

ICFF 2019

Proceedings of the First International Conference on
Financial Forensics and Fraud

Bali, Indonesia

13-14 August 2019

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Preface

We are delighted to introduce the proceedings of the first edition of the 2019 International Conference on Financial Forensics and Fraud (ICFF). This conference has brought researchers, developers and practitioners around the world who are leveraging and developing the great chance of financial forensics and fraud sector also related to the social and business community toward industry 4.0. The theme of ICFF 2019 was “Financial Forensics and Fraud Detection in Revolution Industry 4.0”. Within this scope, ICFF is intended to provide a unique international forum for many universities worldwide, practitioners and also researchers working on financial forensics and fraud detection in private and public institution.

The technical program of ICFF consider 25 full papers, including 5 papers from other country Malaysia especially Universiti Teknologi MARA. The conference tracks were divided into: Track 1 – Economics and Business; Track 2 – Social Sciences. Apart provided the high quality technical paper presentations, the technical program also invited four keynote speeches, they were I Wayan Koster as Governor of Bali, Prof. Dr. Ian Fargher from University of Wollongong Australia, Prof. Nafsiah Mohamed from ARI UiTM and also Hendi Yogi Prabowo, Ph.D from FEB UII Indonesia.

Coordination with all committee including the steering and organizing committee was essential for the success of the conference. We sincerely appreciate their constant support and guidance. It was also a great pleasure to work with such an excellent organizing committee team for their hard work in organizing and supporting the conference. In particular, the Technical Program Committee, led by our TPC Chair and Co-Chairs, I Gede Aryana Mahayasa and I Putu Fery Karyada who have completed the peer-review process of technical papers and made a high-quality technical program. We are also grateful to Publication Chair, Darmawan Napitupulu for his support and all the authors who submitted their papers to the ICFF 2019 conference.

We strongly believe that ICFF conference provides a good forum for all researcher, developers and practitioners to discuss all science and technology aspects that are relevant to smart grids. We also expect that the future ICFF conference will be as successful and stimulating, as indicated by the contributions presented in this volume.

Putu Krisna Adwitya Sanjaya, Ida Ayu Putu Widani S

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Analysis of Factors That Influence The Delay in Reporting The Realization of Village Funds in New Villages in Rote Ndao Regency

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Abstract. The timely reporting of the realization of village funds has a huge influence on the smooth distribution of village funds. However, there are often delays in reporting the realization of village funds caused by several factors, namely human resources, facilities and infrastructure, geographical location, reporting standards and government internal control systems. The study was conducted to find out how the influence of each factor on the occurrence of delays in reporting the realization of village funds. This research is quantitative descriptive. Data collection through questionnaire distribution. The data analysis technique used is descriptive statistics, validity test, reliability test and hypothesis test. The results of the study show that human resources, infrastructure, geographical location, reporting standards and the government's internal control system influence the occurrence of delays in reporting the realization of village funds.

Keywords: late reporting, village funds.

1 Introduction

Village funds are funds sourced from the State Revenue and Expenditure Budget (APBN) intended for villages that are transferred through the district/city APBN and are used to finance government administration, implementation of development, community development, and community empowerment (Ministry of Finance, 2017). The village fund program has been started since 2015 until now with an increase in the amount of funds each year. Stages of village fund management include planning, implementation, administration, reporting to accountability. Changes in the procedures for managing village funds continue to be carried out by the government to improve the efficiency of village fund programs. In 2018 the procedures for managing village funds refer to PMK No.225 / PMK 07/2017. The most difficult stage to be implemented in managing village funds is the reporting stage. Timeliness of Submission Report of Responsibility for Realization The implementation of the Village Revenue and Expenditure Budget (APBDes) has a huge influence on the smooth distribution of village funds where the report is used as a condition in disbursing village funds the following year. The instrument of timeliness is the availability of report information, systematic and regular reports (Government Accounting Standards, 2010).

Based on data obtained from the Ministry of Village, village funds provided by the central government to NTT Province from 2015 to 2018 continue to increase. In 2015 as the initial year for the entry of village funds, the province of NTT received village funds in the amount of Rp. Furthermore, in 2016 it increased by 131% to Rp1,889,353,802,000. 2017 increased by 28% to Rp. 2,360,353,320,000. And in 2018 it increased by 7.5% to Rp. 2,537,837,576,000. Village funds that have been received by NTT Province are then channeled to the 21 existing districts. Rote Ndao Regency is one of the districts in NTT that receives a large amount of village funds, with a total of 10 sub-districts consisting of 82 old villages and 30 newly created villages that received village funds for the first time in 2018.

Based on data from the Ministry of Home Affairs (MOHA) In 2015 village funds allocated to Rote Ndao Regency amounted to Rp23,228,248,000. Then in 2016, village funds in Rote Ndao District increased by 124% to Rp. 5,2124,542,000. In 2017, the amount of village funds increased by 28% to Rp.

66,765,336,000. And in 2018, the amount of village funds increased by 38% to Rp. 92,287,919,000. PMK Number 225 / PMK.07 / 2017, article 1 paragraph 5 concerning changes in reporting procedures, states that the village head submits a report on the realization of the implementation of the Village Revenue and Expenditure Budget (APBDes) which also contains realization of village funds to the district at each stage of distribution. The first phase of the report is the report on the realization of the absorption and achievement of village fund output in the previous fiscal year delivered no later than the beginning of March of the current fiscal year. While the report on the realization of absorption and achievement of village fund output up to stage II must be submitted no later than July of the current budget year.

Submission of reports on the realization of village funds in Rote Ndao District always has a long delay from the time it should be (Rote online news, 2018). Rote Ndao Regency has 30 newly created villages that received village funds in 2018. This is because these 30 villages are only definitive in 2017 (Regulations of Regent Rote Ndao Number 30 of 2017). As a beginner recipient of village funds, these villages experienced delays in delivering village funds realization. Phase I and II reporting should be carried out no later than the beginning of June of the current year, but in reality the villages carry out reporting in mid-August to early September. This will cause disbursement of village funds for the next stage will also experience delays that affect the increasingly late village development (DPMD of Rote Ndao District, 2018). The problems in this study were formulated as follows: Are human resources, facilities and infrastructure, geographical location and reporting standards and the government's internal control system can affect the delay in reporting the realization of village funds in new villages in Rote Ndao district. While the objectives to be achieved from this study are to find out the influence of HR, Infrastructure, Geographical Location, Reporting Standards and SPIP on the delay in reporting the realization of village funds in new villages in the Rote Ndao District area.

2 Literature Review and Hypothesis Development

2.1 Village Formation and Village Scope

Villages are legal community units that have territorial limits that are authorized to regulate and manage government affairs, the interests of the local community based on community initiatives, origin rights, and / or traditional rights recognized and respected in the system of government of the Unitary Republic of Indonesia (Law No. 6 Year 2014).

The formation of the village is one form of village structuring activities carried out by the government, the provincial government, and the district / city government. Formation of villages can be in the form of expansion from one village to two or more villages, merging village sections from villages that are side by side into one village, or merging several villages into one new village (Law No.6 of 2014).

2.2 Village Fund

According to PP No. 60 of 2014 concerning Village Funds sourced from the APBN, Village Funds are funds originating from the State Budget intended for Villages that are transferred through the district / city APBN and used to finance government administration, implementation of development, community development, and community empowerment. The amount of the budget allocation that is allocated directly to the village is determined to be 10% outside the regional transfer funds in stages. Budgets sourced from the APBN are calculated based on the number of villages and allocated by taking into account the population, poverty rate, area size, and level of geographical difficulties in order to improve welfare and equitable distribution of village development. The population, area, and poverty rate are calculated by weight: (1). 30% for the total population of districts / cities; (2). 20% for district / city area; and (3). 50% for district / city poverty rates.

2.3 Village Financial Management

Village financial management starting from the planning, implementation, reporting and accountability phases is guided by the Minister of Home Affairs Regulation Number 20 of 2018 concerning Village Financial Management which is described as follows: Village Financial Planning. 1). Implementation of Village Finance; 2). Village Finance Administration; 3). Reporting; and 4). Village Financial Accountability.

2.4 Village Fund Realization Report

According to Murtiono and Wulandari (2014), the report on the realization of village funds is a form of accountability from village management holders to provide information about village activities and activities to the village government community for village fund management and implementation in the form of program plans funded by village funds. Regarding the reporting mechanism for the use of village funds, it is clearly stipulated in PMK No.225 / PMK.07 / 2017, namely: (1) The village head submits a report on the realization of the use of village funds at each stage to the regent / mayor.

The realization report on the use of village funds consists of: a). Report on the use of village funds in the previous fiscal year, which is submitted no later than the second week of March of the current budget year; and b). Report on realization of use of village funds stages I and II, submitted no later than the second week of July of the current budget year.

The regent / mayor can facilitate the acceleration of submitting reports on the realization of the use of village funds. The regent / mayor submits a report on the realization of the distribution and consolidation of the use of village funds to the Minister of Director General of Financial Balance with a copy to the Governor, Minister of Home Affairs, Minister of Village, Development of Disadvantaged Regions and Transmigration, which consists of: a). Report on the realization of the distribution and consolidation of the use of the Village Fund in the previous fiscal year; and b). Report on the realization of distribution and consolidation of the use of Village Funds stages I and II.

2.5 Factors Affecting Delays in Reporting on Realization of Village Funds

Human Resources elements or in this case are village officials, as follows (Santoso, 2016): a). Capacity of Village Officials; b). Autonomous Village Officials; and c). Development of Village Apparatus. The elements in the facilities and their relation to village fund reporting are as follows (Setiawan, 2017): a). Device is a complete support for the facilities available in the village to support the preparation of reports on the realization of village funds. Three indicators to measure the complete range of devices, namely the presence of hardware such as the availability of electricity and computers, funds for the procurement of devices and the availability and utilization of internet network systems; and b). Management of Financial Data. It is an illustration that shows the use of technology and infrastructure to compile reports on the realization of village funds. Three indicators in financial data management are guidelines for utilizing technology facilities, utilization of applications in accordance with needs and computerized accounting processes.

Care is an indicator that shows the schedule of maintenance and data collection of scheduled equipment to support the process of preparing reports on the realization of village funds. Geographical aspects such as location, distance and accessibility are aspects that greatly affect the timeliness of submitting reports on the realization of village funds (Wida, 2016). The location of the village is closely related to the natural conditions and topography in the village. Topography describes the physical characteristics of the earth. The same is true of the relationship with the village, such as the location of the village directly adjacent to hills, sea, river or mountain. Village distance from the sub-district and district government centers is also an indicator of geographical location because, if the distance between the village and the central government district is approximately 30 Km, reporting of the realization of village funds will be too late. This also applies if the distance between villages and districts reaches approximately 40 km. Accessibility is the degree of ease achieved by people, towards an object, service or environment. The ease of access is implemented in buildings, the environment, public roads, transportation and other public facilities. Accessibility is an indicator of geographical location because the availability of public transportation facilities and public road conditions are very influential in reporting the realization of village funds.

Reporting Standards or village funds there are 2 elements in the reporting standard for village funds, namely: a). Reporting Mechanism in PMK No. 225 / PMK.07 / 2017; b). PMK No. 225 / PMK.07 / 2017 concerning Village Financial Management describes the format of village financial reports which include reports on the realization of village funds along with provisions in village financial management; and c). District and District Reporting Standards. Village financial reports differ from public sector and government financial reports. Village financial reports are also simple. There are no

provisions that regulate the format of reports on the realization of village funds that must be submitted by the village to the sub-district and district governments. This has caused village officials to have no reference in compiling reports on the realization of village funds (BPKP, 2015).

Government Internal Control System (SPIP). The government internal control system (SPIP) is a system of internal control that is carried out thoroughly in the central government and regional government. Control environment means that the heads of government agencies are required to create and maintain a control environment that creates positive behavior and is conducive to the implementation of internal control systems in their work environment. The heads of government agencies are required to carry out risk assessments. Risk assessment consists of: a). Risk identification. Implemented an adequate mechanism to recognize risks from external factors and internal factors; and b). Risk analysis. Implemented to determine the impact of risks that have been identified towards achieving the objectives of government agencies.

The head of a government agency must carry out control activities in accordance with the size, complexity and nature of the duties and functions of the relevant government agency. Control activities consist of: (1) review of the performance of the tangible government agencies, (2) fostering human resources, (3) control over management of information systems, (4) physical control of assets, (5) separation of functions, (6) authorization of important transactions and events, (7) accurate and timely recording of transactions and events, (8) good documentation of internal control systems and important transactions and events.

To carry out effective communication, leaders of government agencies must at least: (a) provide and take advantage of various forms and means of communication and (b) manage, develop and update information systems continuously. Supervision of the internal control system is carried out through continuous supervision, separate evaluations, and follow-up on audit recommendations and other reviews.

2.6 Delays in Reporting on Village Funds

Financial statements must be presented on time so that they can be used as a basis for economic, social, political and political decision making and to avoid delays in making such decisions. Constraints on the timeliness of presenting reports are related to the length of time required by the organization to produce financial statements. The faster the presentation of financial statements, the better for decision making. The problem is that the more information needs, the more time it will take to produce such information. Financial reports may be presented in a timely manner so that they are not relevant for decision making (Mardiasmo, 2009).

The instrument of timeliness is the availability of systematic and regular report information, reports (SAP, 2010). Timeliness in submitting work unit level financial reports (SKPD) relates to several factors, both in the preparation process and conveying it. These factors include educational background, training, availability of facilities, and understanding of regulations. The village government in financial reporting should be able to provide timely information and be free from misleading understanding (Susanti and Wardani, 2017).

2.7 Effect of Human Resources on Delays in Reporting on Realization of Village Funds

The results of the research by Widyatama, Novita, and Diarespati (2017) show that HR competency has no significant effect on ADD allocation, whereas Azhari's research results (2018) show that human resources are a factor that influences the delay in reporting village funds because of the relative level of human resource competency low, and research Rabb (2016), shows that human resources are a factor that influences the management of ADD, and Widowati, Santoso (2016), human resources are factors that influence the management of ADD, because the level of competency of human resources is relatively low. This is indicated by a low level of education and a lack of training, mentoring and socialization for officials who manage village funds. Based on the description above, a hypothesis can be obtained, namely:

H1: HR affects the reporting of realization of village funds

2.8 Effect of Facilities and Infrastructures on Delays in Reporting on Realization of Village Funds

The results of Azhari's research (2018) state that facilities and infrastructure are one of the important things in supporting the management of village funds. The availability of complete facilities

and infrastructure without training as well as guidebooks to be used as a reference is also an obstacle in preparing village fund realias reports to be delivered in a timely manner. The results of Widowati's research, Santoso (2016) also show that office facilities and infrastructure are the main unaccountable indicators of village fund management. Based on the description above, a hypothesis can be obtained, namely:

H2: Facilities and infrastructure affect the delay in reporting the realization of village funds.

2.9 Effect of Geographical Position on Delays in Reporting on Village Funds

Geographical aspects such as location, distance and accessibility are aspects that greatly affect the timeliness of submitting reports on the realization of village funds (Wida, 2016). The results of Azhari's research (2018) show that the geographical location of the village is also a factor that affects the delay in reporting the realization of village funds. Things like the location of the village office are relatively not in the center of the village and the distance between the village office and the district office is very much influential on the period of submission of the report on the realization of village funds. Based on the description above, a hypothesis can be obtained, namely:

H3: Geographical position affects the reporting of realization of village funds

2.10 Effect of Reporting Standards on Delays in Reporting on Realization of Village Funds

The results of Azhari's research (2018) state that reporting standards are things that also affect the delay of village officials in compiling and submitting reports on the realization of village funds. This is due to the absence of standard standards set by the sub-district and district governments to become a reference for village officials in preparing reports on the realization of village funds. the lack of socialization of regulations in the preparation of village fund reports made village officials misunderstand the actual deadline for submitting reports on the realization of village funds. Based on the description above, a hypothesis can be obtained, namely:

H4: Standard reporting standards have an effect on reporting the realization of village funds

2.11 Effect of the Government's Internal Control System on Delays in Realization of Reporting on Realization of Village Funds

The results of the Widyatama, Novita, and Diarespati (2017) studies show that the Apparatus Control System of the Village Government significantly influences the Village Fund's Location Financial Management Accountability (ADD). Based on the description above, a hypothesis can be obtained, namely:

H5: SPIP affects the reporting of realization of village funds

3 Research Methods

The research approach used by researchers is a quantitative approach. Quantitative approach is a research approach that views a reality that can be classified, concrete, observable and measurable, the relationship of variables is causal where the research data is in the form of numbers and the analysis uses statistics (Sugiyono, 2017).

Data was obtained from respondents by distributing questionnaires to parties who were competent and understood the management and reporting of the realization of the use of village funds in new villages in Rote Ndao District.

The population of this study was all village officials in 30 new villages / pemekaran in the area of Rote Ndao Regency. The researcher used a purposive technique to determine the sample. The criteria used are as follows: (1). Village officials in villages with the highest number of villagers. Because the population is an object as well as the subject of village development and (2). Village officials who deal directly with village fund reporting. Namely the village head, village secretary, village treasurer, and head of development affairs in the villages that are the object of research.

The number of respondents in this study were 4 respondents from each village X the number of villages chosen for sampling (16) = 64. The data analysis technique uses the SPSS version 25 application to determine the validity test, reliability test, hypothesis test.

4 Results and Discussion

Rote Ndao Regency is a part of the East Nusa Tenggara Province which is located on an Indonesian hidden veranda with the capital of this district located in Ba'a. This district has an area of 1,280.10 km². Rote Ndao Regency is located in 1025 ' - 1100' South Latitude and 12149 ' - 12326' East Longitude. Rote Ndao Regency consists of 82 old villages and 30 new villages which are spread over 10 sub-districts, namely Landu Leko, Lobalain, Ndao Nuse, Rote Timur, Pantai Baru, Rote Tengah, Rote Selatan, Rote Barat Daya, Rote Barat Laut, and Rote West.

Table 1. Descriptive Statistics

Variabel	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Total_X1	64	12	23	1092	17.06	2.690
Total_X2	64	14	23	1103	17.23	1.743
Total_X3	64	11	18	919	14.36	1.597
Total_X4	64	14	22	1099	17.17	1.714
Total_X5	64	12	18	916	14.31	1.446
Total_Y	64	11	18	885	13.83	1.686

The lowest value of the HR variable is 12 while the highest value is 23. The average value of the HR variable is 17.06 and the standard deviation is 2.690. The lowest value of the facilities and infrastructure variable is 14, while the highest value is 23. The average value of the facilities and infrastructure variable is 17.23 and the deviation standard is 1.743. The lowest value of the geographical location variable is 11, while the highest value is 18. The average value of the geographical location variable is 14.36 and the standard deviation is 1.597. The lowest value of the standard reporting variable is 14, while the highest value is 22. The average value of the standard reporting variable is 17.17 and the standard deviation is 1.714. For the lowest SPIP variable the value is 12, while the highest value is 18. The average value of the SPIP variable is 14.31 and the standard deviation is 1.446. The lowest value for the delay in reporting the realization of village funds is 11, while the highest value is 18. The average value of the variable delay in reporting the realization of village funds is 13.83 and the standard deviation of 1.686.

Table 2. The Result of Multiple Regression Analysis

Variable	Regression Coefficient
Konstanta	-2,600
SDM	0,118
Sarana prasarana	0,190
Letak geografis	0,257
Standar pelaporan	0,178
SPIP	0,307

4.1 Results of Multiple Regression Analysis

The table shows a constant value of -2,600 which means it shows the amount of reporting delay of -2.6% when there are no HR variables, infrastructure, geographical location, reporting standards and SPIP. HR suitability variables provide a coefficient of 0.118, infrastructure facilities provide a coefficient value of 0.190, geographical location variables provide a coefficient value of 0.257, reporting standard variables provide a coefficient value of -0.178 and SPIP variables provide a coefficient of -0.307.

Table 3. Partial Test Result

Model	T	Sig.
SDM	2,540	0,014
Sarana Prasarana	2,214	0,031
Letak Geografis	2,339	0,023
Standar Pelaporan	2,228	0,030
SPIP	2,871	0,006

4.2 Effect of Human Resources on Delays in Reporting on Realization of Village Funds

The partial test results in Table 4.22, show the value of the HR variable t count of 2.540 and at the level of the possibility of a 5% error, and the significance value of the HR variable of 0.014. SDM has a tcount of 2.540 > t table 2.002 and a significance value of 0.014 < 0.05. Based on the results of these calculations, it was concluded that HR had a positive and significant effect on the delay in reporting the realization of village funds.

4.3 Effect of Facilities and Infrastructure on Delays in Reporting on Realization of Village Funds

The partial test results in Table 4.22, show the value of the variable facilities and infrastructure amounting to 2,214 and at the level of possibility of a 5% error, and the significance value of the facilities and infrastructure variable is 0,031. Facilities and infrastructure have a value of tcount 2.214 > t table 2.002 and a significance value of 0.031 < 0.05. Based on the results of these calculations, it was concluded that infrastructure had a positive and significant effect on the delay in reporting the realization of village funds.

4.4 Effect of Geographical Position on Delays in Reporting on Realization of Village Funds

The partial test results in Table 4.22, show the tcount value of the geographical location of 2,339 and at the level of possibility of a 5% error, and the significance value of the facilities and infrastructure variable is 0,023. Geographical location has a value of tcount 2.333 > t table 2.002 and a significance value of 0.023 < 0.05. Based on the results of these calculations, it can be concluded that the geographical location variables have a positive and significant effect on the delay in reporting the realization of village funds.

4.5 Effect of Reporting Standards on Delays in Reporting on Realization of Village Funds

The partial test results in Table 4.22, show the value of the t reporting standard variable of 2.282 and at the level of possibility of a 5% error, and the significance value of facilities and infrastructure variable is 0.030. The reporting standard has a value of t2228 > t table 2.002 and a significance value of 0.030 < 0.05. Based on the results of these calculations, it can be concluded that the standard reporting variable has a positive and significant effect on the delay in reporting the realization of village funds.

4.6 Effect of SPIP on Delays in Reporting on Realization of Village Funds

The partial test results in Table 4.22, show the value of the SPIP variable of 2.871 and at the level of the possibility of a 5% error, and the significance value of the SPIP variable of 0.006. SPIP has a tcount of 2.871 > t table 2.002 and a significance value of 0.006 < 0.05. Based on the results of these calculations, it was concluded that SPIP had a positive and significant effect on the delay in reporting the realization of village funds.

Table 4. Determination Coefficient Test

Model	R		R Square	Adjusted R Square	Std. Error of the Estimate
1	.911 ^a		0,830	0,816	0,724

The value of R Square shows the influence of the independent variables of HR, Infrastructure facilities, Geographic location, reporting standards and SPIP on the dependent variable, the delay in reporting the realization of village funds. The testing of determination coefficient obtained Adjusted R Square value of 0.816, this means that the influence of independent variables on the dependent variable is 82%. While 18% are influenced by other factors. Other factors include internal factors, namely the

gender manager reporting the realization of village funds. From external factors, namely political conditions such as the change of regional head and the capabilities of the local inspectorate.

Gender is a consensus belief about the differences in male and female characteristics that show different behaviors in acting. In the work environment when a problem occurs, the behavior of female employees tends to avoid the consequences of conflict, although in many situations women do more work than men. While the behavior of male employees in conflict situations feels challenged to deal with it rather than avoid it (Taufik, 2014). Substitution of regional heads (political conditions), namely where if elected new regional leaders, tend to investigate regional financial problems in order to reveal hidden issues in the financial statements, and will recruit auditors to resolve them. This anticipation is feared to extend the preparation period for village financial reporting (Cohen and Leventis, 2013). Capability of the inspectorate is the ability to carry out supervisory tasks consisting of capability, authority and HR competencies that the auditor must have in carrying out supervision. The capability of the inspectorate is higher, so it will affect the level of regional financial supervision including village finance. (Taufik, 2014).

Based on the results of data analysis that has been done, it can be further elaborated as follows:

4.7 Effect of Human Resources on The Delay in Reporting The Realization of Village Funds

The results of testing the first hypothesis show that human resources have a positive and significant effect on the delay in reporting the realization of village funds. Human resources are something that is very important and must be owned in an effort to achieve the goals of the organization or company. Human resources are the main elements of the organization compared to other resource elements such as capital and technology, because humans themselves control other factors. The same goes for villages and village fund management which also requires adequate, ready and competent human resources in managing village funds. The problem that arises in implementing village fund management is the lack of human resources (HR) who are ready to manage village funds. HR competency is one of the important points in implementing the Village Fund.

Elements of competency in Human Resources or in this case are village officials consisting of the capacity of village officials, village officials tupoksi village development funds. The capacity of village officials is a standardization of the capacity of village officials, both in terms of quality and quantity. The capacity of village officials in new villages in Rote Ndao Regency in terms of education level indicators still has officers who are graduating from junior high school. This certainly contradicts the PERMENDAGRI No.83 of 2015 concerning the Appointment and Dismissal of Village Devices. In Article 2 paragraph (1) it is stated, Village Devices are appointed by the Village Head of the Village residents who have met the General and Special Requirements. Where the general requirements of the first item are written: "Education is at the lowest for a high school or equivalent". After being traced by conducting interviews, respondents stated that the level of education in the village where they worked was indeed quite low. This is due to a lack of prior public understanding of the importance of education. So that it has an impact on the lack of village officials who have the last high school education or equivalent. The low level of education of the authorities will also.

4.8 Affect The Ability of Village Officials to Prepare Reports on The Realization of Village Funds

Autonomy of the village includes the division of tasks and understanding of village officials on the tasks they have. Village officials in the new villages in Rote Ndao District already have a good separation of functions and duties, but do not yet have good abilities to carry out their duties and functions properly. From the results of interviews with researchers and respondents, it was also known that there was already a separation of duties of good village officials within the village. Then for HR development indicators, the apparatus of new villages in Rote Ndao District have received accounting and training training in preparing reports on the realization of village funds, but from the interviews it is known that village officials still need guidance to prepare reports on the realization of village funds.

The results of this study are supported by Azhari's research (2018), namely that human resources influence the delay in reporting the realization of village funds. Widowati and Santoso (2016), namely human resources affect the management of village funds.

4.9 Effect of Facilities and Infrastructure on Delays in Reporting The Realization of Village Funds

The results of testing the second hypothesis show that facilities and infrastructure have a positive and significant effect on the delay in reporting the realization of village funds. This is in accordance with the hypothesis proposed previously which states that facilities and infrastructure affect the delay in reporting the realization of village funds. From the frequency of the questionnaire's answers, it was found that the facilities and infrastructure in the new villages in Rote Ndao District were on average inadequate. The factor is the status of a new village / bloom so that supporting facilities for reporting village funds are still incomplete. Not all new villages have village office buildings, village offices temporarily operate at the village head's house or other village officials. Electronic equipment such as computers are available but are still limited, but reporting on the realization of village funds in all new villages has been computerized. The village government has also prepared a special budget to procure operational support resources to assist village officials in preparing reports on the realization of village funds. Whereas for software in this case, internet and WiFi networks are not yet available in every new village in Rote Ndao Regency, this causes the process of sending data and information relating to the report on realization of village funds to be too late.

New villages in Rote Ndao District have not yet set a maintenance schedule for village infrastructure. From the results of interviews, it is known that village officials do not yet know the importance of the maintenance schedule for infrastructure. Viewed in terms of utilization of infrastructure facilities have not been utilized properly. From the observations of researchers in the field, there were a number of village offices whose facilities and infrastructure were not used and were only stored, this was due to the lack of knowledge of the use of these facilities.

There are also uses of facilities such as computers that are not as they should be. From the results of interviews with several respondents, it is known that there are village officials who use facilities and infrastructure for personal gain. The results of this study are consistent with the research of Widowati and Santoso (2016) which shows that office facilities and infrastructure are one of the obstacles that are not accountable for managing village funds.

4.10 Effect of Geographical Location on The Delay in Reporting The Realization of Village Funds

The results of the third hypothesis testing show that the geographical location has a positive and significant effect on the delay in reporting the realization of village funds. Geographical location is a position where the region is based on its shape and location on earth. In relation to the report on the realization of village funds, the geographical location is also a factor that can affect the delay in reporting the realization of village funds. In this study, the geographical location was measured by 2 indicators, namely the village office location and distance. This study shows that the majority of village office locations in new villages in Rote Ndao District are not in the center of the village. This caused the location of the village office to be a little difficult to reach. Furthermore, relating to the location of the village is the natural boundary between the new village and the neighboring village in the area of Rote Ndao District. New villages in Rote Ndao Regency have natural borders with neighboring villages. Based on the results of direct observation in the field, the majority of the natural boundaries in the new villages in Rote Ndao Regency are hills and sea boundaries.

In this study, geographical location is also related to distance. The focus of this research is the distance between the village office where the village officials work to the sub-district office and the distance between the village office to the district office. This is because in carrying out the reporting of the realization of village funds, village officials must conduct verification at the sub-district office and then bring the report on the realization of village funds to the district office. The results of the study show that the distance between the offices of the new villages and the subdistrict office reaches 20 Km. And for the distance between the village office and the district office to reach 40 Km. This shows that the distance from almost every village office in the new villages to the Rote Ndao district office reaches approximately 40km.

It can be concluded that the distance to the district office is relatively far away, so that village officials have a relatively long time to reach the district office which increases the level of delay in reporting the realization of village funds. This can be overcome by using the internet network in the village to send data and information on the realization of village funds reports.

The results of this study are consistent with Wida's (2016) research, namely geographical aspects such as location, distance and accessibility are aspects that greatly influence the timeliness of submitting

reports on the realization of village funds, and Azhari's research (2018) that the geographical location affects the delay in submitting village funds realization reports.

4.11 Effect of Reporting Standards on Delays in Reporting The Realization of Village Funds

The results of testing the fourth hypothesis show that reporting standards have a positive and significant effect on reporting the realization of village funds. The manager of reporting on the realization of village funds in new villages in Rote Ndao District has worked in accordance with the guidelines / reporting stages of PMK No. 225 / PMK.07 / 2017. From the interviews, it is known that the managers of reporting on the realization of village funds have understood the reporting stages according to PMK No. 225 / PMK.07 / 2017. To get further information related to this point, the researcher gave further questions about the time of submitting the report on the realization of village funds. The majority of respondents stated that they were on time, namely the submission of the report on the realization of village funds for the first and second stages carried out in September of the current year and for the third stage of the end of the year carried out in March of the following year. However, as is known in Part Four Article 25 paragraph (2a) states that the report on the realization of village funds, the previous fiscal year is submitted no later than the second week of February of the following year. Whereas paragraph (2b) states that reports on realization of village funds in stages I and II, are submitted no later than the second week of July of the current year.

In addition, there are already reporting standards from districts and sub-districts that are implemented in the village. However, the results of the research show that the managers of reporting on the realization of village funds have not understood the reporting standards well. This is an obstacle to the reporting stage of the realization of village funds. The district government also has not given special attention such as socialization and training regarding the system and procedures for reporting the realization of village funds. To overcome this problem, it is necessary to have regular training and socialization from the government regarding the stages and standards of reporting to village officials tasked with preparing reports on the realization of village funds.

The results of this study are consistent with Azhari's research (2018) which states that reporting standards are things that also affect the delay of village officials in compiling and submitting reports on the realization of village funds.

4.12 The Influence of The Village Government's Internal Control System on The Delay in Reporting The Realization of Village Funds

The results of the fifth hypothesis testing show that the government control system has a positive and significant effect on reporting the realization of village funds. The purpose of the government's internal control system according to PP No. 60 of 2008 is to provide adequate assurance about; effective and efficient activities, reliable financial reports, safeguarding state assets and compliance with legislation. Elements of the government's internal control system, namely the control environment, risk assessment, control activities, information and communication and internal control monitoring.

Discipline rules for village officials and clear responsibilities, performance reviews of village officials and the process of supervision, inspection and evaluation support the effectiveness of village government internal controls in managing village funds. In this case the village head must have a plan to reduce the risk of violations of the system and during the procedure for reporting the realization of village funds. In addition, to support the effectiveness of village government internal controls, the village head must also review the performance of the manager of the village fund realization report with the target expected by the village government. The information system within the village is also one of the important indicators of a good village government internal control system, where the information system must be updated regularly.

Based on the description, it can be concluded that the better the internal control system of the village government, the less likely the delay in reporting the realization of village funds in new villages in Rote Ndao District. The results of this hypothesis testing are supported by the results of the Widyatama, Novita, and Diarespati (2017) studies showing that the Apparatus Control System of the Village Government significantly influences the Village Fund's Location Financial Management Accountability (ADD).

5 Conclusions and Recommendations

Based on the formulation of the problem, objectives, theoretical basis, hypothesis, and the results of tests conducted, it can be concluded that the variables of human resources, facilities and infrastructure, geographical location, reporting standards, and the village internal control system significantly influence the delay in reporting the realization of village funds. This means that with low human resource capabilities in managing the reporting of realization of village funds, incomplete infrastructure, the geographical location of villages that are not strategic, poorly understood reporting standards and poor village government internal control systems, reporting on the realization of village funds is increasingly late.

Based on the results of the research described in the conclusions obtained, the suggestions that can be given are: (1) To District and District Governments in terms of overcoming human resource problems so that they conduct training and assistance more often to village officials especially in preparing reports on realization of village funds. Basic computer training is more often done and gives village officials written guidelines so that village officials are not confused when experiencing obstacles in utilizing operational facilities to prepare reports on the realization of village funds. In terms of overcoming the problem of geographical location, the government should pay more attention to the condition of the internet network in the area of new villages in Rote Ndao District. Installation of WiFi that can be used for sending information relating to reports on the realization of village funds.

The reporting standards from the District and District governments are regularly socialized and can be a solution to overcome the problem of lack of understanding of village officials in preparing reports on the realization of village funds in a timely manner. It is necessary to improve internal control in the village both in the control environment, risk assessment, control activities, village information systems and supervision of the government and village apparatus, (2) Factors that affect the delay in reporting the realization of village funds in this study consist of only 5 variables, namely human resources, facilities and infrastructure, geographical location, reporting standards, and village government internal control systems. It is expected that the next researcher can develop other variables not examined in this study, which might influence the delay in reporting the realization of village funds, both other internal and external factors and (3) research using questionnaires namely sometimes the answers given by respondents do not indicate really is. It is better for future researchers to use the mixed method so that they will get more and more new information, which was not present in this study.

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Money Laundering in Indonesia Bankers: Compliance, Practice, and Impact

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Abstract. Money laundering is the process by roomates large amount of illegally obtained money from drug trafficking, terrorist activity or other serious crimes, is given the appearance of having originated from a legitimate source. The purpose of this study is to examine the rules that related to money laundering, money laundering practices that existed in Indonesian banks and the impact of money laundering. We argue that the concept of money laundering have been adopted by regulation of Indonesian banks to detect money laundering. However, reviews the regulation has not been with the practice of money laundering occurring in Indonesian banks. We propose to addressed the determinants that influence of bank employees in Indonesia towards money laundering as the fundamentals for making anti-money laundering models.

Keyword: money laundering, money laundering regulation, anti-money laundering models

1 Introduction

The development of science and technology has many benefits in the field of economy, particularly in support of business activities and improve financial services to the public (FM Teichmann & Sergi, 2018). However, developments in science and technology also increases the risk of irregularities (Dujovski & Mojsoska, 2019). International Narcotics Control Strategic Report makes it clear that the more advanced the economy and financial system of a country, the more attractive also for criminals to commit acts of crime (INCRS, 2017). The most common crime is done through the services of the financial system in a country is money laundering.

Money laundering is a problem that can not be avoided by any country in the world (Dujovski & Mojsoska, 2019). Money laundering continues to be a challenge for compliance departments, law enforcement and intelligence agencies around the world (Teichmann, 2019). The main problem faced is the difficulty of knowing precisely how money laundering occurs. Although there has been a wide range of global efforts to combat money laundering, is often argued that efforts to address this illegal activity is not adequate (Teichmann & Sergi, 2018),

The emergence of money laundering can be said as a result of technological advances in the financial transfer system (FM Teichmann & Sergi, 2018). This is due to the electronic financial delivery can take place easily and in just a few seconds, for example by making use of Automated Teller Machines (ATMs) and Electronic Wire Transfer. The technological advances in the field of financial transfers This facilitates the flourishing of money laundering because it has no geographic horizons, operates 24 hours, and has a speed of transacting electronically (Niepmann & Schmidt-Eisenlohr, 2017). Advances in information technology are causing national boundaries become meaningless. It makes organized crimes be easy to do.

Money laundering based on the various factors that are known by the term of diamond fraud. Fraud diamond include pressure, rationalization, opportunity and capability (Simser, 2012). Money laundering actions are often guided by financial pressure (Zaleskiewicz, Gasiorowska, Kesebir, Luszczynska, & Pyszczynski, 2013). Factors opportunities also become one of the main drivers of the action. Launderer would have a reason to justify the act even though the action was in fact wrong (Zaleskiewicz et al., 2013). Money laundering may not be possible without the people who have the right skills to carry out such actions (Wolfe & Hermanson, 2004).

The concept of money laundering has been adopted by Bank Indonesia regulations by detecting money laundering. However, this rule has not been matched with money laundering practices occurring

in Indonesian banks. Thus, research on money laundering in the Indonesian banking has the potential to be investigated. This study has the objective to examine the rules relating to money laundering, money laundering practices in Indonesian banks and the impact of money laundering. This research is expected to contribute to the proposed additional determinants that affect the bank's employees in Indonesia against money laundering as a basis for creating models of anti-money laundering.

2 Literature Review

2.1 Concept of Money Laundering

Money laundering is the process of taking the results generated by criminal activity and provide these results as legality (FMJ Teichmann, 2019). Money laundering activity is classified as one of the criminal offenses (Jayasekara, 2018). In fact, because money laundering has to be cross country, then money laundering is considered a criminal offense internationally (international crime). There are different ways by the perpetrators to conceal or disguise the origin of their funds, one of them by including the proceeds of crime into the financial system (Pramod, Li, & Gao, 2012). Thus, through this way, the origin of the funds is not easy to be tracked by law enforcement.

Money laundering can be a very diverse variety of modes, such as savings in banks, buying shares, or buy luxury items. All models of washing can be classified into three types of typologies, including placements, separation / coating (layering), and integration.

Placement is by entering a phase of money laundering of illegal funds into the financial system. The results of the most obvious crime and high-risk placement is detected at this stage. Convert the illegal funds into cash deposits in bank accounts and use the cash to buy high-value assets such as land, property and luxury goods is an example of placement (Chelliah & Prasad, 2017).

Layering is the second phase involving financial transactions with the purpose of deciding trace money laundering (Chelliah & Prasad, 2017). Examples of layering phase is the use of a series of complex transactions involving many banks, account, or a company that aims to transfer, spread, or disguise of illegal funds to conceal the actual funds (Naheem, 2018). Layering can also be used for structuring techniques to divide the money laundering large sums of money into a smaller deposit (Chelliah & Prasad, 2017).

Integration is the final phase which involves the movement phase 2 (layering) into the formal economy. Integration is usually done through the banking system, so that the illegal funds will look like income from normal business activities. At this stage, actors combine funds that have been through the process of money laundering to the legal fund, making it more difficult to separate the two (Cassella, 2018). Another technique in the integration stage includes buying letters of credit, bonds, securities, notes, bills of lading, and assurance. Through this step, the flow of illegal funds are returned to the legitimate economy. Having reached this stage, the actors are free to use the funds in various ways (Balani, 2019).

2.2 Money Laundering Phenomenon in Indonesian Bankers

Money laundering activities actually become a dilemma for banks (Naheem, 2018). This is due to the presence of large amounts of funds saved will make banking is growing rapidly, while on the other side of the bank faced the Act which prohibits such activities. If banks in operation tend to rely on the proceeds from money laundering, the bank will have sufficient liquidity serious problems if funds are suddenly withdrawn without prior notice (Pramod et al., 2012). How to avoid these events is to obey the existing rules, therefore, necessary firmness all parties to address the problem of money laundering.

In Indonesia, cases of money laundering is also rife. In 2016, former General Treasurer Democratic Party, Muhammad Nazaruddin, demanded seven years in prison in the case of money laundering. Nazaruddin using political power as a means of corruption, so it is classified as grand corruption. Additionally, Nazaruddin legally convicted of money laundering amounting to Rp 580 billion. The money comes from gratuities PT Duta Graha Indonesia (DGI) of Rp 23.1 billion and gratuities PT Nindya work is Rp 17.25 billion. Illegal money laundering is done by transferring the property since October 2010 to 15 December 2014 with a value of Rp 500 billion. Nazaruddin also disguise his assets amounting to Rp 80 billion on September 15, 2009 to October 22, 2010.

In addition to these cases, the National Narcotics Agency (BNN) has just revealed the case of laundering money from narcotics sales made prison network (Detik.com, 2018), Confiscated from the

suspect, BNN secure the assets and money worth Rp 24 billion. In that case disclosures, BNN cooperation with the Center for Financial Transaction Reports Analysis Center (INTRAC) and the Directorate General of Corrections. Disclosure of money laundering cases originated from drug trafficking cases committed by Juvictor Indraguna aka Viktor Indraguna and confiscated 8.3 kg of methamphetamine on March 4, 2017 last. Interestingly, this case involves foreign nationals assigned to dating women from Indonesia that can be used to open bank accounts.

