	Nil	Nil	62.13	20,100.00
4.	Philip Kilaka	19.75	10,000.00	Nil	Nil
5.	Teresa Musuyah	Nil	Nil	Nil	Nil
6.	Julius Kabanga	58.86	29,800.00	Nil	Nil
7.	Lee Omanje	1.44	730.00	Nil	Nil
8.	Julius Kilinda	Nil	Nil	3.40	1,100.00
9.	Omwamba Matagi	Nil	Nil	6.18	200.00
10.	Albert Makuba	Nil	Nil	7.88	2,550.00
11.	Michael Muchoki	Nil	Nil	6.35	2,050.00
	TOTAL	100.00	50,630.00	100.00	32,350.00

Table 7: Colleagues versus Receipts/Payments (2017)
Source Data: Safaricom Co. Ltd.

S/No	Individual	Rate %	Receipts in Value	Rate %	Payments in Value
1.	Denis Abuya	6.70	4,550.00	Nil	Nil
2.	Katito Maina	16.21	11,000.00	Nil	Nil
3.	Richard Miima	6.12	4,150.00	Nil	Nil
4.	Simon Ochego	3.00	2,030.00	Nil	Nil
5.	Denis Njiru	1.52	1,030.00	Nil	Nil
6.	Lee Omanje	14.74	10,000.00	Nil	Nil
7.	Gilbert Abuya	4.48	3,040.00	Nil	Nil
8.	Peter Munene	17.68	12,000.00	Nil	Nil
9.	Stephen Nyamunyamu	4.42	3,000.00	Nil	Nil
10.	Carolyne Njeru	2.95	2,000.00	Nil	Nil
11.	Lucas Opondo	4.42	3,000.00	Nil	Nil
12.	Collins Nundu	3.00	2,030.00	Nil	Nil
13.	Consolata Oyinda	4.49	3,050.00	Nil	Nil
14.	Loyce Wanyama	1.52	1,030.00	Nil	Nil
15.	Whycliffe Shifwoka	3.54	2,400.00	Nil	Nil
16.	Julius Kilinda	Nil	Nil	50.62	2,050.00
17.	Walter Avihama	5.23	3,550.00	49.38	2,000.00
	TOTAL	100.00	67,860.00	100.00	4,050.00

Table 8: Colleagues versus Receipts/Payments (2018)
Source Data: Safaricom Co. Ltd.

S/No	Individual	Rate %	Receipts in Value	Rate %	Payments in Value
1.	Aston Asikoye	50.24	2,100.00	Nil	Nil
2.	Mary Ikanda	24.64	1,030.00	Nil	Nil
3.	Walter Avihama	25.12	1,050.00	Nil	Nil
4.	Joseph Muoki	Nil	Nil	39.87	6,000.00
5.	Lee Omanje	Nil	Nil	39.87	6,000.00
6.	Lawrence Warui	Nil	Nil	6.64	1,000.00
7.	David Omweno	Nil	Nil	13.62	2,050.00
	TOTAL	100.00	4,180.00	100.00	15,050.00

Table 9: Colleagues versus Receipts/Payments (2019)
Source Data: Safaricom Co. Ltd.

S/No	Individual	Rate %	Receipts in Value	Rate %	Payments in Value
1.	Lee Omanje	Nil	Nil	55.33	16,100.00
2.	Lawrence Warui	Nil	Nil	27.49	8,000.00
3.	Milcah Odeny	Nil	Nil	3.44	1,000.00
4.	Juliet Lubanga	Nil	Nil	3.44	1,000.00
5.	Alice Onzere	Nil	Nil	10.31	3,000.00
	TOTAL	100.00	Nil	100.00	29,100.00

Table 10: Colleagues versus Receipts/Payments (2020)
Source Data: Safaricom Co. Ltd.

S/No	Individual	Rate %	Receipts in Value	Rate %	Payments in Value
1.	Linda Mugenya	Nil	Nil	50.31	6,000.00
2.	B2C NIC	34.48	10,000.00	Nil	Nil
3.	Cash Deposit/Nakumatt	65.52	19,000.00	Nil	Nil
4.	Kawasco	Nil	Nil	49.69	5,925.00
	TOTAL	100.00	29,000.00	100.00	11,925.00

Table 11: Other Known Individuals (Unknown Transactions) versus Receipts/Payments (2017)
Source Data: Safaricom Co. Ltd.

S/No	Individual	Rate %	Receipts in Value	Rate %	Payments in Value
1.	Thomas Senaji	Nil	Nil	20.34	3,000.00
2.	Linda Mugenya	Nil	Nil	16.95	2,500.00
3.	Paul Oduor	Nil	Nil	20.68	3,050.00
4.	Thomas Senaji	Nil	Nil	13.90	2,050.00
5.	Francis Namu	18.92	1,050.00	Nil	Nil
6.	Philip Kilaka	54.05	3,000.00	Nil	Nil
7.	William Wasike	27.03	1,500.00	Nil	Nil
8.	Fanuel Okaya	Nil	Nil	14.24	2,100.00
9.	Julius Kilinda	Nil	Nil	13.90	2,050.00
	TOTAL	**100.00**	**5,550.00**	**100.00**	**14,750.00**

Table 12: Other Known Individuals (Unknown Transactions) versus Receipts/Payments (2018)
Source Data: Safaricom Co. Ltd.

S/No	Individual	Rate %	Receipts in Value	Rate %	Payments in Value
1.	Cash Deposit/Maraba Rd	0.71	600.00	Nil	Nil
2.	B2C Equity	0.59	500.00	Nil	Nil
3.	Isabella Andia	Nil	Nil	3.83	1,500.00
4.	B2C Coop. Bank	5.88	5,000.00	Nil	Nil
5.	Cash Deposit	11.75	10,000.00	Nil	Nil
6.	Tobias Olweny	Nil	Nil	63.86	25,000.00
7.	Jois Oronje	Nil	Nil	12.90	5,050.00
8.	B2C Payments	47.00	40,000.00	Nil	Nil
9.	Julius Miroga	Nil	Nil	13.03	5,100.00
10.	Cash Deposit	31.73	27,000.00	Nil	Nil
11.	Linda Mugenya	Nil	Nil	6.39	2,500.00
12.	Deposit ICEA Bldgs.	2.35	2,000.00	Nil	Nil
	TOTAL	**100.00**	**85,100.00**	**100.00**	**39,150.00**

Table 13: Other Known Individuals (Unknown Transactions) versus Receipts/Payments (2019)
Source Data: Safaricom Co. Ltd.

S/No	Individual	Rate %	Receipts in Value	Rate %	Payments in Value
1.	Donald Jagero	Nil	Nil	21.19	2,500.00
2.	Jois Oronje	Nil	Nil	25.85	3,050.00
3.	Agripina Atsango	Nil	Nil	12.71	1,500.00
4.	Linda Mugenya	Nil	Nil	6.36	750.00
5.	Fanuel Okaya	Nil	Nil	33.90	4,000.00
	TOTAL	**100.00**	**Nil**	**100.00**	**11,800.00**

Table 14: Other Known Individuals (Unknown Transactions) versus Receipts/Payments (2020)
Source Data: Safaricom Co. Ltd.