2.3 The Effect of Money Laundering

Money laundering is a risk faced by all banks (Naheem, 2016). This is because the perpetrators of acts of money laundering often utilize the facilities of the banking sector to move, swap, or disguise the illegal funds. Money laundering becomes a serious concern when offenders use the results of laundering through the banking system that led to the attacks on 11 September 2001 in the United States (Balani, 2019). Since 1970, legislation passed by the US government progressively increasing requirements for banks to develop anti-money laundering (Nazri, Zolkafilil, and Omar, 2009). Over the past few years, money laundering has become a major focus area for risk assessment in the banking sector (Naheem, 2015). The banking sector is required to detect, monitor and report potential money laundering and will receive a significant penalty if it does not comply with these rules (Pramod et al., 2012).

Money laundering does not harm a specific person or company directly, even at first glance there appears to be a victim (Balani, 2019). Money laundering is not the same as robbery, theft, or murder which has direct victim, and cause harm to the victim. However, the actual money laundering has a variety of negative effects. These negative impacts can occur in the economic sector, real sector, productivity, international trade, and capital flows (Dujovski & Mojsoska, 2019). Ba & Huynh (2018) revealed that money laundering can undermine the financial system and reduce foreign investment. In addition, the action may also encourage money laundering crime. This form of fraud, the sale of psychotropic substances, unfair competition, even corporate bankruptcy (Dujovski & Mojsoska, 2019).

Money laundering may interfere with the market mechanism (Ba & Huynh, 2018b). Obtaining money illegally cause the absence of protection of property rights, the market becomes inefficient as indicated by the rising costs of market transactions, as well as their access to the market information asymmetry. Money laundering also avoid the obligation to pay taxes means reducing state revenues (Simsler, 2012). Their financial transactions carried out by bringing illegal money abroad will increase the foreign balance of payments deficits and result in reduced banking funds which causes difficulty in bank credit expansion. In addition, when the country obtained a number of illegal money from abroad, it will add to the shock of macroeconomic stability.

2.4 Determinant of Money Laundering Intention

Money laundering fraud based on the diamond which includes pressure, rationalization, opportunity and capability (Simsler, 2012). Pressure can be categorized into four groups, namely financial pressure, the pressure will be bad habits, and stress associated with the job (Elsbach & Stigliani, 2018). Financial pressure is often accomplished by the action of fraud can be caused by several factors, namely greed and standard of living is too high. Money laundering actions carried out due to financial pressure, that human nature is greedy (Zaleskiewicz et al., 2013).

Fraud can occur if there are opportunities to do so. FM Teichmann & Sergi (2018) divide the potential fraud in the six factors, including lack of supervision to prevent or detect fraud, the inability to assess the quality of the performance, as well as the lack of control on access to information. E-money facilities that are digitally signed by an agency through the encryption key will be easier for money launderers to hide the crime committed.

Rationalization is a reason to justify the act even though the action was actually wrong (Zaleskiewicz et al., 2013). Rationalization is often the case when fraud include the assets actually belong to me, I just borrowed and will pay it back, there are no losers, and it was committed to something urgent. The perpetrators of acts of money laundering have the view that the action taken benefit and not harm others, so it is legal to do (Teichmann & Sergi, 2018).

Fraud may not be possible without the people who have the right skills to carry out the fraud or Fraud (Wolfe & Hermanson, 2004). It means that is the nature of the individual to commit fraud, which prompted players to seek opportunities and exploit them. The chance to become the access to commit

fraud, pressure and rationalization can attract someone to commit fraud, but the actors still have to have a good ability to be able to conduct proper tactics and get the maximum benefit.

Love of money, Work environment and organizational culture a factor that encourages the action of money laundering. Money plays an important role in meeting the needs of biological and psychological (Tang et al., 2018). Love of money causes a person has the desire to be rich and have a view that money is very important. However, the nature of human greed led to taste love of money is excessive (Zaleskiewicz et al., 2013). Love of money were so overdone it has the potential to encourage individuals to make decisions that are unethical, including money laundering (Kashif & Khattak, 2017).

Work environment consists of safety for employees, job security, good relationships with colleagues, recognition for good performance, motivation to perform well, and participation in company decision-making process (Raziq & Maulabakhsh, 2015). Kundu & Lata (2017) said that most organizations ignore the working environment and adverse effects on employee performance. When organizations consider employees as an important part, employees will have a high level of commitment and ownership of the organization. Every individual who prioritize work in his life and has the organizational environment that supports crime, will do anything to gain. This will increase the intent to commit money laundering (Elsbach & Stigliani, 2018).

Organizational culture includes the values and norms shared by members of the organization (Jogarotnam, 2017). Organizational culture provide individualized norm for the behavior of members of the organization and serves as a management tool to shape the direction of the organization. Good culture can help motivate employees, increase productivity, and provide a major influence on the overall function of the organization. A sovereign, when cultures developed by bad organization, this will also have an impact on the behavior of members of the organization were bad anyway (Bortolotti, Boscarei, and Danese, 2015).

3 Discussion

3.1 Regulation of Money Laundering for Indonesian Bankers

The banking sector has an important role in the global economy, facilitating the movement of funds, and provide financial transaction services (Balani, 2019). Banks play an important role in the economy and provide financial services to trade stimulates economic growth (Prمود et al., 2012). However, the banking sector is considered to lead to a financial crisis if not properly organized (Balani, 2019). Therefore, banks tend to be highly regulated to ensure no unnecessary risk taking.

Banks play a central role in the financial system and the economy of a country, but in fact the banks are private institutions which have an obligation to maximize returns for shareholders (Niepmann & Schmidt-Eisenlohr, 2017). Any events that require a large fee would be contrary to the intention of maximizing profit (Solaiman, 2018). The nature of this bank maximization needs to be balanced with the economic role played in society. From the regulatory perspective, it is important for regulators to determine whether enforcement action is made effective without damaging the health of banks and the financial system and potentially damaging the country's economy (Jayasekara, 2018).

The banking sector can not be separated from the inherent risks of money laundering and terrorism originating from financial institutions, geographic regions, products and services, as well as transaction (Jayasekara, 2018). Money laundering has a long history in the banking sector as a mechanism to transfer money (Naheem, 2018). At first the money laundering is done using a simple cash deposit in bank branches and takes a long time. Along with the development of technology, has now developed methods with complicated financial schemes that are designed to complicate the process of investigation and hiding the source of funds. The scheme is done through a merger transaction and a valid account but hidden (Nazri et al., 2009).

The banking sector is expected to implement appropriate systems and controls to reduce the risk of money laundering (Jayasekara, 2018). Bank Indonesia issued Bank Indonesia Regulation Number 19/10 / PBI / 2017 on the application of anti-money laundering and combating the financing of terrorism for the payment system service providers other than banks and providers of business activity non-bank foreign exchange to overcome the rampant cases of money laundering. Therefore, the regulation is considered as a way of managing the risk can not be avoided (Tan, 2018). Anti-money laundering system also required a risk-based. Assessing risk in the banking sector is an important component of the risk management processes as a result of innovation in the banking and finance industry. Money laundering risk

management is also very important in the prevention of operational risk and reputation for launderer can use various services provided by the banks as deposits, loans, investments, and foreign exchange (FM Teichmann & Sergi, 2018).

3.2 Anti-Money Laundering Models

Anti-money laundering regulation of the banking sector of Indonesia stipulated in the Financial Services Authority No. 12 /POJK.01/2017 on the implementation of anti-money laundering and combating the financing of terrorism in the financial services sector. Financial Services Provider (FSP) must identify, assess, and understand the risks of money laundering and financing of terrorism a criminal offense related to customers, countries or geographic areas, products, services, transactions or tissue distribution (delivery channels). CHD also have an obligation to document the risk assessment and consider all relevant risk factors before setting the overall level of risk.

FSPs are required to have policies, controls and procedures management, and mitigation of risk of money laundering and financing of terrorism were approved by the Board of Directors and Board of Commissioners. In this regulation, the FSA also requires FSPs to implement a program of Anti-Money Laundering (AML) and Combating the Financing of Terrorism to manage and mitigate the risks that have been identified based on risk assessment. Implementation of this program is at least includes active supervision of Directors and Board of Commissioners, policies and procedures, internal controls, management information systems, and human resources and training.

One problem for Indonesia is the concealment of assets through the mechanism of money laundering. Money laundering in the country are still considered to have the possibility to be eradicated, but Indonesia will have difficulty if money laundering committed abroad (Dujovski & Mojsoska, 2019). This difficulty will be increasing when foreign countries that serve as the wash does not have a security cooperation agreement with Indonesia. However, the ASEAN Political-Security Community is a solution for Indonesia to build a network of security cooperation with ASEAN countries as the place of money laundering. Aside from being an entry point for Indonesia to open access, international cooperation as a mechanism to combat money laundering in the scope of ASEAN.

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Between Internal Control System and Information Asymmetry on Accounting Fraud

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Abstract. LPD assets developments in Badung Regency is so fast, making these financial institutions susceptible to accounting fraud. Accounting fraud can be influenced by several factors such as the internal control system, information asymmetry and unethical behavior. Based on this, the purpose of this research was to determine the effect of the internal control system on accounting fraud and unethical behavior as a mediating variable and to determine the effect of information asymmetry on accounting fraud and unethical behavior as a mediating variable in LPD Badung. The sample in this study were all LPD in Badung Regency with 122 LPD. The analysis tool used is Partial Least Square (PLS). The results of this study prove that unethical behavior can provide full mediation between internal control system and accounting fraud. Other results also found, unethical behavior gives partial mediation between information asymmetry and accounting fraud.

Keywords: fraud, unethical behavior, internal control system, information asymmetry

1. Introduction

Culture-based development has made Bali a destination for both foreign and domestic tourists (Putra and Yuliasuti, 2019)[21]. The development of the tourism sector will also influence economic development, including the development of financial institutions such as the Lembaga Perkreditan Desa (LPD). Public trust in LPD is getting higher, people are starting dare to put their funds in LPD, compared to financial institutions overseen by the Otoritas Jasa Keuangan (OJK). LPD is financial institution that is exempted by OJK. LPD in Bali is currently growing rapidly, in 2017 LPD Bali recorded an encouraging performance despite the midst of a slowdown in the island's economic growth. This is proven by the increase in total assets held by LPD in 2017 reaching 18.47 trillion rupiah, up by 22.5% compared to the value of assets recorded at the end of 2016 at 16.06 trillion rupiah (Bisnis.com, 2018)[6].

According to Suamarnayasa (2018), LPD that have large assets have not been evenly distributed and are still concentrated in Badung, Denpasar and Gianyar. LPD in Badung are noted to have the greatest assets, reaching Rp. 5.9 trillion, compared to the other two regions which are recorded as having large assets as well as Gianyar Rp. 3.6 trillion and Denpasar Rp. 1.9 trillion (LPLPD, 2018)[15]. The LPD assets of Badung are large, because LPD in Badung have LPD administrators and supervisors who are already professional as evidenced by the level of education of their average master degree graduates. Another factor, also because the economic capacity of the people in Badung is better than other regional residents.

LPD assets in Badung is so rapid, making these financial institutions vulnerable to accounting fraud. In general, accounting fraud is related to corruption cases. As reported in the IDN Times (2018), there have been corruption cases up to Rp.15 billion in the LPD Kapal, Mengwi, Badung, which were carried out by the LPD head who had served for 20 years. Initially, the LPD Kapal had healthy finances, but around the end of 2017 there were irregularities in its financial statements, where customers began to unable to withdraw money from the LPD. Financial reports are very important for an institution (Arie et al, 2018)[5]. Like cooperatives, LPDs should also hold meetings with members, so that LPD members can also receive copies of financial statements, to participate in reviewing fiscal information over the past year. This is needed to prevent the desire to commit accounting fraud.

Judging from this case, corruption is one form of accounting fraud. According to Amalia (2015)[3] one of the factors that can influence accounting fraud that occurs is the internal control system. Weak internal controls can provide a person's opportunity to conduct unethical behavior, so that it can

lead to accounting fraud that can harm an entity (Shintadevi, 2015)[23]. More effective internal control of financial statements can reduce the possibility of unethical behavior that can lead to fraudulent financial reporting (Spatecen, 2012)[24].

Other factors that can also influence accounting fraud are information asymmetry (Amalia, 2015)[3]. Information asymmetry arising from industry and the complexity of a company can increase the likelihood of financial report fraud (Ndofor, 2015)[19]. According to Fitri (2016)[9] information asymmetry is an imbalance that occurs between owners (principal) with the manager (agent). If information imbalances occur in a financial institution such as the LPD, it will provide an opportunity for the LPD head to conduct unethical behavior such as misappropriation of funds and data manipulation, so that this can lead to accounting fraud.

One's unethical behavior can also influence the occurrence of accounting fraud, where the more someone behaves unethically, the greater the likelihood of fraud occurring in an agency. According to Shintadevi (2015)[23], unethical behavior occurs because of a lack of supervision carried out, thus providing an opportunity for someone to take unethical actions that can harm the institution itself. Unethical behavior that occurs can also be caused due to dissatisfaction and disappointment with the results obtained with what they have done. Based on these problems and background, the purpose of this study is to determine unethical behavior in mediating the internal control system and information asymmetry on accounting fraud in the LPD in Badung.

2. Literature Review

2.1 Agency Theory

Agency theory is used to predict and explain the behavior of the parties involved in a company (Arie et al, 2018)[5]. According to Jensen and Meckling (1976)[11], agency theory is a contract that occurs between the manager (agent) and the owner (principal). Agency theory is often used to explain accounting fraud. In this study, Pekraman Village acted as principal, while LPD administrators acted as agents. Problems arising from differences in interests between principals and agents are called agency problems.

2.2 Attribution Theory

Attribution theory was developed by Kelley (2007), who views that attribute leadership behavior can explain how leadership behavior occurs. In this study, attribution theory is used to find out how the actions and decisions taken by leaders or authorized people, including unethical actions and fraud occur.

2.3 Accounting Fraud

Accounting fraud can occur if there is a behavior or a policy that removes or hides important company information that is actually by manipulating financial data, which can benefit oneself or a certain group of parties (Pamungkas, 2016)[20]. According to Amiruddin (2017)[4] accounting fraud that occurs is an act or policy that is wrong in the form of concealment and disguise in presenting financial statements and assets of management organizations that benefit themselves.

2.4 Unethical Behavior

According to Fitri (2016)[9] unethical behavior is a deviant attitude that is carried out by a person to achieve a certain goal, but that goal is different from the goals previously agreed upon. If this unethical behavior is allowed then it can develop into behavior that is very broad and difficult to trace, giving rise to adverse consequences (Ahriati, 2015)[2]. Unethical behavior that someone has will also lead the person to commit accounting fraud.

2.5 Internal Control System

According to Government Regulation Number 60 of 2008 concerning the Government's Internal Control System (SPIP) states that the internal control system is an integral process in the actions taken continuously by the leadership and all employees to provide adequate confidence in achieving organizational goals through effective activities and efficient, reliability of financial reporting, safeguarding state assets and compliance with laws and regulations. So, the more effective the internal control system is applied in an entity, the lower the accounting fraud that occurs (Ahriati, 2015)[2].

2.6 Information Asymmetry

According to Amalia (2015)[3], information asymmetry is a situation where there is an inconsistency in information between parties who have information and those who need information. The existence of this information asymmetry will cause a gap in internal financial knowledge, so that the management can do engineering to increase its own profits. In the public sector, if financial reports published to the public are not in accordance with the actual situation, then this can provide an opportunity to commit fraudulent actions or data manipulation.

2.7 Hypotheses

2.7.1 Effect Of Internal Control System On Accounting Fraud With Unethical Behavior As A Mediation Variable

The internal control system is a process that is influenced by management to provide adequate confidence as a guideline to improve effectiveness and efficiency, reliability of financial statements and compliance with the law (Randiza, 2016). Weak internal control systems can provide a person's opportunity to conduct unethical behavior, so that it can lead to accounting fraud that can harm an entity (Shintadevi, 2015)[23]. Based on the description, the hypothesis that can be built is:

H1: Unethical behavior can mediate the influence of the internal control system on accounting fraud.

2.7.2 Effect of Information Asymmetry on Accounting Fraud with Unethical Behavior as Mediator

According to Fitri (2016)[9], information asymmetry is an information imbalance that is held between the principal and the agent. In the public sector such as the LPD, if there is an imbalance of information between leaders or public employees, then this can provide an opportunity for leaders or employees to conduct unethical behavior. Unethical behavior itself is a deviant attitude that is carried out by someone to achieve a certain goal but that goal can cause harm to the other party (Fitri, 2016)[9]. If the unethical behavior that is owned by someone is not controlled, it can lead to behaviors such as misappropriation of funds and data manipulation that will lead to accounting fraud. Based on the description, the hypothesis that can be built is:

H2: Unethical behavior can mediate the effect of information asymmetry on accounting fraud.

3. Research Methods

The type of data used in this study is primary data, where the data collection technique is using a questionnaire, which lists the statements that must be answered by the respondent. This questionnaire uses assessments with skalia likert 1-5 with details strongly disagree (sts) given a score of 1, disagree (ts) given a score of 2, neutral (n) given a score of 3, agree (s) given a score of 4, and strongly agree (ss) were given a score of 5. The variables used in this study were accounting fraud as the dependent variable, internal control system and information asymmetry as independent variables, and unethical behavior as mediating variables.

3.1 Operational Definition of Variables

3.1.1 Internal Control System

The internal control system is an integral process in activities carried out continuously by the leadership and all employees to provide adequate confidence in achieving organizational goals through effective and efficient activities, reliability of financial statements, safeguarding state assets and compliance with laws and regulations (Fitri, 2016)[9]. The statement instrument used was measured by a Likert scale 1-5, and used five indicators developed into five statement items by Fitri (2016)[9]. The five indicators of internal control system variable statements are: 1) Control environment, 2) Risk assessment, 3) Control activities, 4) Monitoring, and 5) Information and communication.

3.1.2 Information Asymmetry

Information asymmetry is a condition where there is information misalignment between the owner (principal) and the manager (agent) (Amalia, 2015). The statement instruments used were measured using the Likert scale 1-5, and used one indicator developed into two statement items by Amalia (2015)[3]. The indicators of the information asymmetry variable statement, namely the management of funds knows more about an agency's information than the owner of the fund.

3.1.3 Unethical Behavior

Unethical behavior is a deviant attitude by a person to achieve a certain goal, which is different from the goals previously agreed upon (Fitri, 2016)[9]. The statement instruments used were measured using the Likert scale 1-5, and used four indicators developed into four statement items by Fitri (2016)[9]. The indicators of statement of unethical behavior variables are 1) Management behavior that misuses position, 2) Management behavior that misuses organizational resources, 3) Management behavior that misuses power, and 4) Behavior that does nothing.

3.1.4 Accounting Fraud

According to Karyono (2013)[12] accounting fraud is an illegal act and intentional deviation for certain purposes such as deceiving other parties by making misstatements in financial statements carried out by people, both from within and from outside the organization. The instrument used was measured by a Likert scale 1-5, and used three indicators developed into six item statements by Karyono (2013)[12]. The three indicators of accounting fraud variable statements are: 1) The tendency to misuse assets, 2) The tendency to make material misstatements of financial statements, and 3) Corruption.

3.1.5 Population and Sample

The population in this study were all LPD in Badung Regency, totaling 122 LPDs. The sampling technique used is saturated sampling (census), where all members of the population are sampled. So the sample in this study was 122 LPDs in Badung.

3.1.6 Analysis Technique

The data analysis used in this study is the Partial Least Square (PLS) approach in this case using SmartPLS 2.0 software. The data analysis method used is the inner model (test the validity and reliability of data) and the outer model (structural model). The analytical methods carried out include descriptive statistics and inferential statistics (outer model test, inner model test).

4. Results and Discussion

The questionnaire was distributed by 122 questionnaires to each LPD in Badung Regency. Of the 122 questionnaires that returned only 110 questionnaires, which did not return as many as 12 questionnaires and there were 4 questionnaires that did not meet the requirements because they were not filled in completely, so the questionnaires that could be processed in this study were 106 questionnaires.

4.1 Outer Model (Test Validity and Data Reliability)

4.1.1 Convergent Validity Test

This test is conducted to determine the validity of the indicators used, and indicators are declared valid if weights or loadings factors range above 0.50. The results of the convergent validity evaluation in Figure 1 below show that there are several reflective indicators that produce a loading factor value of <0.5 , which means that some of the construct indicators are invalid, for more details the factor loading values of all indicators can be seen in Table 1 below.

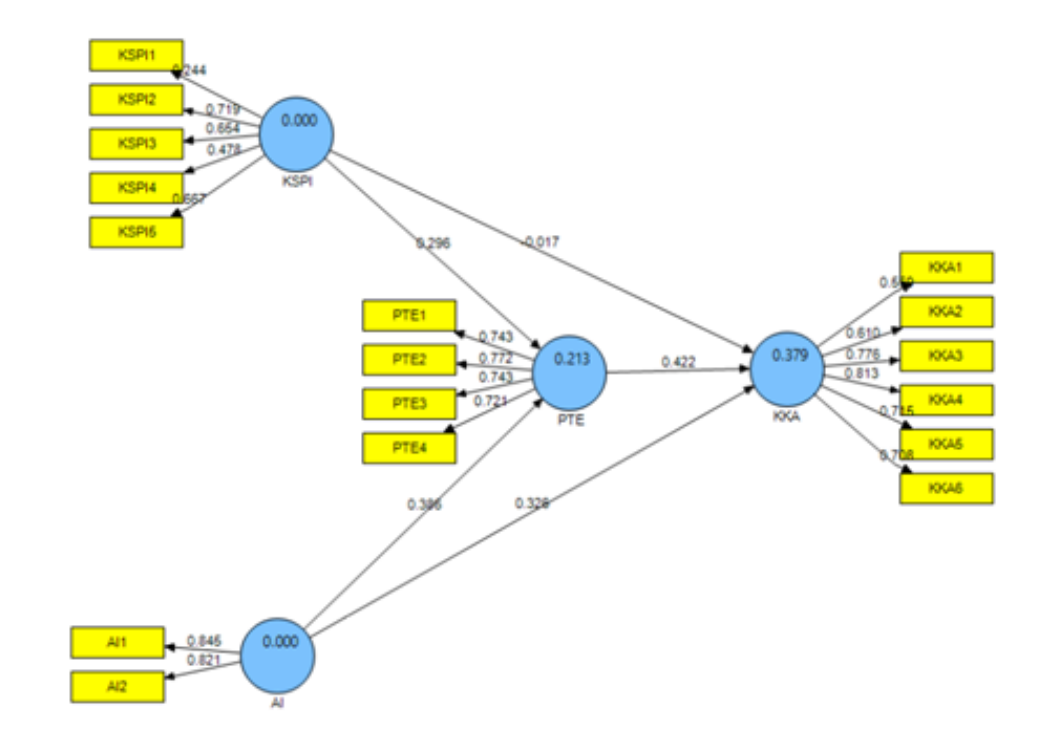


Figure 1. Value of loading factor

Table 1. Uji convergent validity

No.	Variabel	Indikator	Weights or Loadings	Keterangan
1.	Keefektifan Sistem Pengendalian Internal (KSPI)	KSPI 1	0.244096	Tidak Valid
		KSPI 2	0.719308	Valid
		KSPI 3	0.654369	Valid
		KSPI 4	0.477882	Tidak Valid
		KSPI 5	0.667368	Valid
2.	Asimetri Informasi (AI)	AI 1	0.845264	Valid
		AI 2	0.820572	Valid
3.	Perilaku Tidak Etis (PTE)	PTE 1	0.742988	Valid
		PTE 2	0.771675	Valid
		PTE 3	0.742860	Valid
		PTE 4	0.721074	Valid
4.	Kecenderungan Kecurangan Akuntansi (KKA)	KKA1	0.550022	Valid
		KKA2	0.610119	Valid
		KKA3	0.775778	Valid
		KKA4	0.812782	Valid
		KKA5	0.714658	Valid
		KKA6	0.708235	Valid

Source: Result Data Processing, 2019

In table 1 above, it can be seen that the KSPI 1 and KSPI 4 indicators are invalid because they have a value of loading factor < 0.5 , so that this indicator is omitted.

4.1.2 Discriminant Validity Test

This test is conducted to determine the correlation between each indicator with all existing latent variables, which are valid if the cross loading correlation value of all indicators used to form latent variables is greater than the correlation with other latent variables. In table 2, it can be seen that all

indicators are declared valid because they have cross loading correlation values for all indicators of information asymmetry (AI), accounting fraud (KKA), internal control system (KSPI) and greater latent behavior (PTE) other cross-variable variable cross loading correlation values.

Table 2. Uji discriminant validity

	AI	KKA	KSPI	PTE
AI1	0.844711	0.436499	-0.143699	0.270570
AI2	0.821164	0.356618	0.016281	0.324495
KKA1	0.144790	0.549894	-0.028410	0.360194
KKA2	0.283278	0.609572	0.181856	0.373660
KKA3	0.384687	0.775918	0.131462	0.469851
KKA4	0.441540	0.812667	0.102510	0.409597
KKA5	0.321104	0.715214	-0.105539	0.359575
KKA6	0.379217	0.708270	-0.075122	0.238979
KSPI2	0.038435	0.112648	0.730184	0.196248
KSPI3	-0.129908	-0.006068	0.642379	0.155991
KSPI5	-0.106409	0.002856	0.713345	0.187796
PTE1	0.325473	0.385461	0.195139	0.748807
PTE2	0.263306	0.355001	0.290062	0.773862
PTE3	0.182824	0.417951	0.185345	0.740181
PTE4	0.281378	0.429931	0.102755	0.715416

Source: Result Data Processing, 2019

4.1.3 Average Variance Extracted (AVE)

This test is done to find out the value that shows the magnitude of the indicator variant contained by the variable. Variables are declared valid if the AVE value ranges above 0.5. Table 3 below shows that AVE > 0.50, so that all variables are declared reliable.

Table 3. Average variance extracted

No.	Variabel Laten	AVE	Keterangan
1	Asimetri Informasi (AI)	0.693923	Reliabel
2	Kecurangan akuntansi (KKA)	0.591603	Reliabel
3	Sistem pengendalian internal (KSPI)	0.584894	Reliabel
4	Perilaku Tidak Etis (PTE)	0.554815	Reliabel

Source: Result Data Processing, 2019

4.1.4 Composite Reliability

This test is conducted to show whether all variables used are reliable, by looking at the composite reliability value and the cronbachs alpha value of more than 0.70 (Ghozali & Latan, 2015)[10]. Table 4 below shows that the composite reliability value and cronbachs alpha are all variables above 0.70 which means that all variables in this study have good reliability.

Table 4. Composite reliability

No.	Variabel Laten	Composite Reliability	Cronbachs Alpha	Keterangan
1	Asimetri Informasi (AI)	0.819279	0.755928	Reliabel
2	Kecurangan akuntansi (KKA)	0.850852	0.788618	Reliabel
3	Sistem pengendalian internal (KSPI)	0.737919	0.747844	Reliabel
4	Perilaku Tidak Etis (PTE)	0.832807	0.732320	Reliabel

Source: Result Data Processing, 2019

4.1.5 R Square Determination Coefficient

R square is used to see the significance value of latent variables. In table 5 below, it can be seen that the R2 value of the Endogenous Latent Variables is 0.378635 and 0.210635 which indicates that the model is good.

Table 5. R2 Variabel Latent Endogen

No.	Variabel Laten	R Square
1	Asimetri Informasi (AI)	
2	Kecurangan akuntansi (KKA)	0.378635
3	Sistem pengendalian internal (KSPI)	
4	Perilaku Tidak Etis (PTE)	0.210635

Source: Result Data Processing, 2019

4.1.6 Hypothesis Testing

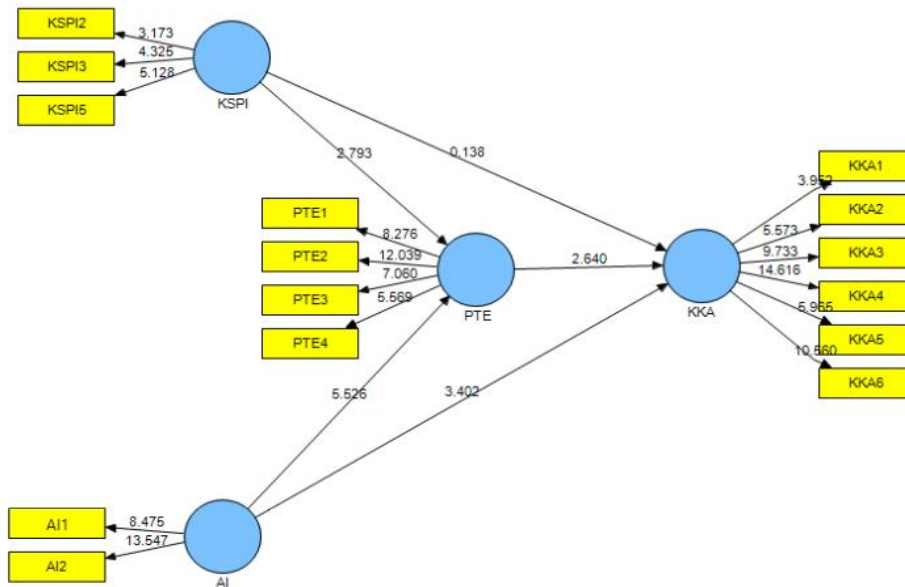


Figure 2. Output bootstrapping

The results for inner weights table is the result of running bootstrapping which is used to determine the direct effect between variables of each hypothesis, which is stated to have an effect if the t-stat value is above 1.96 (5% significance).

Table 6. Path coefficient

No	Keterangan	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	Standard Error (STERR)	T-Stat	Signifikansi
1	Asimetri Informasi -> Kecurangan akuntansi	0.325461	0.328192	0.095655	0.095655	3.4024	Signifikan
2	Asimetri Informasi -> Perilaku Tidak Etis	0.379118	0.382262	0.068611	0.068611	5.5256	Signifikan
3	Sistem pengendalian internal ->	-0.021630	-0.047878	0.157238	0.157238	0.1375	Tidak Signifikan

	Kecurangan akuntansi						
4	Sistem pengendalian internal -> Perilaku Tidak Etis	0.290563	0.289116	0.104028	0.104028	2.7931	Signifikan
5	Perilaku Tidak Etis -> Kecurangan akuntansi	0.422001	0.390736	0.159848	0.159848	2.6400	Signifikan

Source: Result Data Processing, 2019

Based on table 6 above it can be explained that:

1. Information asymmetry towards accounting fraud results in a coefficient of 0.325461 and t-statistics of $3.402463 > 1.96$, so that it can be stated that information asymmetry has a positive effect on accounting fraud.
2. Information Asymmetry towards unethical behavior produces a coefficient of 0.379118 and t-statistics of $5.525643 > 1.96$, so that it can be stated that information asymmetry has a positive effect on unethical behavior.
3. The internal control system of accounting fraud results in a coefficient of -0.021630 with a t-statistic value of $0.137565 < 1.96$, so that it can be stated that the internal control system has no effect on accounting fraud.
4. The internal control system for unethical behavior produces a coefficient of 0.290563 with a t-statistic value of $2.793111 > 1.96$, so that it can be stated that the internal control system has a positive effect on unethical behavior.
5. Unethical behavior towards accounting fraud results in a coefficient of 0.422001 with a t-statistic value of $2.640010 > 1.96$, so that it can be stated that unethical behavior has a positive effect on accounting fraud.

4.2 Discussion of Research Results

4.2.1 Effect of The Internal Control System on Accounting Fraud With Unethical Behavior as A Mediating Variable

Based on the results of the path coefficient test shows that the internal control system has no effect on accounting fraud, while the internal control system has an effect on unethical behavior and unethical behavior also affects accounting fraud. This means that unethical behavior can provide full mediation in the relationship of the internal control system to accounting fraud. The first hypothesis which states unethical behavior can mediate the effect of the internal control system on proven accounting fraud, so H1 is accepted.

This means that the weak internal control system in the LPD in Badung Regency will not directly affect one's desire to commit accounting fraud. However, if the LPD's internal control system is weak, it will be able to provide someone the opportunity to conduct unethical behavior, so that it will lead to the desire to commit accounting fraud, such as corruption that occurred in the Ship LPD, Mengwi, Badung conducted by the LPD Head and has cost the LPD customers up to Rp.15 billion.

4.2.2 Effect of Information Asymmetry on Accounting Fraud with Unethical Behavior as Mediator

From Table 6 above it can be seen that information asymmetry has a significant effect on accounting fraud. In addition, information asymmetry also has a significant effect on unethical behavior and unethical behavior also has a significant effect on accounting fraud. This proves that unethical behavior gives the effect of partial mediation in the relationship of information asymmetry to accounting fraud, so the second hypothesis which states unethical behavior can mediate the effect of information asymmetry on proven accounting fraud.

5 Conclusions, Limitation and Suggestion

5.1 Conclusion

Based on the results of the analysis and discussion, conclusions can be drawn as follows:

1. Unethical behavior can provide the full mediation effect in the relationship of the internal control system to accounting fraud, so the first hypothesis which states unethical behavior can mediate the effect of the internal control system on accepted accounting fraud.
2. Unethical behavior gives the effect of partial mediation in the relationship of information asymmetry to accounting fraud, so the second hypothesis that states unethical behavior can mediate the effect of information asymmetry on accounting fraud is accepted.

5.2 Limitation

Current research still has many disadvantages and limitations, including the following:

1. There are still answers to questionnaires that are not filled in completely and inconsistently. Respondents tended to be less careful about existing questionnaire statements, so many statements were not answered or had inconsistent answers. This can be anticipated by assisting and supervising the respondent in answering the statements on the questionnaire.
2. Variables that influence accounting fraud used in this study are still limited to three variables, namely the internal control system, information asymmetry and unethical behavior, while there are still other factors that can be used for research that also affect accounting fraud.

5.3 Suggestion

The suggestions that researchers can provide are as follows:

1. The internal control system of the LPD must be improved, each employee and boss must comply with applicable regulations so that accounting fraud can be prevented.
2. The financial statements that are usually presented in LPDs should be complemented with performance that contains a summary of the activities carried out and the results achieved in each program by adhering to the applicable accounting rules. With the openness of customers or other parties who have an interest in the LPD, it is expected to prevent accounting fraud that might occur.
3. At the LPD strict sanctions should be applied if the employee behaves unethically, which is not in accordance with the applicable rules.

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The Effect of Material Weakness Disclosure on Investment Judgment

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Abstract. In Indonesia, financial information is information that is most needed by investors or shareholders. One form of financial information needed by investors is information about the company's ability to generate profits. Based on this information show that the role of information on internal control is not important in investment decision making. This paper examines decision making by nonprofessional investors regarding the risks associated with auditing and the risk of disclosure weaknesses associated with auditing. This study uses an experimental method (in subjects). Respondents are undergraduate students at private universities. Participants were asked to evaluate the company's attractiveness. In manipulating the types of material weaknesses, participants analyze 2 types of material weaknesses including entity level material weaknesses and account specific material weaknesses. The results of this study reveal that there are different responses in analyzing entity level material weaknesses and account specific material weaknesses. Furthermore, a direct effect exist between types of material weaknesses and financial reporting risks mediated by risks that are not audit related and risks related to audit.

Keywords: material weakness, investment judgment, entity level material weakness, account-specific material weakness.

1 Introduction

Good corporate governance is one of the attractions of investors, besides that it can also attract creditors to lend funds to companies. However there is no guarantee that every company that applies the principles of good corporate governance will avoid mistakes and failures. Factors that can be considered in implementing Good Corporate Governance (GCG) consist of external and internal factors. In order to have effective usage of good corporate governance practices, internal factors are the key drivers of the originating from within the company. One of the question to be asked in the internal factor is: Is there an effective internal control system to avoid any conceivable inconsistencies in the company?

In purpose to form solid and secure operating activities, the internal control system manages and controls risks properly includes all policies and procedures in all working activities to protect company's assets. To achieve the functional effectiveness and efficiency, the internal controls is applied to support the operationalization. A vigorous internal control system is intended to achieve planned performance goals, intensify confidence for management, and promote compliance through tide regulations and risk mitigation.

Internal control can provide a reliable basis for investors and potential investors to assess investment performance and management. In Indonesia, financial information that is most needed by investors or shareholders. One form of financial information needed by investors is information about the company's ability to generate profits. This information is provided by the Accounting field. Financial information is a company financial information that shows profit or loss in one accounting period. This financial information is useful for shareholders or investors to make decisions to buy shares or invest in one company or provide capital loans supported by bonds. Without financial information, investors will not invest their capital and entrepreneurs will lose capital from investors. By looking at the financial statements, everyone can know what is done by the company, including the occurrence of fraud. This financial information is made as proof of accountability to the owners of capital or investors, so investors know where their money is being used.

Based on the information above shows that the role of information on internal control is not important in investment decisions making for investors in Indonesia. This is different in other countries, for example the United States that information related to internal control can also affect investors in

making investment decisions. If there is weakness in the balance sheet in the client's Internal control over financial reporting (ICOFR), the auditors are required to issue and report them. The disclosure of this information in an adverse report describes the nature of the control deficiency and the likelihood that the control deficiency fails to prevent or detect material misstatement in the financial report. (Asare and Wright, 2012a).

2 Literature Review

2.1 Investment Decision Making

Some studies examine the factors that influence investment decision making. Hogart and Einhorn (1992) develop a model related to investment decision making namely the Belief Adjustment Model. This model denotes that decision makers often fall into irrational decisions.

The second study works on the overconfident and experience on the increasing or reducing the information order effect in investment decision making. Almilia and Wulanditya (2016) assert that person with an overwhelm confidence tends to neglect the circulate information, and this excessive confidence will affect the loading of information.

The third study attempts to combine the belief adjustment model with the investment decision frame on the investment decision making. Almilia et al. (2018) show that respondents provide different answers when receiving non-accounting information (expressive decision frameworks) with different presentation patterns, step by step and the final sequence. The other result that Almilia et al. (2018) found that there were similar responses between participants who received accountancy information (financial decision frame) and non-accountancy information (expressive decision frame) at the last sequence presentation format. Overall, the conducted study by Almilia et al. (2018) designate that Investment Decision Frame has an effects on the investment decision making, when the information presentation format is in chronological order.

The fourth study examines the task complexity, information technology utilization (interactive and visualization), information classification (pro forma earnings and profit information), and information pattern (graphs and texts). Dilla et al. (2013) state that amateur investor influence by graphic content information to make an investment decision, while the professional does not. Tang et al. (2014) revealed that by providing a high levels of visualization information or high level of interaction alone may degrade the investment decision making performance. Ang and Trotman's work in 2015 describe that that if the investment decision is organized in groups, information comparison between quantitative and qualitative is preferred. In term of assignment acceptance with lower and higher complexity in decision making, there are significant differences in the average level of accuracy, level of confidence, and calibration levels stated by Almilia et al. (2019).

2.2 Internal Control and Investment Decision Making

The historical control model has changed in the section 404 (b) of SOX by requiring the auditor to prove and verify the effectiveness of their public client's ICOFR. ICOFR proposes to provide early warning signals to the stakeholders to assess the accuracy of financial information in the company's reporting system. When a material weakness found in company's internal controls over financial reporting (ICOFR), a report issues by the auditors that disclosure this information is required which also portrays the nature of control deficiency and the possibility that the control deficiency fails to uncover and inhibit material misstatements in the financial report. The purpose of this adverse report is for users' consideration regard to the reliability of the company's financial reporting system.

Asare and Wright (2012a) denotes that when entity-level material weaknesses occurred, the assessment of equity analyst is similar with the reporting threshold regime regarding the possibility of future misstatements. Moreover for specific material weakness, the assessment of equity analysts which compare between reasonable possible condition and remote condition is significantly higher on probability material misstatement. The result of Asare and Wright work (2012a) revealed that entity-level material weaknesses create the same level of concern for potential future misstatements, whether reporting thresholds are more than remote or reasonably possible. As such, it is important to provide information to users about these material weaknesses, and if it is possible they will prevent or early detect material misstatement.

Asare and Wright (2012b) suggest that it is necessary to conduct a Standard unqualified audit report (SAR) on financial statements that have lost credibility when combined with adverse entity level ICOFR reports as alleged by several users. These costs that were not previously recognized to the entity-level ICOFR recipients are detrimental, because they have a negative impact on the investment appraisal of investors, providing another reason to avoid or correct material weaknesses in ICOFR. Arguably, this is also potentially dangerous for the audit profession because the diminished trust in SAR can eventually slide down the guarantee function.

Rice and Weber (2012) found that detection and disclosure incentives play a role in reporting material weaknesses found. The findings also indicate that the ICOFR report is not always effective in identifying and disclosing existing material weaknesses by asking whether the recent decrease in reported material weaknesses reflects improvements in underlying control practices. However, because of the design choices, it is unclear whether the results can be generalized to companies with material weaknesses that do not lead to restatement.