S/No	Individual	Rate %	Receipts in Value	Rate %	Payments in Value
1.	Allan Wanyama	Nil	Nil	49.91	19,080.00
2.	Nancy Wanyama	40.42	6,600.00	10.46	4,000.00
3.	Doreen Kihara	3.67	600.00	6.54	2,500.00
4.	Raymond Moturi	25.11	4,100.00	Nil	Nil
5.	Joan Ongongo	6.12	1,000.00	30.47	11,650.00
6.	Pamela Wanyama	18.37	3,000.00	Nil	Nil
7.	Faith Wanyama	6.31	1,030.00	Nil	Nil
8.	Loi Ngoli	Nil	Nil	2.62	1,000.00
	TOTAL	100.00	16,330.00	100.00	38,230.00

Table 15: Relatives versus Receipts/ Payments (2017-June 2022)
Source Data: Safaricom Co. Ltd.

S/No	Period	Rate %	Receipts in Value	Rate %	Payments in Value
1.	2017	34.14	163,169.00	22.90	120,254.00
2.	2018	20.09	96,027.00	14.13	74,190.00
3.	2019	10.49	50,130.00	22.36	117,410.00
4.	2020	31.05	148,360.00	35.47	186,245.00
5.	2021	4.23	20,200.00	4.69	24,640.00
6.	June 2022	Nil	Nil	0.44	2,300.00
	TOTAL	100.00	477,886.00	100.00	525,039.00

Table 16: Unknown Individuals/Unknown Transactions versus Receipts/ Payments (2017-June 2022)
Source Data: Safaricom Co. Ltd.

Reference is made to the above tables. Hence, a summary of the findings is listed below according to the above information:

- Table 2: Civil Servants (known) versus Receipts/Payments from Wareng/Kapseret Sub-County (January 2017-December 2018): The percentage rating was the main indicator. The percentage rate indicators were made for each individual (civil servants) who worked there during the period specified (14 individuals versus receipts of 1,103,333.00 against payments of 221,880.00.

The following outcomes were rated to measure the independent indicators (variables) which were found to be marred with irregularities/illegalities. The indicators were being rated in the form of receipts/payments (in value), whereby the receipts (1,103,333) (100%) and payments (221,880) (100%). The highest individual rating (17.35%) was receipts from Simiyu Munoko (191,380), followed by Fiedory Onyango rating (14.71%), receipts (162,270), Sharon Okweno (13.51%) (149,100), Eliud Chirchir (13.38%) (147,614), Wesley Maina (12.94%) (142,769) in that order hence payments made by Simiyu Munoko (21.63%) (48,000), Eliud Chirchir (19.2%) (42,650), Noellyne M. (18.95%) (42,050), Fiedory Onyango (18.15%) (40,250) among others in that of payments.

- Table 3: Civil Servants (known) versus Receipts/Payments from Transnzoia West Sub-County (December 2018-February 2021): The receipts which were the highest and marred with irregularities/illegalities were from Peter Kuya (23.14%) (211,765), Francis Waguchu (16.07%) (147,100), John Wambui (12.18%) (115,000), Zaitun Ndukuyu (8.82%) (80,700) among others in that order of receipts. Payments, the highest value was from Francis Waguchu (53.8%) (70,000) and Kevin Wekhanya (23.06%) (10,000), among others in that order of payments.
- Table 4: Contractors versus Receipts/Payments (2017-June, 2022): Eight contractual individuals were identified as having been marred with irregularities/illegalities. The only receipt was from Francis Lutta (100%) (51,000), 51.77% of the total payments (100%) (446,100), and the highest payments were from Francis Lutta (51.77%) (230,950), Jackson Lunganyi (23.78%) (106,100) among others in that order of payments.
- Table 5: Landlords Tenants (known/unknown) versus Receipts/Payments (2017-June 2022): The total receipts marred with irregularities/illegalities were (100%) (10,670) and payments (100%) (175,020). The highest receipts were from Stephen Kimuge (66.07%) (7,050), Javan Shibonje (18.74%) (2000), and Adams Kwaloto (15.18%) (1,620) in that order of receipts. The highest payments were from Evans Onchiri (84.73%) (148,300) and Stephen Kimuge (10.40%) (18,200) in that order, among other payments.
- Table 6: Hazina Sacco Ltd/Kobil versus Receipts/Payments on 20/04/2017 (Eliud Chirchir): Transactions carried out both in Nairobi and outside Nairobi on that particular date. Total receipts and payments were (100%) (119,617)/ (100%) (60,500), respectively, made by one colleague (Eliud Chirchir).
- Table 7: Colleagues versus Receipts/Payments (2017): 11 colleagues were cited with marred irregularities/illegalities. Total receipts/payments were (100%) (50,630)/ (100%) (32,350) respectively in 2017. Julius Kabanga indicated the highest receipt (58.86%) (29,800), and Richard Miima indicated the highest payment (62.13%) (20,100) among other receipts/payments in that order, as indicated in the table.
- Table 8: Colleagues versus Receipts/Payments (2018): 17 colleagues were cited for having marred irregularities/illegalities in 2018. Total receipts/payments were (100%) (67,860) / (100%) (100%) (4,050), respectively. The highest receipt was from Peter Munene (17.68%) (12,000), Katito Maina (16.21%) (11,000), and Lee Omanje (14.74%) (10,000) in that order of receipts. Payments were two:
  - ✓ From Julius Kilinda (50.62%) (2,050), and
  - ✓ From Walter Avihama (49.38%) (2,000) in that order of payments
- Table 9: Colleagues versus Receipts/Payments (2019): 7 individuals were represented as marred with irregularities/illegalities in 2019. Total receipts/payments were (100%) (4,180) and (100%) (15,050). The highest receipts were from Aston Asikoye (50.24%) (2,100) in that order of receipts, and the highest payment was from Lee Omanje and Joseph Muoki, both as (39.87%) (6,000) hence were in that order of payments.
- Table 10: Colleagues versus Receipts/Payments (2020): In 2020, five colleagues cited with marred irregularities/illegalities were as follows: total receipts/payments (100%) (0)/ (100%) (29,100). The highest payments were from Lee Omanje (55.33%) (16,100); hence others follow in that order of payments.
- Table 11: Other Known Individuals (Unknown Transactions) versus Receipts/Payments (2017): In 2017, four known/unknown transactions marred with irregularities/illegalities were cited. Total receipts/payments were (100%) (29,000)/ (100%) (11,925), respectively. The highest receipt was the amount deposited at Nakumatt Kakamega (65.52%) (19,000), and the highest payment from Kawasco (49.69%) (5,925), respectively, in those orders.

- Table 12: Other Known Individuals (Unknown Transactions) versus Receipts/Payments (2018): Nine individuals were cited for having been marred with irregularities/illegalities in 2018. Total receipts/payments were (100%) (5,550)/ (100%) (14,750). The highest receipt was from Philip Kiliaka (54.05%) (3,000), and the highest payment was from Paul Oduor (20.68%) (3,050) in those orders, respectively.
- Table 13: Other Known Individuals (Unknown Transactions) versus Receipts/Payments (2019): In 2019, 12 individuals were cited for having marred with irregularities/illegalities with a total receipts/payments of (100%) (85,100)/ (100%) (39,150) respectively. The highest receipts/payments were from B2C Payments (47.00%) (40,000)/ Tobias Olweny (63.86%) (25,000) in those orders, respectively.
- Table 14: Other Known Individuals (Unknown Transactions) versus Receipts/Payments (2020): In 2020, there were 5 individuals who were cited for marred irregularities/illegalities. Total receipts/payments were as follows: (100%) (0)/ (100%) (11,800). The highest payment was from Fanuel Okaya (33.90%) (4,000) in that order.
- Table 15: Relatives versus Receipts/ Payments (2017-June 2022): 8 individuals were cited for having been marred with irregularities/illegalities during the stipulated period. The total receipts/payments for the period were (100%) (16,330)/ (100%) (38,230), respectively. The highest receipts/payments were from Nancy Wanyama (40.42%) (6,600)/ Allan Wanyama (49.91%) (19,080), respectively, in those orders.
- Table 16: Unknown Individuals/Unknown Transactions versus Receipts/ Payments (2017-June 2022): Six transactions were cited according to stipulated periods; hence total receipts/payments were: (100%) (477,886)/ (100%) (525,039). The highest receipts/payments were experienced during the periods of (34.14%) (163,169) / (35.47%) (186,245) in 2017 and 2020, respectively, and in that order.

N/B
A separate sheet was provided indicating specific individuals per specific period the activities occurred.

4.2. Descriptive Analysis
It represented an overview of descriptive analysis related to the study variables (exaggerations in amounts, unknown/ unknown individuals, unknown transactions/known individuals, multiple transactions, dispositioning, and adoption of similar trends on individual investment decisions. The use of central tendency (means and standard deviations) was applied. Each variable was discussed separately, and the responses were presented in table forms followed by elaborative discussions underneath:

4.2.1. Exaggerations versus Marred Irregularities/Illegalities

4.2.1.1. Civil Servant vs. Receipts/ Payments Transactions
From the previous findings both from Wareng/ Kapseret Sub-County and Transnzoia West Sub-County, an element of exaggeration was auspicious whereby we experienced abnormal transactions both from internal individuals (members of staff) and external individuals (members from the same department) having transacted with an individual investor at Safaricom Co. Ltd./Cooperative Bank and other subsidiary agents.
Most exaggerations were noted, especially the trend from the deputy bosses and the cashiers of the time: that is, from the members of the staff. A lot of receipts were made from the two categories of individuals, which were over-emphasized hence making all the activities carried out look bigger and better, and, on the other side, there was an effect of overall/ overdress, which worsened the situation. Likewise, other civil servants whose activities, both in receipts and payments, were exaggerated to give a bigger, better image which later on worsened the situation through oversell/overdraw; hence, all activities were termed as fraudulent.

4.2.1.2. Contractors vs. Receipts/Payments Transactions
Over-emphasized payments are made by dispositioning activities in creating space for others and for receipts/payments for a certain period. Payments made to contractors, as emphasized earlier, are either inclusive of a trend of 2,000/2,050 or treated as a trend on Safaricom Co. Ltd. (Category of family/friends), which is not true.

4.2.1.3. Landlords/Tenants vs. Receipts/Payments Transactions
There is an element of exaggeration through additional non-existence information and over-estimation (Javan Shibonje and Adams Kwaloto). All transactions done resulted in bigger, better, imaginary transactions, which ended up having an oversell/overdraw hence heading to a worse encounter.

4.2.1.4. Colleagues vs. Receipts/Payments Transactions
The author thought that the idea of having colleagues was to improve a good relationship that will cement strong inter/intra personal. Inclusiveness in the family/friends category when drawing up the trend graphs at Safaricom Co. Ltd showing how transactions were being done between them and the individual investor. For example, a constant trend of values such as 1,500-3,050 indicated the adoption of a certain pattern/logarithm being used to arrive at end results. It remained an obvious indication that the activities carried out were cooked; hence by doing so, there was an element of overdraw/oversell to balance off trading activities.

4.2.1.5. Known individuals/ Unknown Transactions vs. Receipts/Payments

Several receipts and payments were made from other known individuals who were unknown with the intention of increasing the number of family/friends to be seen to be making profits at the Safaricom Co. Ltd and Cooperative Bank, and also subsidiary agents inform of B2C receipts/payments which were not the true position. In reality, it was a one-individual investment (simple, transparent, and honest) activity. Only a few relatives transacted genuine activities with the individual investor (out of 12 relatives, 4 transacted genuine activities and 8 had disputed values). Due to this, exaggerations were caused by overdrawing/selling in various transactions.

4.2.1.6. Unknown Individuals/Unknown Transactions vs. Receipts/Payments

An element of exaggeration was seen in various activities carried out. Genuine activities carried out were treated as a category of family/friends so that the activities are seen to shift general charges to an individual investor and also liable for any dubious activity that may be a syndicate between the organization/ unknown individual investors.