Literatures on auditors' evaluation, reporting, internal control over financial reporting (ICOFR), as required by the Sarbanes-Oxley Act were synthesized by Asare et al. (2013). The objectives of this work are as follow: firstly is information presentation on how well auditors perform the task, which serves as feedback to the Public Company Accounting Oversight Board on implementation issues and problems related to auditors' application of the professional standards on ICOFR; and secondly are gaps identification of existing literatures and promote fruitful areas for further research. In line with Auditing Standard No. 5, Asare et al. (2013) portray five stages of the ICOFR audit: (1) planning; (2) scoping; (3) testing; (4) evaluation; and (5) reporting. Moreover, they classify the determinants of performance into five broader areas namely: (a) the auditor's attributes, (b) the client's attributes, (c) the interaction between the auditor and the client, (d) task attributes, and (e) environmental attributes. By giving the ICOFR task taxonomy, proposing performance determinant models, evaluating the auditor's performance, underline findings and substantial gaps for regulators, and putting a milestone for research in the future are the key contributions in this study. Therefore, hypothesis to be examined towards the influence of material shortcomings formulated as follow:

H1: Subject who are received entity-level material weakness information will give difference judgment on financial reporting risk assesment and non-audit related risk compared to Subject who are received account-specific material weakness information.

3 Research Method

An experimental study applied in this study by examining the causal relationship among variables in order to achieve the research objective. Some requirements for selected respondents are as follows: familiar with investment, capital market and financial statement analysis. The selected are students from accounting department who have taken the subject of Investment Management and Capital Markets and also Financial Statement Analysis subject.

Participant were asked to analyze a company's investment attractiveness. The given instrument provides general instruction, company's general information in order to complete the task. In the background information contained with auditor's unqualified report on the financial report. In purpose to attract more student participation and shorten the duration of experiment completion, this study provides summary of financial statement audit report. In order to manipulate the type of material shortcomings, this study provides more information on entity-level material weakness and account-specific material weakness in the part of summary audit report (the instruments from Asare and Wright, 2017 was modified).

Moreover, respondents were asked to presume that they were evaluating a company's common stock investment attractiveness in the first quarter and also assess the risks related to the material control weakness: remediation, operations, familiarity, information, and verification. Eventually, respondents conclude their overall risk assessment as suggested by the company's financial reports regarding to the auditor's adverse control report (0 = no financial reporting risk and 100 = maximum financial reporting risk).. In the last stage, respondents After reading and examining the items provided, further analysis is carried out to examine the manipulation of questions, questions to measure participants' basic skills in the area of financial reporting and capital market analysis, and respondent demographic items.

Participants were divided into two assignment groups. The first group participants were asked to do assignments related to entity level weaknesses, after that they continued to do assignments related to

account-specific material weaknesses. Participants in the second group were asked to do assignments related to account-specific material weaknesses after that followed by assignments related to entity level weaknesses. This research use *an independent sample t test* to examine the hypothesis.

4 Results and Discussion

Accountancy and management students are the respondents in this study who have knowledge in the field of investment and stock market and financial report analysis. A total of 137 students where 112 of them have passed the manipulation check and could be proceed to the hypothesis testing.

Table 1 presents the results of the participant testing in group 1, which is the group that receives assignment of entity level weaknesses, after that it does the assignment of account-specific weaknesses. The results show that there were differences in response to operational risk and financial reporting risk for participants who received assignment of entity-level material shortcoming compared to members who gotten account-specific shortcomings. The results show that the risk of financial reporting would be higher in companies that experienced account-specific material weaknesses compared to companies that experienced entity-level material weaknesses. The results of this study also indicate that there are differences between operational risks in companies that experience account specific material weaknesses and companies that experience entity-level material weaknesses.

Table 1. Descriptive Statistics and Univariate Test of Mean Difference (First Group)

Variables	Mean Entity-Level Material Weakness	Mean Account-specific Material Weakness	t-test	p-value
Remediation Risk				
Costliness to fix	71,0204	72,8163	-0,414	0,680
Difficulty to fix	69,0408	71,6735	-0,568	0,572
Operational Risk				
Management effectiveness	50,4694	40,6735	1,868	0,065
Impact on operations and profitability	72,1224	80,4286	-2,097	0,039
Impact on future cash flows	69,1020	78,4082	-2,138	0,035
Familiarity Risk				
Familiarity with material shortcomings	67,3265	70,4694	-0,732	0,466
To what extent risk is understood by management	67,0204	65,7551	0,265	0,792
To what extent risk is known by management	60,9796	52,6367	1,379	0,171
Immediacy of risk	49,0612	54,8980	-0,991	0,324
Extent to which it is difficult for management to control risk	58,9796	638980	-0,961	0,339
Information Risk				
Likelihood of current year material misstatement	72,8776	77,0000	-0,898	0,371
Magnitude of misstatement	35,5714	46,1837	-1,582	0,117
Likelihood next year is misstated	58,6939	62,4490	-0,657	0,513
Verification Risk				
Confidence that auditor will detect misstatements present	79,4082	79,8367	-0,103	0,918
To what Extent risk is known by Auditor	71,0408	78,6122	-1,676	0,097
Financial Reporting Risk	71,2041	80,7447	-2,354	0,021

Table 2 presents the results of participant testing in group 2, namely the group that received the assignment of account-specific weaknesses, after which they received the assignment of entity level shortcomings. The revealed result in the group 2 shows different results. The result implies that

operational risks related to management effectiveness would be higher in companies that experienced entity-level material weakness compared to companies that experienced account-specific material shortcomings.

Table 2. Statistical Descriptive and Univariate Test of Mean Difference (Second Group)

Variables	Mean Entity-Level Material Weakness	Mean Account-specific Material Weakness	t-test	p-value
Remediation Risk				
Costliness to fix	66,1429	66,7302	-0,130	0,897
Difficulty to fix	61,5714	65,3810	-0,830	0,408
Operational Risk				
Management effectiveness	52,3333	44,0794	1,790	0,076
Impact on operations and profitability	69,7619	68,5873	0,278	0,782
Impact on future cash flows	70,7460	70,6984	0,012	0,991
Familiarity Risk				
Familiarity with material shortcomings	66,5397	69,8571	-0,917	0,361
To what extent risk is understood by management	65,2857	67,9206	-0,662	0,509
To what extent risk is known by management	60,3175	57,9841	0,445	0,657
Risk Immediacy				
To what extent management difficult to control risk	62,0159	52,5714	2,023	0,045
To what extent management difficult to control risk	74,0653	63,6508	2,649	0,009
Information Risk				
Likelihood of current year material misstatement	70,8571	68,7143	0,462	0,645
Magnitude of misstatement	43,1905	46,5397	-0,586	0,559
Likelihood next year is misstated	58,1587	58,6984	-0,108	0,914
Verification Risk				
Confidence that auditor will detect misstatements present	73,0635	71,8254	0,261	0,794
To what extent risk is understood by auditor	74,1905	72,5238	0,413	0,680
Financial Reporting Risk				
	73,3968	75,7143	-0,567	0,572

The results also show higher familiarity risk, especially in terms of risk immediacy and to what extent management difficult to control risk that experience entity-level material weaknesses compared to companies that experience account-specific material weaknesses. Inconsistency was indicated in this study's results which can be caused by different assignment sequences among those two groups.

The implication of the results of the study shows that information related to material weaknesses at both entity-level and at account-level can also affect investment decision making. This shows that the information submitted by the auditor regarding material weaknesses also has an impact on investment decision making.

5 Conclusions and Suggestions

This study aims to examine whether there are differences in risk assessment responses in investment decision making. In this study, accounting students were served as respondents who have followed the subjects of Investment Management and Capital Markets and Financial Statement Analysis as well. The results indicate that the differences in risk response in companies that experience entity-level weakness and account-specific weakness.

Eventually, this study suggests to consider securities analysts and investors as the respondents in the future research. This suggestion is to explore more on response of securities analysts and Investors in

Indonesia whether they need information other than accounting information, namely information on audit findings on investment decision making.

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Barriers to Fraud Risk Assessments in The Public Sector: The Deviations of SAS No.99

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Abstract. Fraud may never be fully prevented, but the detection responsibilities of auditors will continue to increase with growing public dissatisfaction of auditing results. As stated in the Statement of Auditing Standards (SAS) 99, Fraud Risk Assessment (FRA) must be performed by auditors in each audit assignment at the planning phase. On the other hand, determining the fraud risk factors has become the main issue faced by auditors due to budget and time limitations. As the impact, the auditor’s competence level is not aligned with the expected results of the FRA implementation. The auditor should have a very good justification for any deviation from SAS No.99 so that it can reduce their responsibilities in finding the fraud. Hence, there is a prospect gap between auditors' role and SAS No.99 in identifying the occurrence of fraud in the business sector and the public sector. In this paper, we critically examine the constraints in implementing the FRA in the public sector audit. In this paper, we critically examine constraints in implementing FRA in public sector audits. We argue that the implementation of FRA failed so that it cannot reduce fraud in the public sector.

Keywords: fraud, fraud risk assessment, SAS 99, public sector, fraud detection, auditors’ abilities

1. Introduction

Fraud has been a problematic issue in all sectors all over the world because fraud has a negative impact on the quality of life (Whitehill, 2017). Based on Certified Fraud Examiners (CFE) surveys, the typical organization has lost 5% of sales because of fraud occurrence in a given year (Association of Certified Fraud Examiners, 2016). The Cressey Fraud Triangle generally stated that during the occurrence of fraud, there will be three conditions happened such as management and employee will be under pressured, ineffectiveness of the internal control, and recognizing fraud capability (R. Kassem & Higson, 2012). When fraud prevention has failed, the methodology for detecting fraud is very important. (Bolton et al., 2002). A key aspect of detecting fraud is the establishment of an audit plan designed to carry out

procedures related to fraud detection and material misstatement. (Dorminey, Scott Fleming, Kranacher, & Riley, 2012).

Both the public sector and the business sector are not immune to fraud that will cause financial losses to the organization (Holmes, Strawser, & Welch, 2000). The public sector is a part of the economy that is bound by the state and some sectors are given subsidies by the state to provide services or goods to the public (De Vries, Bekkers, & Tummers, 2016). Based on the definition, the scope of public sectors and private sectors are different whereby the public sector is referred to services that are provided by government and also state-owned organizations. Meanwhile, private sectors are good and services that are provided by non-governmental organizations and non-governmental associations (Almquist, Grossi, van Helden, & Reichard, 2013). To assess accountability in public sector organizations must be audited by external auditors (De Vries et al., 2016). Public sector auditing is very important in order to provide the information and to conduct the independent evaluation that consists of the following assessments: the realization of conducting and managing government policies and the activities or procedures to handle the public governance (ISSAI 100, 2013). The difference methods might apply by auditors to produce the reliable services and to act with veracity (Date, 2012).

The auditor's responsibility will become wider when SAS no. 99 is fully implemented because they must carry out the FRA and plan an audit procedure to detect fraud. The auditors have to determine the fraud that is related to the audit process and remain updated till the audit process completed. There are three requirement processes done by the auditor as written in SAS No.99 which are: (1) gather the necessary data to determine the visible deficiency risk due to fraud, (2) measure the risk of fraud based on the entity's assessment and managing the operations, and (3) provide an act on fraud risk assessment results. In SAS No. 99, auditors also need to gather and consider fraud risk assessment information in the past (Ramos, 2003). The responsibilities of public sector auditors are also the same in relation to the implementation of this FRA as required in SAS no 99. During the audit process, the auditor must be able to do the investigation and perform certain procedures to determine the fraud risks that are aligned with the audit objectives. They also have to be critical in determining the fraud occurrence possibility (ISSAI 100, 2013).

2. Literature Review

2.1 Statement on Audit Standard (SAS) 99

The audit objective in general is the auditor movement to ensure the financial statements fulfill the related framework for financial reporting. Meaning that, there is no room for errors which might cause by material error and fraud error (IFAC, 2016). The auditor should follow the following steps: determine the fraud risk factors and develop fraud detection procedures so that the audit purposes can be achieved. On the other hand, the audit might not able to determine fraudulent areas if the auditor cannot identify the fraud risk when the audit plan is drawn up and audit procedures are started (Schafer & Schafer, 2018). In fact, in the international audit standards, auditors have to identify fraud risk factors before the audit began. The American Institute of Certified Public Accountants (AICPA) Auditing Standards Board has delivered Statement on Auditing Standard (SAS) No. 99 "Consideration of Fraud in a Financial Statements Audit" (Sabala, 2011). Based on SAS No.99, the auditors are responsible to justify financial

statements clear from the fraud errors during the audit process. Hence, the auditors should have clear planning to determine and control the fraud risk occurrence.

As stated in current audit standards and the official guidelines, the auditor is required to check the audited financial statements does not have any mistakes or fraud (Hogan, Rezaee, Riley, & Velury, 2008). There is a three-pronged framework that also known as the "fraud triangle". The fraud occurrence cases have happened because of many aspects such as under pressure, opportunity, and rationalization. The fraud triangle has been a powerful tool for Certified Public Accountants (CPA) who attempt to understand and manage fraud risk and have been officially adopted by the audit profession as part of Statement on Audit Standard (SAS) 99: Consideration (Wolfe & Dana, 2004). Adoption of the fraud triangle in SAS No. 99 is the obligation for the auditor to understand fraudulent behavior in the fraud risk assessment (Lokanan, 2015). In order to observe the pressure, opportunity, and rationalization, the auditor has to develop proxy variables for measurement purposes (Skousen & Wright, 2006). The auditors can be assisted to asses risk factors for fraud through some specific examples of management attitudes, organizational values, and personal characteristics (Johnson, Kuhn, Apostolou, & Hassell, 2013).

SAS 99 requires auditors to conduct FRA separately for each audit assignment where the auditor's ability to detect fraud is overseen by regulatory oversight (Brazel, Jones, & Zimbelman, 2009). Identifying fraud risk factors is an unstructured task that requires a fraud hypothesis, the implications of the hypothesis, an effective audit method for disclosing fraud as hypothesized (Hammersley, 2011). Identifying fraud risk factors becomes a critical issue due to budget constraints (Lin, Chiu, Huang, & Yen, 2015). The obligation of external auditors to detect material irregularities including fraud, has made auditors under pressure because they accept legal responsibility for detecting material fraud (Krambia-Kapardis, 2002). The Public Company Accounting Oversight Board (PCAOB) put the pressure on auditors on detecting high-risk fraud situations and react to those situations with a proper adjustment to planned audit procedures (Hammersley, 2011). SAS 99 mandates the improvement of documentation in certain audit areas, discussions among audit team members, including the obligation to brainstorm fraud risk factors for the entity and then establish audit procedures related to fraud detection (Marczewski & Akers, 2005).

Auditing standards provide an important foundation supporting audit quality. According to Statement on Auditing Standards (SAS) no. 99, to get this reasonable assurance, the auditors must keep a professionalism and skepticism and consider the potential for fraud in financial statements by conducting the fraud risk assessment (Abdullatif, 2013). Fraud risk assessment is defined as a process and activity to identify an organization's internal and external fraud and overcome organizational vulnerability towards the fraud cases. Thus, the auditors have an important role to make and a plan and perform the audit so that free mistakes in financial statements can be obtained (ACFE, 2016). The purpose of fraud risk assessment is to identify possible fraud in the audited entity and suggest audit procedures to detect fraud (Institutions, 2013).

2.2 Fraud Risk Assessment

Fraud risk assessment is involved the management evaluation of the potential fraudulent schemes in the organization and corruption that might be done in internal or external of the organization. Thus, it can sustain the mitigation and monitoring of the efficiency of the internal controls which can protect

mechanism. Fraud risk assessment is included three aspects which are: 1) fraud risk identification; 2) inherent fraud risk assessment; 3) identification; (Cascarino, 2012).

To conduct a fraud risk assessment, the team audit must identify the risk of fraud risks simultaneously into the elements of the fraud triangle. Risks will be assessed based on professional judgment to categorize the risk according to the fraud triangle (Asare, Wright, & Zimbelman, 2015). Furthermore, the IFAC Audit Guide (2007) provides guidance related to the Fraud Risk Assessment Procedures include 1) audit team discussion, 2) identification of fraud risk factors, 3) assessment of fraud risk, 4) fraud risk register, 5) determination of significant risk, and 6) responding to significant risks (International Federation of Accountants, 2007). In the public sector, the International Organization of Supreme Audit Institutions (INTOSAI) have set the audit standard on International Standards of Supreme Audit Institutions (ISSAI) 1240 about the auditor's responsibilities relating to fraud in an audit of financial statements in the audit planning stage (Institutions, 2013).

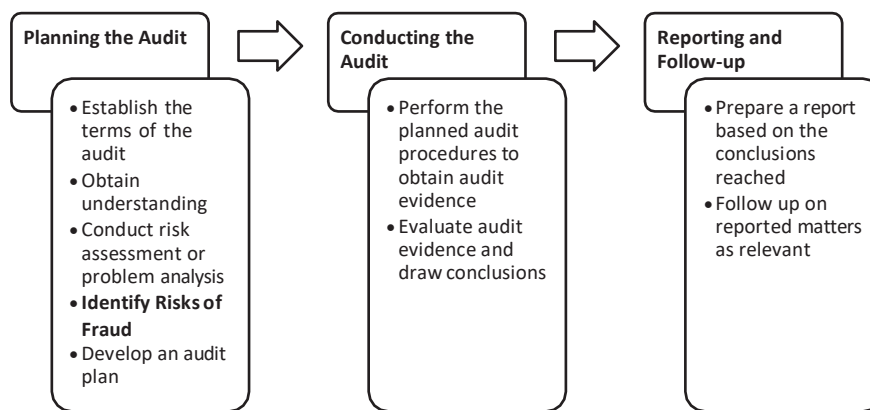


Figure. 1. Phase of Public Sector Auditing (Institutions, 2013)

Responsibility for fraud detection will support the realization of adequate audit procedures and minimize audit failure. The auditor should have a concern to identify fraud as it is required in the audit standards. The auditor might express the misjudgment due to the audit failure. The failure in the auditing can ensue because not implement the general auditing standards. In examining the application of standards, it has been revealed that although audit standards are compulsory, there is little attention and responsibility for external auditors to corporate corruption cases. (Rasha Kassem & Higson, 2016). The deadline for implementing an audit program under audit standards can reduce auditor performance and influence auditor dysfunctional behavior (Simanjuntak, 2008).

Audit planning is to decrease audit risks to an acceptably low level that consists of overall engagement audit strategy preparation and audit plan development. The engagement team involvement in the audit strategy will benefit from the experience and insight of the engagement partner and other key team members. It is also able to increase the efficiency and effectiveness of the planning activities (International Federation of Accountants (IFAC), 2013). Fraud risk assessment should be carried out by the auditor when preparing the audit plan (Institutions, 2013).

The risk assessment process for fraud comprises the following stages: 1) risk identification, 2) risk assessment, and 3) risk treatment (*Ethics and organization: The Fraud Risk Management practice in Istat*, 2017). Factors to consider when conducting FRA are assessing possibilities fraud based on previous data or similar fraud cases in other industries including the complexity of the relationship between the personnel involved in the process (Lit, n.d.). Auditing standards have suggested that auditors brainstorm during fraud risk assessments. Brainstorming has to be emphasized to the auditors in order to enhance the fraud risk evaluations so that it can support the decision-making process instead of doing it individually (Nassir, Sanusi, Ghani, & Prabowo, 2016).

2.3 Public Sector Auditing Research in Previous Literature

There are many studies on auditing that concentrate on the FRA problem, but not much on the public sector audit. The effective method to reduce the auditors from diminish the audit quality is to align the accounting firms' ethical culture with professional values and also reduce the time pressure to avoid underreporting time (Svanberg & Öhman, 2016). Identifying a fraud is a complex task that necessary for auditors to understand the nature of fraud which includes how it can be done and how it can be hidden (R. Kassem & Higson, 2012). Auditors have seen an increase in their responsibility to detect fraud as a result of SAS No. 99, but many still fail to fully understand the recommendations they make for fraud detection and prevention (Sabala, 2011).

The assessment influence by the professional skepticism of the auditors that will greatly impact the risk of material misstatement. An experienced auditor is more skeptical to investigate the risk comparing to auditors who less experience. However, time pressure will give a negative impact on the assessment process. Hence, when the auditor working under high time budget pressure, their positive effect of professional skepticism on risk assessment is low comparing when they work under low time budget pressure conditions (Sayed Hussin, Iskandar, Saleh, & Jaffar, 2017). There is a significant influence between the experience, training, and auditor skepticism simultaneously on the detection of fraud (Hilmi, 2011). The audit procedures implementation to identify the fraud is influenced by specialization and independence of auditors (Sarwoko & Agoes, 2015).

The improvement of fraud risk assessment can be done by differentiate fraud risk assessment and errors in misrepresentations, Then, it is important also to share ideas on fraud risks and strategically thinking about the efforts that client management might make to conceal and hide fraud (Allen, Hermanson, Kozloski, & Ramsay, 2006). Auditors also require improving their sensitivity on fraud risk factors and effectively transform their audit plan to react to financial risk changing, or systematically allocate effective resources for all audits. These are to enhance fraud detection (Foster, 2018). The consideration auditor on fraud risk assessment will cause brainstorm and affect the number of audit procedures in detecting fraud (Chiu, Vasarhelyi, Alrefai, & Yan, 2018). In audit practicality, the auditors have a failure potential to detect fraud since the audit environment is very complex. Besides that, there is a significant correlation between decreased audit quality and time pressure (Gundry & Liyanarachchi, 2007).

The components that might avoid auditor to implement the FRA and detecting fraud are as follows: 1) the auditor is unsuccessful to evaluate the management incentives of committing fraud

effectively; 2) the auditor is unsuccessful in recognizing the chance for management to commit fraud and 3) the auditor does not have sufficient time to revise the audit activity. During fraud risk assessment, the auditors pay more attention to their perception of the management characteristics. It will cause a low fraud risk assessment when management considers having significant incentives and opportunities for fraud (Asare et al., 2015).

2.4 Agency Theory

The theory of agencies seeks to understand the problems that arose when one party, the agent, acts for another, the principal. The agent has many kinds of issues to deal with the directors, while the director has different issues to face the agents in order to ensure the action taken by the agents has corresponded with the standard preferences. Thus, the agency theory was developed to provide an understanding of the agency behaviors which includes two aspects. First, identify the problems and activities so that they can provide "acting for" (agent side) services. Second, the process of guiding and revising the agent actions (the main side) (Mitnick, 2014).

The theory of agencies also applies in the public sector, because citizens are in the position of the principal who has entrusted assets as agents to managers. The agency relationships of the public sectors are more complicated comparing to the private sectors. It is involved in so many factors. First, there is a correlation of the agent relationship with voters (as the principal) and politicians (as agents). However, voters are unable to perceive the legislator activities without make a payment. The advantage of any voter's potential is too low to adjudicate the rational ignorance. Second, there is a relationship between the Government and Parliament among the agency. In parliamentary democratic government, the government has to provide the report of the budget and expenditures to Parliament. Thus, the audit has a significant role to avoid data from being subjective or manipulated by the government. Lastly, the third agency relationship that involves the government and civil servants. The issue is the conflicting interest between Bureaucrats chairmen and ministers. The Bureaucrats chairmen focus on having larger budgets for incentives, while ministers tend to eliminate leeway on budget. However, the bureaucrats have admittance to get more information (Hay & Cordery, 2018).

2.5 The Signaling Theory

Signaling theory applied to understand the behavior of two parties (individuals and organizations), when they have admittance to different information. The sender focus on deciding the communication (providing signal) approach to deliver the information, while the receiver is required to find a way to interpret the signal. Signaling theory plays a vital role in most management literatures such as: strategic management, entrepreneurship, and managing human resources. Likewise, signaling theory has been implemented in the last decades which leads to unclear core principles as applied to organizational concerns (Connelly, Certo, Ireland, & Reutzel, 2011).

The feedback of the incentives provided by the bond market; the municipal governments have incentives to release more financial data. Signalization could be fully implemented in the government. It is useful for the government in order to convince the public through public expenditures or public assets. It can be used to make a decision based on that reliable information that can assist by a credible

independent audit body (Hay & Cordery, 2018).

3. Discussion

Increased law enforcement, regulatory oversight, wider control, implementation of auditing standards related to fraud, and sophisticated monitoring technology are all appropriate steps and will contribute to preventing and detecting fraud (Wolfe & Dana, 2004). Auditors work under pressure because the time provided is limited with tight deadlines (Gundry & Liyanarachchi, 2007). In addition to time pressure, auditors have problems related to audit costs, competition, and good relations with the auditee that make auditors fail to detect fraud and reduce audit quality (Koroy, 2009). When the auditors are under the time pressure, the auditors will be focused more on the main task to gather the documentary evidence on misrepresentations of financial statements. They will have less attention to misstatement quality and the possibility of fraud occurrence (Allen et al., 2006). The risk of having the time and budget constraints, the auditors put the priority more on planning and audit procedures which consider as the primary task, while fraud risk assessment considers as a secondary task (Braun, 2000).

The results of the study have shown that the higher the time budget pressure felt by auditors in the implementation of audit procedures, the more the auditor's tendency to carry out dysfunctional actions in carrying out audit tasks (Simanjuntak, 2008). An audit work environment where there is pressure on the auditor can reduce audit quality (Norbarani, 2012). If the auditors have the ability to recognize the difference of fraud risks, it might impact the audit quality since the auditors might not concern on the signal mistakes evidence. The auditors will focus more on gather fraud risks between accounts whereby having difficulty in recognizing the potential for mistakes in low-fraud risk accounts. Besides that, the auditor also pays more attention to fraud risk on the manager target on low-risk accounts for assertive financial reporting deliberately. Thus, this will affect information related to the fraud (Mubako & O'Donnell, 2018).

Fraud issues have gradually become a problematic issue for the public and private sectors (Holmes et al., 2000). Fraud is increased due to the modern technology development and the global communication superhighways. As the impact, loss of billions of dollars to due fraud every year all over the world (Bolton et al., 2002). Today, companies are facing a perfect storm of internal, external, regulatory, and reputational fraud risk (Price Waterhouse Cooper's PwC, 2008). Graph 1.4 shows the reported global economic crime and fraud in the world is on the rise.

In the public-sector audit environment, government and other public sector entities are accountable for tax-derived resource usage and other sources that use to provide services for citizens and other beneficiaries. These entities are also responsible for their management and performance and resource utilization for those who provide and citizens who use those resources. Public auditing is also to ensure the public sector entities and public servants perform their roles effectively. Hence, it can create an appropriate condition and strengthen the expectation (ISSAI 100, 2013). The auditors are responsible to identify and report the fraud occurrence. So, the auditors will see the report extensively for any misspelled financial (Halbouni, 2015). Auditors also need to conduct inquiries and procedures to detect and react to fraud risks that are associated with the audit goals. They have to be critical and alert for any occurrence fraud possibility during the entire audit process (ISSAI 100, 2013).



Figure 2. The Reported Rate of Global Economic Crime and Fraud

The purposes of a public sector financial audit are not only related to the material aspects to have the financial statement that is produced according to the applicable financial reporting framework (i.e. the ISAs scope). These also relate to audit and reporting responsibilities since there might be additional targets from the audit mandate including legislation, regulation, ministerial directives, government policy requirements, or legislative resolutions. These additional targets also align with general public expectations for the auditors to detect any non-compliance with authorities, including budgets and accountability frameworks, and/or reporting on internal control effectiveness. Hence, auditors should pay attention to those responsibilities and consider the fraud risks during planning and performing the audit (Ifac.Org, 2009).

Based on the audit standards, during the audit planning phase, the auditors have to able to determine the fraud risks and prepare the audit procedures to analyze the identified risk (Reffett, 2010). The responsibility for fraud detection by carrying out FRA will support the realization of adequate audit standards and minimize audit failures (Minaryanti & Ridwan, 2015). The shortcoming in the fraud risk assessment process is considered to play a significant role in the failures of audit (Asare et al., 2015). On the other hand, the outcome of the risk assessment depends on the strategic behavior interpretation of the risk evaluations. The risk assessment of errors will be high compared to the fraud risk assessment (Foster, 2018).

Fraud risk assessment involves the management to evaluate the potential fraudulent schemes in the organization. It also includes internal and external corruption assessment. The purpose is to monitor and control mitigation efficiency so that mechanisms can be protected. Fraud risk assessment comprises the following actions: 1) identify fraud risk; 2) inherent fraud risk assessment; 3) identify the structures of internal control to control mitigation risk 4) An adequacy evaluation on control structure 5) identification of critical control mechanisms within those structures, 6) testing and evaluation of the effectiveness of these critical control components (Cascarino, 2012).

4. Conclusion and Recommendation

Based on the literature review above the fraud risk assessment issues in auditing have been identified. Thus, it also explains why FRA takes into account. In another discussion, it was explained that there was time and budget pressure so that the implementation of the FRA could not be optima

though it was required by auditing standards (SAS No. 99). The deadline for implementing an audit program in accordance with audit standards can reduce auditor performance and influence auditor dysfunctional behavior. Agency theory and signaling theory are very important in explaining fraud risk assessment in audits, and this is more complicated in the public sector. The big issue in identifying the risk factors is due to budget limitation. For future research, the researchers might focus on providing solutions to the implementation of FRA limitations.

The external auditors put under pressure due to their role to identify material irregularities including fraud to identify material irregularities. In examining the application of standards, it has been revealed that although audit standards are compulsory, there is little attention and responsibility for external auditors to corporate corruption cases. As stated in SAS No.99, the auditor is required to assess the fraud risk that includes in audit procedure as part of the fraud detection process. The auditors face difficulties to implement the FRA due to time pressure, budget constraints, and capacity shortages.

In further research, an in-depth study of the auditor's concern in implementing the FRA should be carried out. The constraints of implementing the FRA, namely time pressure, budget constraints, and human resource capabilities, are serious problems in meeting auditing standards (SAS No. 99). Thus, further research should be able to find out why and how the FRA is conducted.

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The Role of Professional Auditor Skepticism and Red Flag Understanding in Assessing Risk of Fraud: An Experimental Study

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Abstract. This study aims to examine the level of skepticism of professional auditors and the understanding of red flags in detecting fraud. Professional auditor's skepticism as an internal auditor factor and understanding red flags as an external auditor factor. This study uses a 2x2 factorial design between subjects. Professional skepticism and understanding of red flags are manipulated at 2 levels namely high and low professional skepticism and high and low understanding of red flags. The experimental subjects were 60 undergraduate accounting students who had studied the auditing process. ANOVA is applied as a tool to test hypotheses. The results show that fraud risk assessment is influenced by professional auditor skepticism and understanding of red flags.

Keywords: professional auditor skepticism, red flags understanding, fraud risk assessment

1 Introduction

Fraud in financial statements becomes an endless issue. This can have an impact on several parties or stakeholders so that it becomes the main concern of external auditors. The latest scandal that occurred in Indonesia is the freezing of PT Garuda Indonesia (Persero) 's public auditor permit permits. The Ministry of Finance imposed sanctions on Kasner Sirumapea Public Accountants in the form of a freeze for 12 months, whereas Kasner Public Accountant was one of the two auditors of PT Garuda Indonesia (Persero) financial year 2018 which was considered odd. Kasner Sirumapea is proven to have committed a serious violation that has the potential to significantly influence the opinion of the Internal Auditor's Report. On the other hand, Kasner Sirumapea also has not fully complied with Auditing Standards (SA)-Professional Standards for Public Accountants (SPAP), namely SA 315 identification and assessment of the risk of material misstatement through an understanding of the entity and its environment, SA 500 related to audit evidence and SA 560 events later.

Even the phenomenon of fraud in financial reporting is the center of attention of the Indonesian Institute of Certified Public Accountants (IAPI). IAPI regulates fraud risk assessments for external auditors by issuing Section 240 Audit Standards which state that the external auditor's responsibility to obtain a reasonable guarantee that the financial statements are free from material misstatements is either due to fraud or errors. This standard asserts that the risk of not detecting material misstatement due to fraud is higher than the risk of not detecting material misstatement from errors.

Previous research has documented several factors that influence fraud risk assessment. [1] revealed that auditor experience and competence influence the effectiveness of fraud risk assessments. More experienced auditors will have a more effective fraud risk assessment using analytical procedures [1]. Effective communication within the audit team is also another factor that influences the effectiveness of fraud risk assessments. [2] argues that audit team brainstorming improves the quality of fraud risk assessments, especially when fraud occurs. In addition to competence and communication, auditor professional skepticism is an important factor influencing fraud risk assessment [3]. [4] explains that auditor's knowledge and character are related to their level of professional skepticism. Auditors who lack experience and during their careers have never found cheating, professional skepticism becomes very important [5].

[6]) using experimental methods prove that auditors with high professional skepticism behave differently from low professional skepticism in evaluating evidence related to the symptoms of fraud. This finding is also supported by [7] who proves that auditor professional skepticism is consistent in predicting the symptoms of fraud. In other words, the auditor seeks more audit evidence and is able to identify more misstatements or contradictory information that usually leads to misstatements of information or symptoms of fraud.

However, different results were shown by [8] who stated that the level of professional skepticism of internal auditors cannot influence their professional judgment in detecting fraud during fraud risk assessment. [9] found that although the auditor recognized the importance of skepticism, the auditor did not show the right level of skepticism when assessing the risk of fraud. Therefore, efforts are needed to increase professional skepticism, such as continuing education about fraud and emphasizing the importance of skepticism at the audit firm level. This finding was also supported by [10]. Through a survey of 63 external auditors in KAP in Yogyakarta and Surakarta, the results were obtained that the auditor's professional skepticism has not been able to make the auditor suspect an indication of fraud from the client and subsequently made auditor skepticism less provoked to increase and trigger efforts to work harder in detecting fraud.

In addition to paying attention to internal factors in itself, external auditors should also pay attention to potential factors that can lead to financial statement fraud by recognizing early signs of potential fraud. Recognizing the early signs of potential fraud The auditor can use the initial signal in assessing the risk of fraud in the form of a red flag. Knowledge of the understanding of the red flag becomes very important in assessing the risk of fraud [11]. [12] claim in their research that the red flags method is effective for use in detecting fraud. This finding is supported by [13]. Based on the results of previous studies, research on understanding red flags in detecting fraud has not been used with the experimental design and most of the red flag studies use surveys in assessing the perceptions of internal auditors and external auditors on the level of effectiveness of red flags in detecting fraud as has been done by [13] and [12].

Based on the researchers' view above, this study looks at two factors that influence the assessment of external auditors in assessing fraud risk, namely internal and external factors. Internal factors in the auditor for example in the form of professional skepticism and external factors in the form of an auditor's understanding of the red flag. With the factor of professional skepticism, auditors will be more sensitive to material misstatements caused by fraud, then become better at making fraud risk assessments [14]. While understanding the red flag with regard to the client's environment can be directed as an initial signal the auditor assesses the risk of fraud in detecting fraud.

The experimental method was used in this study because it was considered appropriate to answer research questions about causation and made it possible to measure professional skepticism and auditor behavior. The experimental model also allows researchers to manipulate to create situations or phenomena that are artificially desired to represent reality. therefore, the choice of audit perspective as a dynamic process and the use of experiments is expected to have high theoretical, practical and policy relevance [7].

This research is motivated by the inconsistency of the findings about the importance of fraud risk assessment in detecting fraud and the absence of experimental design to test the effect of understanding the red flag in assessing fraud risk. This study aims to empirically examine the effect of auditor professional skepticism and red flag understanding on fraud risk assessment in detecting fraud.

The novelty in this research is to develop a fraud risk assessment model by taking into account the auditor's external factors namely the client's environment in assessing the risk of fraud in an experimental study. Red flags are an initial signal for auditors to detect fraud, so this research can contribute to the additional literature in assessing fraud risk. Another contribution is that the government as a regulator can be used as a model in combating corruption, considering that in Indonesia the level of corruption index is still high.

2 Literature Review and Hypothesis

2.1 Fraud Risk Assessment

Fraud risk assessment is the process of assessing the risk of material misstatement in the financial statements caused by fraud [15]. [16] issued an audit standard (SA) Section 240 specifically requiring the

auditor during the audit process to conduct fraud risk assessments in order to direct the objectives of the financial statement audit where this fraud risk assessment is a method to assist the auditor in determining the scope of audit procedures related to type and amount of fraud risk in an organization. External auditors conducting fraud risk assessments are a form of responsibility for preventing material misstatements due to fraud during the audit process [16]. Aside from being a form of auditor responsibility in order to prevent material misstatement due to fraud, fraud risk assessment can also be used as a tool against the auditor, if the auditor is exposed to future litigation risks relating to fraudulent financial reporting [15]. Furthermore [17] explains that auditors must play an active role to always dig up information about which parts of the financial statements or business processes are vulnerable to fraud. The auditor must specifically provide an assessment of the possibility of misstatement due to fraud. [11] states that to improve fraud risk assessments, external auditors can use the red flag in this case the client's narcissistic personality as an initial signal to conduct fraud risk assessments. On the other hand, red flags do not only observe personal client personalities, accountants should also pay attention to various client environmental conditions that have the potential to commit fraud. So thus the auditor should be able to understand the red flag not only observe the client personally but thoroughly as an early indication of danger signs in conducting fraud risk assessments [12].

2.2 Professional Auditor Skepticism

SA Section 200 states that auditors must plan and carry out audits with professional skepticism given that certain conditions may occur which cause financial statements to contain material misstatements. Professional skepticism also includes being aware of, among other things, audit evidence that conflicts with other evidence obtained, information that raises questions about the reliability of documents and responses to requests for information used as audit evidence, circumstances that indicate possible fraud, and conditions that suggest the need for audit procedures additional to the procedures required by the SA. In applying professional skepticism, the auditor does not assume that the client is dishonest, but does not also directly believe the information made by the company's management is true [16].

Furthermore, SA Section 240 states that to maintain professional skepticism, it is necessary to ask questions on an ongoing basis about whether the information and audit evidence that has been obtained provides clues that material misstatement due to fraud may occur. This includes considering the reliability of information that will be used as audit evidence and control over its preparation and maintenance, if relevant. Because of the characteristics of the fraud, the auditor's professional skepticism is important especially when considering the risk of material misstatement due to fraud. [6] illustrates that professional skepticism is a multi-dimensional individual characteristic. As an individual characteristic, professional skepticism can take the form of each innate trait (ie, a stable and enduring aspect of a person and also situational (state), ie a temporary condition caused by a particular situation. [15], auditor professional skepticism is needed to make decisions about how much and what type of audit evidence should be collected. Meanwhile, the phrases in the auditing process are the first, there is information and criteria that have been set. Second, gathering and evaluating evidence. Third, it is handled by competent and independent auditors. Finally, then prepare the audit report.

It can be explained from this, that skeptical auditors will continue to search and explore the available evidence so that it is sufficient for the auditor to carry out his work to audit, is not easy to believe and is quickly satisfied with what has been seen and presented in plain view. So that it can find errors or cheats that are material, and ultimately can provide the results of an appropriate audit opinion according to a picture of the actual state of a company.

2.3 Red Flag Understanding

The term red flags has often been used in a variety of audit literature, the meaning is a sign of danger, a sign that something is out of place and needs attention. [18] states that auditors and investigators use red flags as indications or indications of fraud or fraud in a financial statement. Red flags can also be regarded as an odd condition or different from normal conditions. In other words, red flags are instructions or indications of something unusual and require further investigation. Red flags do not absolutely indicate whether someone is guilty or not but are warning signs that cheating is or is happening. Red flags are said to be important as cited in Audit Standard 240 which states that the auditor

is asked to specifically assess the risk of misstatement caused by fraud and also provide operational guidelines for the auditor when assessing fraud in the middle of the audit process.

[19] in Red Flags for Fraud states that many studies discuss fraud, where when fraud is occurring, red flags also appear, either in the company's financial statements, or seen when auditors are conducting audits, but are not aware of or may realized but no action was taken. DiNapoli said that when a red flag had appeared, someone had to take action to investigate the situation and determine whether fraud had taken place. Indeed, if there is an indication of fraud, an action is taken to check whether the indicated fraud has occurred, but sometimes misstatements in reports, changes in employee lifestyle, sudden sales volume increase, etc. do not always indicate fraud. For this reason, public accountants and auditors must be able to know the difference and remember that the responsibility for conducting follow-up investigations for a warning sign must be in the hands of people who can be trusted and responsible.

Detecting fraud is not an easy task because it requires comprehensive knowledge about the characteristics and ways to commit fraud. Fraud detection also does not always get a bright spot due to various underlying motivations, and the many methods of committing fraud [20]. The reasons above affirm that the auditor needs indicators or signs (red flags) to focus on performance in assessing fraud risk. Red flags are a potential symptom that requires deeper investigation, which indicates a higher risk of intentional misstatement in the financial statements. It can be said that red flags are an early warning signal so as to reduce the risk of fraud being not detected by the auditor.

2.4 Hypothesis Development

2.4.1 Professional Auditor Skepticism and Fraud Risk Assessment

Audit Standards (SA) Section 230 in Indonesia states that auditors must consistently question and evaluate existing audit evidence critically [16]. This standard also requires the auditor to be critical of all evidence during the audit process from the collection to evaluation stage. Skeptical auditors will continue to search and explore the available evidence so that the auditor is able to carry out his work to audit, is not easy to believe and is quickly satisfied with what has been seen and presented in plain view. So that it can find errors or cheats that are material, and ultimately can provide the results of an appropriate audit opinion according to a picture of the actual state of a company.