<u>4.2.2. Assumption vs. Marred Irregularities/Illegalities</u>

- According to transactions carried out between civil servants vs. receipts/payments from January 2017-March 2021 purely indicated the element of assumptions whereby speculations, guesswork, and guess reckoning was on the rampage. It was assumed that the highest receipts were from individuals in strategic sections such as cash office/ministries/state departments in receipt of huge funds irrespective of the number of individuals from the same department. For example, huge receipts from Wesley Maina, Jacckline Sainare, and Sharon Okweno from NGCDF Kapseret Constituency were all assumed with reasons that even a layman could detect. Only one department cannot be involved in such activity at a certain time. In addition, there were overlaps experienced from receipts/payments and the period of predecessor/successor, which were fraudulent activities done inside/Safaricom Co. Ltd.
- Another example was seen with huge activities carried out by staff members such as Eliud Chirchir/Fiedory Onyango as Deputy District Accountant/ District Cashier, respectively. Peter Kuya/Kennedy Simbauni (predecessor/successor in the cash office at Transnzoia West Sub-County) and Francis Waguchu and Samwel Motari (predecessor/successor) as Deputy District Accountants at the same place. All these result from reckoning (calculations estimates) speculations and, to a lesser extent, imaginary expectations, which render all transactions null and void. Speculations were as a result of individuals who were fond of making enquiries/abrupt visits, such as Martin Cheruiyot (District Education Officer), James Obwocha (Deputy County Commissioner), Wareng/Kapseret Constituency who were mistakenly assumed to form part of family/friends category as indicated by Safaricom Co. Ltd.
- According to contractors vs. receipts/payments, assumptions were a result of speculations and expectations that there was previously a contractor by Jackson Lutta who was contracted at one given time to construct several government offices during president Uhuru's regime (2012 ESP programs). So the assumption of the same made speculations with other contractors with similar names (Jackson Lunganyi, Jackson Khavwanditsa, and Jacktone Kombo) to be included in the category of family/friends (Safaricom Co. Ltd.) as imaginary transactions. The most pronounced one was Francis Lutta, a brother to Jackson Lutta, who was a prominent supplier of raw building materials both publicly/privately; hence an element of assumption was on the increase due to several transactions carried out during the period.
- Other contractors were also included in transactions of similar consistency value (2000/2050) with no approval for what they were being paid for. They include- Boniface Okello, Fanuel Okaya, Hassan Omar, Mandel Omulando, and Benard Akhonya, among others.
- Another assumption was experienced through transactions carried out by landlords (both known/unknown) and tenants (known) unexplained activities. There was guesswork of landlords (Peter Waswa/unknown and Eunice Okal/ unknown) whose activities were guess reckoning at the sometimes unknown individuals, which rendered the whole transactions fraudulently. Evans Onchiri (landlord in Transnzoia West Sub-County/ civil servant in Vihiga and motorists, Javan Shibonje/Adams Kwaloto (treated as tenants who leased the motorbikes from the owner) with a similar consistent value of receipts/payments (2,000/2,050) were unexplainable. Over-estimating and guesswork were applied, and even a lack of understanding (Stephen Kimuge, a landlord in Eldoret, was even mistaken at one given time as a civil servant. Among other factors.
- Activities both receipts/payments made on 20th April 2017 at Hazina Sacco, Kobil Petrol Station Ltd, and other places outside Nairobi for 119,617.00 was pure speculation in that the individual investor will not have assumed to have received dividends from Sacco and transacted on the same day in another place outside Nairobi less than one hour with the amount overestimated as dividends received (70,000.00).
- Colleagues vs. receipts/payments were pure guesswork. There was an idea of including them as grants which were illegally withdrawn in the name of the investor to cater for training facilities whereby the value of 1,000/1,050, 1,500/1,550, 2,000/2,050, 3,000/3,050 and even 5,000/ and above was experienced as awards of certificates mostly in the form of degrees, masters, Ph.D. in the category of family/friends. The assumption was to boost the transactions and inclusive of 40 unknown individuals (2017-2020). This is according to the findings.
- Other assumptions were experienced between known/unknown activities whereby several transactions in the form of B2C receipts/payments were made through paying bills to various corporations, and other transactions made by individuals both in the form of receipts and payments were speculations, for example, receipts/payments

(2017-2019) between Safaricom and Cooperative Bank inclusive with other agents. The investor had not applied for mobile banking until 2020, which shows that activities carried out before 2020 using mobile banking were non-existence and assumed. Guess the reckoning for payments made to Kawasco (5,925) in 2017 when the investor did not have water. Other activities are payments made to a tailor (Lynda Mugenya) were a symbol of fabrication in speculations of manufacturing industries. Many unknown transactions with forged amounts were a clear indication of the same.

- Several activities were carried out by unknown/unknown transactions, both in receipts/payments during the specified period. All measuring indices for assumption were reckoning and guess estimates to increase transactions carried out. Some of the highest receipts (Kamau Mwaura/21,000, Rose Andayi/47,275, B2C/40,000, Ann Gachau/30,500, Kipchumba Limo/10,000, Catherine Murututu/35,000, Musa Ainea/9,900, Bett Benard/ 9,100, Samwel Maina/6,700, Ruth Esendi/6,800, DTB/12,500, Patrick Wahome/20,000, B2C/51,000, Deposit/13,000 and highest payments include Gilbert Shikuku/5,300, Wilson Ngariarita/15,100, Mwaura Kamau/10,050, James Watenya/15,000, Robert Wetende/7,100, Milka Ogeso/10,100, Beatrice Wanjiku/5,500, Fatuma Mahafudh/4,300, Bernadetta Omondi/37,000, and Godfery Omilly/10,000 among others in proportion.

4.2.3. Dispositions vs. Receipts /Payments Marred with Irregularities/Illegalities
It is a way of dealing with something the way it pleases someone. It can be through the distribution or transfer of something to suit the balances of receipts/payments.

4.2.3.1. Civil servants vs. Receipts/Payments Transactions
Transactions were involved in dispositioning to create a balance of receipts/payments where activities were either shifted or imagined to exist. This is clearly seen during the specified periods, and the activities carried out during those periods. There was an overlapping of situations whereby there was a lack of knowledge of the transactions performed. For example (Martin Cheruiyot, former District Education Officer Kapseret Constituency, encountered transactions with an individual investor in 2019/2020 while on transfer to Kwale County in 2018, and the author transferred to Transnzoia West Sub County in November 2018, which was unrealistic/unfalsified activities. Likewise, Wesley Maina/Jackline Sanaire (predecessor/successor, fund account managers Kapseret Constituency, and Joseph Obwocha (Deputy County Commissioner), all transacted with the individual investor between 2019-2020. Francis Waguchu transacted with the individual investor even after his retirement in 2020. The main idea was to suit the taste of the fabricator.

4.2.3.2. Contractors vs. Receipts/Payments/Transactions
Contractors who were prominent and seemed to have several transactions at a given time were used for dispositioning transactions, for example, Francis Lutta. Transactions were omitted to create new unknown transactions .unknown individuals. Some payments were treated as B2C; hence they were made directly by mpesa to individual accounts provided.

4.2.3.3. Colleagues vs. Receipts/Payments Transactions
The activities were massively dispositioned by other genuine ones to create allowances for them so that they can be seen to have transacted with the individual investor; hence the entire thing was an individual idea and creation.

4.2.3.4. Known Individuals/Unknown Receipts/Payments Transactions
Dispositioning was created in favour of certain sectors to claim the balance of transactions. This practice was massively seen through Lynda Mugenya, who was monopolized by an individual investor in matter wear and clothing.

4.2.3.5. Unknown Individuals/Unknown Receipts/Payments Transactions
Dispositioning was massively seen in this category because of the greatest number of individual investors/transactions which were slotted in and hence comprised of greatest values in receipts/payments for the stipulated period (477,886/525,039 respectively). Other queer activities were introduced by the so-called family/friends category whereby relatives (Nancy Wanyama) slotted in their unknown relatives (Roselyne Esendi, Ruth Esendi, Fatuma Mahafudh, among others) with unknown activities to suit their liking. Transactions that also were suspicious were from relatives who are already deceased (Pamela Wanyama & Doreen Kihara).

4.2.4. Manipulations vs. Receipts/Payments Marred with Irregularities/Illegalities
Several transactions, both in receipts/payments, were manipulated (doing things without the investor's knowledge), which in the end result caused doubt and confusion about transactions made during the specified period.

4.2.4.1. Civil Servants vs. Receipts/Payments Transactions
There were huge manipulations whereby several individuals' transactions were manipulated. For example, receipts from individuals who assumed to have given out money to the investor includes: Kennedy Simbauni, Peter Kuya, Wesley Maina, Zaituni Ndukuyu, Thomas Keitany, Joseph Obwocha, Jackline Sanaire, Simiyu Munoko, among others in different proportions).almost all receipts made from civil servants were manipulated since occasionally head of the department can appreciate one with 4,000 or less for good services rendered. It is absurd to see these kinds of transactions claimed to have emanated from fellow colleagues who depend on salary like 'investors'. It is questionable

where they were getting these kinds of funds to facilitate individual investors in the business. These are some of the activities which have prompted the investor to come up with this research to understand what might have been with both organizations (public/private /practitioners) to come up with such kind of reports in an individual's statements without proper consultations from the former.

4.2.4.2. Contractors vs. Receipts/Payments Transactions

Manipulations which were measured by the influence from other activities to advantage others, for example, payments made to Francis Lutta were interfered with so that it creates space for other less advantaged contractors like Fanuel Okaya so that it is assumed there is an increase in the category of family/friends as indicated by Safaricom Co. Ltd.

4.2.4.3. Landlords/Tenants (Known/Unknown) vs. Receipts/Payments Transactions

Manipulations of non-existence activities through unknown individuals (Peter Waswa/Eunice Okal). Manipulations in values (Javan Shibonje/Adams Kwaloto). Wrong comparison between Stephen Kimuge (landlord) and Stephen Jalenga (civil servant), among many other activities that have already been discussed above.

4.2.4.4. Colleagues vs. Receipts/Payments Transactions

These transactions are similar to the previous whereby the main idea was to create a vacuum for other fraudulent and unknown transactions. These included colleagues who are neither known to the investor nor dealt with the investor directly (Gilbert Abuya, Collins Nundu, and David Omweno, among others). The mathematical/algorithm sequences applied (1,000/1,030/ 1,050: 2,000/2,030/2,050: 3,000/3,030/3050, 5,000/5,050/5,100 for awarding certificates ranging from KNEC, diplomas, and degrees, masters, Ph.Ds, and honorary degrees.

4.2.4.5. Hazina Sacco Co. Ltd/ Kobil Petrol Station vs. Receipts/Payments on 20-04-2017

Payments were manipulated in favour of certain individuals using a specific individual who manipulated the transactions within and without Nairobi city on that particular date. Transactions were both done using B2C and cash (deposits/withdrawals).

4.2.4.6. Known/Unknown vs. Receipts/Payments Transactions

For activities to make sense, they were actually manipulated at the expense of creating these transactions, whereby the whole exercise was fully marred with irregularities/illegalities. There was no way to form any reasonable conclusions from these activities because they formed over 50% of transactions marred with irregularities/illegalities. It was not easy to introduce a good number of transactions/ individuals to their advantage. Every bit of correct transaction was shaken to come up with what looked real but, in reality, nominal.

4.2.5. Repetitions with Marred Irregularities/Illegalities

4.2.5.1. Civil Servants vs. Receipts/Payments Transactions

There was a recurrence of one individual from one period of time to another. This was clearly seen through individuals cited between 2017-2018 and 2019-March, 2021. The activities revolved around the same individuals throughout the said periods. There was an idea of persistence in character whereby they kept revolving in the same manner and pattern. What was lacking was the idea of the investor's knowledge of other individuals; in conclusion, the whole transactions rendered were null and void.

4.2.5.2. Contractors vs. Receipts/Payments Transactions

Likewise, these transactions were not an exception from what has been discussed in bulletin one. The element of persistence in payments in value was seen to re-occur from one period to the other, with the persistence value being 2,000 (mostly).

4.2.5.3. Landlords/Tenants vs. Receipts/Payments Transactions

Persistence activities were felt by some individuals including Stephen Kimuge and Evans Onchiri.

4.2.5.4. Colleagues vs. Receipts/Payments Transactions

There were certain pertains which were seen to be persistent in nature which actually categorized individuals with educational performance/attainment of certificates/ and other degrees and awarded in terms of value ranging between 1,000- 5,000. Certain individuals were seen to be pronounced much, for example (Lee Omanje) who happened to appear in almost all transactions (twice/or even more).

4.2.5.5. Unknown Transactions/Known Individuals vs. Receipts/Payments

Likewise, certain individuals were sighted to have regular transactions (persistence in nature) throughout the specified periods, which was not true, for example, tailor (Lynda Mugenya) and Jois Oronje. The cited transactions were persistent in value. For example, payments made of 6,000/3,050 to the said individuals, respectively.

4.2.5.6. Unknown Transactions/Unknown Individuals vs. Receipts/Payments

A separate list of attached 40 individuals/transactions (both unknown) had a similar experience, as shown above in other bulletins. Names like Peter Mwashi, Vincent Oduor, Kenedy Kiprono, Elvis Ogutu, Harriet Lyaka, and Lucy Wandere, among others, were all unknown to the investor.

4.2.6. Investment Decisions Marred with Irregularities/Illegalities

4.2.6.1. Value/Size vs. Receipts/Payments

4.2.6.1.1. Civil Servants vs. Receipts/Payments Transactions
The largest receipts were from staff members either deputizing or working in potential offices such as the cash office (Eliud Chirchir/147,614: Fiedory Onyango/162,270). It was followed by Head of Departments from potential departments/Ministries (Simiyu Munoko/191,380: Wesley Maina/142,769, Jackline Sanaire/101,500, Martin Cheruiyot/71,250, Sharon Okweno/149,000) from Wareng/Kapseret Sub-County and (Peter Kuya/211,765: Francis Waguchu/147,100: John Wambui/111,500: Zaitun Ndukuyu/80,700: Kennedy Simbauni/58,200: Samwel Motari/55,000: Kevin Wekhanya/69,600 and Catherine Chemaiti/70,000) from Transnzoia West Sub-County.
The highest payments were seen to have been made by members of staff and potential ministerial/departmental heads (Joseph Obwocha/12,050: John Sanganyi/12,100: Consolata Omondi/18,600: Fiedory Onyango/40,280: Noellyne M./42,050: and Simiyu Munoko/ 48,000. Francis Waguchu/70,000 and Kevin Wekhanya/30,000 were receipts/payments done and reversed on the same day, both from Transnzoia West Sub-County.

4.2.6.1.2. Contractors vs. Receipts/Payments Transactions
The highest value of both receipts/payments were from Francis Lutta (230,950/51,000), followed by receipts of 106,100 from Jackson Lunganyi.
4.2.6.1.3. Landlords/Unknown and Tenants/known vs. Receipts/Payments
The highest receipt was from Stephen Kimuge, and the highest payment was to Evans Onchiri.