Previous research from [6] explains that skepticism from auditors influences auditor behavior, namely in the assessment of evidence and making alternative arguments. The assessment of evidence consists of the auditor's search for additional information, detection of contradictory information, and accidental errors [6]. Professional skepticism as an internal factor of an auditor is a critical thought to detect whether there is something unusual in the financial statements. Professional skepticism is formed by the personal character of each auditor. Therefore, professional skepticism possessed by each auditor has a different level from one another. Some auditors have a higher level of skepticism than others, which causes the auditor to have a tendency to doubt some of the statements made by the client.

The results of Husein's research [21] in the Big 4 and non Big 4 groups showed that professional skepticism and experience had a positive effect while time budget pressure had a negative effect on the auditor's assessment of the risk of material misstatement; and 4) The positive effect of professional skepticism on the auditor's assessment of the risk of material misstatement is stronger among more experienced auditors than less experienced ones. On the other hand, the positive effect of professional skepticism in risk assessment is weaker when auditors work under high time budget pressure than that when they work under low time budget pressure.

[22] in a survey study of 40 auditors in KAP Makassar obtained evidence that the perception of red flags and professional skepticism had a positive and significant effect on fraud detection. While the auditor's work experience has a positive but not significant effect on fraud detection. Red flags and auditor work experience have a positive and significant influence on professional skepticism. Professional skepticism is able to mediate the significant influence between red flags and auditor work experience on fraud detection.

Audit Standards Section 240 provides guidance for auditors to always maintain professional skepticism about the current audit regardless of previous experience with clients. However, a study from [3] revealed that prior experience significantly influenced the level of auditor skepticism to determine initial cheating or error rather than auditor skepticism of their nature. Furthermore, auditors who have a

higher level of professional skepticism tend not to be influenced by previous experience with clients and maintain professional skepticism to determine initial fraud/errors.

Professional auditor's skepticism influences the auditor's decision on the risk of material misstatement contained in the client's financial statements [14]. [23] show that auditors with higher levels of professional skepticism are more sensitive to higher incidents of fraud and client narcissism positively influences the auditor's assessment of fraud risk. [24] also examined the positive effect of professional skepticism on increasing the ability to detect fraud. The study states that professional skepticism makes auditors seek additional information about the symptoms of fraud. Auditors who have a high level of professional skepticism will influence the auditor in assessing the risk of fraud in the report. Based on the arguments above, this study proposes the following hypotheses:

H1: Auditors with a higher level of professional skepticism tend to assess a higher risk of fraud than an auditor with a lower level of professional skepticism.

2.4.2 Understanding Red Flag and Fraud Risk Assessment

Red flags are the appearance of signs or symptoms that are not reasonable that occur in the environment and the attitude of someone who indicates the possibility of fraud so that further investigation is needed. Further analysis of the red flags by linking the Fraud Triangle Theory will help the auditor's next steps to obtain preliminary evidence in detecting fraud, whether the signal appears due to high pressure, the magnitude of the opportunity, or the existence of rationalization, so that later helps the auditor to focus the audit at the point that has a higher fraud risk so that it gets a higher priority to be audited [12].

[25] in a study of 51 internal auditors in Brazilian credit institutions, found evidence that in the assessment of fraud risk by internal auditors that the most important attribute of the red flag refers to operational activities and internal control procedures. In addition, it is recommended that internal auditors are impartial about their perceptions about the relevance of most warning signs of possible fraud. [12] and [26] have a perception that the red flags method is effective for use in fraud detection. [27] also confirms the study which states that the higher the level of red flags found by an auditor in his audit assignment, the higher the ability of an auditor to detect fraud. The auditor in detecting fraud first assesses the risk of fraud. From the results of these studies, the following hypotheses can be drawn:

H2. Auditors with a higher level of understanding of red flags tend to assess fraud risk higher than auditors with a lower level of understanding of red flags.

3 Research Methods

3.1 Participants

This study uses an experimental method approach. The experimental participants in this study were S1 students majoring in Accounting, Faculty of Economics, Business and Tourism, Hindu University of Indonesia in Denpasar, Bali Province. Researchers consider the use of students because 1) the process of laboratory experiments is a fairly long process, so it is likely to involve auditors who actually will be very difficult to do. The determination of participants is based on certain criteria, namely S1 undergraduate students majoring in accounting who have already received Auditing 2 courses and received auditing training, thus it is expected to have insight in audit assessments, especially fraud risk assessments. 2) The effect of bias can be reduced especially with respect to the level of skepticism of those who have not been influenced by other parties.

3.2 Experimental Design

The type of experimental research used is pure experiment with a 2x2 factorial design between subjects (see table 1). Experiments were chosen in order to observe the causality relationship between the independent variable and the dependent variable with a high degree of accuracy. In this study can be identified into two independent variables namely professional skepticism and understanding the red flag which will later be tested for its effect on fraud risk assessment to detect fraud by external auditors. Participants were then divided into four different groups, with each group receiving a different exposure to manipulation through randomization.

Table 1. Experimental Design

		Red Flag Understanding	
		Low	High
Professional	Low	Sel 1	Sel 2
skepticism	High	Sel 3	Sel 4

The first stage of this experiment is to prepare the research instrument. The research instrument is a case that illustrates the behavior of auditors in assessing the risk of fraud adopted from [6] for professional skepticism, [28] understanding red flags and [11] for fraud risk assessment. The second stage before the actual experiment was carried out first carried out a pilot test conducted on ten accounting study students to get the quality of the instrument before doing the actual research. The third stage is the process of collecting data which is part of a real experiment. The implementation of this experiment was carried out in the classroom by controlling the environmental confounding variables in the experiment. Things that need to be considered so that the confounding variable does not affect the results of the experiment are the influence of the environmental conditions in which the experiment is controlled so that the environment is not noisy, a good microphone, cool air conditioner and comfortable seating and the influence of other factors such as mood and fatigue. This can be avoided by giving a prize to each participant. The experimental activities carried out in March-April 2019 with about 20 minutes to fill the questionnaire.

This study uses a questionnaire instrument in experimental activities which can be divided into 3 parts, namely the first part contains the demographic factors of participants consisting of age and sex. The second part contains measurements of the level of skepticism and understanding of red flags. The third part contains a fraud risk assessment from a case of The Beaumont Construction Company, a company that specializes in private and government projects.

3.3 Operational Definitions of Research Variables

3.3.1 Fraud Risk Assessment

The measurement of the dependent variable in this study was carried out as a study conducted by [11] Fraud risk assessment as the dependent variable in the case scenario is measured by the following sentence: "Overall, I believe the risk of fraud in this business unit is

"Responses to fraud risk assessment questions are measured on a seven-point graph scale, where 1 shows" very low ", 7 shows" very high "and number 4 as the midpoint is labeled" medium "[11](Johnson, et al., 2013).

3.3.2 Professional Skepticism

Professional skepticism is measured using the [6]Hurt scale (2010), the scale has been developed by including 6 characteristics of professional skepticism. The characteristics include questioning mind, suspension of judgment, search for knowledge, interpersonal understanding, autonomy, and self-esteem. The Hurt Scale (2010) consists of 30 items of statements using a 6-point Likert scale, where the information includes strongly disagreeing, disagreeing, disagreeing, somewhat agreeing, agreeing, and strongly agreeing. Then the participants' answers are accumulated with a total total of 30 and a total of 180, where total values above the median indicate a high level of skepticism while a total score below the median indicates a low level of skepticism.

3.3.3 Understanding of Red Flag

Red Flag understanding is measured using the Yanti scale (2013), the scale has been developed by entering 16 number of situational questions with dichotomous criteria namely True and False. The more participants answered correctly, the higher the score and it can be said that participants also accumulated with the lowest total value of 0 and the highest total value of 16 for each participant, where the total value above the median indicates a high level of understanding of the red flag while the total a value below the middle value indicates a low level of red flag.

4 Results and Discussion

4.1 Characteristics of Participants

The total number of participants in this respondent were 60 people who came from accounting study programs at the Faculty of Economics, Business and Tourism, Hindu University of Indonesia. Twelve questionnaires cannot be processed because the participant did not follow orders or the filling did not follow procedures. So that the total data that can be analyzed is 48 participants. Next, the following participants' characteristics are presented in more detail in table 2 as follows:

Table 2. Characteristics of Participants

Characteristics	Level	Frequency	Percentage
Age	15 - 20 years	0	0
	21 – 25 years	48	100%
	26 – 30 years	0	0
	31 – 35 years	0	0
Amount		48	
Gender	Male	21	43,75%
	Female	27	56,25%
Amount		48	
Skepticism	Low	22	45,83%
	High	26	54,17%
Amount		48	
Red Flag understanding	Low	21	43,75%
	High	27	56,25%
Amount		48	
Experiment Group	Sel 1	13	
	Sel 2	13	
	Sel 3	14	
	Sel 4	8	
Amount		48	

Based on table 2 it can be explained that the participants of this study were dominated by students with ages between 21 years and 25 years. In addition, in this study, participants with female more than men.

4.2 Hypothesis Testing and Interpretation

The hypothesis that has been developed is tested using two ways Analysis of Variance or better known as ANOVA. Testing using ANOVA in this study was carried out using a significance level of 0.05. Both hypotheses that have been developed will be tested using the two-way ANOVA method because there are two independent variables.

4.3 Professional skepticism

The results of testing the first hypothesis in Table 3, show the results of $F = 5.287$ and a significance value of 0.014. This means that the average participant who has a high level of professional skepticism tends to provide a higher risk of fraud when compared with participants who have a low level of professional skepticism. The results of this statistical test support hypothesis 1 (H1) which states that auditors with a higher level of professional skepticism tend to assess a higher risk of fraud compared to auditors with a lower level of professional skepticism.

Table 3. Two-way ANOVA Test Results

Hipotesis	F	Sig
H1 High Skepticism > Low Skepticism	5,287	0,00,014*
H2 High Red Flag > Low Red Flag	3,654	0,028*

* Significant at $\alpha = 0.05$; Source: Data processed

Apart from the various limitations encountered when carrying out the audit function, auditors are always expected to provide quality audits. Therefore, auditors need to maintain their professional skepticism wherever they are so that every audit process that is carried out is of high quality [4] (Nelson, 2009). One effort to provide quality audit results is the accuracy of the auditor in assessing the risk of fraud, here this assessment depends one of them on professional skepticism as an internal factor.

Professional skepticism from auditors is important for assessing the risk of fraud. Through professional skepticism, auditors are increasingly sensitive to the possibility of material misstatement caused by fraud. Then the auditor improves the assessment of fraud risk by increasing or decreasing the level of existing risk. Previous research from [6]Hurt, et al. (2010) explains, skepticism from auditors influences auditor behavior, namely in evaluating evidence and making alternative arguments. Which the assessment of evidence consists of the search for additional information by the auditor, the detection of contradictory information, and unintentional errors [6] (Hurt, et al., 2010)

For professionals in Indonesia, this research can provide input on the importance of professional skepticism for auditors. Through regulation or other authority possessed by the profession, this factor of professional skepticism should be regulated in more depth. For example with the obligation of training for auditors with training material specifically training professional skepticism of auditors. Or setting more detailed standards about the extent to which auditors must optimize professional skepticism that is owned for the audit process to be effective and efficient.

4.4 Understanding of Red Flag

The results of testing the second hypothesis in table 3, shows the results of $F = 3.654$ and a significance value of 0.028. This means that the average participant with a high level of understanding of red flags will provide a higher risk of fraud when compared to participants with a low level of understanding of the red flag. The results of this statistical test support hypothesis 2 (H2) which states that Auditors with a higher level of understanding of red flags tend to assess the risk of cheating higher than auditors with lower levels of understanding of red flags.

The results of this study illustrate that the existence of an understanding and knowledge of the existence of a red flag will make it easier for auditors to set the steps to be taken in examining fraud and can immediately take preventive action [27] (Prasetyo, 2015). Suspicion arising from signs of fraud is one indication that will enable the auditor to focus more on his performance to obtain accurate and relevant information about the fraud that occurs. Increased awareness of the emergence of red flags will make auditors conduct a deeper search or investigation of audit evidence, this can make the auditor's ability to detect fraud increasingly high [29] (Purwanti and Astika, 2017). These results support the statement [13] (Kassem and Higson, 2012) which explains that in carrying out their duties, external auditors need a good understanding of fraud opportunities that are needed so that external auditors can be helped to process the identification of various fraud schemes. it can do and how to take the risk of fraud.

With the relationship between understanding red flags and enhancing fraud risk assessments, this finding can be a consideration for auditors to better understand and pay attention to the red flags around the client's environment as a starting signal, even though in reality it may not necessarily be real.

5. Conclusions and limitations

The results show that fraud risk assessment is influenced by internal and external factors within the auditor. Where the internal factor in the auditor is professional skepticism and the external factor is the understanding of the red flag. This finding shows that the higher the professional skepticism and understanding of an auditor's red flag, the higher the fraud risk assessment.

This research is inseparable from the limitations of the study and should be considered for further research. The limitation is to use undergraduate students as participants so that the results of this study cannot be generalized to all auditors in Indonesia, and the manipulation of red flags is limited to understanding only by not observing directly how the red flag is.

Given the limitations that have arisen in this study, greater opportunities are available for further research to corroborate existing findings or even provide new findings. Some suggestions for further research from researchers include further research should use actual auditor participants, so the results of subsequent studies provide more generalizable information to all auditors in Indonesia. Furthermore,

further research can also use auditor participants who already have a widely recognized professional certification. Then, further research can use more interactive research instruments not only limited in the form of case questionnaires so that participants can take the experiment seriously from the beginning to the end of the study.

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The Effect of Pressure to Financial Statement Fraud (Study of Manufacturing Companies Listed on the Indonesian Stock Exchange)

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Abstract. This study aims to examine the effect of pressure factors on the occurrence of financial statement fraud. The pressure aspect is seen in three forms, namely financial stability, financial target, and external pressure. The study was carried out in 2015-2017 at 69 production companies listed on the Indonesia Stock Exchange. Hypothesis testing is performed using multiple linear regression procedures. The study results showed that financial stability and external pressure had an effect on fraud's financial statements, whereas the financial target had no effect on fraud in financial statements. The results of this study indicate that pressure from external companies is more likely to trigger fraud than internal pressure. This may be influenced by the company's interests in keeping investors at the value of the company.

Keywords: external pressure, financial stability, financial target, financial statement fraud

1 Introduction

The Financial Statements function to provide stakeholders with information on company finances for a single period. Financial statements users are shareholders, other investors and creditors according to the FASB. The company's purpose in issuing financial statements is in fact to show the company's best state. Yet this motivation can lead to the company's fraudulent financial reporting. Financial statements fraud makes the information in the financial statements irrelevant and causes material mistakes that can mislead users of the financial statements. Almost all cases of fraud that occur involve unethical hiding experiments (Dalnial, Kamaluddin, Sanusi, & Khairuddin, 2014).

For example, in Indonesia cases can be raised that occurred in PT. Kimia Farma. Based on indications from the BUMN Ministry and its review, it was found that there were misstatements in the financial statements resulting in overestablishment of net income for the year ended 31 December 2001 of Rp 32.7 billion, which represents 2.3% of sales and 24.7% of net revenues. Fraud is a deliberate act to cheat, deceive or dishonest ways to take or eliminate money, property, legitimate rights owned by another person either because of an action or fatal impact of the action itself. Fraud can be done by individuals, but it can also be done by a group of people within the organization who work together in the practice of fraud (Skousen, Smith, & Wright, 2009)

In general, fraud always occurs when prevention and detection are not previous. Therefore, there are several ways to detect fraud such as fraud triangles and fraud diamond. Cressey (1953) Suggested three conditions in order to identify factors affecting fraudulent actions, namely pressure, opportunity and rationalization, known as triangular fraud. Additionally, (Wolfe & Hermanson, 2004) add three conditions that have been found by Cressey (1953) in (Skousen & Twedt, 2009) with capability, so that the four conditions are called fraud diamond.

Someone in a state of not being depressed would not commit fraud even though there was an opportunity (Nursani & Irianto, 2016). The most frequent pressure is the pressure that comes from the financial actors who commit fraud, although there are still other pressure factors such as pressure from outside parties. Research conducted by (Annisa & Asmaranti, 2016) results found that financial stability had a significant positive effect on fraud in the financial statements. Research conducted by (Quraini & Rimawati, 2019) the external pressure was found to have a significant positive effect in detecting fraud in the financial statements. Putri, et al. (2017) it has also been found that financial targets and ineffective monitoring have a positive effect on the fraud in financial statements.

Research on fraud is interesting as the development of fraud cases is increasing. The results of various previous studies were motivated to do research again. Based on this background, this study aims

to test the pressure factor for manufacturing company's financial statements fraud listed on the Indonesia Stock Exchange in 2015-2017.

2 Literature Review and Research Hypotheses

Jensen & Meckling (1976) stated that the relationship between the agency arises as a result of a contract between the principal and the agent by delegating some authority to the agent to take decisions. In accordance with the agreement, it can be assumed that some decisions will give authority to the agent. Company managers acting as agents are responsible for increasing the owners '(principals)' profits but managers are also interested in maximizing their welfare. This difference of interest can result in a conflict of interest between the agent and the principal that triggers the cost of the agency. This conflict encourages fraud so as to maximize one party's interests.

Clinard & Cressey (1954) Triangle fraud introduced which can be used to detect the cause of the fraud. The three factors that cause fraud are: pressure, opportunity and streamlining. Pressure leads to somebody committing fraud. Pressure most often stems from the financial pressures. This need is often considered a need that can not be shared with others to solve it jointly, so that it has to be resolved secretly and ultimately lead to fraud.

Pressure gives someone the motivation to commit fraud because of financial burdens (Murtanto & Umar, 2016). Pressure can also be said to be the desire or intuition of someone urged to commit a criminal offence. (Skousen et al., 2009) There are a number of pressure conditions that cause a person to commit fraud, namely: financial stability, external pressure, personal financial need and financial objectives.

According to SAS No. 99 (Skousen et al., 2009) explained that managers face pressure to commit fraud and manipulation of financial statements when economic, industrial, and other situations threaten financial stability and profitability of their companies. Loebbecke and Bell in (Skousen et al., 2009) It indicated that companies were growing below the industry average, enabling management to manipulate financial statements to improve the prospects for companies. Research conducted by (Skousen et al., 2009) proves the possibility of fraud is influenced by the growth of assets which are positive fast. (Sihombing & Rahardjo, 2014), financial stability proxy by changes in total assets (ACHANGE) has been shown to have an influence on fraud in financial statements. On the basis of the description the proposed hypothesis is:

H₁: Financial stability has a positive effect on financial statement fraud.

Managers are striving to improve their performance to achieve various company goals, one of which being financial goals (Skousen et al., 2009) state Return on Total Assets (ROA) is an operating performance measure widely used to demonstrate how assets were used efficiently. This is supported through (Kasmir, 2019) who says ROA is a ratio showing a return (return) on the amount the company has used. Hence, ROA is used as a proxy for the variable financial targets.

The study of (Skousen et al., 2009) The Return on Assets (ROA) was found to have no effect on fraudulent financial statements. This result is supported (Sihombing & Rahardjo, 2014) study which states that ROA proxies of financial target variables have no effect on fraud in financial statements. Often, the profit achieved in the previous year is used as the basis for the following year's profit targets. High ROA illustrates how effective the firm's overall operation has been. It is only that by increasing its performance by targeting higher ROA, management enables financial statements to be cheated in the form of earnings management. Based on the description, the hypothesis proposed in this study is:

H₂: Financial Targets have a positive effect on financial statement fraud.

Skousen et al., (2009) the source of external pressure was said to be one of the ability of the companies to pay debts or meet debt requirements. Additionally, managers can also be under pressure to obtain additional debt or capital. This was also revealed by (Aprillia, Cicilia, & Pertiwi Sergius, 2015) Who said that external pressure is the ability to meet the exchange requirements for the recording, payment of debts or fulfillment of the debt of widely recognized agreements originating from outside parties. External pressure is calculated using the leverage ratio, which is the ratio of total debt divided by total assets (the ratio of debt to assets). When a firm has a high leverage ratio, it has a large debt (Kasmir, 2019). The company's management will feel pressured by the rising debt, as the credit risk will also be high allowing fraud to occur.

Research by the (Skousen et al., 2009) Prove that external pressure has no bearing on fraud. This was backed by (Aprillia et al., 2015) External pressure proxied by the use of a leverage ratio proxy that

did not affect the fraud in the financial statements. Whilst research is carried out by (Sihombing & Rahardjo, 2014) state that external pressure has an influence on the detection of fraudulent accounts Quraini & Rimawati (2019) showed that the influence of external pressure expected fraudulent financial report. The hypothesis we formulated for the above explanation is as follows:
H3: External Pressure affects the financial statement of fraud.

3 Research Method

To support the data studied, a variable analysis is needed to be used in conducting research in accordance with existing problems. Before conducting research, each variable needs to be defined.

3.1 Financial Stability (X₁)

Skousen et al., (2009) prove that the higher the ratio of changes in a company's total assets, the greater the possibility of a company's fraudulent financial statements, the ratio of changes in total assets is used as a proxy for financial stability (financial stability). In this study, financial stability is proxy by the ratio of change in total assets (ACHANGE), which is calculated by the formula:

$$\text{ACHANGE} = \frac{(\text{Total Aset}_t - \text{Total Aset}_{t-1})}{\text{Total Aset}_{t-1}} \quad (1)$$

3.2 Financial Target (X₂)

Return on assets in this study has been used as a proxy for financial targets. Return on Assets (ROA) is part of the profitability ratios for the analysis of financial statements or the measurement of company performance (Skousen et al., 2009). ROA (Kasmir, 2019) can be calculated using the following formula:

$$\text{ROA} = \frac{\text{Earning After Interest and Tax}}{\text{Total Assets}} \quad (2)$$

3.3 External Pressure (X₃)

External Pressure is excessive Management Pressure to meet third party requirements or expectations. The Leverage Ratio (LEV) is proxy for external pressure in this study. The leverage ratio is calculated by the formula Debt to Assets Ratio (Kasmir, 2019), namely:

$$\text{Debt to Assets Ratio} = \frac{\text{Total Debt}}{\text{Total Assets}} \quad (3)$$

2.1 Financial Statement Fraud (Y)

The dependent variable used in this study is fraud with the financial statements. This study detected fraudulent accounts (fraud in financial statements) using the fraud score model as determined by (Dechow, Hutton, Kim, & Sloan, 2012). The model F-Score is the sum of two variables: accrual quality and financial performance (Skousen & Twedt, 2009), can be illustrated in the following equation:

$$\text{F-Score} = \text{Accrual Quality} + \text{Financial Performance} \quad (4)$$

Variable components in the F-Score include two things that can be seen in financial statements, namely accrual quality and Financial Performance. Accrual quality is proxy by accrual RSST that is:

$$\text{RSST}_{accrual} = \frac{(\Delta \text{WC} + \Delta \text{NCO} + \Delta \text{FIN})}{\text{Average Total Assets}} \quad (5)$$

Explanation:

WC (*Working Capital*) = (*Current Assets* – *Current Liability*)

NCO (*Non-Current Operating Accrual*) = (*Total Assets* – *Current Assets* – *Invesment and Advances*) – (*Total Liabilities* – *Current Liabilities* – *Long Term Debt*)

FIN (*Financial Accrual*) = *Total Investment* – *Total Liabilities*

ATS (*Average Total Assets*) = (*Beginning Total Assets* + *End Total Assets*):2

Financial performance of a financial report can be seen as predicting the occurrence of financial reporting fraud (Skousen & Twedt, 2009). Financial performance is proxy by changes in accounts receivable, changes in inventory accounts, changes in cash sales accounts, changes to EBIT, namely:

Financial performance = change in receivable + change in inventories + change in cash sales + change in earnings

Explanation:

$$\text{Change in receivables} = \frac{\Delta \text{Receivables}}{\text{Average Total Assets}} \quad (6)$$

$$\text{Change in inventories} = \frac{\Delta \text{Inventories}}{\text{Average Total Assets}} \quad (7)$$

$$\text{Change in cash sales} = \frac{\Delta \text{Sales}}{\text{Sales } (t)} - \frac{\Delta \text{Receivables}}{\text{Receivables } (t)} \quad (8)$$

$$\text{Change in earning} = \frac{\text{Earnings } (t)}{\text{Average Total Assets } (t)} - \frac{\text{Earnings } (t-1)}{\text{Average Total Assets } (t-1)} \quad (9)$$

The population in this study is manufacturing companies that have been listed on the Indonesia Stock Exchange in 2015-2017. Sampling was done by purposive sampling in this study. The purposive sampling technique is a technique which takes data with some considerations or criteria. The sample in this study is all Indonesia Stock Exchange-listed manufacturing companies which meet the following criteria:

1. Production companies listed on the Indonesia Stock Exchange for the period 2015-2017.
2. Companies which experience profits during the observation period and use the rupiah as the currency of reporting.

The regression model used is a multiple linear regression model that is preceded by testing classical assumptions. The relationship between financial report fraud and pressure is presented with a regression model:

$$F\text{-SCORE} = \beta_0 + \beta_1 ACHANGE + \beta_2 ROA + \beta_3 LEV + e \quad (10)$$

4 Data Analysis And Discussion

The results of determining the sample based on purposive sampling criteria obtained 207 observation periods consisting of 69 companies. Of the 158 manufacturing companies listed on the Indonesia Stock Exchange, 47 have suffered losses, and 32 have used currencies other than the rupiah. Classical assumption testing shows the regression model has normal distribution; no autocorrelation, no multicollinearity, and homoscedasticity (Appendix 1). The regression model in the initial test encountered a normality problem, so it needs to be improved by doing an outlier on 12 observations with a Z-Score above 3.00. The final data used is 195 observations.

Score > 3.00. The final data used consists of 195 observations. The testing of the hypothesis shows that financial stability and external pressure have a positive effect on fraud in financial reports. Financial stability is one form of pressure which could encourage fraud in financial statements. SAS No. 99 states that managers tend to commit fraud in financial statements when financial stability and/or profitability are threatened by economic circumstances, industry or the operating entity's situation (Skousen et al., 2009). Companies with growth below the average in the industry tend to manipulate financial statements to improve business prospects (Skousen et al., 2009). These results support the hypothesis proposed, namely financial stability has a positive effect on fraud in financial reporting.

External Pressure is excessive Management Pressure to meet third party requirements or expectations. The need for external financing relates to cash generated from operational and investment activities (Skousen et al., 2009). Companies that use their own funds tend to have a higher chance of profit than using external funds. Research conducted by (Skousen et al., 2009) proves that the higher the free cash flow ratio, the lower the company's likelihood of committing fraud. Based on the results of the testing of the hypothesis, external pressure was found to have a negative impact on fraud in financial statements. This is based on the results of statistical tests that show a significance value (level of

significance) of 0,000 or less than 0.05. This result is in line with the research of (Sihombing & Rahardjo, 2014) and (Maghfiroh, 2015).

Financial objectives are excessive management pressure to achieve the financial targets set by directors or shareholders. The target set encourages management to manipulate profits to meet the benchmarks of analysts, such as the profit from the previous year. The test results show that financial goals have no effect on financial statement fraud. These results can be seen at a significance value of $0.126 > 0.05$. This result is consistent with the research conducted by (Skousen et al., 2009), (Sihombing & Rahardjo, 2014) who said that financial target variables proxy by ROA did not affect financial statements of fraud. (Aprillia et al., 2015) and (Sari, 2016) it was also found that the financial targets did not affect the fraud in the financial statements.

5 Conclusions, Limitation, and Suggestion

Based on the results of the analysis and discussion of the data, it can be concluded that financial stability and external pressure have a positive effect on financial report fraud. This research focuses only on aspects of pressure as part of triangle fraud so that only 16.8 percent when viewed from the adjusted R-Square value while the rest are influenced by other factors. Future research can deeper identify other factors that may be influencing fraud in financial statements. The next researcher is wished to find other proxy variables suspected having effect on fraudulent financial reporting.

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Determinants of Income Smoothing: Empirical Evidence from Indonesian Stock Exchange

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Abstract. This study aims to analyze the effect of Managerial Ownership, Company Size, Profitability, Leverage and Tax on Income Smoothing. The population of the study are manufacturing companies listed on the Indonesia Stock Exchange in 2015-2017. The data analysis technique used in this study is logistic regression. The sampling technique used was purposive sampling and the number of samples from this study were 20 manufacturing companies. The results of this study indicate that the leverage variable has a positive effect on income smoothing, while the managerial ownership, firm size, profitability and tax have no effect on income smoothing.

Keywords: Managerial Ownership, Company Size, Profitability, Leverage, Taxes, Income Smoothing.

1 Introduction

Financial statements are one of the tools used to assess the performance of a company. The parties interested in the company use financial statements as a basis for decision making because financial statements contain information about management's performance, one of which is reflected in the company's earnings information. Income smoothing is a method used by company management in influencing financial statements by slowing down or accelerating the recognition of income or expenses in order to deceive users of financial statements who want to know the position and performance of the company. Shareholder satisfaction increases with the existence of stable earnings growth (Saputra, 2014). This action is carried out to increase the value and performance of the company so that it looks good to influence investors in making decisions to invest their capital.

As for several factors that encourage companies to practice income smoothing, including managerial ownership, company size, profitability, leverage and tax. Managerial ownership by the management of the company will cause management to easily manage the company's financial statements, because management has more information about the company and management will do income smoothing to stabilize the profits generated by the company. Research on the influence of managerial ownership on income smoothing practices conducted by Noviana and Yuyetta (2011) found that managerial ownership did not have a significant effect on income smoothing. This is contrary to the research conducted by Widiawati (2016) who found the results that managerial ownership has a significant positive effect on income smoothing.

Large size of the company shows that the company has developed so that investors will respond positively and the value of the company will increase. Research on the effect of company size on income smoothing practices conducted by Budiasih (2009) found results that firm size had a significant positive effect on income smoothing. This is contrary to the research conducted by Juniarti and Corolina (2005) which found that the size of the company had no significant effect on income smoothing.

Companies that have high profitability tend to do income smoothing because management knows the company's ability to earn profits in the future. Research conducted by Agustianto (2014), Saputra (2014), and Budiasih (2009) found that profitability had a positive effect on income smoothing practices. Another result was found by Setyaningtyas (2014) who found that profitability did not affect the income smoothing practice.

Leverage owned by a company based on the debt covenant hypothesis in positive accounting theory stated that companies with a high level of debt tend to manage profits to avoid violations of debt agreements (Rahmawati, 2012). In the research conducted by Dewi (2010) who found results that financial leverage had a significant effect on income smoothing practices. This is contrary to the research

conducted by Widaryanti (2009), Rahmawati (2012), and Budiasih (2009) who found that leverage did not significantly influence the practice of income smoothing.

Management's desire to always pay low taxes is one of the factors that encourages management to practice income smoothing. Profit that is too high will result in a large tax rate that must be paid by the company, whereas low profits will show the poor performance of the company. The research conducted by Pratiwi and Handayani (2014) found that the tax did not affect the income smoothing practice. Another result was found by Widiawati (2016) who found that tax had a significant positive effect on income smoothing practices.

Based on the results of previous inconsistent research, researchers are interested in analyzing the factors that influence income smoothing in manufacturing companies listed on the Indonesia Stock Exchange in the period 2015-2017. So that this research is expected to expand the results of previous studies.

2 Literature Review

2.1 Agency Theory

Income smoothing in a company can be explained through the agency theory approach. Agency relationship is defined by Jensen and Meckling (1976) in Wahyuningsih (2007) as a contract between one person or more owners (principals) who hire another person (agent) to do several services on behalf of the owner which includes delegating decision-making authority to the agent. Even though there is a contract, the agent will not do the best for the benefit of the owner. This is because agents also have an interest in maximizing their welfare. In other words, the agent will take a policy that benefits him before providing benefits to the owner of the company.

2.2 Positive Accounting Theory

Watts and Zimmerman (1978) in Agustianto (2014) formulated an understanding of income smoothing formulated in Positive Accounting Theory (PAT), namely the assumption that the purpose of accounting theory is to explain accounting practices, including:

a) The Bonus Plan Hypothesis

This hypothesis assumes that companies that use bonus plans will tend to use accounting methods that can increase reported earnings in the current period from future profits. This is done to maximize the bonus they will get because how much the level of profit generated is often used as the basis for measuring the success of performance

b) Debt Covenant Hypothesis

This hypothesis is related to the terms and agreements that must be fulfilled by the company in a debt covenant. Some debt agreements have conditions that must be met by the borrower during the agreement period, if such an agreement is betrayed, the debt agreement can provide or issue a penalty.

c) The Political Cost Hypothesis

This hypothesis states that the greater the political costs faced by the company, the greater the tendency of companies to use accounting choices that can reduce profits, because companies that have a high level of profit are considered to receive broad attention from consumers and the media who will also be interesting the attention of the government and regulators to cause political costs, including government intervention, higher taxation, and various other demands that could increase political costs.

2.3 Income Smoothing

Management actions to make income smoothing are generally based on various reasons including to satisfy the interests of the owner of the company such as increasing the value of the company so that the assumption arises that the company concerned has a low risk of uncertainty. Income smoothing is one pattern of earnings management where management seeks to stabilize (flatten) corporate profits for several periods with specific objectives (Wulandari, 2013). Profit actions are deliberately carried out by management within the limits of existing rules and lead to a desired level of reported profits. The parties interested in the company tend to avoid high risks so that they are more interested in companies with stable profits compared to fluctuating profits.

2.4 Hypotheses

Managerial ownership by the management of the company will cause management to easily manage the company's financial statements, because management has more information about the company. Management will do income smoothing to stabilize the profits generated by the company. Christiawan and Tarigan (2004) state that managerial ownership is a situation where a manager owns a company's shares or in other words the manager is also a shareholder of the company. Managers who are also shareholders will increase the value of the company, because by increasing the value of the company, the value of their wealth as individual shareholders will also increase. The management who is also domiciled as a shareholder will try to raise the stock price, where the stock price is influenced by the information presented by the company, one of which is profit. If reported earnings have fluctuations that will dramatically affect the level of investor confidence. If investors begin to lose their trust, the actions that investors will take are to sell their shares and this will cause the company's share price to decline which will harm other shareholders including managers.

Managers who have a lot of access to company information will have initiatives to manipulate that information if they feel that the information is detrimental to their interests (Febrianto and Erna, 2005). However, if the interests of managers and owners can be aligned, managers will not be motivated to manipulate information or do income smoothing so that the quality of accounting information and informational earnings can increase. Increased managerial ownership is expected to reduce income smoothing actions and is expected to improve financial reporting quality and profit generated. This opinion is in accordance with Pratama (2012), Midiastuty and Mahfoedz (2003) which states that managerial ownership has a negative influence on income smoothing, which means that the higher managerial ownership will minimize the practice of income smoothing. This can happen because managers think like company owners who are more concerned with the development of the company and public trust. The presence of managerial ownership will increase control within the company because managerial ownership can form harmonious and synchronous relationships as managers and company owners. With the existence of considerable managerial ownership by management and the thought of developing the company by management so that it can minimize income smoothing actions. Based on the description above, the first hypothesis developed in this study is:

H1: Managerial ownership has a negative effect on income smoothing.

The size of the company is thought to have a tendency to affect income smoothing. Larger companies have the incentive to do income smoothing compared to smaller companies because larger companies are examined and viewed more critically by various parties. Moses (1987) in Suwito and Herawaty (2005) found evidence that larger companies also have a greater incentive to do income smoothing compared to smaller companies because larger companies are subject to scrutiny (tighter supervision from the government and general public). The results of research conducted by Budiasih (2009) Yulia (2013) and Briliano et al., (2016) stated that company size has a positive effect on income smoothing practices. Based on the description above, the hypotheses developed in this study are:

H2: Company size has a positive effect on income smoothing.

Profitability is a component of the company's financial statements that aims to assess management performance. Company profitability can also be used to measure a company's ability to earn profits and know the company's effectiveness in managing its assets. In this study profitability is calculated by Return On Assets (ROA). ROA is obtained from net income divided by total assets. High profitability fluctuations have a tendency for the company to carry out income smoothing actions, especially if the company establishes a bonus compensation scheme based on the amount of profit generated. This is in accordance with the research conducted by Assih et al. (2000) in Budiasih (2009) which states that companies that have a higher ROA tend to do profit compared to lower companies because management knows the ability to earn profits in the future. making it easier to delay or speed up profits. The results of research conducted by Agustianto (2014) and Saputra (2014) state that profitability has a positive effect on income smoothing practices. Based on the description above, the third hypothesis developed in this study is:

H3: Profitability has a positive effect on income smoothing.

A high leverage ratio indicates that most of the company's financing is financed by debt. Income smoothing practices can be triggered by a large leverage ratio. Based on the debt covenant hypothesis in positive accounting theory, that the greater the company's leverage ratio, managers tend to practice income smoothing with the aim of avoiding violations of the debt agreement. So that the higher the debt ratio, the tendency of companies to do income smoothing will also be higher. Jin and Machfoedz (1998) explain that leverage influences income smoothing based on the indication that companies do income smoothing to avoid violations of debt agreements can be seen through the company's ability to generate profits. The results of research conducted by Yulia (2013) state that leverage has a positive effect on income smoothing practices. Based on the description above, the fourth hypothesis developed in this study is:

H4: Leverage has a positive effect on income smoothing.

Management's desire to always pay low taxes is one of the factors that encourages management to practice income smoothing. Profit that is too high will result in a large tax rate that must be paid by the company, whereas low profits will show the poor performance of the company. According to Heyworth (1953) in Widodo (2011) one of the reasons for management to do income smoothing is to reduce the total tax paid by the company. Management will try to shift profits from one year to the next in order to obtain the most minimal tax payments (Tanomi, 2012). The higher the profit generated by the company, the greater the tendency of management to do income smoothing with the aim that the tax paid is lower. Kusumawati (2002) which proves that taxes affect the practice of income smoothing. The results of these studies are reinforced by research conducted by Widiawati (2016) which states that taxes have a positive influence on income smoothing practices. Based on the description above, the fifth hypothesis developed in this study is:

H5: Taxes have a positive effect on income smoothing.

3 Research Methods

3.1 Operational Definition of Variables

The dependent variable in this study is income smoothing which is measured in the form of an index that will distinguish between companies that practice income smoothing and those that do not. For the purpose of this study Eckel Index (1981) was used, as follows:

$$\text{Income Smoothing index} = \frac{CV \Delta I}{CV \Delta S}$$

Note:

CV : variable coefficient of variation, namely the standard deviation divided by the expected value.

ΔI : changes in earnings in one period

ΔS : changes in sales in one period

The values of CV ΔI dan CV ΔS can be calculated by the formula:

$$CV \Delta I \text{ or } CV \Delta S = \sqrt{\frac{\sum(\Delta x - \bar{\Delta x})^2}{n-1}} : \bar{\Delta x}$$

note:

Δx : change in profit (I) or sales (S) between year n and year n-1

$\bar{\Delta x}$: average change in profit (I) or sales (S) between year n and year n-1

n : years observed

Criteria for companies that practice income smoothing are:

- Companies are considered to practice income smoothing if the income smoothing index is smaller than 1.
- The company is deemed not to do income smoothing if the income smoothing index is greater than or equal to 1.
- Managerial Ownership

In this study managerial ownership is calculated by dividing shares owned by management, directors and commissioners who actively participate in corporate decision making with the number of shares outstanding.

- Company Size

Company size is a variable that is measured by the total amount of company assets transformed in the form of natural logarithms (Suryani, 2010). Company size is calculated using the natural logarithm of total assets.

e. Profitability

In this study, company profitability is measured as Return on Assets (ROA). ROA analysis is a form of profitability ratio that is used to measure the ability of a company with the overall funds invested in assets used for the company's operations in generating profits. ROA is a ratio of net income to total assets.

f. Leverage

Leverage is measured using the debt to asset ratio. This ratio shows the amount of assets owned by companies financed by debt. This variable is measured using the ratio of total debt to total assets.

g. Tax

In this study tax is a variable measured by the total amount of corporate tax burden transformed in the form of natural logarithms. Taxes are calculated using the natural logarithm of the total tax burden.

3.2 Samples

The method of determining the sample used in this study is the purposive sampling method which is part of the Non Probability Sampling, namely the technique of determining the sample with certain considerations. The purpose of using the purposive sampling method is to get a sample according to the specified criteria. The criteria used are manufacturing companies listed on the IDX for the period 2015-2017, not conducting mergers or acquisitions, publishing financial statements that can be accessed during the study period, and using the rupiah currency in their reports. Based on these criteria obtained a total sample of 20 companies.

3.3 Analysis Techniques

Logistic regression analysis was used in this study because the dependent variable, income smoothing is qualitative data using dummy variables and the independent variable is a mixture of continuous (metric) and categorical (non-metric) variables (Ghozali, 2016:321). States that logistic regression is used to test whether the probability of the occurrence of the dependent variable can be predicted by the independent variable. Logistic regression analysis does not require the assumption of normality of data on the independent variables. Logistic regression analysis was carried out using the assistance of the Statistical Package for Social Science (SPSS) program.