4.2.6.1.4. The Hazina Sacco/Kobil Ltd vs. Receipts/Payments on 20/04/2017
The highest receipts/payments were cash withdrawals (70,000)/ 40,000:20,100).

4.2.6.1.5. Colleagues vs. Receipts/Payments Transactions
The highest values were from Lee Omanje/26,100, and Winston Kalema/10,000 vs. Richard Miima/20,100 and Peter Munene/12,000, respectively.

4.2.6.1.6. Unknown Transactions/Known individuals vs. Receipts/Payments
Highest receipts/payments: receipts from B2C/(40,000) and payments to Tom Olweny/25,000.

4.2.6.1.7. Relatives vs. Receipts/Payments Transactions
The highest receipts/payments were made from Nancy Wanyama/6,600 and Allan Wanyama/19,080, respectively.

4.2.6.1.8. Unknown Transactions/Unknown Individuals vs. Receipts/Payments
The highest receipts/payments were from the period of 2017, and the lowest receipts/payments were from 2018. This clearly indicates certain adoption of certain patterns to suit the transactions.

4.2.6.2. Volatility vs. Receipts/Payments

4.2.6.2.1. Civil Servants vs. Receipts/Payments Transactions
From the graphs drawn (Y-axis/receipts and payments and X- axis/individual investors, we can deduce the trend of receipts from each individual investor to be higher than payments. This trend is similar to both sub-counties (Wareng-Kapseret/Transnzoia West), respectively. There are clear indications of guesswork (assumptions, (overemphasizing), exaggerations (something done without someone's knowledge), manipulations, and persistence in nature (repetitions), among others.

4.2.6.2.2. Contractors vs. Receipts/Payments Transactions
The graphs (Y-axis/receipts and payments and X-axis individual investors) indicate that the payments are higher than receipts (negligible cutting across all individuals). This is because contractors are on the recipient side while payments are made by the investors rather than receipts/rear occasions. Although the above is applicable, we find out that the values fluctuate inconsiderably due to other biases, including exaggerations (overemphasizing) and dispositions (placing something in a way/or arranging it in relation to other activities).

4.2.6.2.3. Landlords (Known/Unknown)/Tenants (Known) vs. Receipts/Payments
Receipts from tenants (Javan Shibonje/Adams Kwaloto) and receipts from landlord Stephen Kimuge (mistaken as friend/family member) indicated a higher pattern at the beginning (comparison between receipts/payments) but at the middle of the graph that indicated payments shot up abruptly due to the landlord (Evans Onchiri who had the highest

value). However, the skew also shorts down abruptly due to the decline of payments experienced from the other two landlords (Stephen Kimuge/known and Eunice Okal/unknown) hence making the graph of Y axis/X axis: receipts/payments vs. individual investors flattening down gradually hence receipts were slightly more than payments at the end.

4.2.6.2.4. Hazina Sacco Ltd/Kobil vs. Receipts/Payments on 20-04-2017 Transactions
A graph was indicated (Y-axis/receipts and payments and X-axis/ individual investors). There was a sharp skew increase in receipts at the beginning (for the first two transactions but later on there was a drop and again a high rise for the next two transactions which actually slowed down towards the end, unlike payments which shot up gradually and maintained the trend till the end hence making the payments higher/lower inflation in value till the end).

4.2.6.2.5. Colleagues (2017) vs. Receipts/Payments Transactions
The receipts were higher compared to the corresponding payments at the beginning. However, later on, gradually, the graph indicated a zig-zag pattern whereby the payments decreased, the receipts increased, and vice versa till the end, whereby the last four indicated a continuous gradual increase of payments compared to flatten receipts of zero till the end. Due to such kind of infrequent (vitality) value variations, it became difficult to understand low investment decisions should be made.

4.2.6.2.6. Colleagues (2018) vs. Receipts/Payments Transactions
Unlike colleagues in 2018, receipts were on the increase compared to payments, although the pattern was persistent, fluctuations with steep skews towards the right till middle whereby they became gradual as they went down to the end; hence on the payments side, the graphs remained flattened till the last three transactions whereby there was a gradual increase that narrowed the gap between receipts/payments at the end although receipts were higher than the payments throughout the transactions.

4.2.6.2.7. Colleagues (2019) vs. Receipts/Payments Transactions
The first three transactions indicated higher receipts than payments whereby the receipts decreased gradually to zero till the end of the last transaction. However, (unlike) payments, which were flattened at the first three transactions and later on, increased abruptly and flattened again a bit before decreasing later in the last transaction. However, unlike the graph trend of the previous year (2018), the payments made more than receipts (even towards the end).

4.2.6.2.8. Colleagues (2020) vs. Receipts/Payments Transactions
The graph showed a flattened (zero value) for the period. However, the payments started with a high value (on the first transaction) and decreased uniformly to transaction 3, which later on increased gradually/fairly till the end. Like the graph trend of previous (2019), the payments made were more than receipts.

4.2.6.2.9. Known Individuals/Unknown (2017) vs. Receipts/Payments Transactions
There was a total inverse in payments and receipts for the four transactions cited: at the beginning, the receipts were high and payments low, later on, at an intercept (between receipts/payments), the receipts increased highly, and payments decreased drastically and later on the payments shot up again abruptly likewise receipts dropped instantly at the end of the transactions. This indicated high volatility in value, where it was easy to determine the next move in case the transaction was in continuity.

4.2.6.2.10. Known Individuals/Unknown (2018) vs. Receipts/Payments Transactions
The same criteria (2017) seemed to be applied in 2018. The only slight difference was seen during payments made first, whereby an element of fluctuations was experienced before decreasing to zero and then abrupt increase to the end. The inverse was experienced with receipts. At the start, there was zero value; hence gradually and later on, steepening to the apex and skewing down to zero at the end.

4.2.6.2.11. Known Individuals/Unknown (2019) vs. Receipts/Payments Transactions
The graph indicated fluctuations both in receipts and payments starting from the beginning to the end, whereby interceptions were experienced (decrease/increase of payments/receipts). The receipts were more than the payments; hence, the pattern indicated more receipts than payments.

4.2.6.2.12. Known Individuals/Unknown (2020) vs. Receipts/Payments Transactions
The graph indicated an increase in payments for the first two transactions and a gradual decrease for the next two, and later on, a steep increase in the transaction. However, no receipts were made during the period, and therefore payments dominated in value.

4.2.6.2.13. Relatives vs. Receipts/Payments Transactions
In persistence, occurrence fluctuations were noticed whereby payments were higher at first transaction but dropped drastically then later on gradually increased to the end. The receipts were also persistent; at the beginning, the value was zero, increased gradually, later decreased gradually, and took the pattern of (increase/decrease) gradually to the end. At the end, the payments were more than the receipts.

4.2.6.2.14. Unknown Individuals/Unknown Transactions (2017-2022) vs. Receipts/Payments

A certain pattern of graph was adopted whereby there was uniformity in both receipts/payments carried out on a yearly basis. This was indicated in the graph clearly, where there was a decrease in receipts, and also a corresponding effect (decrease) in payments and vice versa for the increase in both receipts/payments till the end. This clearly indicated that a pattern was created to allow dubious (unknown individuals vs. unknown transactions) activities. However, payments at the end of the period were more compared to receipts.

5. Summary Categories vs. Receipts/Payments Transactions

Payments in the first category were on the highest increase, then gradually in the next category but later on decreased steeply to the next category. A gradual pattern (up/down) later on was adopted to category 2, and then finally, a gradual steep increase was experienced to the end of category 15. Receipts decreased gradually between categories 1/2, then increased fairly steeply, and later decreased to almost a zero value level, where the pattern fluctuated very gradually to category 14 and increased steeply to category 15. The fluctuations in receipts/payments adopted almost a 'U' curve pattern in which, in the beginning, the gap between them was large (payments were greater than receipts in comparison in value), and it narrowed to the end (the gap between receipts/payments was small).

S. No	Category	Receipts	Payments
1.	Civil Servants (Wareng-Kapseret)	1,103,333.00	221,880.00
2.	Civil Servants (Transnzoia West)	915,167.00	130,100.00
3.	Contractors	51,000.00	446,100.00
4.	Landlords/Tenants	10,670.00	175,020.00
5.	Hazina Sacco Ltd/Kobil Ltd	119,617.00	60,500.00
6.	Colleagues (2017)	50,630.00	323,500.00
7.	Colleagues (2018)	67,860.00	4,050.00
8.	Colleagues (2019)	4,150.00	15,050.00
9.	Colleagues (2020)	Nil	29,100.00
10.	Known Individuals/Unknown Transactions (2017)	29,000.00	11,925.00
11.	Known Individuals/Unknown Transactions (2018)	5,550.00	14,750.00
12.	Known Individuals/Unknown Transactions (2019)	85,100.00	39,150.00
13.	Known Individuals/Unknown Transactions (2020)	Nil	11,800.00
14.	Relatives/ Unknown Transactions (2017-June2022)	16,330.00	38,230.00
15.	Unknown individuals/Unknown Transactions (2017-June 2022)	477,886.00	525,039.00
	TOTAL	2,936,323.00	1,755,044.00

Table 17: Summary Categories vs. Receipts/Payments (2017-June 2022)

The above table refers to the narrations discussed above and presented/plotted in curve graphs (details presented on a separate sheet to avoid voluminous activities presented in diagram forms.

6. Summary, Conclusions & Recommendations

6.1. Introduction

The study aimed to establish the significant effect of herding behavior on marred irregularities/illegalities of individual investors on individual investment decisions at Safaricom Co. Ltd. It represented a summary of findings and several conclusions in relation to various stakeholders. It highlighted the limitations of the study and further suggested areas of further research considering the study of unique findings.

6.2. Summary

This study was given a different (basic) approach from the usual studies, whereby the literature review was not a major reference. Therefore, to understand the limitations and scope of the study and where, how, or what to research as additional or new inventions that might have cropped in. the basis of this research was prompted with activities that were discovered through enquiries from responsible entities to understand the financial statements provided by those entities. They include Safaricom Co. Ltd as the major entity and others linked to it as mobile banking services (B2C Receipts/Payments), for example, Cooperative Bank of Kenya Ltd.

No questionnaires were floated to that effect, but the information provided by the specified entities constituted the interpretation of data required to interpret the results. The main activity was treated as a survey due to its volatility; hence every data provided was entirely used to evaluate better outcomes.

The major source of information was individual' statements from Safaricom Co. Ltd from January 2017-June2022. Activities carried out during that period amounted to receipts and payments of 6,336,426 (in total) and 4,691,367 (cited for marred with irregularities/illegalities). This is what formed the entire research forming a percentage of 83.45% of receipts and 62.28% of payments that were questionable/unexplained to the individual investor.

Another form of data was retrieved from statements provided by Cooperative Bank of Kenya and Hazina Sacco Co. Ltd. The author improvised 15 categories which were like indices, to separate the activities carried out during that period.

In summary, they included a-colleagues, relatives, contractors, and landlords/tenants. Organizations, other transactions: known/unknown and unknown/unknown in persons/transactions. A total of 337 individuals were cited for having been involved in these dubious exercises. Findings/discussions were detailed and interpreted uniquely, unlike the use of the questionnaires in consideration of general information, independent variables, and dependent variables, among others.

The findings revealed that the average mean/standard deviation calculated per receipts/payments had ups/downs irregular curves, which indicated mass irregularities and, in comparison, activities transactions carried out throughout the prescribed periods.

Receipts (mean) the average of standard deviation vs. categories of 15 transactions as per the records drawn indicated the largest variations in value between category 1 (civil servants vs. mean/standard deviation;-2017-December 2018 Wareng/Kapseret Sub-County), which the dispersion was (78,809.50-13,588.83=65,220.67) and also category 15 (unknown/unknown individuals/transactions respectively). The dispersion was (79,647.67-19,198.76=60,448.91).

Other categories experienced lesser variations between the mean/average standard deviations, indicating closeness and fewer disparities. The fluctuations were inconsistency in the first 6 categories, then after which the trend was even. In category 14, there was a sharp increase in both mean/average standard deviation. Payments (mean/average standard deviation vs. 15 categories had similar movements to receipts whereby the largest variation was experienced at the beginning;- that is, category 3 (55,762.50-21,310.11=34,452.39) and at the end of category 15 (87,506.50-24,058.53=63,447.97). Other trends remained gentle with gradual ups/downs movements with lesser variations hence closer dispersions.

In summary the comparison between receipts and payments in respect of mean/average standard deviations, there was an inverse action whereby according to receipts, the mean was higher at the beginning compared to that of the payments and lower at the end compared to that of the payments indicating a reverse has taken place.

S. No.	Receipts	Payments	Difference	Critical	Comments
	Cal. Value	Cal. Value	R/P	Value	
1	-0.9661	Nil	0.9661	1.345	Accept Null
2	-4.2375	-1.9148	2.3227	1.363	Reject Null
3	7.4833	-.3.7416	11.2249	1.895	Reject Null
4	0.9129	-1.8258	2.7387	2.015	Reject Null
5	1.8258	1.8258	Nil	1.476	Accept Null
6	2.8605	-2.8605	5.721	1.812	Reject Null
7	-5.8206	1.8142	7.6348	1.746	Reject Null
8	2.7774	Nil	2.7774	1.44	Reject Null
9	Nil	-0.8944	-0.8944	1.533	Accept Null
10	1.732	-1.732	3.464	2.353	Reject Null
11	2.8284	5.6568	2.8284	1.397	Reject Null
12	-0.9575	0.9575	1.915	1.796	Reject Null
13	Nil	0.8944	0.8944	1.533	Accept Null
14	Nil	-0.9354	0.9354	1.415	Accept Null
15	-0.9128	Nil	0.9128	1.476	Accept Null

Table 18: Hypothesis (T-Tests)

Hypotheses were tested among the 15 categories hence results were as follows:

According to the table above categories (1, 6, 9, 13, 14 & 15), the calculated t value was less than the critical value; hence we fail to reject null hypotheses and say there were similarities in the means of the six mentioned categories. The other remaining t values of calculated indices were greater (2-5, & 7-12); hence we reject the null hypothesis and say there were large disparities between the means of the said (receipts/payments) and accept alternative hypotheses. This is according to the findings made in chapter four.