A logistic regression model can be formed by looking at the estimated values of the parameters in the Variables in The Equation. The regression model formed based on the value of parameter estimates in the Variables in The Equation is as follows:

$$\text{Ln} \frac{P(\text{Smoothing})}{1 - P(\text{Smoothing})} = \alpha + \beta \text{MOWN} + \beta \text{SIZE} + \beta \text{ROA} + \beta \text{DAR} + \text{TAX} + e$$

Note:

P	: probability income smoothing action
MOWN	: managerial ownership
SIZE	: company size
ROA	: profitability
DAR	: leverage
TAX	: tax
α	: constant
β	: logit regression coefficient
Ln	: odds
e	: error term

4 Result & Discussion

4.1 Logistic Regression Result

The feasibility of the regression model was assessed using Hosmer and Lemeshow's Goodness of Fit Test. If the statistical value of Hosmer and Lemeshow's Goodness of Fit Test is greater than 0.05, it means that the model is able to predict the value of its observations or it can be said that the model is acceptable because it matches the observational data. Based on the test results (attachment), the statistical values of Hosmer and Lemeshow's Goodness of Fit Test were obtained at 9.506 with a significant value of 0.301. From these results it can be seen that the significant value is greater than 0.05. This means that the regression model is feasible to be used in the subsequent analysis, because there is no difference between the classification predicted by the observed classification. Or it can be said that the model is able to predict the value of its observations.

This test is done by comparing the value between -2 log Likelihood (-2LL) at the beginning (Block Number = 0) with the value of -2 log Likelihood (-2LL) at the end (Block Number = 1). The reduction in the value between the initial -2LL (initial-2LL function) and the value of -2LL in the next step (-2LL end) indicates that the model is hypothesized to be fit with the data (Ghozali, 2016: 328). The initial value of -LL is 83,111 and after five independent variables are included, the final value of -2LL decreases to 71,671 (attachment). This decrease in the value of -LL shows a good regression model or in other words the model hypothesized to fit with the data.

The coefficient of determination is used to find out how much the variability of the independent variables is able to clarify the variability of the dependent variable. The determination coefficient in logistic regression can be seen in the value of Nagelkerke R Square. Nagelkerke R Square value is 0.232 (attachment) which means the variability of the dependent variable which can be explained by the independent variable is 23.2 percent, the remaining 76.8 percent is explained by the variability of other variables outside the research model.

Classification table shows the predictive power of a regression model to predict the possibility of a company making an income smoothing action. The predictive power of the regression model to predict the probability of the occurrence of the dependent variable is expressed in percent. Classification table (attachment) shows that of the 29 observational data samples that made 17 or 58.6 percent income smoothing actions can be accurately predicted by the logistic regression model and 12 observational data not accurately predicted by the model, while from 31 observational data samples that were not make income smoothing actions 12 or 61.3 percent which can be accurately predicted by the logistic regression model, while 19 observational data are not exactly predicted by the model. So overall means the predictive power of the regression model to predict the likelihood of companies taking action on income smoothing at 60.0 percent.

A good regression model is a regression with no symptoms of a strong correlation between the independent variables. Multicollinearity testing in logistic regression using a correlation matrix between independent variables to see the magnitude of the correlation between independent variables. In the correlation matrix table shows no serious symptoms of multicollinearity between independent variables, indicated by the correlation value between independent variables below 0.8.

Regression models formed based on the estimated value of parameters in the Variables in The Equation are as follows:

$$\text{Ln} \frac{P(\text{Smoothing})}{1 - P(\text{Smoothing})} = -5,786 + 0,054 \text{ MOWN} + 0,256 \text{ SIZE} - 0,042 \text{ ROA} + 0,021 \text{ DAR} - 0,109 \text{ TAX}$$

4.2 Discussion

Based on the test results show managerial ownership variables have a positive regression coefficient of 0.054 with a significance level of 0.088 which is greater than α (0.05). This means that managerial ownership has no effect on income smoothing. The size of managerial ownership owned by management does not affect the occurrence of income smoothing actions. The average manufacturing company that is the sample in this study has a very low number of managerial ownership, namely with an average managerial ownership of 9.0523. Thus the results can not be used to show that managerial ownership can influence income smoothing actions by management. This indicates that managerial ownership does not necessarily indicate management incentives to practice income smoothing. The

results of this study are in accordance with the results of research conducted by Noviana and Yuyetta (2011), Pratiwi and Handayani (2014) which state managerial ownership does not affect the practice of income smoothing. Other results found by Widiatmaja (2010) and Widiawati (2016) found results that managerial ownership had an effect on income smoothing practices.

Firm size has a positive regression coefficient of 0.256 with a significance level of 0.574 which is greater than α (0.05). Based on this, it can be concluded that the variable size of the company has no effect on income smoothing. Total assets describe the value of assets or assets owned by a company. The greater the total value of the company's assets reflects that the company has assets that are increasingly high in value, so that it can be said the size of the company can be seen from the size of the total value of assets of a company. The total assets owned by the company, cannot ensure a company will earn a profit in carrying out its business activities, this indicates that the size of the company does not affect the keiginan of the company to practice income smoothing. The results of this study are in accordance with the results of research conducted by Dewi (2010) and Prasetya (2013) stating that firm size has no effect on income smoothing, while Rahmawati (2012) and Narayani (2017) conclude that firm size affects income smoothing.

Profitability has a negative regression coefficient of -0.042 with a significance level of 0.555 which is greater than α (0.05). This means that profitability has no effect on income smoothing. Management that is motivated to maintain a position or get a bonus does not take into account the size of the profits generated by the company, so management is not motivated to practice income smoothing through profitability variables. The profitability produced by the company in the period of this study did not fluctuate too much, namely the average profitability of 6.8982, so it did not affect the company to practice income smoothing. The results of this study are in accordance with the results of research conducted by Wulandari (2013) and Narayani (2017) which state that profitability does not affect the income smoothing practice. Other results found by Cendy (2013) and Saputra (2014) found that profitability had an effect on the practice of income smoothing. The leverage variable has a positive regression coefficient of 0.021 with a significance level of 0.030 that is smaller than α (0.05). This means that leverage has a positive effect on income smoothing. Debt covenant hypothesis in positive accounting theory, which states that the greater the leverage ratio of the company, the management will tend to practice income smoothing with the aim of avoiding violations of the debt agreement. So that the higher the debt ratio, the tendency of companies to do income smoothing will also be higher. The results of this study are in accordance with the results of research conducted by Yulia (2013) which states that leverage has a positive effect on income smoothing practices. But it is not consistent with the research conducted by Widaryanti (2009) and Setyaningtyas (2014) who found that leverage did not affect the income smoothing practice.

The next variable is Tax, has a negative regression coefficient of -0.109 with a significance level of 0.791 which is greater than α (0.05). This means that taxes have no effect on income smoothing. The obligation of management to pay taxes to the government, whether in large or small amounts, and the amount of tax imposition rates set by the government will not affect the company to carry out income smoothing actions. Besides the strictness of the tax regulations issued by the government does not affect the company to practice income smoothing, this is because in this study the amount of tax burden imposed on most companies is also not too fluctuating. The results of this study are in accordance with the results of a study conducted by Pratiwi and Handayani (2014) stating that taxes do not affect income smoothing, while Widiawati (2016) concludes that taxes affect income smoothing.

5. Conclusion

The purpose of this study is to examine and obtain empirical evidence the influence of managerial ownership, company size, profitability, leverage, and tax on income smoothing. Sample selection using purposive sampling technique and obtained as many as 20 manufacturing companies that meet the sample criteria. The data analysis technique in this study uses logistic regression analysis. Based on the results of the analysis it can be concluded that the leverage proxied by DAR has a positive effect on income smoothing. While managerial ownership, company size, profitability, and taxes have no effect on income smoothing.

This study only uses five variables, namely managerial ownership, company size, profitability, leverage and tax in knowing the relationship to income smoothing. Future studies can add other variables

that theoretically have a relationship to income smoothing such as Public Ownership, Institutional Ownership, Dividend Payout Ratio, Current Ratio, Industrial Sector, and Type of Business. This study uses the Eckel model (1981) to determine companies that do income smoothing with companies that do not do income smoothing. It is recommended that further research can use other models such as Michelson (1995) or Moses (1987), with the aim to find out whether using other models will get the same or different results.

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Detection of Financial Statement Fraud with The Fraud Pentagon Method for Mining Sector Companies Listed on Indonesian Stock Exchange (IDX) for period 2012 to 2018

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Abstract. The purpose of this study was to determine the detection of financial statement fraud using the Pentagon fraud method in mining sector companies listed on IDX during 2012 to 2018. This study used five (5) independent variables, namely pressure on financial stability, opportunity on nature of industry, rationalization on total accrual ratio, competence on change in CEO, and arrogance on dualism position of CEO and financial statement fraud as dependent variable that is proxied by earnings management. Sample in this study using purposive sampling method with the final sample is fifteen (15) mining sector companies listed on IDX during 2012 to 2018. The results of this study are pressure on financial stability, opportunity on nature of industry, rationalization on total accrual ratio, competence on change in CEO, and arrogance on dualism position of CEO partially does not significantly influence financial statement fraud and simultaneously does significantly influence financial statement fraud

Keyword: financial statement fraud, fraud pentagon, pressure, opportunity, rationalization, competence, arrogance, earnings management, financial stability, nature of industry, total accrual ratio, change in CEO, dualism position of CEO

1 Introduction

Fraud is a term that we often hear, but some people will be unfamiliar with the term. Based on Statement of Auditing standards (SAS) No. 99 issued by the American Institute of Certified Public Accountants (AICPA) in 2002 fraud was "intentional act that results in material misstatement in financial statements that are subject to an audit". In the business world a fraud besides causing financial losses can also worsen the image of a company in the eyes of shareholders, investors and other interested parties. Viewed from accounting point of view, fraud is called the top-level crime or white collar crime.

In the 2018 Report To The Nations published by the ACFE on Global Study on Occupational Fraud and Abuse, reported that there were 2,690 cases of fraud found throughout the world, of which 29 cases were found in Indonesia. The report also shows that financial statement fraud is the least number of cases, namely 10% or 269 cases of all cases that have occurred, but causes the highest losses of \$800,000 per case. ACFE Indonesia collaborated with the White Collar Crime Prevention and Research Center to conduct fraud surveys in Indonesia. In 2016 Indonesian Fraud Survey, 178 (77%) of respondents stated that corruption was the most detrimental fraud. While as many as 41 (19%) respondents stated that the abuse of assets was the most detrimental and 10 (4%) respondents stated that the Financial Report Fraud was the most detrimental. Based on data from the survey, 4 out of 10 respondents (40%) said that the losses incurred by fraudulent financial statements were above 10 billion rupiah

Several methods have been developed to understand and find fraud, but the condition of the company is growing and complex and the perpetrators of fraud are also getting smarter, besides that due to the rapid development of technology the perpetrators are also increasingly easy to get various information about the company. Crowe Howarth, an accounting, consulting and public technology company which the largest in the United States, in 2012 introduced a new theory that could be used more deeply to detect fraud in financial statements. The theory is pentagon fraud which is an extension of the fraud triangle by adding two other elements of fraud namely competence and arrogance. Competence in pentagon fraud has the same understanding as the capability stated in diamond fraud.

The Agriculture Industry sector and the mining industry sector based on JASICA are included in the primary sector group [6]. One of the industrial sectors detected by financial statement fraud is a company engaged in the mining sector [12]. Judging from the 2018 Report To The Nations data on the Global Study on Occupational Fraud and Abuse published by the ACFE, it shows that there are 2,690 cases of fraud, the agricultural sector has 32 cases with a total loss of \$ 136,000 per case. While the mining sector has 27 cases found with a greater loss of \$ 208,000 per case.

The problems in this study were formulated as follows: How to Detect Financial Statement of Fraud with the Pentagon Fraud Method in Mining Sector Companies listed on the Indonesia Stock Exchange (IDX) for the period 2012 - 2018. Meanwhile, the objectives to be achieved from this study are as follows: Knowing Detection Fraud's Financial Statement with the Pentagon Fraud Method for Mining Sector Companies listed on the Indonesia Stock Exchange (IDX) for the period 2012 – 2018.

2 Literature Review

2.1 Fraud

According to Mark F. Zimbelman et al [14] in the book Forensic Accounting defines fraud as a general term, and includes all kinds of ways that can be used with certain skills, chosen by an individual, to benefit from other parties by making a wrong representation. There are no fixed rules that can be issued as a general proportion in defining fraud, including surprises, deception, or devious and unnatural methods used to commit fraud. The only limitation in defining fraud is the things that limit human honesty.

The International Standards for the Professional Practice of Internal Auditing [11] defines fraud as "any illegal act characterized by deceit, concealment, or violation of trust. These acts are not dependent upon the threat of violence or physical force. Frauds are perpetrated by parties and obtain money, property, or services; to avoid payment or loss of services; or secure personal or business advantage ". The Association of Certified Fraud Examiners [2] explains that fraud against a company can occur or be carried out by parties from within the company itself which ACFE classifies such fraud as occupational fraud. The ACFE defines occupational fraud as the use of one's work for personal enrichment through deliberate abuse or the application of organizational resources or assets. ACFE shares three (3) main categories of fraud which are also called fraud trees.

2.2 Financial Statement Fraud

In 2013, the Indonesian Institute of Certified Public Accountants issued Audit Standards (SA) 240 concerning the Responsibilities of Auditors Related to Fraud in an Audit of Financial Statements, SA 240 explains that fraud in financial statements can occur due to intentions in presenting financial statements. There are two types of errors in the presentation of financial statements, namely presentation errors arising from financial reporting that contain fraud and misstatement arising from improper treatment of assets.

In SA 240 it is also explained that the risk of not being detected is due to a mistake that is caused by fraud. This is because fraud may involve sophisticated and carefully organized schemes designed to cover it, such as forgery, deliberately failing to record intentional misrepresentations of transactions or presentations to the auditor. Fraud done by management has a higher risk compared to fraud committed by employees to be undetected because management is in a position, either directly or indirectly to manipulate accounting records, present incorrect financial information, override control procedures designed to prevent similar fraud that can be done by other employees.

According to Mark F. Zimbelman et al [14] in the book Forensic Accounting, it is believed that there are nine (9) factors that emerge simultaneously that lead to fraud in financial statements which are referred to as perfect fraud storm, namely economic booms, deterioration in moral values, high expectations of analysis, high levels of debt, focus on rules rather than accounting principles, lack of auditor independence, greed and failure of educators. In the analysis of perfect fraud storm, it can be understood that the motivation to make a misstatement of financial statements is to support stock prices and offers to bonds and stocks remain high and to maximize bonuses received by management due to high stock prices.

2.3 Crowe's Fraud Pentagon Model

In 2012, Jonathan T. Marks, CPA, CFE a forensic accountant and partner from Crowe, the largest public accounting, consulting and technology company in the United States developed a new way to understand the reasons for fraud. The new understanding is known as Crowe 'Fraud Pentagon Model (Figure 2.2), and is a development of the Cessey Fraud Triangle which is considered unable to describe the reasons for fraud due to the rapid development in the world of business and technology today.

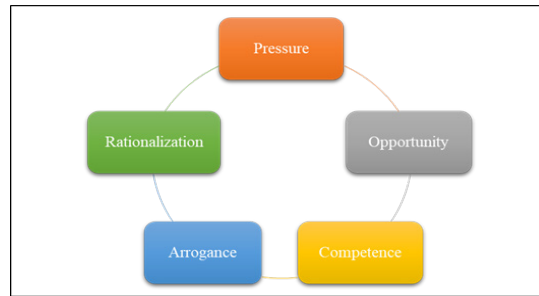


Figure 1. Crowe's Fraud Pentagon Model

2.4 Earnings Management

According to Subramanyam and Wild [8], earnings management is a deliberate management intervention in the process of determining earnings, usually to meet personal needs. There are many possible reasons behind earnings management, including increasing stock prices, increasing managerial compensation related to reported profits and efforts to obtain government subsidies [8]. In general, economic actors, governments, professional associations and other regulators, regard earnings management as opportunistic behavior of managers to play with the numbers in financial statements in accordance with the objectives to be achieved, so that they are categorized as fraud [9]. In the science of accounting, earnings management can be interpreted as an accounting trick where flexibility in preparing financial statements is used or utilized by managers who try to meet profit targets [5].

One approach used to detect earnings management is an aggregate accrual based approach which uses discretionary accruals to describe earnings management [9]. Dechow, Sloan and Sweeney developed the Jones model into a modified Jones model, in calculating the value of discretionary accruals. This model is widely used in accounting studies because it is considered to be the best model in detecting earnings management and provides the most robust or strong results [9].

2.5 Relations of Financial Statement Fraud with Financial Stability

SAS No. 99 defines financial stability as a condition that describes the stability of the company's financial position in a stable position. Financial statements can be used to assess the company's financial position, the results of the performance achieved by the company, and assess the company's financial prospects in the future [1]. The company's finance can be said to be stable by measuring its financial growth through company sales, the value of corporate earnings per year and the growth of company assets [7]. The number of total assets owned by the company is the main attraction for investors, creditors, and other decision holders [3]. In Siddiq et al [7] research, the growth of company assets is calculated by reducing the total assets in a given year with the total assets of the previous year then divided again by the previous year's total assets, which are formulated as follows:

$$\text{ACHANGE} = \frac{\text{TA}_{it} - \text{TA}_{it-1}}{\text{TA}_{it-1}}$$

2.6 Relations of Financial Statement Fraud with nature of industry

Nature of industry is the ideal state of a company in an industrial environment [13]. In ISA 240 about "The Auditor's Responsibilities Relating to Fraud in Audit of Financial Statement" states that the nature of industry provides an opportunity for financial statement fraud. Nature of industry is the ideal state of a company in an industrial environment. In ISA 240 it is explained that one of the factors of the nature of a company that can lead to fraud is assets, liabilities, income, or expenses based on estimates

that involve subjective valuations or uncertainties that are difficult to strengthen. Accounts receivable is a form of nature of industry that can be responded to with different reactions from each company manager [4].

According to Skousen et al in Faradiza [4] accounts receivable are related to estimates of uncollectible receivables whose amounts are subjective, so management can use these accounts as a tool to manipulate financial statements, which can be calculated using the formula:

$$\text{RECEIVABLE} = (\text{Reveivable}_t / \text{Receivable}_{t-1}) - (\text{Sales}_t / \text{Sales}_{t-1})$$

2.7 Relation of Financial Statement of Fraud with Accrual Based Accounting

Accrual-based accounting attempts to record all financial influences that occur in a transaction and event that have cash consequences for the period concerned, not only when cash is received or paid in cash [9]. Transactions that are regulated by utilizing freedom to determine the value of accounting estimates are transactions that are not easy for the report user to know [9]. Total accruals will affect fraud in financial statements because accruals are strongly influenced by management decisions in rationalizing financial statements [4]. In general, earnings management can be done because the basis for recording the transactions used is accrual, which is recording transactions carried out without having to have cash receipts or cash outlays [9]. Based on the calculation of the modified Jones model [9], the accrual value of a company can be calculated using a formula:

$$\text{TAC} = \text{NI}_{it} - \text{CFO}_{it}$$

2.8 Relations of Financial Statement Fraud with change in CEO

Financial report fraud is usually carried out by individuals who are in the highest position in the organization, and carried out in the name of the organization, not against the organization [14]. According to Wolfe and Hermanson in Zellin [13] indications of fraud can occur if carried out by the right people and understand and can take advantage of existing opportunities. In the Bawakes study [3] there are six components in competence, including: positioning, intelligence, confidence (ego), coercion skills, effective lying / deceit, and stress management (stress management).

According to Wolfe and Hermanson in Bawakes [3], that changes in directors are able to cause stress periods that have an impact on the opening of opportunities for fraud. Fraud management actors usually have a high position in the company, for example the Chief Executive Officer (CEO). According to Skousen et al in Faradiza [4], CEOs who will retire or expire will carry out a strategy of maximizing the amount of profit reporting to increase the amount of bonus that will be received later.

2.9 Financial Statement Relationship Fraud with The Dualism Position of The Chief Executive Officer (CEO) of The Company

According to Wolfe and Hermanson in Aprilla [1] states that the position of Chief Executive Officer (CEO), directors, and other division heads is a determining factor for fraud, by relying on its position which can influence others and with their ability to utilize circumstances that can facilitate fraud. Dualism position is a condition where a member of the board of directors has another position both inside and outside the company [13]. Based on the Financial Services Authority Regulation No.33 / POJK.04 / 2014 concerning Directors and Board of Commissioners of Issuers or Public Companies a member of the board of directors is permitted to concurrently hold positions with the following conditions:

1. The members of the board of directors are at most one (1) issuer or other public company.
2. Members of the Board of Commissioners are at most 3 (three) issuers or other public companies
3. The committee members are at most 5 (five) committees in the issuer or public company where the relevant member also serves as a member of the board of directors or board of commissioners.

2.10 Hypothesis

2.10.1 Pressure in the category of financial stability affects Financial Statement Fraud

Management is pressured to be able to maintain a stable financial position so that it can be trusted by interested parties. One of the ways in which the management of the company remains stable is to show that the company has good asset growth every year. However, if the company's performance is not in

line with expectations, the possibility of fraud will arise because of how management must maintain the company's financial stability. The growth of a company's assets can be calculated by using a total comparison ratio for 2 years. This description can formulate the following hypothesis:

H: Pressure in the relation category of financial stability affects Financial Statement Fraud

2.10.2 Opportunity in the category nature of industry affects Financial Statement Fraud

In relation to external auditors, management of an organization will decide to commit fraud if it sees an opportunity to do so if the external auditor examining does not have adequate or easy ability to deceive. The quality of an auditor can be seen through the selection of a Public Accounting Firm appointed by the organization to conduct an audit, namely the KAP is included in BIG4 or not included in BIG4. This description can formulate the following hypothesis:

H2: Opportunity in the category of external auditor quality affects Fraud's Financial Statement.

2.10.3 Rationalization in the total accrual ratio category affects Fraud's Financial Statement

Recording of transactions based on accruals is very vulnerable to fraudulent actions because the estimated value of a transaction is only based on estimates from the management of the company. Companies that use accrual-based transactions will cause subjective judgments taken by management to be justified, so that fraud occurs is justified. This description can formulate the following hypothesis:

H3: Rationalization in the total accrual ratio category affects Fraud's Financial Statement

2.10.4 Competence in the change in category of CEO influences Fraud's Financial Statement

CEO turnover shows instability in the organization so companies need to carry out stress management to improve the performance of directors to improve company performance. Placing people who have better abilities to manage companies can be an indication of fraud committed by previous people. This description can formulate the following hypothesis:

H4: Competence in the change in category CEO influences Fraud's Financial Statement.

2.10.5 Arrogance in the dualism position of CEO category affects Fraud's Financial Statement

Arrogance can be interpreted as acts of arrogance that lead to only being selfish and looking at others who are below them. A management who has such characteristics is very likely to commit fraud to fulfill his personal desires. One way to see this is to pay attention to the multiple positions of a CEO with the same position in more than two companies both in subsidiaries or other companies. This description can formulate the following hypothesis:

H5: Arrogance in the dualism position of CEO category affects Fraud's Financial Statement.

3 Research Methods

The population taken in this study are all companies listed on the Indonesia Stock Exchange (IDX) in the period 2012-2018 with samples taken are companies engaged in the mining industry sector. Due to the large number of samples and not necessarily all samples can be used in this study, the method used to determine the sample used is purposive sampling method.

3.1 Independent Variable (X)

Pressure that can lead to fraud in financial statements is seen in the business management category of an organization to maintain the company's financial position to remain good. To see financial stability is used the ratio of total assets for 2 years, which according to Siddiq et al [7] can be calculated by the formula:

$$ACHANGE = TA_{it} - TA_{it-1} / TA_{it-1}$$

After that the value of ACHANGE is measured by a dummy variable, that is value 1 for companies with asset growth which is well marked ACHANGE positive sign and value 0 for company with asset growth which is not well marked with ACHANGE value marked negative.

Oppurtunity in this study, oppurtunity (Opportunity) that can cause fraud (fraud) on financial statements seen in the nature of industry category is calculated using the ratio of total accounts.

According to Skousen in Faradiza [4] the ratio of total accounts receivable can be calculated using the formula:

$$\text{RECEIVABLE} = (\text{Reveivable}_t / \text{Receivable}_{t-1}) - (\text{Sales}_t / \text{Sales}_{t-1})$$

Then the RECEIVABLE value is proxied by the dummy variable which is value 1 for companies with high total receivables which are marked with a positive sign, and a value of 0 for companies with low total receivables which are marked with a negative sign.

Rationalization In this study, rationalization which can lead to fraud in financial statements is seen in the category of total accrual ratios. Based on the calculation of the modified Jones model [9], the accrual value of a company can be calculated using the formula:

$$\text{TAC} = \text{NI}_{it} - \text{CFO}_{it}$$

Then, the value of TAC is proxied by the dummy variable which is given a value of 1 for the company with an accrual value showing that profits are either marked with a positive sign, and a value of 0 for the company with an accrual value shows a poor profit marked with a negative sign.

Competence that can lead to fraud in financial statements is seen in the change in CEO category, which is proxied by a dummy variable that is given a value of 1 for companies that make changes to the president director or director for the period 2012-2018, and 0 for companies that do not change of president director or director for the period 2012-2018.

Arrogance that can lead to fraud in financial statements is seen in the category dualism position of a CEO as measured by a dummy variable that is given a value of 1 for companies whose directors or directors hold concurrent positions in more than 1 company as a member of the board of directors, and 0 for companies whose president directors or directors do not hold concurrent positions in more than 1 company as directors.

3.2 Dependent Variable (Y)

In this study the dependent variable used is financial statement fraud that is proxied by earnings management. To be able to do the calculation of the measurement of discretionary accrual which is the determination of accruals whose value is based on decisions from the management of the organization. In this study calculated using the Jones modification model, calculation of the modified Jones model [9] is as follows:

Calculate total accruals (TAC), that is profit after taxed year t minus the operating cash flow in year t by the formula:

$$\text{TAC} = \text{NI}_{it} - \text{CFO}_{it}$$

Then total accrual (TA) is estimated using Ordinary Least Square (OLS) which is formulated as follows:

$$\text{TA}_{it} / \text{Ait} = \beta_1 (1 / \text{Ait-1}) + \beta_2 (\text{evRevit} / \text{Ait-1}) + \beta_3 (\Delta \text{PPE}_{it} / \text{Ait-1}) + \varepsilon$$

Using regression coefficients such as the previous formula nondiscretionary accruals (NDA) can be formulated as follows:

$$\text{NDA}_{it} = \beta_1 (1 / \text{Ait-1}) + \beta_2 (\Delta \text{Revit} / \text{Ait-1} - \Delta \text{Recit} / \text{Ait-1}) + (\Delta \text{PPE}_{it} / \text{Ait-1})$$

Then, to calculate discretionary accruals (DA) that are used to measure earnings management an organization can use the formula:

$$\text{DA}_{it} = \text{TA}_{it-1} / \text{Ait-1} - \text{NDA}_{it}$$

3.3 Data Analysis Method

This study uses SPSS 25 computer application program to analyze the effect of the relationship between the independent variables and the dependent variable with the logistic regression model as follows:

$$\ln \text{DA}_{it} / 1 - \text{DA}_{it} = \alpha + \beta_1 \text{ACHANGE} + \beta_2 \text{RECEIVABLE} + \beta_3 \text{ACCRUAL} + \beta_4 \text{CEOCHANGE} + \beta_5 \text{CEOCP} + e$$

The stages used in Logistic regression are the feasibility test of the regression model, Overall model fit, Assessing the coefficient of determinant, Table Matrix of Clarification and Logistic regression coefficient test, Wald test and G Test.

4 Results and Discussion

Based on the determination of the sample by purposive sampling method, a sample of 15 companies was obtained for each year so that there were 105 data used in this study.

Table 1. Logistic Regression Coefficient Test Result

		B
Step 1a	ACHANGE	0,71
	RECEIVABLE	0,393
	ACCRUAL	0,814
	CEOCHANGE	-0,391
	CEOCP	-0,663
	Constant	0,318

Based on table 4.11 it is known that the significance level of model is 0.043, meaning that it is smaller than $\alpha = 0.05$ so that H_0 cannot be rejected or can be said to be accepted, then the independent variable model is worth explaining the dependent variable.

Based on the results of data analysis that has been done, it can be further elaborated as follows:

$$\ln DA_{it}/1-DA_{it} = 0,318 + 0,71ACHANGE + 0,393RECEIVABLE + 0,814ACCRUAL - 0,391CEOCHANGE - 0,663CEOCP + \varepsilon$$

From the above equation can be seen the direction of influence of each independent variable on the dependent variable seen from the regression coefficient value (B) of each independent variable. Regression coefficients that are positively marked have a direction of influence that is in line with financial statement fraud (DA_{it}), while the regression coefficient that has a negative direction has the opposite direction to financial statement fraud (DA_{it}).

Table 2. Wald Test

		Sig.
Step 1a	ACHANGE	0,108
	RECEIVABLE	0,374
	ACCRUAL	0,078
	CEOCHANGE	0,384
	CEOCP	0,146
	Constant	0,642

Based on table 4.10 it can be concluded as follows:

1. H1: Pressure (ACHANGE) in the category of financial stability affects Fraud's Financial Statement. Pressure free variable (ACHANGE) shows a significance value of 0.108, meaning that it is greater than $\alpha = 0.05$ so H1 is rejected and in this study proves that Pressure in the financial stability category does not significantly influence Fraud's Financial Statement.
2. H2: Opportunity (RECEIVABLE) in the nature of industry category affects Fraud's Financial Statement.

The independent opportunity variable (RECEIVABLE) shows a significance value of 0.374 which means that it is greater than $\alpha = 0.05$ so H2 is rejected and in this study proves that the opportunity in the nature of industry category does not significantly influence Fraud's Financial Statement.

3. H3: Rationalization (ACCRUAL) in the category of total accrual ratio affects the Financial Statement of Fraud
Free rationalization variable (ACCRUAL) shows a significant value of 0.078 meaning the same as $\alpha = 0.05$ so that H3 can be accepted and in this study proves that the Rationalization in the total accrual ratio category significantly influences Fraud's Financial Statement.
4. H4: Competence (CEOCHANGE) in the change in category CEO influences Fraud's Financial Statement
The independent variable competence (CEOCHANGE) refers to a significance value of 0.146, which means that it is greater than $\alpha = 0.05$ so that H4 is rejected and in this study proves that Competence in the change in CEO category does not have a significant influence on fraudulent Financial Statement
5. H5: Arrogance (CEOCP) in the Dualism position of CEO category affects Fraud's Financial Statement
Arrogance free variable (CEOCP) shows a significance value of 0.642 which means that it is greater than $\alpha = 0.05$ so that H5 is rejected and in this study shows that Arrogance in the dualism position of CEO category does not have a significant influence on Fraud's Financial Statement.

Table 3. G Test

		Sig.
Step 1	Step	0,043
	Block	0,043
	Model	0,043

Based on table 4.11 it is known that the significance level of model is 0.043, meaning that it is smaller than $\alpha = 0.05$ so that H0 cannot be rejected or can be said to be accepted, then the independent variable model is worth explaining the dependent variable.

Based on the results of data analysis that has been done, it can be further elaborated as follows:

4.1 Effect of Pressure (ACHANGE) on Financial Statement Fraud (DAit)

Based on the test of the logistic regression coefficient which can be seen in table 4.8, it shows that the independent variable ACHANGE has a positive direction of 0.71 and a probability of 73.65%. While based on the Wald test shows a significance level of 0.1028 which is $> \alpha = 0.05$ so that it does not significantly influence and cannot detect the occurrence of dependent variable financial statement fraud (DAit) in mining sector companies listed on the Indonesia Stock Exchange (BEI) period 2012 to 2018.

This happens because the management of the company does not feel the need to manipulate the growth of company assets because in the business world the rise and fall of asset values is a natural thing so that company management is not under pressure to commit fraud so that the company's financial position is in a position that stable which can be seen from good total asset growth. This study proves that company management prefers to address the company's financial stability in accordance with existing conditions without having to manipulate its financial statements.

Previous research conducted by Faradiza [4], Bawakes [3], Siddiq et al [7], Aprilla [1] and Zelin [13] have different results in research they stated that pressure in the financial stability category seen from the growth of total assets for 2 years (ACHANGE) had a significant effect on the financial statement of fraud, this happened because the object of research was different so that the results were also different. The companies used in the previous research did get pressure to maintain financial stability then commit fraud, but this study that took objects to mining sector companies showed the opposite results.

4.2 Influence of Opportunity (RECEIVABLE) on Financial Statement (DAit)

Based on the test of the logistic regression coefficient which can be seen in table 4.8, it shows that the RECEIVABLE independent variable has a positive direction of 0.393 and a probability of 67.06%. Whereas based on the wald test shows a significance level of 0.374 which $> \alpha = 0.05$ so that it does not significantly influence and cannot detect the occurrence of dependent variable financial statement fraud

(DAit) in mining sector companies listed on the Indonesia Stock Exchange (BEI) for the year 2012 to 2018.

This happened because the company management did not manipulate the total receivables received, because the company has an industrial nature that does not have a small uncollectible risk because the company implements risk management to minimize the risk of uncollectible receivables which can reduce company revenue. This research proves that the opportunity to cheat by raising the value of accounts receivable so that it has an impact on large profits is not done because it is not the nature of the industry of the company which is the object of this research that has implemented risk management so as to minimize the occurrence of uncollectible accounts. This is supported by research conducted by Zellin [13] which in the study stated that Opportunity in the nature of industry category did not significantly influence financial statement fraud seen from earnings management.

4.3 Effect of Rationalization (ACCRUAL) on Financial Statement Financial (DAit)

Based on the test of the logistic regression coefficient which can be seen in table 4.8, it shows that the independent variable CEA has a positive direction which is 0.814 and the probability is 75.62%. While based on Wald test shows a significance level of 0.078 which $> \alpha = 0.05$ so that it does not significantly influence and can not detect the occurrence of dependent variable financial statement fraud (DAit) in mining sector companies listed on the Indonesia Stock Exchange (IDX) year period 2012 to 2018.

This is because the value of total accruals is not the result of manipulation by the management of the company to justify the management of profits made but rather the actual condition of the company. This research proves that the Rationalization in the category of total accrual ratio does not significantly influence financial statement fraud seen from earnings management. This is supported by research conducted by Faradiza [4] which in the study also states that the Rationalization in the category of total accrual ratio does not significantly influence financial statement fraud seen from earnings management.

4.4 The Effect of Competence (CEOCHANGE) on Financial Statement (DAit)

Based on the test of the logistic regression coefficient which can be seen in table 4.8, it shows that the CEOCHANGE independent variable has a negative direction which is -0.391 and a probability of 48.17%. Whereas based on the Wald test shows a significance level of 0.384 which $> \alpha = 0.05$ so that it does not significantly influence and cannot detect the occurrence of dependent variable financial statement fraud (DAit) in mining sector companies listed on the Indonesia Stock Exchange (BEI) for the year 2012 to 2018.

This can happen because the replacement of a president director or director is not solely because of improvements in the performance of the company's directors but is a natural thing because each member of the board of directors can resign or his term of office has ended so that changes are made and do not indicate performance improvement of a company director. This is supported by the Zellin study [13], Siddiq et al [7], and Bawakes [3] which in the study also stated that Competence in the change in CEO category did not significantly influence financial statement fraud seen from earnings management.

4.5 Arrogance Effect (CEOCP) on Financial Statement (DAit)

Based on the test of the logistic regression coefficient which can be seen in table 4.8, it shows that the independent variable CEOCP has a negative direction which is -0.663 and a probability of 41.45%. While based on the Wald test shows a significance level of 0.146 which is $> \alpha = 0.05$ so that it does not significantly influence and cannot detect the occurrence of the dependent variable financial statement fraud (DAit) in mining sector companies listed on the Indonesia Stock Exchange (IDX) for the year 2012 to 2018.

This can happen because of the government or institution that has the authority to do so that requires every company that goes public to implement Good Corporate Governance (GCG) so that even though a CEO is arrogant in nature who wants a lot of positions not to cheat by manipulating company financial statements. This study proves that Arrogance in the dualism category of CEO position does not significantly influence financial statement fraud seen from earnings management. This is supported by the research of Zellin [13] which in his research stated that arrogance in the dualism category of CEO position did not significantly influence financial statement fraud seen from earnings management.

5 Conclusion and Suggestion

From the results of the study using logistic regression analysis techniques using the SPSS 25 analysis tool it can be concluded that the regression model used can predict the observed value, the model used is good and fit with the data, the independent variable is only able to explain 13.9% of the dependent variable namely the financial fraud statement and 86.1% are explained by variables outside the study, overall the classification regression accuracy of observational data is 65.7% and independent variable pressure (ACHANGE), independent variable opportunity (RECEIVABLE), independent variable rationalization (ACCRUAL), competence (CEOCHANGE), and arrogance free variables (CEOCP) were unable to detect financial statement fraud in mining companies listed on the Indonesia Stock Exchange (IDX) for the period 2012 to 2018.

The obstacle in this study is that the variables used have not been able to explain the dependent variable, this is because the pentagon fraud model is a model that is seen based on reasons arising from within a person so that it will be very difficult to be found in audited financial statements or reports annual company. Based on the results of the research that has been explained in the conclusions obtained, there are several suggestions that can be done, namely For further research, it is expected to be able to use other factors that can be used to detect the occurrence of fraud in the financial statements by using perfect fraud strom which states that there are (9) factors that emerge simultaneously that lead to fraud in financial statements, namely economic boom, deterioration of moral values, high expectations of analysis, high levels of debt, focus on rules rather than accounting principles, lack of auditor independence, greed, and failure of educators [14].

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Analysis of Sharia Banking Financial Fraud using Beneish Ratio and Sharia Compliance Ratio

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Abstract. The concept of Sharia is recently growing in Indonesia. It offers sharia compliance and Islamic values in company management. Therefore, the Islamic concept applied in Islamic banks is inseparable from fraud. 99 % of BPR /BPRS liquidation cases are caused by fraud (Kompas, 2017). This research was descriptive. Data were taken from Financial Statements of Sharia Rural Banks (BPRS) HA on 2013 -2015. In addition, the data collection used documentation method while the analysis used Ratio Index. The classification of Sharia Rural Banks (BPRS) HA during 2013 to 2015 based on Beneish ratios revealed that, in that period, the Sharia Rural Banks (BPRS) HA were classified as a non-manipulator. Results of research indicate that these are classified as non-manipulators, however the DSRI, AQI, SGI, DEPI and profit sharing ratios prove that there is a fraud in the financial statements. These ratios can be used as a tool to detect fraud on Sharia Banks' financial statements.

Keywords: fraud, beneish, sharia compliance

1 Introduction

In the past few years, the performance of the world Islamic economy shows great potential and continues to grow and it is estimated that the volume of the halal industry and global Islamic finance will grow to reach USD 6.8 Trillion (Liputan 6 2018)[1]. Sharia trends also have increasingly developed in Indonesia because the majority of the population in Indonesia is moslems. It offers sharia compliance and Islamic values in company management. Meanwhile, it also raises fraud in Sharia banks management as occurred on 2013, there were fictitious loans that were potentially harming the country by 59 billion involving 3 officials of Syariah Bank Branch of Bogor (Liputan 6 2013)[2]. The Director of IDIC Accounting and Budget Group, Suwandi, said that in general the closed banks were actually able to compete with other banks, but many frauds by their directors, commissioners, and Rural Banks causing banks to be liquidated (Finansial Bisnis 2015)[3]. In addition, based on bank liquidated data on IDIC web from January 19, 2006 to April 29, 2016, there were 1 Conventional Commercial Bank, 66 Conventional Rural Banks and 2 Sharia Rural Banks. The statistic above indicates that Sharia concept in Islamic banks is inseparable of fraud.

Fraud may not be eliminated, but it losing effects may be minimized by detecting either the fraud is occurring or has occurred as soon as possible. Beneish (1999)[4] states that variables capable of detecting earnings manipulation are Variable Days Sales in Receivable Index (DSRI), Gross Margin Index (GMI), Asset Quality Index (AQI), Sales Growth Index (SGI), Depreciation Index (DEPI), Sales General and Administrative Expenses Index (SGAI), Leverage Index (LVGI) and Total Accruals to Total Assets Index (TATA). Kaur et al (2014)[5] in their study used 5 beneish ratios, namely DSRI, GMI, AQI, SGI and DEPI variables to detect earnings management in 6 sectors in India on 2012-2013. In addition, Roxas (2011)[6] in his research indicated that the Beneish M Score Model uses 5 variables, which then resulting in more significant outcomes, by identifying 62% of companies as manipulators rather than using 8 variables, which only identifying 46 companies as manipulators. Further, Tarjo & Herawati (2015)[7] indicate that Gross margin index of Beneish Model M Score, depreciation index, sales index and general administrative burden and all significant total accruals in detecting the financial fraud. In addition, Omar et al (2014)[8] indicated that Megan Media manipulated their income with a fictitious income of RM 198,727. Suyanto (2009)[9] who urges beneish ratio to classify Manipulator companies and manipulators indicates that Pressure Variables (Profit/ total assets) and Opportunity (Inventory/total

assets, related party transaction and Big 4) significantly relates to fraud of financial statements. Handayani et al (2016)[10] indicates that the relationship between cash flow and profit can be used as red flags, meanwhile the correlation between receivables and income cannot be used as red flags, and the correlation between allowances for uncollectible accounts and receivables cannot be used as red flags. Therefore, Beneish Ratio has the ability to detect fraud in financial statements in non-sharia companies based on the research above.

Rahman & Anwar (2014)[11] indicates that Management and non-management employees representing internal parties accounted for 22% of fraud parties while the rest is caused by outside factors. In addition, there is a fraud detection tool as disclosed by Najib & Rini (2019)[12] indicating that Sharia Compliance proxied by a profit sharing ratio has a significant negative effect on fraud in the Banks, but Sharia Compliance proxied by Income Islamic Ratio and Investment Islamic Ratio does not have significant effect. Astuti et al (2019)[13] showed that the implementation of sharia corporate governance is still not able to prevent fraud in sharia banking. Based on the research above, the Beneish ratio and profit sharing ratio can be used to detect fraudulent financial statements.

In other studies about fraud in islamic bank, Junita (2016)[14] indicates that financial stability pressure, proxied by Total Asset Change (ACHANGE), and external pressure proxied by the Free Cash Flow Ratio (FREEC) has a significant effect on fraudulent financial statements and can detect fraudulent financial statements, while financial targets proxied by ROA and effective monitoring as proxied by IND does not significantly affect fraudulent Sharia banking financial statements. Suryanto and Ridwansyah (2016)[15] urges that Sharia Financial Accounting Standards, Independent Sharia Council and Sharia Auditors Competency have a simultaneously effect to prevent fraud in sharia banks in Indonesia and those 3 variables Synchronization can detect occurring fraud. Fathi et al. (2017)[16] showed that significant relationship on age, gender, religiosity and position in influencing the bank employees to commit asset misappropriation in the Islamic banks. The studies above indicate the fraud perpetrators, the prevention and detection effectiveness and financial ratios of fraud detection in Sharia banks.

Based on the phenomenon/cases and research above, the researcher examines "Behind the Sharia Rural Bank (BPRS) Liquidation Process, Case Study of HA Sharia Rural Bank" using a beneish ratio as the financial statements detection of non-sharia institutions. Besides, there is also sharia compliance as a detection tool and distinguishes sharia and non-sharia institutions. 99 % of BPR /BPRS liquidation cases are caused by fraud (Kompas, 2017)[17]. The researchers choose HA Sharia Rural Bank case study because it business license was revoked due to fraud. These issue becomes researcher's attention to choose the research title above. Based on the background, the research problem is:

1. Is HA Sharia Rural Bank classified as manipulator on 2013, 2014 and 2015?
2. Which variables of beneish ratio indicate a fraud?
3. Can Sharia Compliance prove there is a fraud in HA Sharia Rural Bank?

Using the research problems above, this research aims to discover a fraud as a cause upon the liquidation process at HA Sharia Rural Bank above. Therefore, this research benefits are as follows:

1. For Auditors, it can be used as a reference in detecting fraud in the Sharia Banks.
2. For Scholars, it can be used as a research reference to develop knowledge in fraud detection

2 Literature Review

2.1 Sharia Compliance

Sharia compliance is the fulfillment of all sharia principles in all activities carried out as a form of Islamic financial institutions (Usnah and Suprayogi, 2015)[18]. The MUI DSN fatwa and Indonesia Bank (BI) regulations as a measurements of compliance using sharia principles, both in products, transactions, and operations in Sharia bank.

Some provisions to be used as qualitative measures to assess sharia compliance in the Islamic financial institutions cover the followings:

1. A used contract to collect and distribute the funds according to the sharia principles and applicable sharia rules.
2. Zakat funds are calculated, paid, and managed according to the Sharia rules and principles.
3. All economic transactions and activities are reported fairly according to applicable sharia accounting standards.
4. Work environment and corporate culture according to sharia.

5. The finance sharia businesses do not oppose sharia.
6. There is a Sharia Supervisory Board (DPS) as a sharia director upon whole operational activities of sharia bank. (Sutedi, 2009:146)[19]

2.2 Financial Statement Fraud

According to Association of Certified Fraud Examiners (ACFE ,2016)[20], fraud is a cheating or mistake conducted by a person or entity who knows this mistake can result in some poor benefits for the individual or other parties. it can be caused by several triggers, namely pressure, opportunity, and rationalization. (Donald R. Cressey, 1953 in Hall and Singleton, 2007:296)[21].

Association of Certified Fraud Examiners (ACFE) categorizes fraud in three groups, namely Fraudulent Financial Statements, Asset Abuse, and Corruption. Fraudulent Financial Statements is fraudulent financial or non-financial conducted by management in the form of misstatement financial statements material harming the investors and creditors (ACFE, 2016)[20].

According to (Rezaee, 2005)[22] Fraudulent financial statement is related to the several schemes as follows:

- a. Falsification, alteration, or manipulation of material financial records, supporting documents, or business transactions;
- b. Material intentional misstatement, deletion, or error presentation of events, transactions, accounts or other significant information which is a source of information on financial statement;
- c. Deliberate misapplication, intentional misinterpretation, and wrongful execution of accounting standards, principles, policies and methods used to measure, recognize, and report economic events and business transactions;
- d. intentional omissions and disclosures or presentation of inadequate disclosures regarding accounting standards, principles, practices, and related financial information;
- e. the use of aggressive accounting techniques through illegitimate earnings management;
- f. Manipulation of accounting practices under the existing rules-based accounting standards which have become too detailed and too easy to circumvent and contain loopholes that allow companies to hide the economic substance of their performance.

Hall and Singleton (2007:296)[21] classify risk factors related to fraud in financial statements based on the classification as follows:

- a. Management effects and characteristics on the controlling environment.
This factor is related to top management attitude on the internal control, management style, situational pressure, and financial statement process
- b. Industrial state.
It covers the economic environment related to the regulations in which the institution is related to the operations. For instance, the companies in decline industry or whose main customers are experiencing business bankruptcy, have greater risks of fraud than the institution in stable industry.
- c. Operational and finance stability characteristics.
It is related to the institution characteristics alongside the transaction complexity. For instance, companies involved in transactions with other unaudited parties are at risk of fraud.

(ACFE 2016)[20] urges that fraud in financial statement presentation can be detected through the financial statement analysis as follows:

- a. Vertical Analysis, a technique to analyze the relationship among items in the income statement, balance sheet, or cash flow statement by describing them in percentages.
- b. Horizontal Analysis, a technique to analyze items changing percentages on financial statement during several reports period.
- c. Ratio Analysis, a tool to measure the relationship among the item values in financial statements.

2.2.1 Days Sales in Receivables Index (DSRI)

This ratio is used to identify the relationship of sales days in accounts receivable with net sales figures for current year compared to the previous reporting year. It is easier to determine whether the accounts receivable and income are balanced or not in two consecutive years using this ratio. The increase in sales days in accounts receivable can occur due to various reasons including changes in credit

or financial policy, strategic change, and profit manipulation. Further, there is a possibility of income inflation if DSRI ratio has a value of more than 1 (Ugochukwu et al, 2013)[23].

2.2.2 Gross Margin Index (GMI)

GMI is previous year's gross margin index ratio compared to the current year. Business main purpose is increasing profit margins and reduce gross profit margins, perhaps a warning. GMI ratio with a value of more than 1 indicates a deteriorating Gross margin and becomes a sign that the company is likely to manipulate income (Ugochukwu et al, 2013)[23].

2.2.3 Asset Quality Index (AQI)

AQI is a ratio determining the relationship between number of current assets and non-current assets as property, plant and equipment for running year total assets with the previous year. According to Siegel (1991)[24], if AQI is greater than 1, it indicates that the company has the potential to increase its involvement by charging costs. In addition, this ratio evaluates the asset quality among the two years. Then, asset realization risk increasing and asset quality reducing become an indicator to detect profit manipulation.

2.2.4 Sales Growth Index (SGI)

SGI is the ratio of current year's net sales compared to the previous year. The increasing of company growth becomes an indicator of profit manipulation. However, developing companies depend on external finance than mature. Financial sources need might increase managers to manipulate whether profits and sales or achieve future targets and benefits (Wahlen, J.M., Baginski, S.P., & Bradshaw, 2015 : 465)[25]. If it has a value of more than 1 or smaller than 1, there is a possibility that a company is under pressure and might manipulate profits to maintain performance (Ugochukwu et al, 2013)[23].

2.2.5 Depreciation Index (DEPI)

Depi is a ratio of depreciation from the previous year compared to the current year. In the case of a ratio is greater than 1, the company has implemented a policy to expand the depreciation rate by extending depreciation to increase profits (Wahlen, J.M., Baginski, S.P., & Bradshaw, 2015 : 465)[25]. Depi ratio with a value is greater than 1 indicates the Asset Trend is depreciated at a slower rate to increase income (Ugochukwu et al, 2013)[23].

2.2.6 Profit Sharing Ratio

Najib and Rini (2019)[12] in his research "Analysis of Fraud Affecting Factors in Sharia Banks" indicates that Sharia Compliance proxied by the profit sharing ratio has a significant negative effect on fraud in the Bank. This result means when the value of Profit Sharing Ratio is higher, the number of occurring fraud is lower.

3 Research Method

The type of research is descriptive research describing the characteristics of a phenomenon that can be used as a basis for making decisions to solve business problems. The data used were secondary data. The data taken were data from Sharia Rural Banks (BPRS) HA Financial Statements in 2013, 2014, 2015 (the last 3 years before being liquidated).

The data collection technique in this research used documentation method. This research used Ratio Index analysis technique for financial statements data to be classified as non-manipulator or manipulator categories. It was classified as manipulator if M Score was greater than -2.22. On the other hand, it was classified as Non-Manipulator if M Score smaller than -2.22. M Score was calculated based on the equation below:

$$M \text{ Score} = -6,65 + 0,823 * DSRI + 0,906 * GMI + 0,593 * AQI + 0,717 * SGI + 0,107 * DEPI \quad (1)$$

4 Result & Discussion

4.1 Background of Sharia Rural Bank (BPRS) Ha

PT Sharia Rural Bank HA (BPRS HA) in Indonesia. In the website of Deposit Insurance Corporation (*Lembaga Penjamin Simpanan - LPS*), the business license of Sharia Rural Bank (BPRS) HA has been revoked based on Board of Commissioners of the Financial Services Authority number

KEP-X/D.0X/X01X on XX April XX01X. Tempo (2016)[26] revealed that the Financial Services Authority has revoked the business license of Sharia Rural Bank(BPRS) HA due to fraud in the management resulting in the financial performance did not meet the standard. In addition, the news also reported that Capital Adequacy Ratio (CAR) was minus of 205.61 % and Non Performing Financing (NPF) reached 88.97 percent or Rp 13.71 billion from the total financing of Rp 19.8 billion.

4.2 Sharia Rural Banks (BPRS) Classification (Manipulator / Non Manipulator)

By applying beneish ratio approach, it can be seen that BPRS HA is indicated as manipulator or non-manipulator, namely by calculating M-Score. If M Score is greater than -2.22, it is indicated as Manipulator. While, if M Score smaller than -2.22, it is indicated as Non-Manipulator. Below is the data needed to calculate M Score:

Table 1. Data Input of Beneish ratio

Data Input	2015	2014	2013
Total net receivables	13,103,975	18,330,794	15,903,568
Total current assets	15,306,057	21,997,056	19,298,486
Net fixed assets	237,952	310,269	383,817
Total Assets	17,102,765	22,809,335	20,180,866
Depreciation Expenses	72,317	51,320	104,733
Total amount of Debt	25,410,559	21,113,971	18,741,158
Total Income	3,831,149	4,670,502	4,447,787
Total Cost of Revenue	2,196,026	1,994,817	1,446,137

Based on input data as described in table 1 and the M Score equation, the results below are found:

Table 2. Results of M Score Equation:

Beneish Ratio	2015	2014	2013
DSRI	0.871	1.098	1.125
GMI	0.146	0.102	0.043
AQI	0.927	1.014	1.034
SGI	0.82	1.05	1.21
DEPI	0.61	1.51	2.05
M Score	(4.598)	(4.138)	(3.987)
Manipulator (> -2.22)	-	-	-
Non-Manipulator (< -2.22)	V	V	V

Based on table 2, it was found that BPRS HA in 2013, 2014, and 2015 are classified as non-manipulator. It indicates that BPRS HA in those years did not perform financial statements fraud.

4.3 Analysis of Beneish Ratio and Syariah Compliance Ratio

4.3.1 Change Analysis of DSRI since 2013 - 2015

DSRI is used to measure accounts receivable and balanced income or not in two consecutive years. If the increase in the number of days of sales in accounts receivable means the impact of changes in credit policies to spur sales. If DSRI ratio has value more than 1, then it has possibility of income inflation (Ugochukwu et al, 2013)[23]). From table 2, it can be seen that in 2013 and 2014, the DSRI ratio was

above 1, indicating the existence of income manipulation. However, the DSRI ratio was below 1 in 2015, indicating that the management did not perform income manipulation. In addition, it can also be seen that DSRI Ratio continued to decline every year, indicating that BPRS HA tended to minimize its income manipulation towards the year of revoking business license. Based on the data above, it shows that the management was indicated to perform income manipulation. However, approaching in 2016, the management's tendency to perform the manipulation declined along with the improvement in the CAR ratio in 2014, from 9% to 12% and the DSRI Ratio in 2014 from 1,125 to 1,098. Nevertheless, in 2015, the DSRI Ratio which did not indicate income manipulation seesaw 0,871, but contrary to the deteriorating CAR ratio of minus 63%.

4.3.2 Change Analysis of GMI since 2013 - 2015

The increases GMI indicates that the company is inflating profits. If GMI ratio has a value of more than 1, then it has possibility of deteriorating Gross margin that indicates the company is more likely to manipulate income (Ugochukwu et al, 2013)[23]. From table 2, it can be seen that GMI Ratio was not above 1, indicating that BPRS HA was not inflating the profit.

4.3.3 Change Analysis of AQI since 2013 - 2015

According to Siegel (1991)[24], if AQI is greater than 1, it shows that the company has the potential to increase its involvement by suspending the cost. From table 2, it can be seen that AQI ratio was above 1 in 2013 and 2014, indicating the existence of manipulation by suspending the cost. However, in 2015, AQI ratio was below 1, indicating that the management did not perform suspension of costs. In addition, it can also be seen that AQI ratio continued to decline every year, indicating that BPRS HA tended to minimize the suspension of cost toward 2016 (revocation of business license). Based on the data above, it shows that the management was indicated to perform manipulation by performing suspension of cost. However, the management's tendency to manipulate declined along with the improvement in the CAR ratio in 2014, from 9% to 12% and the AQI Ratio in 2014 from 1.034 to 1.014. Nevertheless, in 2015, the AQI ratio of 0.927 which did not indicate manipulation was contrary to the deteriorating CAR ratio of minus 63%.

4.3.4 Change Analysis of SGI since 2013 - 2015

SGI can show which company includes fake sales. The increase in SGI shows that there is a tendency for companies to record fictitious income to consider the normal growth expected in that period. If SGI ratio has a value of more than 1 or too smaller than 1, then it has a possibility that a company under pressure might manipulate profits to maintain performance (Ugochukwu et al, 2013)[23]. From table 2, it can be seen that SGI ratio was above 1 in 2013 and 2014, indicating the existence of profits manipulation. However, SGI ratio was below 1 in 2015, indicating that the management was not manipulating the profits. In addition, it can also be seen that the SGI ratio continued to decline every year, indicating that BPRS HA tended to minimize manipulating profits. Based on the data above, it can be seen that the management was indicated to perform profits manipulation. However, the management's tendency to perform manipulation declined along with the improvement in the CAR ratio in 2014, from 9% to 12% and the SGI Ratio in 2014 from 1.21 to 1.05. Nevertheless, in 2015, the SGI Ratio of 0.82 which did not indicate manipulation was contrary to the deteriorating CAR ratio of minus 63%.

4.3.5 Change Analysis of DEPI since 2013 - 2015

If the DEPI is greater than 1 (one), it indicates that the rate of depreciating assets is slowing, which increases the possibility that the company has raised estimates of assets useful lives or applied a new method of increasing income. Beneish (1999)[4] estimated that there is a positive relationship between DEPI and the possibility of manipulation. From table 2, it can be seen that the DEPI ratio was above 1 in 2013 and 2014, showing the existing of depreciation manipulation indications. However, the DEPI ratio is below the number 1 in 2015, indicating that the management was not indicated to manipulate depreciation. In addition, it can also be seen that the DEPI ratio continued to decline every year, indicating that BPRS HA tended to minimize manipulating depreciation toward 2016 (revocation of business licenses). Based on the data above, it shows that management was indicated to perform depreciation manipulation. However, over time, the manipulation tendency declined along with the

improvement in the CAR ratio in 2014, from 9% to 12% and the DEPI Ratio in 2014 from 2.05 to 1.51. Nevertheless, in 2015, the DEPI ratio of 0.61 which did not indicate manipulation was contrary to the deteriorating CAR ratio of minus 63%.

4.3.6 Change Analysis of Profit Sharia Ratio

Table 3. Data Input of Sharia Compliance

Data Input	2015	2014	2013
Mudharobah Financing	10,005,500	9,282,000	6,354,000
Musyarokah Financing	83,700	83,700	83,700
Total Financing	20,437,563	18,696,545	16,268,203

Based on input data as described in table 3, the results of the profit-sharing ratio are found below:

Table 4. Sharia Compliance

Sharia Compliance	2015	2014	2013
Profit Sharing Ratio	0.494	0.501	0.396

Based on table 4, the results show that BPRS HA in 2013 had a low Profit-Sharing Ratio, which means that the implementation of BPRS HA towards low sharia compliance would have an indication of great fraud. The profit-sharing ratio in 2014 increased, which means that the BPRS HA reduced the indication of fraud in Islamic banks. In 2015, BPRS HA had a decline in the profit-sharing ratio, showing an indication of fraud that had increased.

Based on other information in the BPRS HA Publication report, that the Capital Adequacy Ratio (CAR) as of 31 December 2015, 2014 and 2013 were respectively (-63%), 12%, 9%. This ratio is used to measure the ability of banks to provide funds for business development purposes and to accommodate the risk of possible losses caused by bank operations. On the strength of CAR as of December 31, 2015 and within 180 days, the management of BPRS HA was unable to recover CAR, so finally the Financial Services Authority decided to liquidate. A significant decrease in CAR was due in 2015 to the allowance for possible losses on earning assets of Rp 6,964,537,000, which increased significantly compared to the previous year of Rp 74,172,000. This indicates that financing / receivables owned by BPRS HA are problematic.

5 Conclusions, Implication, and Limitation

5.1 Conclusion

Based on the discussion above, the conclusions are as follows:

1. The classification of BPRS HA during 2013 to 2015 based on beneish ratios revealed that BPRS HA was classified as a non-manipulator in those years.
2. It was only 4 of the five banish ratios used in this research, namely DSRI, AQI, SGI, and DEPI, indicating that BPRS HA tended to manipulate financial statements in 2013 and 2014.
3. In 2015, BPRS HA experienced a decline in the profit-sharing ratio, showing an indication of increased fraud.

5.1.2 Implication

Ratio that can prove the existing of fraud in BPRS HA can be used to detect fraudulent financial statements.

5.1.3 Limitation

In this research, we only used 5 Boenish Ratios and Profit-Sharing Ratio to analyze fraud occurred in BPRS HA due to limited data in the BPRS HA financial statements.

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Accountability and Herding Bias: An Experimental Study on Audit Fraud Judgement

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Abstract. Auditors' behavior and attitude likely affect their judgments in determining fraud risks. As suggested by previous studies, an important auditor behavior is accountability that arguably affects auditors' judgment. Together with herding behavior, accountability likely affects audit fraud judgment. This study aims to examine the effects of accountability and herding behavior on audit fraud judgment. As quantitative research, this study uses a 2x2 between-subjects experimental design. The subjects are 79 external auditors in Central Java Province. The results show that both accountability and herding affect audit fraud judgment. Additionally, the paper also demonstrates that auditors with high (low) accountability and low (high) herding behavior exhibit the best (worst) audit fraud judgment. Thus, this study suggests that partner auditors need to ensure that their auditors exhibit disciplined behaviors. Also, this paper implies that auditors need to protect their independence and to be less affected by others' opinions.

Keywords: accountability, herding, audit fraud judgment

1 Introduction

Firms are obliged to prepare financial statements for their internal and external stakeholders. Financial statements help investors, creditors, governments, and other stakeholders make decisions. The requirement to prepare financial statements is stipulated by BAPEPAM Regulation No. Kep-36/PM/2003 and Jakarta Stock Exchange (BEJ) Regulation No. Kep-306/ BEK/07-2004. Both regulations require firms listed at the Indonesian Stock Exchange (BEI) to submit audited financial statements that comply with the Indonesian Financial Accounting Standards (*Standar Akuntansi Keuangan – SAK*).

External auditors' independence in performing audit is instrumental to ensure that financial statements are reliable, relevant, and accurate. An important role of external auditors is making audit judgments. Audit judgments consist of several categories, including audit fraud judgment. External auditors' judgment will affect fraud-related audit results in responding to the existing audit evidence. External auditors must generate sufficient confidence that financial statements are free from material misstatements due to errors or frauds (*Ikatan Akuntan Publik Indonesia, 2016*).

External auditors should make audit fraud judgments according to existing field conditions because such judgments will affect their final opinion on the fairness of audited financial statements. Audit fraud judgments that are not in line with the existing conditions will affect organizations' reputation with their stakeholders. External auditors work in organizations with various interests. Consequently, external auditors are potentially affected by their surrounding environments and tend to imitate existing behavior. This condition is often called as herding. For auditors, mimic is a negative behavior because it motivates them not to implement independence and professional skepticism in making judgments.

Besides herding, another factor that potentially affects audit fraud judgment is accountability. Accountability significantly affects audit judgment because auditors are responsible to their superiors (Hoffman dan Patton, 1997). Accountability helps auditors account for their final opinions to their clients. External auditors' accountability and herding likely affect auditors' judgments in detecting frauds that potentially lead to audit failure.

A notable audit failure in detecting fraud involves British Telecom and PwC. As an audit client, British Telecom is a multinational firm that experienced accounting frauds. As the auditor, Price

Waterhouse Coopers (PwC), a big-four accounting firm, failed to detect the frauds. The failure eroded the reputation of PwC and even of public accountant profession in general. Specifically, the Italian business line of British Telecom conducted accounting frauds by inflating profits for several years by making agreements with several clients and financial services through corruption. Consequently, British Telecom had to cut its projected cash flows of GBP 500 million to pay previously unreported liabilities.

Several factors affect auditors' judgment in detecting frauds. Carpenter dan Reimers (2013) argue that professional skepticism identifies fraud risk factors. Hammersley (2011) identifies that auditors need fraud knowledge to help them make audit judgments in detecting frauds. Besides, Putri *et al.*, (2013) empirically find that independence, experience, due professional care, accountability, and time budget pressure simultaneously affect audit quality. Auditors with a high level of accountability fully commit to their assignments that will affect audit results. Based on several factors that affect audit judgments, accountability is a variable that affects auditors' judgment in detecting frauds.

Individuals' behavior is closely related to their groups or environments because of their subjective norms or mindsets as a response to social pressures to commit or not to commit certain behaviors that are commonly labeled as herding. Studies on herding behavior commonly use investors as their research context. For example, Tristyanto (2014) empirically show that herding is affected by the perspectives of various investor types. Further, Gozalie dan Anastasia (2015) demonstrate that heuristic and herding behaviors affect investment decisions of residential properties. Also, Litimi (2017) analyzes herding behavior in the French stock market. Herding also potentially exists in the audit context of public accountants. Public accountants must make audit judgments professionally. However, as individuals with bounded rationality, they also potentially experience herding. In this respect, their audit judgments are likely affected by their surrounding environments.

This study aims to investigate the causal relationship between accountability and herding and audit fraud judgment. Thus, this study informs audit firms' top management and external auditors' behavioral factors that affect audit fraud judgments. Besides, future studies can refer to this paper in analyzing the relationships between accountability, herding, and audit fraud judgment.

2 Literature Review and Hypothesis Development

2.1 Accountability

Mardisar dan Sari (2007) define accountability as an individuals' internal motivation to account for their actions to external parties (environment, society, and other parties). Tetlock dan Kim (1987) explain that accountability is an attitude to predict individual behavior more accurately. Besides, accountability also refers to auditors' attitude and ability to explain all audit procedures more detailed and to answer all questions and to provide explanations to clients (Salsabila & Prayudiawan, 2011). It then can be concluded that accountability is a responsible behavior to produce more accurate and accountable outputs.

Accountability affects judgment making process because it reflects the relationship between individuals and their surrounding environments (Tetlock, 1992). Besides, accountable attitude requires individuals' motivation to utilize their knowledge and skills to make decisions (Tetlock, 1992). When external auditors exhibit a high degree of accountability, they are likely to make fraud judgments more accurately (Schafer, 2007). In accounting, auditors use relevant information in making judgments. Accountability emphasizes good judgments that it requires prudence and internal motivation to make judgments because such judgments affect their stakeholders.

Meanwhile, Aji (2009) identifies three indicators to measure accountability, namely motivation, dedications to the profession, and social responsibility. Motivation is the individuals' internal urge to commit a certain act to achieve their objectives. A dedication to the profession is a commitment that reflects professionalism to work totally. Lastly, social responsibility emphasizes the importance of the profession's role to the public and surrounding environments.

2.2 Herding

Herding is an individual tendency to imitate behaviors of a group of a larger number of other individuals (Subash, 2012). In the accounting context, herding is the external auditors' behavior that imitates their surrounding environments in making judgments. Herding behavior can make both positive and negative consequences. However, this study largely focuses on the negative effect of herding on

external auditors' judgments in detecting frauds in their clients. Specifically, it is likely that low herding negatively affects external auditors' audit fraud judgments. External auditors' herding behavior will negatively affect their fraud judgments because of the lack of independence in performing audits. Herding behavior will erode individuals' self-confidence in making decisions. Individuals will arguably perceive that imitating what others act will enhance the likelihood of being accepted by their surrounding environments likely because of their cognitive limitations in making judgments.

Setiyono *et al.*, (2013) identify three factors that are closely related to herding, namely information-based herding, informational acquisition herding, and reputation and compensation herding. Information-based herding is a condition where individuals observe and learn the behavior of their surrounding environments under uncertain conditions. Next, informational acquisition herding occurs when investors receive the same information and decide to buy or sell assets similarly to other investors' decisions. Lastly, reputation and compensation herding refers to a condition where investors tend to follow other investors' behavior because they receive imperfect information for various reasons, such as to protect their reputation, to advance their careers, and to generate certain compensation.

2.3 Audit Fraud Judgement

Auditors are accountable for generating sufficient confidence and expressing opinions about whether financial statements are free from material misstatements due to errors or frauds (Ikatan Akuntan Publik Indonesia, 2016). Errors are unintentional while frauds are committed by highly conscious individuals. Financial statements frauds consist of intentional misstatements and the omissions of amounts or disclosures to mislead financial statement users

(Arens, Randal, & Beasley, 2015). Three factors encourage individuals to commit frauds, namely pressure, opportunity, and rationalization. Pressure refers to financial and emotional powers to motivate frauds. Opportunity is the chance to execute plans without being known by others. Lastly, rationalization refers to individuals' justification to act dishonestly (*Association of Certified Fraud Examiners (ACFE)*, 2018).

Auditors need to detect three types of frauds in audit procedures, namely corruption, asset misappropriation, and financial statement frauds. External auditors focus on financial statement frauds to determine the materiality of the frauds. Further, there are three modes of financial statement frauds. Firstly, fraudsters manipulate, falsify, or change accounting records or documents that serve as the basis of preparing financial statements. Secondly, fraudsters make erroneous statements or intentionally delete significant events, transactions, or information from financial statements. Thirdly, fraudsters intentionally make the erroneous implementation of accounting principles concerning the amount, classification, presentation, or disclosure (Ikatan Akuntan Publik Indonesia, 2016). Concerning audit fraud judgment, auditors determine the fraud risk level of clients by analyzing fraud types. External auditors' consideration in detecting frauds is their decisions that are related to the estimation of fraud risk and the modification of audit procedures (Hammersley, 2011).

2.4 The Effect of Accountability and Audit Fraud Judgment

Accountability refers to an attitude that is responsible for one's decision. Auditors are responsible for making judgments, including fraud-related ones. Schafer (2007) shows consistent results that accountability likely affects auditors' judgment by affecting audit evidence as to the basis of making audit judgments. Auditors are internally motivated to detect clients' frauds to demonstrate that they perform audits responsibly. This motivation is affected by auditors' internal beliefs to produce opinions that better reflect clients' real situation. Besides, commitment when performing audit procedures also affects auditors' accountability. An indicator that measures one's accountability is the dedication to the profession. Auditors' professional ethics enable auditors to perform totally in auditing frauds. Auditors play a significant role in society and audited firms because audit opinion affects clients' reputation.

According to Putri *et al.* (2013), independence, experience, due professional care, accountability, and time budget pressure simultaneously affect audit quality. Audit quality is also affected by auditors' fraud judgment. Audit quality will increase if auditors make correct fraud judgment. As suggested by Hoffman dan Patton (1997), accountability is a factor that significantly affects auditors' judgments because auditors are required to account for their judgments to their superiors that will potentially lead to fraud risk in giving audit opinions. Thus, auditors' accountability will likely affect audit fraud judgments.

H1: Auditors with high accountability will make audit fraud judgments that are in line with clients' actual condition.

2.5 The Relationship between Herding and Audit Fraud Judgment

Herding refers to a behavior that imitates surrounding environments. Auditors are required to make judgments to assess their clients. When making judgments, external auditors likely consider previous auditors' judgments. Besides, external auditors can also make judgments based on clients' surrounding environments and even the influence of clients' management. This condition potentially erodes external auditors' independence and professional skepticism.

Andhika dan Damayanti (2017) argue that individuals' perception of social pressures to commit or not to commit certain actions likely leads to herding, and it is a subjective norm. In other words, when individuals interact more frequently with other individuals in certain groups, they are more likely to behave similarly to other individuals in these groups. When external auditors are under social pressures from their environments, herding will occur to motivate external auditors to make generally accepted decisions. External auditors make numerous decisions, including estimating clients' fraud risk. Herding may negatively affect the decision process when external auditors make fraud judgments that are not in line with clients' real condition due to external influences. For example, when external auditors are affected by herding, they are likely to assess fraud risk low by considering unqualified opinions of previous auditors.

No previous studies investigate the relationship between herding and audit fraud judgment. However, Tristyanto (2014) have investigated the relationship between the herding variable with investor type. Meanwhile, Gozalie dan Anastasia (2015) empirically find that herding affects investment decisions on residential properties. Andhika dan Damayanti (2017) also investigate herding and show that herding positively affects SME owners' intention to maintain accounting records. This study investigates the relationship between herding and audit fraud judgment.

H2: Auditors with low herding will make audit fraud judgments that are in line with clients' actual condition.

2.6 The Relationship between Accountability and Herding and Audit Fraud Judgment

Auditors need a high accountability behavior to detect frauds and to determine risk levels because auditors are motivated by a high confidence level to perform audit procedures and to complete assignments optimally. Meanwhile, individuals are social creatures who are always connected with others in their surrounding environments. This fact may lead to a negative effect if auditors are constantly affected by others when making decisions. Consequently, auditors become less independent and skeptical in detecting existing frauds.

Auditors' accountability is crucial to perform audit procedures. Accountability facilitates auditors to perform their assignments responsibly and to make good judgments. Judgments that represent real condition will affect audit quality. Several factors affect audit quality, including auditors' client tenure as the span of the engagement between audit firms and clients (Werastuti, 2013). A longer tenure may lead auditors to prioritize management's interests over theirs. Also, a longer tenure may cause auditors to exhibit high herding when making judgments that eventually reduces their independence and skepticism. Herding occurs when auditors highly take clients, previous auditors, and even surrounding environments into account.

Putri *et al.* (2013) argue that independence, experience, due professional care, accountability, and time budget pressure simultaneously affect audit quality. However, no previous studies analyze the herding variable and its relationship with audit fraud judgment. It is then predicted that accountability and herding are related in affecting audit fraud judgment. Besides, the relationship between the independent variables is more dominant in affecting judgments. Thus, more accountable auditors with lower herding are likely to make better audit fraud judgments.

H3: Auditors with low herding but high accountability towards their assignments will make audit fraud judgments that are in line with clients' actual condition.

3 Research Methods

This study uses a 2x2 factorial experiment design. The subjects are senior auditors and supervisors at public accounting firms in Central Java area. The dependent variable is audit fraud judgment, and the independent variables are accountability and herding. This study relies on the experimental method because it offers a higher degree of internal validity in testing the relationship between the dependent and independent variables. Besides, an experimental study can control for other variables.

Accountability is defined as individuals' internal drive to account for their actions to external parties (e.g., environments, society) (Mardisar dan Sari, 2007). Herding refers to a condition where auditors imitate the beliefs of management, previous auditors, and their surrounding environment when determining audit fraud judgments.

Table 1. Research Matrix

		Herding	
		Low	High
Accountability	Low	Group 1	Group 2
	High	Group 3	Group 4

Explanation:

Cell 1: Low accountability and low herding.

Cell 2: Low accountability and high herding.

Cell 3: High accountability and low herding.

Cell 4: High accountability and high herding.

The experiment conditioned high accountability by illustrating three cases that were related to the three accountability indicators. For the motivation indicator, the study conditioned the participants to have a high self-confidence (high accountability) and low self-confidence (low accountability). For the dedication to profession indicator, participants were conditioned that the audit firm where participants work was very disciplined in reporting (high accountability) and was tolerant or implemented code of ethics/ rule flexibly (low accountability). Next, for the third indicator or social responsibility, the experiment conditioned participants by informing that the society and stakeholders paid much attention to them and used their audit reports as a basis of decision making (high accountability). For the low accountability condition, the society and stakeholders did not observe the client's financial statements more detailed and did not use financial statements for their decision making.

In this experiment, herding measured individual bias by distributing questionnaires to participants. Each answer would be standardized. The scores that were above the average would be classified as high herding. Conversely, scores below the average would be classified as low herding. The study tested the herding variable by asking participants 8 questions on participants' innate behavior that were related to fraud-detecting decisions. The questions would be measured with 4-point Likert scale.

The audit situation that was presented was a fraud case that was related to a profit overstatement through fictitious sales and purchases that were both interrelated. The case was subsequently associated with each participant's condition in the accountability variable. Participants would assess the fraud risk level and decide the subsequent phase related to the search of subsequent audit evidence.

As an employee of an audit firm, subjects were assigned to audit highly reputable PT Indomart. The presented case design was that PT Indomart was highly reputable by investors and had a high share price. The company was also well known for its social responsibility to the public. The experimenters would guide participants to fill in the pre-test twice. The first pre-test dealt with the knowledge of audit fraud judgments in the form of questions. Meanwhile, the second pre-test asked subjects about company-related questions. Next, subjects would receive a case that was designed that facilitated subjects to make decisions. Specifically, subjects were required to assess their decisions that were related to fraud audit. Subjects made decisions by the scoring of 1-10. A score that was close to 10 indicated a good audit fraud judgment and vice versa.

The following are the analysis phases in this study: (1). Presenting the descriptive statistics from the experiment; (2). Running the randomization check by using one-way Analysis of Variance (onway

ANOVA); (3). Performing the manipulation check to identify which data qualified or no; and (4). Testing the hypotheses by using the t-test for the first and second hypotheses to analyze the individual effects of the independent variables on audit fraud judgment. For the third hypothesis, the study relied on two-way analysis of variance (two-way ANOVA) to test the relationship of the two independent variables in affecting the dependent variable and to identify which independent variable affects more. The hypothesis would be empirically supported if the significance value is less than 0.05.

4 Results and Discussion

4.1 Subjects' Descriptive Statistics

The experiment was held in a training session for auditors in Central Java area on August 27, 2018, at Hotel Patra Jasa Semarang. There were 70 auditors participated in this experiment. However, six of them did not fill in the participant profile completely, resulting in 64 participants with usable responses.

Table 2. Respondents' Characteristics

Explanation	Total	Percentage
Age:		
20-30 years	9	14.06%
30-40 years	17	26.56%
40-50 years	19	29.69%
50-70 years	19	29.69%
Total	64	100%
Sex:		
Male	47	73.44%
Female	17	26.56%
Total	64	100%
Working Experience:		
1-10 years	24	37.5%
10-20 years	21	32.81%
20-30 years	19	29.69%
Total	64	100%
Highest Education:		
Bachelor	32	50%
Master	25	39.06%
Doctorate	7	10.93%
Total	64	100%

Source: Processed primary data (2019)

4.2 Manipulation Checks

Table 3 explains the manipulation checks. The first manipulation check focused on subjects' understanding of their role and task using five questions. Subjects qualified if they answered at least three questions correctly. Next, the manipulation check on the accountability treatment was measured with a

scale of 1-10 with the theoretical mean of 5. For subjects who received high accountability treatment, they would qualify if they score more than 5 (the theoretical mean). On the contrary, subjects with low accountability treatment would qualify if they scored below 5. Further, the manipulation check of herding asked respondents six questions with a scale of 1-4. Subjects with the high (low) herding manipulation would qualify if their score were below (above) the population mean.

Table 3. Manipulation Checks

No	Explanation	N	Results
1	Understanding the task and role in the experiment (5 questions)	64	64
2	Accountability	64	64
3	Herding	64	64
4	Total participants after the manipulation check	64	64

Source: Processed primary data (2019)

Table 3 informs that all participants passed the manipulation checks of understanding on task and role, accountability, and herding. Thus, all 64 participants managed to participate in the subsequent phase.

4.3 Randomization Check

This study used one-way ANOVA to run the randomization check. Randomization check analyzed and ensured that subjects' audit fraud judgments were not affected by their demographic factors such as age, sex, working experience, and highest educational level.

Table 4. One-Way ANOVA Test

	Mean Square	F	Sig	Explanation
Age:				
Between Groups	4.267	0.864	0.465	No Effect
Within Groups	4.937			
Sex:				
Between Groups	4.289	0.873	0.354	No Effect
Within Groups	4.915			
Working Experience:				
Between Groups	7.661	1.591	0.212	No Effect
Within Groups	4.815			
Highest Education:				
Between Groups	11.944	2.555	0.086	No Effect
Within Groups	4.675			

Source: SPSS (version 22) Output

Table 4 displays the outputs of one-way ANOVA. Specifically, the table suggests that the tests of subjects' demographic factors (age, sex, working experience, and highest educational level) exhibit significance values greater than 0.05 (alpha). It then can be concluded that the audit fraud judgment variable was only affected by the experimental treatments and not by subjects' demographic factors.

4.4 Test of Hypothesis 1

The first hypothesis of this study predicts that auditors with higher accountability will make audit fraud judgments that are more in line with clients' actual condition than auditors with lower accountability. The following Table 5 shows the results of hypothesis 1 testing.

Table 5. The Results of Hypothesis 1 Testing

	Mean	Std. Deviation	F	Sig. (2-tailed)
Accountability				
High	7.708	1.439		
Low	4.744	1.834	2.192	0.000

Source: SPSS (version 22) Output

The results show that the significance value is less than 0.05 (alpha), suggesting that auditors' accountability affects audit fraud judgment. The table also demonstrates that the mean value of audit fraud judgments of subjects with the high (low) accountability treatment is 7.708 (4.744). The figures imply that auditors with high accountability will make audit fraud judgments that are more in line with clients' conditions than those with low accountability.

Subjects in this experiment were required to make judgments by scoring based on the existing information. Specifically, they were required to determine the risk level and to decide whether they would accept or reject to find further audit evidence. Subjects with low accountability would tend not to report the real conditions because their superiors would not give specific punishments or would always tolerate mistakes they made. Subjects would also perceive that the external factors of their stakeholders affect the decision to report or not. Further, auditors who had low accountability would tend to have less responsibility to themselves, their profession, or their clients' stakeholders.

The results of the hypothesis 1 testing are in line with Schafer (2007) and Hoffman dan Patton (2012) who empirically find that accountability likely affects auditors' judgment because accountability affects audit evidence as to the basis of making judgments. Thus, auditors with greater accountability will make audit fraud judgments that better reflect clients' actual condition.

4.5 Test of Hypothesis 2

The second hypothesis predicts that auditors with low herding will make audit fraud judgments that better reflect clients' actual condition than auditors with high herding. Table 6 shows the results of the hypothesis testing.