Each category was tested (receipts/standard deviations on the X-axis and payments/standard deviations on the Y-axis to determine the correlation of coefficient (R) and its variance as follows:

COC (R) = SX/SY where SX (Standard Deviation (X) and SY (Standard Deviation Y) as explained above. A table was drawn to tabulate the same. In normal circumstances, the correlation of coefficient (r) was supposed to evolve around (+1 to -1), where +1 indicates a strong response and -1 indicates a weak response.

According to the table, categories that were within the brackets were (3/0.0989), 4(0.0314), 6 (0.9572), 8(0.2669), 9(0), 10(0.7525), 13(0), 14(0.3952) and 15(0.7980) out of which category 6(0.9572) had the strongest correlation of coefficient (colleague/2017 vs. receipts/payments). The correlation in categories 9/13 was 0. Others were actually out of proportion since they were outside brackets (R/P could not correlate: categories 1, 2, 5, 7, 10 & 12).

Multicollinearity was tested using the formula Value Inflation Factor (VIF) =1(1-r squared). According to the thumb rule VIF should be less than 3 in normal circumstances. All categories met this criterion apart from category 7 (colleagues/2018 vs. receipts/payments), which had a VIF of 11.9474. Since VIF is used to quantify the extent of correlation between one predictor and the other predictor in a model, for example, receipts/payments in the determination of collinearity and multicollinearity, the higher the VIF, the more difficult it becomes to access the accuracy of the contribution of predictors to a model.

A conceptual framework was used to describe independent variables and dependent variables in connection with the topic which was being researched. It gave the elaborative meaning of why the research was being carried out instead of directly raising audit queries on the marred irregularities/illegalities vs. receipts/payments carried out hence the matter taken to court. The author had a wider view of the study in that she was the owner of the source data, which was used for the entire research, and treating the information as a research was as good as highlighting points in audit queries.

As much as independent variables were used, what formed major interpretations lay with categories that were properly cited and analyzed individually in linkage with the independent variables with their measurable indices for further elaboration of the matter. Less of the literature was used as a reference because they were in comparisons hence research formed a new intervention into the market of research and development (R&D). Several tests were carried out and well-represented, both in tables/graphs, including proper findings, well-detailed cross-tabulated and interpreted. These tests include linear regression, multiple regression, mean and standard deviation, coefficient of correlation (R) and variance (R Squared), hypothesis test (t-test), and value inflation factor (VIF) for multicollinearity. Actually not very important for this kind of research but at least to apply some knowledge on how the whole marred activities were applied/adopted.

6.3. Conclusion

Many research works have been using such factors as what the author in this context has applied, which include:

- Exaggerations: Many researchers have been relying on information that is not accurate to make final decisions, as a matter of putting emphasis on an issue because one tends to confuse another one that the activity carried out was not of that nature.
- Assumptions: Because a researcher wants to beautify his/her research work, guesswork and guess reckonings have become the order of the day, and one lacks the integrity to further understand what he/she is researching.
- Dispositions: Someone wants to create space for other unknown issues by transferring information (correct information) and inserting wrong (null & void) information to suit his/her research ambitions. Sometimes the information is not transferred but switched off to introduce a fake one in favor of someone's interest.
- Manipulations: I had somebody say research is the manipulation of ideas. You cannot survive without manipulating documents. This is a serious utterance and needs much attention. Falsifying documents without one's knowledge in a manner likely to suit one's desire is a criminal offense hence it needs to be adhered to most appropriately.
- Repetitions: Other researchers use a lot of repetition information and hence end up distorting the true information. You have already mentioned something why distort it by repeating it many times- for example, settling a bill of Kenya shillings 3,050.00 maybe towards a funeral expense, one takes advantage of repeating the activity more than once to suit the admired situation. This indicates a lack of morals, just one example cited.
- Individual Investment Decisions: Studies have been made throughout the world concerning personal finance and narrowing down to behavioral financial factors, which include several biases studied by so many individuals in relation to individual investment decisions made by individual investors. People have actually abused these kinds of individual investors in respect of individual investment decisions to actually mean 'herding behavior' whereby people tend to flock around like herds of cattle whenever they see someone go around with day-to-day business without profitable invention or any other desire. Suddenly, a pattern is picked and imagined to say that they have been herding around in the context of trading with individual investors so that they may be captured by interested parties such as journalists, which is not true at all.

This has made people lose direction and seek to get soft monies through cybercrimes and other illegal means and shortcuts to get their way through. A practical example is what the author has talked about concerning data from Safaricom Co. Ltd and other subsidiaries. You even wonder if such organizations deserve such beautiful logos:...is the better option/simple, transparent & honest for you among others. Some of these corporations form the country's basic economy; hence their failure will mean a drastic fall in the economy, affecting all sectors in the economy of that particular country. Salvagers are now turning out to be potential sabotages. Think about the outside world and its relationship to such organizations. All these questions leave a mark. An issue is how we are going to sort out this issue.

6.4. Recommendations

This research aimed to find a solution to the above problem/s (one which has turned an individual's investment with individual investment decisions into individual investors with individual investment decisions). 1:1 ratio has become 337:1 which is unrealistic. Safaricom Co. Ltd, with its new product of Mpesa, is categorized into four levels (general services, purchase of airtime, charges/VAT, and last but not least, family/friends) whereby it never consulted to understand who is family/friends and the services which were acquired from these categories and charges laid on them of over 40,000.00 inclusive of those from other general services. Other assumed transactions, such as B2C payments (inapplicable) but slotted in.

Several recommendations cropped into the mind of the author whereby, in summary, conclusions expected the problem to be solved very first and, if any, the culprits to be brought to the board and necessary action to be taken depending on the damages caused by cutting involvement of criminal activities and compensations of character assassination and other damages both in monetary and otherwise recommendations for further studies were crucial to curb up with kinds of activities.

6.5. Limitation of Scope

It has been very difficult to retrieve information from institutions due to fear. Individuals have not been open and friendly to give information; hence there has been a tactic of trying to show you that is what took place indirectly by show of acts and gestures; one could tell what transpired. Conditions were seen as one should not disclose to the author what took place. There was inadequate information provided with a lot of suspicions. The author could even guess the information to relay by source data before getting to the organization; hence the author could not understand why the information required was not provided fully and accurately without stumbling blocks.

7. References
    i.   Source Data: Cooperative Bank of Kenya (2017-June 2022)
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