Table 6. The Results of Hypothesis 2 Testing

	Mean	Std. Deviation	F	Sig. (2-tailed)
Herding				
High	5.514	1.672		
Low	7.033	2.491	5.681	0.006

Source: SPSS (version 22) Output

Table 6 indicates that the significance value of this test is $0.006 \leq 0,05$ (alpha). It then can be interpreted that the herding variable affects audit fraud judgment. The test also finds that the mean value of audit fraud judgments of subjects with high (low) herding is 5.514 (7.033). The results imply that auditors with low herding will make audit fraud judgments that are more in line with clients' real condition than auditors with high herding.

Andhika dan Damayanti (2017) find that subjects with high herding tend to follow their surrounding environments when making decisions. For example, they may base their fraud judgments based on information from the media. Also, subjects with high herding perceive that their findings of audit evidence have been confirmed by previous auditors and compare their findings with the findings of

previous audits without considering to find further audit evidence. Besides, subjects consider it important to maintain their reputation that will affect their fraud judgments because they will follow the demands of their surrounding environments. These factors erode auditors' independence in assessing fraud risk levels through audit evidence.

These arguments hold when auditors who have to determine risk levels must consider various factors from their surrounding environments. The desire to imitate what occurred previously is greater than the intention to protect auditors' independence that will produce poorer audit fraud judgments. The findings are also in line with Gozalie dan Anastasia (2015) who empirically find that herding affects the investment decisions of residential properties. Thus, herding will affect individuals' decisions that require considerations from their surrounding environments.

4.6 Test of Hypothesis 3

The third hypothesis predicts that there is a relationship between the two independent variables (accountability and herding) on audit fraud judgments. Specifically, the hypothesis predicts that auditors with low herding and high accountability towards their assignments make audit fraud judgments that are more in line with clients' actual condition.

Table 7. The Results of Hypothesis 3 Testing

		Mean	Std. Deviation	Mean Square	F	Sig.
High Accountability	High Herding	6.594	1.057			
	Low Herding	8.822	0.718			
Low Accountability	High Herding	4.555	1.539			
	Low Herding	4.988	2.192			
	Corrected Model			60.580	28.552	0.000
	Intercept			2472.514	1165.302	0.000
	Akuntabilitas			136.906	64.524	0.000
	Herding			28.111	13.249	0.001
	Akuntabilitas*Herding			12.777	6.022	0.017

Table 7 informs that the significance value of the relationship between accountability and herding is $0.017 \leq 0,05$. The results indicate the relationship or interaction between accountability, herding, and audit fraud judgments. The mean scores show that subjects with high accountability and low herding exhibit the greatest score, thus indicating that they make audit fraud judgments that reflect best clients' actual conditions compared to other groups.

Subjects with high accountability will make audit fraud judgments that are more in line with clients' actual condition than those with low accountability. Subjects will perceive that they have to report anything they find on the field to their superiors. Thus, accountability is a factor that significantly affects auditors' judgments because auditors are required to be responsible to their superiors that will increase fraud risk in preparing audit results (Hoffman & Patton, 1997). At the same time, subjects with low herding also make audit fraud judgments that are more in line with clients' actual conditions than those with low herding. Subjects will arguably prioritize their independence over their interests, such as reputation or factors from their surrounding environments.

Subjects who have high accountability and also high herding will make audit fraud judgments that are more in line with the actual condition than subjects with low accountability and low herding. Subjects who consider being responsible to their superiors important, although they also take environmental factors or previous auditors into consideration will make better assessments of fraud risk levels.

5 Conclusions, Limitations, Suggestions, And Implications

The study demonstrates that auditors' accountability and herding affect their audit fraud judgments. The results suggest when auditors have the internal motivation to work responsibly are supported with existing rules, they likely make better judgments in estimating frauds. Besides, the findings also indicate that when auditors imitate less their surrounding environments or other external factors, their audit fraud judgments better reflect field conditions.

Accountability and herding are crucial in making audit fraud judgments that are in line with real conditions. Thus, the top management of audit firms needs to implement rules to their auditors to work disciplined and to report anything found in fields. Besides, they need to provide their auditors with motivational training to enhance auditors' responsibility in working activities. It is expected that auditors maintain their independence and are not affected by other auditors' opinion without sufficient audit evidence as stipulated by the professional code of ethics of public accountant.

This study is subject to several caveats. For example, participants have a too long time to fill in the module that potentially leads to biased answers. It is advised that future studies provide participants a shorter time to fill in the modules. Besides, future studies can expand the scope of research subjects to represent expected results better.

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Why do The Auditor Blame for Financial Fraud?

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Abstract. The amount of litigation against auditors were negligent increased significantly in recent years. The first aim of this study was to describe the various phenomena of fraud involving the auditor. Second, describe the roles and responsibilities of auditors and legal requirements as a form of auditor liability in Indonesia. Third, presents a variety of risks and the complexity of the task of the auditor. Fourth, this study aims to describe the auditor's responsibility for negligence accomplishments. This study design using qualitative methods. The study was conducted with data derived from literature review, consist of journal and research report that published in internet. The results of this study indicate that auditor must be give pay attention of their roles and responsibilities for their job results. In addition, auditor should be follow the rule of audit regulation.

Keywords: fraud, fraud motivation, responsibility auditor

1 Introduction

Each company must have financial statements that are beneficial to the company's external and internal. The financial statements will be useful to investors, creditors, governments, and stakeholders in decision-making. Obligations of the financial statements contained in (Bapepam No. Kep-36 / PM / 2003, nd) and (Jakarta Stock Exchange Regulation No. Kep-306 / BEJ / 07-2004), both the regulations specified that the companies listed on the Stock Exchange is required to submit financial statements in accordance with Financial Accounting Standards (GAAP) and audited by an external auditor. The financial statements can be said to be reliable, relevant, and accurate one of them for their roles in the independent external auditors perform an audit.

ACFE (2018) revealed that in 2017 there were 2,690 cases of fraud with a total loss of \$ 7 billion. Financial statement fraud schemes (FFR) is a type of fraud most common at 10% of cases with an average loss of \$ 800,000 (ACFE, 2018), Fraudulent Financial Reporting (FFR) is a scheme to represent the financial statements were inappropriate (Kanapickienė & Grundienė, 2015). After the accounting scandals in the early 2000s such as Enron, WorldCom, and Xerox, the International Federation of Accountants Committee (IFAC) released the International Standard on Auditing 240 on Auditor's Responsibilities Related to Fraud in an Audit Report Keuangan (ISA 240). ISA 240 requires the auditor to learn about the conditions that increase the risk of fraudulent financial reporting to help them develop the program more effective audit tests (Mubako & O'Donnell, 2018). IFAC (2009) explains the purpose of ISA 240: (a) to identify and assess the risks of material misstatement of the financial statements due to fraud; (B) to obtain sufficient audit evidence about the risks.

Accounting and auditing have been developed to prevent asset misappropriation and misrepresentation in the financial statements (Yiu, Xu, & Wan, 2014). Audits carried out to eliminate the asymmetry of information (Asongu, Nwachukwu, and Tchamyou, 2016), in which management as preparers of financial statements have more information than others, so that both the makers and users of financial statements would have the same understanding of the financial statements (Asongu et al., 2016). In addition, the audit also to ensure accountability and corporate management. (Halbouni, 2015; Stirbu, Moraru, Farcane, Blidisel, and Popa, 2009).

Audit make financial statements more reliable and relevant as one of the tools for making economic decisions for stakeholders (Topor, 2017). On the other hand, according to Chau and Yuen (2011) in Halbouni (2015) said that users of financial statements assume that the main purpose of the

audit is to detect fraud. However, the confidence gained by an auditor is subjective and serve as a basis to offer audit opinion. The auditor can not achieve absolute assurance when there is limited evidence of the audit, inherent risk and uncertainty.

This manuscript is a conceptual paper that aims to first, describe a variety of phenomena involving fraud auditors. Second, describe the roles and responsibilities of auditors and legal requirements as a form of auditor liability in Indonesia. The third presents a variety of risks and the complexity of the task of the auditor. The fourth paper describes the auditor's responsibilities for negligence accomplishments.

This paper begins with the first part, which consists of the introduction and research purposes. The second part contains berbagai phenomenon of fraud involving the auditor, followed by a third part contains research methods. The fourth part of the paper shows the results of the study. Furthermore, the final part of this manuscript are the conclusions and suggestions for professional auditor and auditor professional institutions in Indonesia.

2 Literature Review

2.1 Phenomenon of Fraud

In early March 2017, the SEC published an official announcement about the allegations of fraudulent practices to the Mexican housing development company that is Desarrolladora Homex SAB de CV (Homex). Homex recognizes proved fictitious sales of 100,000 units during the three years of financial reporting by 355% or US \$ 3.3 billion (2009-2011). Based on the investigation of fraud, it is evident that most of the land there is no grounding work and buildings that are considered sold has remained undeveloped. Homex obtained sanction is suspension of stock trading and the prohibition for Homex to sell new shares in the United States for five years (Priantara, 2017),

Another fraud case in the world was a financial scandal American Insurance Group (AIG) in 2005. This fraud came to light when federal agencies and US states begin an investigation after receiving a report. The results of an investigation found massive accounting fraud even up to nearly \$ 4 billion. The company must settle with the SEC and the pension funds of the two countries amounted to more than \$ 2 billion. AIG plays an important role in the financial crisis of 2008 in the United States rather than affecting almost all of Western Europe and parts of Asia.

In Indonesia, cases of fraud that have occurred are PT Bank Bukopin Tbk (BBKP) revising the financial statements last three years, namely 2015, 2016 and 2017. The Financial Services Authority (FSA) also perform checks. Based on information compiled by CNBC Indonesia, fraud in the form of credit card data modifications and has performed more than five years ago. The modification causes the position-based credit and commission income increased by an amount Bukopin improperly. Interestingly, this incident escaped from the internal audit Bukopin, Public Accounting Firm (KAP) as an independent auditor, Bank Indonesia as the authority of the credit card payment system, as well as the FSA as a banking supervision agency (Lewis, 2018),

Financial Services Authority (FSA) imposed an administrative sanction in the form of cancellation of registration and ban adds new clients in the sector of Banking, Capital Markets and IKNB to Public Accounting Firm (KAP) Deloitte. These sanctions related unqualified opinion on the Annual Financial Statements PT Sunprima Nusantara Finance (PT SNP). PT SNP indicated to have presented financial statements that do not correspond to the actual conditions and used to obtain credit and thus potentially in default or become non-performing loans (FSA, 2018).

The last case that happened to the public accounting firm was what happened to PwC and its partner, Nicholas Boden. Public accounting firms agree that they do not meet expected standards and fail according to the basic professional principles set by the Institute of Chartered Accountants in England and Wales (ICAEW). Errors that were accepted included failing to obtain appropriate audit evidence and failing to exercise adequate professional skepticism. The number of cases of fraud that befell a number of companies and ultimately also have an impact on the company's public accounting firm, has made fears of legal obligations for auditors continue to grow. Auditors are very important parties, because ultimately they are responsible for improving the reliability of financial statements.

2.2 Motivation of Fraud

Triangle fraud is a model to explain the factors that cause a person to commit fraud (Huang, Lin, Chiu, & Yen, 2016), When fraud exist, a person will be exposed to pressures that drive the action of fraud

such as financial need. The second factor that drives the action of frauding are conditions that are conducive to providing opportunities for fraud perpetrators. Culture of fraud committed hereditary cause to justify the actions taken, is called rationalization.

Pressure provide the motivation to commit fraud (Free, 2015), Pressure is categorized as financial pressures, vices, work-related stress, and other stresses such as the desire to have more material as their colleagues richer (Dellaportas, 2013), Financial problems are key factors in encouraging fraud action (Hogan, Rezaee, Riley, & Velury 2008), Financial problems arise as a result of greed, the business in question, the investment failed, or personal financial problems. Vices are divided into action as gambling, drugs, or alcohol that drives someone to do kecuragan. The dissatisfaction with the work, recognition of low performance, fear of job loss, and felt slighted be pressure to commit fraud related to work

Opportunities are conditions or situations that allow a person to commit fraud (Huang, Lin, Chiu, & Yen, 2016), Opportunities to commit fraud, concealment, and avoid penalties is an important element both in the fraud triangle (Dellaportas, 2013), Internal control systems are less effective provide an opportunity for management to manipulate reported earnings. Failure of performance quality assessment, failure to discipline the perpetrators of fraud, the lack of access to information, lack of audit trail, and ignorance, apathy, or an inability to detect fraud is also an opportunity fraud.

Rationalization is an attitude which allows individuals to commit fraud or ability to rationalize the fraudulent action undertaken (Othman, Aris, Mardiyah, Zainan, and Amin, 2015), In this third category, the perpetrator recognizes that this is wrong, but denied that it was wrong while continuing to be involved in criminal activity (Dellaportas, 2013), Some common forms disclosed rationalization fraud perpetrator is I just borrow money and will return soon, such action will not hurt anyone, this action has a good purpose, organizations do not have a good internal control so I just want to show it, and so forth (Dellaportas, 2013).

3. Roles and Responsibilities of Auditors

In 1895, after the Krüger case, in 1944, the role of the auditor underwent major changes. The next auditor's responsibility was expanded to include responsibility for damage to third parties. Auditors who intentionally or unintentionally, directly or indirectly, cause damage to the company must compensate for the damage (Burton et al., 2013). Auditors have responsibilities both internal and external, internal responsibility is the responsibility of the company and external responsibility is the responsibility of the third party (Lindgren & Lundgren, 2016).

Based on the SA Section 110, the auditor is responsible to plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement, whether caused by error or fraud (Lau & Ooi, 2016). The quality audit referred to is something that requires or liability to encourage auditors behave in accordance with professional ethics (code of conduct). The code of conduct is the norm and principle accepted by a particular group as the basis of the size of the behavior (Burton, Wilks, and Zimbelman, 2013).

Professional conduct of auditors which have been established by the AICPA, including: (a) The principles include responsibility, to act in the public interest, act honestly, integrity, objectivity, and independence, work carefully, and to evaluate the feasibility of the scope and nature of the services, (b) Perturan yang harus behavior observed by the public accounting profession, (c) Interpretation, (d) completeness of ethics. Meanwhile, according to SPAP (2001) 100 AEs include independence, integrity and objectivity. Professional behavior that is implied in the SPAP requires the auditor should have an independent attitude in carrying out any work and objectivity which are an assurance on quality in delivering value to auditors (Lindgren & Lundgren, 2016).

At the end of each fiscal year, the auditors submit the audit report to the board of directors. The audit report is report auditor which states that examination carried out in accordance with the norms of inspection accountant. Accompanied by an opinion on the fairness report finance company checked. The auditor's opinion is divided into unqualified, a qualified, unnatural, and refused to give an opinion (Lisic, Silveri, Song, & Wang, 2015). Statements in the report should determine whether the annual report reflects a true and fair view of the results and financial position of the company, and whether the report contains material errors.

The purpose of the audit report is to add credibility to the financial statements (Lindgren & Lundgren, 2016). The audit report is the only public report submitted by the auditors and also is the only

relationship between the auditor and the company's stakeholders about the results of the audit. The audit report should serve the public interest and adds credibility to the financial statements of the company, but on the other hand it does not mean that investors and other stakeholders can ignore other information from the company and did not make their own opinion (DeZoort & Harrison, 2018). The annual report and audit report serves as the basis for decision making.

4. Risk and Complexity of Liability of Auditors

Samsonova-Taddei & Humphrey (2014) conceptualizes responsibility as a source of risk. Hilgartner characterize risk not as a static fact, independent of interpretation, but as an entity that contextual meanings vary and are inherently unstable. Differences in how we conceptualise risk stems from the risky way of defining objects and identify them by establishing a causal link between the object with the alleged damage.

In the case of the auditor's responsibilities, the key dimensions of variation in the understanding of the risks associated with the liability of auditors revolve around questions such as: who and under what conditions have to bear the consequences of liability claims as well as who the injured party and has the right to demand compensation for damages related. Each party has relied on the audit opinion can claim damages against the auditor arising from misstatement (Samsonova-Taddei & Humphrey, 2014). It is considered as an appropriate way to discipline auditors and also respond to public calls for fair treatment against innocent third parties such as potential investors, creditors, employees and other stakeholders (Chung, Farrar, Puri, & L. Thorne, 2010).

5. Personal Liability For Damages

In 1895, the auditor is responsible to compensate the damage caused by the company for negligence in the audit (Lindgren & Lundgren, 2016). After the accident Krüger, in 1944, the role of the auditor underwent major changes. The next auditor's responsibility was expanded to include responsibility for damage to third parties. Auditors who intentionally or unintentionally, directly or indirectly, cause damage to the company must compensate for the damage (Burton et al., 2013). Auditors have responsibilities both internal and external, internal responsibility is the responsibility of the company and external responsibility is the responsibility of the third party (Lindgren & Lundgren, 2016).

6. Conclusions, Implications, Limitations and Suggestions

6.1 Conclusion

The result of this study describe that auditors must be give pay attention to their roles and responsibilities for their job results. In addition, auditor should be follow the rule of audit regulation.

6.2 Implications

The findings of this study can be useful for regulators, auditors, and the company. For regulators, these findings will help in the assessment of initiatives to combat fraud. For auditors, the findings will highlight whether the cases occurred in the Big Four or non-Big Four in order to minimize the impact of financial or non-financial for the country. For the company, This research contributes to the understanding to be more aware of the importance of fraud risk assessment.

6.3 Limitations and Suggestions

The main limitation of this study is less vast area of research because of the limited number of reported cases of FFR. There is a possibility that some of the companies involved in the FFR may not yet be detected or disclosed publicly. Moreover, not all respondents give honest and complete information. In addition, the auditor often blamed on fraud cases that arise, when in fact there are several parties who may have acted negligently and thereby simultaneously causing financial losses. Thus, more emphasis needs regulation concerning auditor liability.

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Determined Factors of Human Capital Valuation: An Empirical Study in Higher Education Institution

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Abstract. During disrupted economy era with rapid technological development, the role of human capital is often overlooked, especially when information and communication technologies (ITCs) have replaced some of the human functions. Even some experts argued that human capital is an asset of the organization, the contradict of human accounting treatments remains an interested issue especially when human valuation becomes one of the key drivers of the growth of organization such as in higher education institution (HEI). Using analytical hierarchy process (AHP), this study examines whether the human resource development expenses may be accounted as the key driver in a HEI development and determines which human-development activities that continually may contribute to the HEI value. The result shows that the cost of professional or competence development is as the most important activities in the human capital valuation process. This study, therefore, is supporting the previous studies in which such attributes as life experience, knowledge, innovation, motivation are the critical human capital dimension to contribute to the value of institutions.

Keywords: human capital valuation, analytical hierarchical process, higher education institution

1 Introduction

During the digital economy era with the rapid development of information and communication technology (ICT), the role of human capital is often overlooked, and in some organizations, ICT almost replaced human function in the organization [4]. However, for public institution specifically, human capital is remaining a valuable resource that may affect organizational performance. Even some intellectual and knowledge intensive institutions, human capital is one of the key determined factors of organization sustainability.

Human capital's quality plays a vital role in carrying out the company's operational activities; utilizing other resources within the company, and executing the business strategy [15]. Thus, the loss of professional human resources becomes a significant shortfall for the organization, since it will dispose of all of the costs that have been expended for them. Another disadvantage is the loss of opportunities to utilize human resources to increase profits [2].

Unfortunately, even though many experts claim that human resources are the assets of organizations, in reality, human resource development is merely recorded as an expense in financial statements deemed to be no value activities [14]. Besides, the accounting problems for human capital values differ significantly from the concept of historical cost issue. On a broader scale, the measurement of human capital merely based on historical costing process to the company [27]. The problem occurs when the organization has to face future valuation where the value of human resources relies on forecasts and uncertainties. In the effort of bridging this problem, recent scholars have proposed several measurements [14].

Like other resources, human capital would create a value to the organization since they can provide services in the future. From that perspective, this study aims to the importance to hire a concept of human resource accounting (HRA), a process of utilizing human services to achieve the mission of the organization [26]. Recognition of human capital has to congruence with the economic concept as well as the concept of accounting [4; 11]. Since the human capital is considered as the driving force of an organization, understanding human resources as the motor of the organization must be followed up by the weighting or recognition of human resources as a component in the financial statements that can also produce other components [1; 23]. By doing so, this study focus on the analytical hierarchy process (AHP) as a reliable tool for measuring a valuation of human capital better than other tools that currently available [28; 29].

In the meantime, without adequate human capital or resources, the organization's activities will not run well accordingly. There is no exception to higher education institution (HEI) that provides educational services where the role of lecturers, professors, and educational personnel is believed as the determinant of quality and organizational performance. However, the cost of developing human resources in higher education institution, is often a non-value-added activity for individuals as well as for institutional development. Therefore, it is necessary to identify and measure data on human resources and relay this information to interested parties to clarify the added value of human resource development activities. Also, to enrich the development of human capital valuation concept, this study aims to fill the void of measurement in human capital in general and AHP in particular.

2 Literature Review

2.1 Human Resources Accounting (HRA)

Human resource accounting (HRA) is a firm recognition of the notion that human beings are valuable organizational resource and an integral part of the mix of resources. On a broader scale, HRA will greatly assist human resource management in decision making [3]. The domain of accounting discusses human resources as company asset is HRA [15; 22; 26]. This contradicts the traditional accounting that treats human resources as a burden and reduces profits [7]. Sarwoko [29] emphasized that the difference between HRA and non-accounting of human resources is fundamental. Within the scope of HRA, human resources are included in assets and reported in financial statements.

Human resource accounting (HRA) is a process of identifying and measuring data on human resources and communicating this information to interested parties [5]. The purpose of this concept is to improve the quality of financial decisions made by stakeholders by introducing human capital variables to the traditional scope of management decision making. The existence of HRA as a measuring tool for decision makers of human resources is necessary for the development of business today [19; 24]. Furman & Mary [13] argue that the concept of human resource value stems from a general economic value theory whereby all human resources have value because they can provide benefits in the future. From this opinion, the value of individual human assets to the firm can be defined as the present value of future services that individuals provide when they continue working for the enterprise. Mayo [21] argues that it is impossible to insert human values into the company's balance sheet unlike any other physical asset of factories and equipment.

The term of human capital asset can be used to describe the value of an asset from a company's human resources. Humans have a human capital dimension which is the collective number of attributes, life experiences, knowledge, innovation, energy, and enthusiasm that a person chooses to work in their place of work [4; 15].

2.2 The Concept of Human Resource Expenditures

Human resources expenditure comes from the historical cost concepts that represent the costs incurred to obtain or replace employees. The human resources expenses have been treated and asset component, or it can also comprise the outlay cost and opportunity costs [9; 11; 13]. Besides, conventional accounting concept of acquisition cost has relevance in HRA [19; 29].

2.3 Human Capital Measurement and Valuation

Human capital represents the amount of person's knowledge, skill, and ability in organization, and also a source of innovation and modernization strategic [16]. Human capital is an asset that is important to organization, because with their creativity and innovation will help the organization to solve problem and lead the using of another asset in organization. Human capital is one of intellectual capital (IC) components and the most significant element of IC, because a company can accomplish nothing—including innovation—without it [18]. Human capital is precursor to structural and relational capital and influences on innovation performance via these IC components [18]. This means that human capital is the crucial component for the other capital and becomes competitive advantage—as its influence innovation performance in organization. Furthermore, intellectual capital has an impact on creating value and increasing the performance of organization, especially in financial performance [25]. IC development can be interpreted as a mission for university as they are created and funded with the purpose of building the workforce of tomorrow, stimulating organizational and technological innovation, and enhancing the

network of relationships that cross-fertilize industrial and academic expertise [30]. This can be interpreted that developing human capital can increase intellectual capital and furthermore it also can increase organization performance. In higher education institution context, human capital especially promotion and number of researcher become highest priority in the intellectual capital is for growth and organizations development [16].

Human capital dimension is the collective number of attributes, life experiences, knowledge, innovation, energy, and enthusiasm of a person choosing to work in their place of work [7; 11; 17]. Human capital refers to a combination of factors that include knowledge, skills and technical skills, personal characteristics such as intelligence, energy, attitude, reliability, commitment, learning ability, including talent, imagination and creativity, to share information, participate in teams and focus on achieving organizational goals [4; 23] and owned by each and the ability of the workforce [1]. As mandated by Law No. 14/2005 on Teachers and Lecturers [32] lecturers are considered as professional educators and scientists with the primary task of transforming, developing and disseminating science, technology and the arts through education, research and community service. Meanwhile, professionals are declared as a person undertakes work or activities and become a source of income that requires expertise, skill, or skill that meets certain quality or norm standards and requires professional education. The competence of educators, especially lecturers, is defined as a set of knowledge, skills, and behaviors that must be acquired, lived, mastered and realized by the lecturers in carrying out their professional duties. These competencies include pedagogic competence, personality competence, social competence, and professional competence.

Lecturer competence determines the quality of the implementation of "*Tridharma Perguruan Tinggi*" as shown in the professional activities of lecturers. According to the Law No. 12/2012 on Higher Education Institution [31] there are three obligations of Higher Education Institution: (1) Research defines as an activity that carried out according to systematic scientific rules and methods for obtain information, data, and explanation which relating to understanding and / or testing a branch of science and technology; (2) Public Service defines as academicians activity who use science and Technology to advance community welfare and educate people; and (3) Learning defines as the process of student interaction with lecturers and learning resources at learning environment. This is means that lecturer must do research, public service, and learning as their duties in Higher Education Institution. These duties require lecturer to have pedagogical, professionalism, personality and social competence to perform those mandatory tasks.

There are two methods of human capital measurement, which are monetary and non-monetary measurement method. Monetary measurements emphasize the unit of value of money in measuring human values while nonmonetary measurement emphasizes the form of perception or achievement value measured from the organizational structure [19; 29]. Monetary measurements is historical method/acquisition cost that consists of valuation of all costs associated with new recruitment, selection, payroll and education / training, and further amortizing those costs over the expected useful life of the asset, recognizing loss in the case of an asset or by enhancing the value of the asset because any additional expense is expected to enlarge the potential assets [2; 17; 19; 29]. Limitations that occur in using these measures are the economic value of an asset in the form of human may not be required by its historical value. Any appreciation is likely to be subjective and costs related to human resource management may differ from one individual to another within a company. While non-monetary measure is used by economists to analyze the effectiveness of human organizations through a list of questions based on theoretical models, the outcomes serve as a non-monetary measure of human assets, as they illustrate human perceptions of workplace mood [15; 19; 29].

The valuation concept of human capital can or may be derived from general economic theory, because of their ability to provide future economic values. In line with economy assumption, the value of individuals is usually defined as the cash value of services rendered to the organization. Sarwoko study [29] argues how to determine the value of a human asset as follows: "*To measure and disclose the value of human resources required a theoretical framework or human resource value to explain the types and factors that determine the human value for a company or organization.*"

The size of a person's price is the value that is expected to be realized [10; 12; 22] The size of the value comes from the interaction of two variables: (1) The expected conditional value of the individual; and (2) The individual possibility will retain its membership in an organization. This conditional value is

the value of a person's services while in a company and the combination of multidimensional variables consisting of work productivity, transferability, and ability for competency development. [2] explains that human assets are the creators of value for the company and there are individual multiplier assets designed to reflect the relevant factors that can make the individual value. Individual asset multiplier consists of: (1) Specific knowledge, skills and experience; (2) Individual and behavioral abilities; (3) Contribution of value to stakeholders; (4) Have potential to grow and have a higher contribution rate; (5) Personal productivity in relation to value creation to stakeholders; (6) Achieving goals that in line with company values.

3 Research Methods

The study used a quantitative approach to determine the usefulness of analytical hierarchy process (AHP) on measuring human resource value in an organization. In general, the steps in this research are carried out through the following stages: (1) conducting literature review of journals, books, and articles on the internet related to AHP; (2) preparing questionnaire; (3) distributing questionnaires to respondents; (4) processing data; (5) determining criteria and alternatives to be used in ranking process; (6) analyzing data using basic principles of AHP; and (7) conclusion from the results of the study.

Analytical hierarchy process (AHP)

AHP method is one of models for decision making that help the framework of human thinking [17; 28; 29]. AHP method is a numerical scoring process to rank each alternative based on how the alternative should be matched against decision-making criteria. The AHP method is conducted by modeling the problem in stages consisting of criteria and alternatives [17; 28]. A hierarchy is needed in using AHP to define the problem and pairwise comparison to determine the relationship within the structure. The hierarchical structure is depicted in a tree diagram that contains the goal, criteria, sub-criteria, and alternatives. To make decisions in an organized way and to generate a priority this study describes the decision with the following steps: (1) determine the problem and determine the type of information about the problem sought; (2) developing a hierarchical structure of decisions with the top level is the purpose of the decision which is a broad perspective, then in the middle level there are criteria that the next element depends on the lowest level (which is usually an alternative set); (3) make a set of pairwise matrix comparison; and, (4) Use the priorities obtained from the comparison to consider priorities in the immediate level below them.

Population, Sample, Criteria

Population of this study is all lecturers of Faculty of Economics and Business, Brawijaya University which carry out "*Tri Dharma Perguruan Tinggi*" activities. The choice of the university sector in this study is based on a reason that the university is a service-based business sector with human resources as the main resource. This study was conducted on a sample basis. The sampling method is conducted in nonprobability sampling type by judgment sampling method which is a method that involves choices of the subject that has the most favorable place or the best position that provides the required information [20].

According to "*Tri Dharma Perguruan Tinggi*", the obligation of university as higher education institution, lecturer activities are research & publication, education/teaching activity as academic activity and public or vocational services, including student-involved activity as non-academic activity with students. These activities become selected criteria for this study, because these activities require certain competence of all human resource of the university in enhancing the better quality and accreditation of the HEI. As for the alternatives are the costs for achieving competencies, including: (a) Training and workshop defines as the effort to increase technical performance in short term; (b) Self-development defines as the effort to develop self-potential and talent; and (3) Diploma as the effort to achieving competencies of academic and professional degree.

4 Results

In this research, the AHP method is applied in the decision-making system to determine the priority of the importance cost of human resource development valuation in a higher education institution. These criteria include (1) Education activity (Q1); (2) Research and publication activity (Q2); (3) Public and vocational service activity (Q3); and (4) Student-involved activity (Q4). Meanwhile, some alternatives used in this study consist of (1) Training and workshop (T); (2) Diploma and professional

certification (D); and (3) Self-development (SD). These alternatives are used at this stage with consideration of the benefits received from the costs incurred to fund human resource development activities at the faculty level.

Data analysis by using the AHP method through some stages, which are described on the previous section. Based on input data from the questionnaires that distributed to all lecturers of faculty of economics and business, Brawijaya University, asking about their perceived value of selected criteria and alternatives in determining the value of human resource related to the higher education institution quality in the future. Before answering the research problem that have been identified, first step in AHP method is to compile the important score of selected criteria in a matrix pair shown in Table 4.1.

Table 1. The Importance Score of Selected Criteria Compiled in Matrix Forms of Pairs

Criteria	Q1	Q2	Q3	Q4
Q1	1.0000	0.1429	5.0000	4.0000
Q2	7.0000	1.0000	0.1538	0.1351
Q3	0.2000	6.5000	1.0000	0.2941
Q4	0.2500	7.4000	3.4000	1.0000
Total	8.4500	15.0429	9.5538	5.4293

Table 4.1 shows the calculation results of matrix pairs over the data criteria in this study, as well as the number of columns of each criterion which is subsequently used in calculating the weights of the selected criteria shown in Table 4.2.

Table 2. Calculation The Weights of Selected Criteria

	Q1	Q2	Q3	Q4	weights of selected criteria
Q1	0.118	0.009	0.523	0.737	0.347
Q2	0.828	0.066	0.016	0.025	0.234
Q3	0.024	0.432	0.105	0.054	0.154
Q4	0.030	0.492	0.356	0.184	0.265
	1.000	1.000	1.000	1.000	1.000

Based on Table 4.1 shows that the education activity (Q1) less important than research and publication activity (Q2). After generating the weights of the selected criteria, the next step is to calculate the priority of each alternative. The priority values for each alternative are presented in the following Table 4.3.

Table 3. The Value of Alternative Priorities for Selected Criteria (Q1)

Alternatives	Q1	Q2	Q3	Q4
T	0.005	70.000	0.003	30.000
D	0.010	40.000	0.010	20.000
SD	0.030	20.000	0.001	80.000
Total	0.018	130.000	0.014	130.000

When the calculation has been done by tricking of some multiply the matrix, global priorities of each alternative be obtained and presented at Table 4.4. In overall, diploma is a top priority to be capitalized as the cost of human resource development both in education, research & publication, public services, and student activities. Diploma defines as effort of lecturer to achieving competencies of academic degree—by having doctoral education — and professional degree—by having professional certification like CPA, CMA, etc. Diploma cost is high because having degree is needed much money than training or self-development. Diploma cost post must be considered as asset for higher education institution.

Table 4. The Result of Priority Calculation of Each Alternative Based on Each Criterion

	Scores	Priority Order
T	0.321	2
D	0.418	1

SD	0.260	3
1.000		

5 Discussion

In the current era of globalization, the business world is beginning to experience a transition, where the transition leads to the business worldview of the importance of human resources within the company. This is inseparable from the development of technology and science developed by humans, so the most important in a company is not how much the value of machines or other physical assets, but the most important is the potential of human resources owned by a company. A company must maintain its competitive advantage in business competition, where physical assets are incapable of achieving that goal. Therefore, human resources are the one to play an important role in realizing the company's goals [8; 12; 27]

So far, the value of human resources is considered irrelevant to be capitalized as an asset. This is because the value complexity of human resources is not the same as the physical assets in a company. However, with the shifting of the business world paradigm, the value of human resources began to be considered as an added value for the company. The value of human resources as assets will become more relevant in the service industry, especially in educational institutions, where the prime mover in an educational institution, especially an institution of higher education is human resources and not physical assets such as the value of the building or the value of other physical facilities. The most significant expenditure of an institution of higher education comes from honoraria and other expenses related to the development of its human resources. So it also supports the importance of an institute of higher education to begin to conceptualize the valuation of the value of its human resources as an asset.

This study no longer finds out whether the value of human resources is relevant to a higher education institution. This study has entered into the stages of what costs are a priority in the higher education institution to be capitalized as human resource assets of the institution. It is based on the concept that personnel capability is one of the superior values in higher education institutions which can support the competitiveness of a university. Therefore, higher education institution in which the human resources are as its main asset, should no longer burden cost of human resource development as expenses but as assets that able to give economic benefit both in short and long term. The benefits that can be given from the potential of human resources in the higher education institutions are not only short-term economic benefits such as increasing the number of students each year, but they receive long-term benefits from human resource potential such as the branding value of higher education institutions. Therefore, the increase of student bodies may not only be achieved in short-term, but it can take place continuously as well as the quality of higher education institutions sustainably could be maintained.

The results show that the main priority that can be valued as an asset in each criterion is the cost of diploma (achieving professional and academic degree). This is because the diploma costs are not small. Also, diploma not only provides benefits for professional and academic development but also able to provide benefits to the development of institutions one of them in accreditation of higher education institutions. Where the data becomes, one of the requirements of graduation of study programs in accreditation is the availability of data on the potential of human resources. The importance of diploma (achieving professional and academic degree) for educators in higher education institutions began to realize the benefits. Because diploma (achieving professional and academic degree) can provide added value for an academician and it can increase the value of educational institutions in the eyes of society. Currently professional and academic degree is not only considered an additional degree for an academician in a higher education institution. Instead, it can improve the image of higher education institutions in the eyes of the public. For example, if lecturer has doctoral degree, they will be invited to do post-doctoral for country interest, besides if lecturer has professional degree like CPA (Certificate Public Accountant), they will be hired by government or corporate to become their consultant. This will provide direct economic benefits to the institution that is increasing public interest in higher education institutions and also establish relationship with various parties.

Diploma achievement can be interpreted as the value of a person's services which the human resource has the ability for competency development [10; 12; 22] and it can improve specific knowledge, skills and experience that reflect the individual asset multiplier [22]. Diploma (achieving professional and academic degree) becomes the main priority to be accounted into the value of human resource assets,

because the importance of academic and professional competence an educator in higher education institutions. The competence of lecturers is defined as a set of knowledge, skills, and behaviors that must be acquired, lived, mastered and realized by the lecturers in carrying out their professional duties. These competencies determine the quality of the implementation of *Tridharma* University as shown in the professional activities of lecturers. The result is supporting previous studies which reveal that humans have a human capital dimension which is the collective number of attributes, life experiences, knowledge, innovation, energy, and enthusiasm of a person choosing to work in their place of work [7; 11; 17]. Human capital refers to a combination of factors owned by each and the ability of the workforce collectively in a company [1]. These factors include knowledge, skills and technical skills, personal characteristics such as intelligence, energy, attitude, reliability, commitment, learning ability, including talent, imagination and creativity, to share information, participate in teams and focus on achieving organizational goals [4; 13; 23]. On a personal level, these organizations are full of talented, intelligent, and creative people at every level [6; 22]. Therefore, the potential of human resources in a company allows them to build their value internally.

The highest criteria for lecturer activities are doing research and publication. The result supports previous study that human capital especially number of researcher become top priority in the intellectual capital is for growth and Higher Education Institution development [16]. Total number of researcher and publication in Higher Education Institution (human capital indicators) becomes top priorities because these are component of academic intellectual capital. Improving academic intellectual capital especially human capital means improving academic performance in higher education institution.

6 Conclusion

Based on the results and discussion, it can be concluded: (1) As the result of AHP, Diploma (achieving professional and academic degree) cost is the most priority to develop competencies of human resources in higher education institution; (2) Improving human resource competencies can increase the value of lecturer, also increase economic and non-economic values for organization; (3) As the largest expenditure in higher education institution is the cost of human resource development for improving quality human resources, it should be capitalized into assets; and (4) research & publication activity becomes highest criteria for lecturer activities. The result is also supporting previous studies for human capital dimension [7; 11; 17] owned by each workforce [1] for achieving organizational goals [4; 23]. Moreover, improving intellectual capital will also bring better academic performance in higher education institution [16].

As human resources in a company may provide benefits to investors, thus it would become an indicator of current organizational conditions and prospectus of organization performance in the future [15]. Improving the quality of human resources in higher education is the foundation for improving the quality of educational services.

This study used primary data of lecturers' response through closed questionnaire, asking respondents' perception of which cost that may contribute the value of the high education institution. As the result shows diploma cost as the priority of respondents' perception about the human capital valuation. There is some condition may affect respondent perception, such as the demand of higher education institution for having professional certification/degree. Moreover, the selected alternatives that used in further research may expand to other determined factors such as the regulation of higher education institution, other stakeholder's perception about human capital's value in the HEI.

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Fraud in Sharia Rural Bank: How It Affects Their Roles in Assisting Micro Small Medium Enterprise in Indonesia

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Abstract. This concept paper studies fraud in Sharia Rural Bank and how it affects their roles in assisting Micro Small Medium Enterprises (MSMEs). The study reviews the literature on the history of fraud in Sharia Rural Bank. This paper explores previous research and court cases on fraud in sharia rural banks. All these information was collected from journal articles, conference proceedings, newspaper, books and internet search related to this issue. It was found that Sharia Rural Bank play important role in assisting MSMEs however there were a lot of issues found such as miss interpretation in carrying out the sharia principle that affect their roles in helping MSMEs. Therefore, this paper suggests good corporate governance is vital to ensure the fraud risk is minimized, thus improving their effectiveness in assisting MSMEs in Indonesia.

Keywords: fraud, sharia rural bank, micro small medium enterprises

1 Introduction

Indonesia is a country with a lot of diversity, both conventional and Islamic microfinance, the former evolving over a period of over one hundred years, preceded by a history of informal finance of unknown differentiated microfinance infrastructures in the developing world. Comprising some six thousand formal and 48 thousand semiformal registered microfinance units serving about 45 million depositors and 32 million borrowers, eight hundred million channelling groups, and millions of informal financial institutions and self-help groups. There is hardly an institutional type of microfinance that is not found in Indonesia.

One of the microfinance institutions in Indonesia is Sharia Rural Banks (BPR Sharia). The establishment of Sharia Rural Banks in Indonesia is deeply connected to the establishment of Rural Banks. BPR whose legal status is authorized through the Monetary and Banking Financial Policy Package (PAKTO dated October 27, 1998, is essentially a modification (new model) of Lumbung Desa and Bank Desa which have existed since the 1980s. BPRS was first established in October 8, 1990, in Indonesia after obtaining the principal license from the Minister of Finance of the Republic of Indonesia. It opened its doors and began operating on August 19, 1991. The first group of established Sharia BPR were PT. BPRS Dana Mardhatillah, kec. Margahayu, Bandung, PT. BPRS Berkah Amal Sejahtera, Bandung, and PT. BPRS Amanah Rabbaniyah, Bandung. The establishment of BPRS was seen as an active step in restructuring the economic framework of country, as outlined in the various financial policy, monetary and banking packages in general.

The establishment of Sharia Rural Banks in Indonesia is based on the demands of Islamic friendship which is a strong desire of most Muslims in Indonesia, as well as an active step in order to fill the opportunity against the policy that frees the bank in determining the interest rate, which is then known as interest-free banks in particular. Act No. 10 of 1998 which amends Law Number 7 of 1992 concerning Banking seems clear and firmly recognizes the status of Sharia banking, as mentioned in article 13, Rural Bank Enterprises.

Article 13 letter C reads as follows: Provides financing and placement of funds under the principle of Sharia, in accordance with the provisions stipulated by the Bank of Indonesia. The existence of Sharia Rural Banks is specifically spelled out in the form of Decree of the Board of Directors of BI. 32/34 / Decree / Dir, dated May 12, 1999, concerning Commercial Banks based on the Sharia Principles and Decree of the Board of Directors of BI. 32/36 / Decree / Dir, dated May 12, 1999, and Circular Letter No. BI. 32/4 / KPPB dated May 12, 1999, on the People's Credit Bank Based on the Sharia Principles.

Generally, the purposes of the establishment of Sharia Rural Banks are as follows: (1) Improving the economic welfare of the Islamic ummah, especially the weak economic class society in general in rural areas; (2) Increase employment, especially at the sub-district level to reduce the flow of urbanization; (3) To foster the spirit of ukhuwahislamiyyah through economic activities to increase per capita income towards an adequate quality of life.

Objectives for establishing Sharia BPRs in the economy, accelerate the rotation of economic activity because the real sector will get funding especially MSMEs (Rodoni and Hamid, 2008).

Thus, Sharia Rural Banks (hereafter BPRS) can participate in mobilizing capital for development purposes and also to educate the people in saving; by providing a close, safe and easy place to save money for small savers.

From the objectives mentioned above, it is known that BPRS has a role in empowering people's economy by developing weak economic groups such as MSMEs. This is reinforced with data from sharia banking (2016), BPRS focuses to serve the Micro and Small Business sector (hereafter MSEs) that distinguishes themselves with Commercial Banks / Sharia Commercial Banks that focus on medium and large-scale financing. As shown in Figure 1, it appears that the financing disbursed by the BPRS for MSEs is greater as compared to other sectors. Unlike the Sharia Commercial Bank and Sharia Business Unit, the amount of financing is larger for sectors other than small and medium BPRS becomes an alternative to conventional financial institutions, especially on a small-scale, in developing the economic sector in the financing of MSMEs. Based on statistical data of Sharia banking as at December 2015, the distribution of BPRS financing to MSMEs reached Rp.3.377 trillion. This number continues to increase year by year. In the next period per December 2017, the distribution of BPRS financing to MSMEs reached Rp.7.00 trillion.

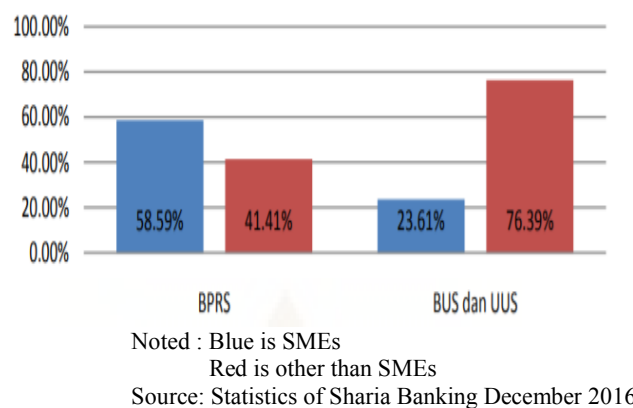


Figure 1. Financing of Sharia Banking by Financing Group

Fraud according to the Association of Certified Fraud Examiner (ACFE, 2016) establishes as an action that receives benefits, in a way that is not by following the rules and is unpredictable, deceitful, cunning, and dishonest which can be detrimental to others.

Bank Indonesia circular letter No. 13/28/DPNP referred to as Fraud is an act of deviation or omission that is intentionally carried out to deceive, cheat, or manipulate banks, customers, or other parties that occur in the bank and/or use bank facilities resulting in banks, customers, or other parties suffer losses and/or fraud perpetrators benefit both directly and indirectly.

The definition of micro-enterprises can be defined from the definition of MSMEs itself, which in Indonesia is different. Among them is the Central Bureau of Statistics (BPS), and Law No. 20 the Year 2008. Central Bureau of Statistics defines MSMEs based on the quantity of labour. Micro, Small-scale business is a business entity that has a workforce of 1-5, and 6-19 people, while medium-sized businesses are business entities that have a workforce of 20-99 people.

2 Literature Review

2.1 Fraud In Islamic Bank

The ACFE research results outlined in the report to nations on occupational fraud and abuse (2016) state that the banking and financial services sector has the highest fraud rate of 17.8% of the total 20%. In practice, the existence of sharia elements does not guarantee an institution is free from fraud or commonly called fraud. This can be seen in cases of fraud that occur in sharia institutions. Like the case in Bank Syariah Mandiri (BSM) which involved internal banks, namely fictional lending to BSM Bogor Branch (Rahman, 2013).

Bank Syariah Mandiri was hit by a case of fraud which was arguably the most primitive of fictitious credit by falsifying key documents, with potential losses reaching Rp102 billion. BSM has fired three of its officials who have been proven to be involved in the distribution of fictitious loans for land purchases and housing development in the Bogor area, namely the Head of the Bank Syariah Mandiri Bogor Main Branch, the Head of the Bank Syariah Mandiri Bogor Supporting Branch, and the Bank Syariah Mandiri Bogor Accounting Officer.

Another case in one of the Sharia Banks, in November 2014, based on internal audit findings and also the implementation of Good Corporate Governance (GCG) carried out a despicable act of embezzlement which was then handed over to the Metro Police at a potential loss of Rp.75 billion.

In addition to sharia compliance, the application of good corporate governance (GCG) has been proven to improve the reputation and trust of the people in Islamic banks. According to Capra, Ahmad, and Habib (2002), failure in applying sharia principles will make customers move to another bank by 85%.

Theoretically, the practice of good corporate governance can improve company performance, reduce risks that may be carried out by the board with its own favorable decisions and generally good corporate governance can increase investor confidence to invest capital which has an impact on performance (Ristifani, 2009).

2.2 Fraud in BPR and BPRS

The Financial Services Authority (OJK) states that the most vulnerable banking crimes occur in Rural Banks (BPR) and Sharia Rural Banks compared to commercial banks. Executive Head of OJK Banking Supervisor said, the number of BPRs and BPRS as many as 1,800 banks compared to the number of commercial banks, which were only 118 banks, certainly made the opportunity for more 'fraud' to occur in BPR and BPRS. "Banking crimes mostly occur at BPR and BPRS. Around 80 percent of BPRs and BPRS are closed because of fraud,"

The Financial Services Authority (OJK) revealed a case of Banking Crimes conducted by the Managing Director of BPR KS Bali Agung Sedana, related to granting loans to 54 debtors with a value of Rp.24,225 billion which was not in accordance with procedures. The modus operandi is to order BPR employees to process loans to 54 debtors with a total value of Rp.24,225 billion in the March-December 2014 period, not in accordance with procedures leading to false records. The case file was submitted to the Public Prosecutor of the Denpasar Bali District Court. OJK through the Decision of the Board of Commissioners (KDK) Number KEP-202 / D.03 / 2017 concerning Revocation of Business License of PT Bali Rural Credit Bank Agung Sedana, revoked the business license of PT Bali Rural Credit Bank Agung Sedana, having its address at Jalan Raya Kerobokan Number 15Z, Kuta, Badung Bali as of 3 November 2017. The BPR has entered the status of the Bank under Special Supervision since 12 April 2017.

The Financial Services Authority uncovered a case of Banking Crimes committed by the BPR Multi Artha Mas Sejahtera Commissioner with a value of Rp 6,280 billion used for personal interests, the modus operandi carried out with false records in the books or in the reporting process, or in documents or reports on business activities. Submit Case Files to Bekasi District Court Public Prosecutors.

PT. Bank Perkreditan Rakyat Multi Artha Mas Sejahtera, having its address at Revo Town (formerly Bekasi Square Shopping Center) Number 78, Pekayon Jaya, Bekasi City has been revoked by OJK since two years ago, namely since August 26, 2016.

The Financial Services Authority (OJK) has handled cases of alleged banking crime by the former head of PT BPRS Al Hidayah Pandaan, Pasuruan Regency and has been handled by the legal apparatus, OJK is still awaiting trial. This case began with the Capital Adequacy Ratio (CAR) of BPRS Al Hidayah minus 205.61%. must be made healthy by fulfilling a minimum capital of 4% or Rp. 20.9 billion.

Because it continues without settlement, BPRS Al Hidayah, whose office is in Ruko Taman Dayu Blok E-1, Pandaan, Pasuruan Regency, was revoked by OJK (Financial Services Authority) dated April 25, 2016.

Above are some examples of fraud cases that occurred in the BPR and BPRS 2012-2017 period

2.3 Fraud in BPRS and How It Affects Their Roles

BPRS in development is facing some problems. The problems identified by OJK include: internal BPRS factors such as lack of capital, lack of management, lack of governance, lack of IT system and government policy and external is the lack of knowledge/information and lack of access to credit.

The Indonesian Deposit Insurance Corporation (LPS) announced in the 2016 annual report there were five sharia people's financing banks (BPRS) that had been and were undergoing the process of liquidation from 2009 to 2016. BPR and BPRS problems were generally caused by fraud practices committed by owners, employees or management, as well as bank management that is still not good, especially in terms of risk management, capital and human resource quality (Suheriadi, 2017).

Based on these objectives Islamic banks also have a role in assisting growth MSMEs in Indonesia. There is an increase in people's interest in Islamic banks, especially in the distribution of funds for MSMEs, shows the importance of the presence of Islamic banks (Zamroni, 2013). Research conducted by Maryati (2014) showed that the productive financing carried out by Islamic banks were able to increase the value of production of MSMEs. Role of Islamic Bank which supports the financing of MSMEs able to boost the development of MSMEs through increased production value. Research Faisol (2017) explains that if the Islamic financing increases, the performance of the Silverback MSMEs will increase as well and Islamic finance a significant effect on the welfare of the MSMEs sector.

For more details, previous research related to the role of micro financial institution in assisting MSMEs can be seen in the following table.

Table 1. Previous Studies on MSMEs and Fraud

Authors	Subject	Country	Findings
Wang (2013)	Microfinance and Small and Medium Enterprises	Taizhou, China	Microfinance plays a crucial role in the revenue and profit growth of SMEs.
Rashidah Abdul Rahmana, Irda Syahira Khair Anwarb (2014)	Effectiveness of fraud prevention and detection techniques in Malaysian Islamic banks	Malaysia	Findings indicated that the protection software/application as the most effective components of fraud prevention techniques
Hamzah and Gazali (2015)	Islamic financing and Micro Enterprises	Labuan, Malaysia	Both industries (Islamic financing and Islamic Micro Enterprise) are insignificant relationship
Faisol (2017)	Islamic bank and Small and Medium Enterprises	Kediri, Indonesia	the Islamic bank financing has significant influence with a positive direction on the SMEs performances
Purnamasari and Darmawan (2017)	Islamic banking and Small and Medium Enterprises	Indonesia	the interaction between SMEs and Islamic banking is quite close relatively but need to be upgraded
Yussuf (2017)	Islamic banking and Small and Medium Enterprises	Nairobi	Islamic banking helps SMEs to grow financially which enhance their financial performance. The study also concludes that Islamic banking affects the growth of SMEs.

Suharto and Faisal (2017)	Islamic banking and Small and Medium Enterprises	Indonesia	Islamic Bank has various barriers, in developing MSMEs in Indonesia
Purwanto and Andriani Kusuma (2019)	Patterns of Fraud Operating Mode of Financing and Efforts to Minimize the Shortcoming in BPRS X	Indonesia	<i>The results showed that there were elements of BPRS X who had practiced fraud starting from the submission stage, data analysis and approval in the form of falsifying documents by conditioning the submission so that they could pass the financing so that there were mask credit findings, credit in the name.</i>

MSMEs that receive funding from Islamic banks to support MSMEs in the ability to provide capital, so that productivity, revenue, and profit increases, resulting in increased performance.

The Association of Bank Rakyat Indonesia (Perbarindo) reports that the performance of the rural bank credit (BPR) and Islamic BPR (BPRS) industry is still growing well until the first semester of 2018. This can be seen from the growth of lending and third party funds (DPK). Perbarindo General Chairman Djoko Suyanto explained, as of July 2018 the number of loans channeled by BPR and BPRS reached Rp. 95 trillion, dominated by loans for MSMEs.

This figure grew 8.59% compared to the same period the previous year. "Success in lending reflects the industry of BPR and BPRS having products and services that can be well received by the community," Djoko said. Meanwhile, in terms of collecting deposits, the amount of savings in July 2018, reached Rp28 trillion, up 14.23% compared to the position a year earlier.

The same is true for the deposits side, which recorded growth reaching 8.99% to IDR 60 trillion in July 2018. Also, the BPR and BPRS industries have served 17 million customers, consisting of 4 million debtors with an average loan IDR 27 million. As for the number of depositors as many as 600,000 accounts with an average deposit of Rp102 million and savers of 12.4 million accounts with an average savings of Rp2 million.

Drs.H. Syukri Iska, M.Ag, in a study revealed that there were problems related to Islamic purity in operating in Islamic banks, margin / mark up on murabahah (buying), mudharabah contract on savings where customers could withdraw their funds at any time (on-call) whereas it has not been produced (tasharruf) by the bank. While Prof. Dr. H. Amir Syarifuddin assessed that the application of mudharabah and murabaha contracts to bank activities raises things that can lead to subhat and also the practice of usury/rent.

In the implementation of these contracts in Islamic banks, there are additional actors of contract, namely banks as intermediaries. then the age of Islamic banking in Indonesia is approximately 17 years which is a relative short age, and Islamic banks in carrying out their operations are still very few human resources who have a background in sharia education.

Islamic banks must be able to provide optimal benefits to the community and the roles and responsibilities of Islamic banks as Islamic financial institutions and ensure that all activities carried out by Islamic banks are by following sharia principles (Hameed, 2004). Also, the biggest challenge that must be faced is to maintain the image and reputation in the eyes of customers to maintain customer trust and loyalty to Islamic banks (Falikhatun and Assegaf, 2012).

As of 2017 there are 166 BPRS operating in Indonesia (Financial Services Authority 2017). A number of research on the financial performance of BPRS show that most of them have inefficient financial performance (Chou & Buchdadi, 2016; Muhari & Hosen, 2014 ; Naufal & Firdaus, 2017; Handayani, 2013).

Data submitted by OJK (2017) also shows that the amount of financing distributed by BPRS exceeds the amount of funds collected, while the level of their profitability tends to decrease. This condition shows a number of problems faced by BPRS in Indonesia from 2007 to 2016.

Indonesia Deposit Insurance Corporation in its 2017 annual report announces that as many as five BPRS, out of a total of 85 rural credit banks (BPR), have been and are undergoing a liquidation process from 2009 to 2017.

The operandi pattern of fraud that occurs in the distribution of bank financing as well as efforts to minimize fraud that occurs in the distribution of Islamic banking financing (Purwanto, 2019).

The thing that often happens in BPRS is that the procedure for granting loans is not in accordance with the procedure, (Hutauruk 2014), the fraudulent modus operandi is played (Budianto 2013), there is a problem that impedes the smooth running of the credit process, which is inconsistent in carrying out procedures for granting credit, (Syafriansyah, 2015), fraudulent acts committed by bank employees can occur because of the behavior and moral honesty that is caused by occupational crime, (Holtfrefer, 2003).

In assisting MSMEs financing arise fraud committed by human resources from lower levels to top management, this has a negative impact on the financial condition of the BPRS so that losses can later be liquidated.

Impacts of BPRS being liquidated on Shareholders and Management (Directors and Commissioners) becomes List of Despicable Person and for other employees it will be a bad record, if there is a criminal element will be further processed in the police.

If many BPRS are liquidated, it will hamper assisting in financing, business assistance, training and network of marketing to MSMEs which in the end will not be able to grow and cause the development of the real sector to stagnate and also the absorption of labor becomes small.

3 Conclusion

The role of MSMEs in the Indonesian economy is so strategic, it can be seen from the Financial Crisis in 1998, MSMEs businesses were relatively more resilient than large-scale enterprises. Based on the discussion above, it can be concluded that the role of BPRS is vital to help the development of MSMEs so that their businesses are growth.

In assisting MSMEs in terms of financing, BPRS face problems in interpreting sharia rules from many fraud cases that occur on average because of fraud (dispute issues, fraud) because the owner or management of the BPRS commits fraud and also their workers.

Most of the BPRS liquidated are caused by fraud, not because of business competition.

The causes of fraud in financing are many factors, including engineering of credit issuance, private credit (which receives credit, not those who apply for credit), fictitious credit (credit is never received by the customer as written in the contract) and twice credit for the same customer.

This fraud made the Sharia Rural Bank suffer losses and could eventually be liquidated so that capital assistance to the MSMEs was reduced and caused the MSMEs could not grow nor did the real sector stagnate and absorb the labor force to a small extent.

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Fraud, Whistleblowing System, and Behavioral Aspect in Public Sector

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Abstract. Whistleblowing is a form of anti-fraud strategy that can be applied in various organizations, including in the public sector. The facts show that public sector fraud in Indonesia is still going on, although it has implemented the whistleblowing system in the government sector. Fraud triangle indicates that fraud caused by pressure, opportunity and rationalization. Of these three factors, pressure and rationalization are influenced by individual factors. This indicates that the individual factor becomes one of the causes of fraud. Individual factors can be traced to behavioral aspects. This research presents a variety of whistleblowing mechanisms in the context of behavioral aspects.

Keywords: fraud, whistleblowing systems, behavioral aspects

1 Introduction

Whistleblowing is a strategy that can assist an organization mitigate the risk of fraud. However, implementing a whistleblowing strategy is not easy. It requires consideration of several factors and behavioral aspect. This paper will consider factors and behavioral aspect in relation to the implementation of a whistleblowing.

Fraud is one of the biggest threats to the organization, both in the public and corporate sectors. Bribery case is a fraud in the form of misappropriation of assets. One bribery case occurred in Indonesia, namely the bribery case of the Supreme Audit Agency (BPK) in 2016. Fraud on the organization can be done by internal parties such as employees, and externally as investors and creditors. *Association of Certified Fraud Examiners* (2018) said whistleblowing can reduce or overcome the fraud detection. Fraud that happening in organizations more expressed by employees in comparison with the external auditors and analysts (Seifert, Sweeney, & Joireman, 2010).

Literature relating to whistleblowing is happens in the organization, either in government or the private sector has begun to emerge since the 1980s (Keil, Tiwana, Sainsbury, and Sneha, 2010). The topics had already highlighted the psychological and social aspects of factors beyond the personal that encourage a person to be a whistleblower (Vandekerckhove & Lewis, 2012).

Whistleblowing an individual or organization disclosure of fraud committed by members of the organization through both internal and external reporting channels, better use of anonymous reporting channels or non-anonymous. Xu and Ziegenfuss (2008); Brink, Lowe, and Victoravich (2013); Andon, Free, Jidin, Monroe, and Turner (2016); and Brink, Lowe, and Victoravich (2017) examine the whistleblowing intentions associated with a system of rewards (incentives). Xu and Ziegenfuss (2008) indicates that internal auditors tend to report an error when a monetary reward in cash or in exchange for a contract of employment is provided.

Gao and Brink (2017) explained that there were five effective determinant of whistleblowing that is characteristics of the whistleblower, the characteristics of the recipient of the report, the characteristics of the wrongdoers, the characteristics of wrongdoing and organizational characteristics. Three characteristics of whistleblower described by Miceli et al. (2008) are the characteristics of personality, moral considerations and demography. Personality characteristics of an internal factor that drives an individual's behavior.

The decision process whistleblower influenced by three aspects: personal characteristics (Bartels, Bauman, Cusham, Pizarro, and McGraw, 2014; Miceli et al., 2008). Brink, Cereola, & Menk, (2015) investigated the personality traits with Big Five Factor of the reporting fraud and ethical position that is associated with whistleblowing intention.

This paper aims to review the various aspects of behavior that affect the whistleblowing intention. The paper consists consider fraud and its causes, the theory of planned of behavior, as well as the whistleblowing system and behavioral aspects. The final part of this paper is the conclusion as well as practical implications.

2 Literature Review

2.1 Fraud and Causes

ACFE (2016) declare fraud is a problem that will continue to thrive in today's world. That is, because the perpetrators of fraud can not only be the elite but also from the middle class and lower class employees. Rezaee (2005) describes the fraud as an intentional act by a made-up by an entity which may result in ownership of benefits that are not valid. Clinard and Cressey (1954) explain the three points of fraud factors usually presented in a triangular diagram. The points contained in the triangular diagram of the pressure, opportunity, and rationalization (Houck et al., 2006).

The perceived pressure refers to the factors that lead to unethical behavior. Every perpetrator of fraud faces some pressure to perform unethical behavior (Abdullahi and Mansor, 2015). Lister (2007) explains the pressure to commit fraud as the source of the beginning of the occurrence of a fraud. This pressure does not become a reason to commit fraud. Significant factors to commit fraud are understood through analysis of pressure that is personal, employment, stress, and external. Hooper and Pornelli (2010) said that stress can occur either through a positive or negative force.

Opportunity takes advantage of an ineffective control or governance system that allows individuals to commit fraud within on an organization. In the field of accounting, this is referred to as an internal control weakness. Several factors give an employee the opportunity to commit fraud in an organization such as employee policy violations negligence and lack of disciplinary action (Sausser, 2007). Rae and Subramaniam (2008) said the chance that refers to the ability and the strength of an employee to realize his weakness and exploit organizational system with fraud. Hooper and Pornelli (2010) found that the chance of having two element, which are attached to the organization's vulnerabilities to manipulation and conditions in which the organization may require a fraud case.

Rationalization is difficult to note before or during a fraud, because it is difficult to read the mind of fraud perpetrators. Individuals who commit fraud have a certain mindset that allows the actors to justify or forgive the perpetrators of fraudulent actions (Hooper and Pornelli, 2010). Rationalization is the justification of fraudulent behavior due to a lack of personal integrity or moral reasoning (Rae and Subramaniam, 2008). The tendency to commit a fraud relies on ethical values and also on the personal attitude of the individual (Kenyon and Tillton, 2006). Howe and Malgwi (2006) found links between stress and opportunity when someone can rationalize the fraudulent behavior. Data on fraud committed in Indonesia is presented in Table 1.

Table 1. Data Fraud Most Adverse in Indonesia

Fraud type	Number of Cases	Percentage
Corruption (Corruption)	178	77%
Abuse Asset / Wealth Organization (Asset Missappropriation)	41	19%
Frauding Financial Report (Financial Statement Fraud)	10	4%

Source: Survey of Fraud Indonesia, ACFE 2016

2.2 Theory of Planned Behavior (TPB)

Factors that encourage whistleblowing can be explained by the theory of Planned Behavior (TPB) developed by Ajzen and Fishbein in 1988 and 1991. TPB explain the behavior of individuals that do arise

because of the intention of the individual to behave and intentions of individuals caused by several internal and external factors of the individual.

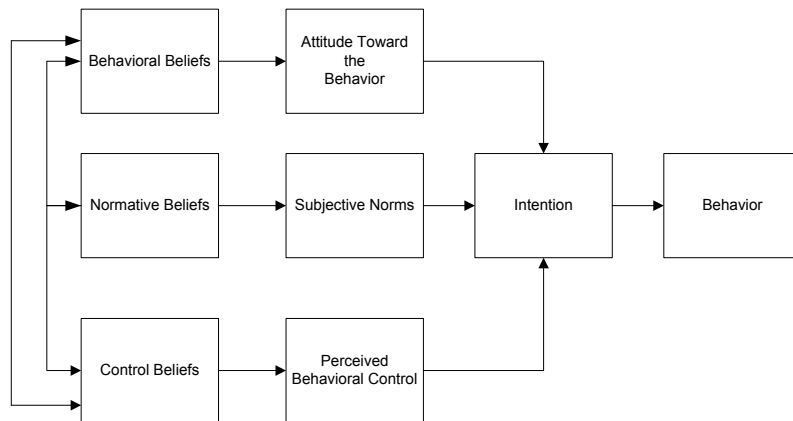


Figure 2. Theory of Planned Behavior (TPB) Framework
Source: Ajzen (1991)

TPB explained that the intention of the individual to behave is determined by three factors: first, the attitude toward a behavior. Attitude is not a behavior, but the attitude of readiness to deliver an action that leads to behavior (Lopez, 2005). Individuals will do things according to its attitude toward a behavior. In addition, the individual will evaluate or assess whether the behavior is a good thing to do or not. Second, subjective norm which refers to the perception of the perceived social pressure to perform or not perform the behavior. Individuals will perform a behavior if it is considered acceptable behavior by people as important in his life. Third, the perception of behavioral control that refers to the ease or difficulty of doing the behavior. Control of an individual to behavior caused by internal factors and external factors. Internal factors come from within the individual such as willingness, skills, information, and others. External factors originating from outside the individual or of the environment around the individual. Perceptions of control behavior is how a person understands that he showed behavior is the result of controls carried out by himself.

TPB has been applied in several studies that tax compliance (Bobek and Hatfield, 2003), the behavior of public accountants (Buchan, 2005), the ethical decision manager (Carpenters and Reimers, 2005), the behavior of whistleblowing by the Chief Financial Officer (Uddin and Gillett, 2002), whistleblowing intentions on business students (Montesarchio, 2009), budgeting (Su and Ni, 2013), in the auditor's whistleblowing intentions (Park and Blekinsopp, 2008).

An individual will have an intention to act in him before he did anything he wanted to do. When individuals have a perception and a positive attitude, have confidence that the behavior can be accepted by the surrounding environment, and believe that anything he does is the result of the controls themselves then the individual will have the intention to show a behavior. Someone will act as whistleblowers when perception, confidence and a positive attitude that what he will do in the process of whistleblowing is aimed at good and acceptable to the surrounding environment.

Park and Blenkinsopp (2009) stated that the TPB can be a general theory suitable for whistleblowing intention, because it shows the cause of whistleblowing three key factors, namely: attitudes, subjective norms, and perceived behavioral control. Alleyne et al. (2013) highlighted that a person's attitude is the assessment of the level of approval or rejection of a particular behavior. Subjective norms are social pressures that arise and may affect the perception of a particular behavior. Control behavior is a perception of the strength of the factors that can facilitate or complicate perform certain behaviors (Bird, Panter, Baker, Jones, & Ogilvie, 2018).

Individuals also will weigh anonymous reporting channels as a means to protect his identity as a reporter, so the possibility of retaliation can be avoided. Therefore, in the perception of behavioral control, incentives and anonymous reporting line into factors that can simplify and complicate the

individual to cause whistleblowing intentions. Cognition whistleblowing system with incentives and reporting channels anonymity, then people will feel motivated. Taylor, Bierstaker, and Brazel (2015) stated that monetary incentives are useful as a means of balancing risks. Lowe et al. (2015) mention the anonymous reporting channels useful for protecting whistleblowers from retaliation threats. From these statements mean that in the perception of behavioral control, the individual will weigh incentives as a form of appreciation for what he has done and is accompanied by risks associated therein. Individuals also will weigh anonymous reporting channels as a means to protect his identity as a reporter, so the possibility of retaliation can be avoided. Therefore, in the perception of behavioral control, incentives and anonymous reporting line into factors that can simplify and complicate the individual to cause whistleblowing intentions.

2.3 Whistleblowing System and Behavioral Aspects

Whistleblowing by employees in the local government can bring critical knowledge of the misconduct and the failure of the policy to be a priority by politicians (Skivenes and Trygstad 2016). Whistleblowing carries the risk when the information becomes publicly available to the public (Davis, 2003; Jubb, 1999; Weiss, 1994). However there refused to do whistleblowing as an internal mechanism for reporting fraud (Callahan & Collins, 1992; Dandekar, 1991; Vandekerckhove & commers, 2004). With reference to Miceli and Near (1985), whistleblowing occurs when employees choose the path to reveal internal rather than external fraud, including to the media.

There are two types of whistleblowing, namely (a) internal whistleblowing, occurs when one or several employees aware of fraud by employees or management, then report the fraud to the company leader; and (b) external whistleblowing, occurs when a person fraud committed employees know the company and then leaked to the public because he knew that such fraud would be detrimental to the public.

Whistleblowing is the disclosure by members of the organization of the practice illegal, immoral or illegitimate practices under the control of the employee to the organization that affect the actions (Near & Miceli, 1985, 4; Near et al., 2004; Miceli et al., 2008, 8). Whistleblowing is important for a variety of reasons, namely to safeguard or improve the welfare of employees with emphasis on democracy as a right in upholding ethics in the organization. Employees may do whistleblowing when disagreeing with his boss (Glazer and Glazer, 1999; Miceli, Near, & Dworkin, 2008). The research also states that the whistleblower bold as to ignore the risks or play the "blame game" to establish responsibility of a risk (Kesselheim, Studdert, and Mello, 2010).

Blowing the whistle may affect interpersonal relations between whistleblowers, co-worker and the accused. The whistleblower may be derived from a loyal worker for being disloyal. This means that they do not recognize the authority of management (Davis, 2003). Glazer and Glazer (1989) stated that whistleblowers should try to rebuild their lives by finding another job and develop a new career.

Kaplan, Pany, Samuels, and Zhang (2012) investigate fraud reporting channel preference witness to experiment and discover the intention of reporting witness through an anonymous channel is higher than non-anonymous channel only when the previous whistleblowing negative results (no retaliation against whistleblowers).

Whistleblowing conditions also influenced by the model of individual ethical orientation (Forsyth 1992). Brink, Cerelola et al. (2015) predicted and found that individuals with idealistic ethical position is more likely to whistleblowing than individuals with ethical relativist position. Brink, Lowe and Victoravich (2017) tested the whistleblower stance on monetary (Yamauchi and Templer 1992) is influenced by external and internal whistleblowing channels.

Other individual factors, namely the demographic characteristics are also influenced by the characteristic aspects of the whistleblower. Experimental research on demographic information on participants such as age, gender, and type of employees do not relate to the desire of reporting (eg, Brink, Lowe, & Victoravich, 2013; Kaplan, Pope, & Samuels, 2011; Seifert, Sweeney, Joireman, & Thornton, 2010).

Some research on the influence of individual characteristics, strength of the evidence and incentives on whistleblowing has been studied by Brink et al. (2013) with the experiment at 81 MBA students. The research results Brink et al. (2013) showed that internal reporting is greater than reporting to the SEC, and the stronger the evidence that internal rewards to improve reporting to the SEC. Research

of Brink, Cereola et al. (2015) examined the materiality wrongdoing, personality traits and ethical position with the experiment and the results show the materiality of wrongdoing affecting the whistleblower. Brink, Eller et al. (2015) provides empirical evidence that the whistleblowing intention related to the strength of the evidence and concern for the actions of employees.

In relation to personality characteristics and moral judgment, Curtis and Taylor (2009) provide empirical evidence that whistleblowing in public accounting firms caused by the perspective of locus of control and ethical style. Locus of control refers to how the attributes of internal factors (eg, hard worker) or external factors (luck). Ethical style describes an individual approach to ethical dilemmas. Dalton and Radtke (2013) tested the effects of Machiavellianism join and ethical environment against whistleblowing. The nature of Machiavellianism is the tendency of individuals to deceive others in order to achieve his personal goal (Christie and Geis, 1970). Dalton and Radtke (2013) found that negative influence between Machiavellianism and whistleblowing. Brink, Cereola and Menk (2015) investigated the characteristics of the individual personality that Big Five Personality and ethical position with whistleblowing intention. Based on these, whistleblowing intention is influenced by factors of individual behavior.

3 Conclusion

This paper presents the public sector fraud and whistleblowing system influenced by behavioral aspects. Behavioral factors that encourage whistleblowing system among other personality factor, Machiavellianism, Locus of Control and demographic factors (age, gender). Whistleblowing personality factors are supported by an effective system, namely the anonymous reporting channels.

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The Effect of Independence, Leadership Style, and Organizational Commitments to Internal Auditor Performance in Inspectorate of Bali Province

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Abstract. The purpose of this study was to examine the effect of independence, leadership style, and organizational commitment on the performance of internal auditors in the Inspectorate of the Province of Bali. The method of determining the sample in this study is the purposive sampling method. The population of this research is all senior auditors working at the Bali Provincial Inspectorate Office. The sample in this study amounted to 30 respondents. The questionnaire became the data collection method used in this study. Multiple linear regression analysis researchers used to examine the effect of the independent and dependent variables. The test results show that independence, leadership style, and organizational commitment have a positive effect on the auditor's internal performance. This can be interpreted that the independence, leadership style, and organizational commitment the higher the internal auditor's performance is also getting better.

Keywords: Independence, Leadership Style, Organizational Commitment, Internal Auditor Performance.

1 Introduction

Internal audit can be interpreted as a process carried out by company employees to determine the level of accuracy of financial information and the company's operational processes compared to established operational standards. The effectiveness of the role of internal audit can be assessed through its ability to prevent and detect and correct if there are acts of accounting fraud in an organization (Hery, 2017: 96).

Auditing is considered very important for the company, because if the audit results of an auditor on a company's financial statements are declared reasonable, then the stakeholders both internal and external will be easily to make the decisions. Auditor performance is the ability of an auditor to produce findings from audit activities carried out (Adelia and Budiarta, 2016). Performance can be measured through applicable standards, where quality is related to the quality generated from a task, while quantity is the amount that can be produced within a predetermined period of time, while timeliness is the completion of tasks in accordance with the planned time (Listiya, 2016). The good performance of an auditor is needed to support the level of success in carrying out audit tasks.

Issues or cases that occur in the domestic scandal can be seen from the case that happened to the middle auditor PT. Jasa Marga, Sigit Yuhoharto who is indicated to have received bribes from Setia Budi (Inactive General Manager of PT. Jasa Marga, Purbaleunyi Branch). BPK's senior auditor, Sigit Yugoharto, is suspected of getting a gift or promise to do or not do something, or because he has done or not finished something which is then associated with his position as auditor. This is certainly not appropriate and contradictory when related to its obligation to conduct an examination of PT Jasa Marga (Persero) in 2017 (www.news.detik.com).

The phenomenon in Indonesia, especially in Bali, is the corruption case in the Tukad Mati Project. The latest news is that the Financial and Development Supervisory Agency (BPKP) has collected audit results from the total state losses. Audit results from the BPKP found that the value of losses showed a nominal value of Rp. 834,835,043.00. Investigators from the Denpasar Prosecutor's Office have named three suspects in connection with the Tukad Mati development corruption case, including Wayan Seraman and AA. Gede Dalem as an official at the Badung PUPR Service, and I Wayan Sutaya as the President Director of PT. Undagi Jaya Mandiri. A report from a local resident related to the Tukad Mati system was the beginning of an investigation by the Denpasar Kejari (www.baliberkarya.com).

The reason we were doing this research because there are inconsistent result which mean the result of the previous research was not conclusive yet. It can be shown with the table below:

Table 1. The Result of Previous Research

Researchers	Internal Auditor Performance	Independence	Leadership Style	Organizational Commitment
Widhi (2014)	√	(-)		
Kompiang dan Dharma (2013)	√	(+)		
Widhi (2014)	√		(x)	
Setiyadi dan Rasmini (2016)	√		(+)	
Widhi (2014), Prameswari dan Nazar (2015),	√			(x)
Setiyadi dan Rasmini (2016)	√			(+)

2 Literature Review

2.1 Agency Theory

Agency theory explains the conflict of interest that occurs between the principal as the business owner and the agent as the company's management. The principal has an interest in advancing his business ventures, while the management has an interest in his personal welfare. This information asymmetry that occurs between the two parties is the reason for the important role of the auditor profession (Wulandari, 2017).

2.2 Theory of Attitude and Behaviour

Theory of Attitude and Behavior states that a person's behavior is determined for what people want to do (attitude), what they think they will do (social rules), what they can do (habits) and with the consequences of the behavior they think (Harlynda, 2011).

2.3 Independence

Independence describes the attitude of not being influenced and impartial to anyone (neutral). Fakhri (2016) states that it is very difficult not to take sides, willing or unwilling to have partiality, in this case the alignment meant is something that is true.

2.4 Leadership Style

Leadership style is defined as a way for a leader to be able to invite and influence the mindset and actions of colleagues or subordinates to be able and willing to take action in order to achieve the goals set (Samsuddin, 2018).

2.5 Organizational Commitment

Organizational commitment describes an action and attitude of individuals to always be loyal and bound to the goals of the organization. Each manager is recommended to be able to increase the level of job satisfaction of his employees so as to be able to create a better commitment to the organization. This will improve employee work productivity and facilitate the process of achieving business goals (Samsuddin, 2018).

3 Research Methods

This research is located at the Bali Provincial Inspectorate Office. The independent variable in this research is independence, leadership style, and organizational commitment while the dependent variable

is the internal auditor's performance. This study used a questionnaire of 30 items using primary data types. The sample is part of the entire population that is considered to have the same characteristics by researchers (Sugiyono, 2016: 81). The researchers used purposive sampling as a method of determining the sample. The multiple linear regression analysis was used to test the effect between the independent variable and the dependent variable.

4 Result & Discussion

The results of multiple linear regression testing are presented in Table 2.

Table 2. Multiple Linear Analysis Test Results

Model		Unstandarized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-31,475	13,971		-2,253	0,033
	Independence	0,516	0,079	0,557	6,558	0,000
	Leadership style	0,705	0,133	0,451	5,303	0,000
	Organizational Commitment	0,232	0,059	0,322	3,925	0,001
R		= 0,910				
Adjusted RSquare		= 0,808				
F _{hitung}		= 41,676				
Sig. F _{hitung}		= 0,000				

4.1 Model Test

This model test consists of the determination test (R^2) and the F test. Based on the table above it can be seen that the value of adjusted r square (R^2)=0.808 or which means that the variables Independence (X1), Leadership Style (X2), and Organizational Commitment (X3) affect the Internal Auditor's Performance by 80.8% and Other variables outside of this study affect the rest of 19.2%.

Based on the results of the statistical test above shows that the value of the F test of significance is equal to 0,000 <5 percent. These results represent the Independence, Leadership Style, and Organizational Commitment simultaneously affecting the Internal Auditor's Performance at the Inspectorate of the Bali Province.

4.2 Hypothesis testing

4.2.1 The Effect of Independence on Internal Auditor Performance at The Inspectorate of The Province of Bali

The conclusion drawing criteria is if the significance value > 0.05 then it can be concluded that the independent variable does not significantly influence the dependent variable, and vice versa (Ghozali, 2016: 99). The regression coefficient for the independence variable is 0.516 with a significance of 0.000 (below 0.05). This means that the independence variable has a significant positive effect on internal auditor performance (H1 accepted). Furthermore, if related to this research, it can be explained that the higher the level of independence of an auditor, the better the performance of the auditor, in this case the internal auditor at the Bali Provincial Inspectorate. Independence can be interpreted as an attitude of not being influenced and impartial to anyone (neutral). With an independent attitude, an auditor will not be able to be influenced by other parties, and is based on audit evidence and actual conditions that occur in the field (objective). The results of this study are consistent with research conducted by Kompang and Dharma (2013).

4.2.2. The Influence of Leadership Style on Internal Auditor Performance on Inspectroat Province of Bali

The value of the regression coefficient for the leadership style variable is 0.705 with a significance of 0,000 (below 0.05). This means that the leadership style variable has a significant positive effect on internal auditor performance (H2 accepted). If related to this research, it can be explained that the better

leadership style of an auditor, the better the performance of the auditor, in this case the internal auditor at the Inspectorate of the Province of Bali. A good leader is one who has the ability to increase work motivation and influence the mindset and actions of his subordinates to achieve organizational goals. The results of this study support the research conducted by Setiyadi and Rasmini (2016).

4.2.3 Effect of Organizational Commitment on Internal Auditor Performance at The Inspectorate of The Province of Bali

The regression coefficient value for the variable organizational commitment is 0.232 with a significance of 0.001 (below 0.05). This means that the organizational commitment variable has a significant positive effect on internal auditor performance (H3 accepted). When associated with this research it can be explained that the higher the commitment of an auditor, the better the performance of the auditor, in this case the internal auditor at the Inspectorate of the Province of Bali. Organizational commitment emphasizes the level of employee loyalty and attachment to an organization. Increasing one's organizational commitment, the loyalty is also increasing for the organization. An employee with a high level of organizational commitment will always try to get involved and fight for the interests of the organization. The results of this study support the research conducted by Setiyadi and Rasmini (2016).

5 Conclusions and Suggestions

5.1 Conclusions

The conclusions that can be drawn from this study are adjusted with the results obtained are independence, leadership style, and organizational commitment have a positive effect on internal auditor performance at the Inspectorate of the Province of Bali

5.2 Limitations of Research and Suggestions

The limitation of this study is that it is only carried out at the Inspectorate of the Province of Bali more specifically, namely the internal auditor's process. In this study, researchers only used three variables. For the next researcher, can add variables that are able to influence the performance of auditors such as professionalism and education level. The results of this study can be considered for application by the Inspectorate of the Province of Bali. The application process can be in the form of an appeal to all auditors to maintain their independence in making audit decisions based on applicable auditing standards, applying a democratic leadership style without losing firmness so that the auditor can be more comfortable giving his opinion regarding auditing and the problems that occur in the institution, and maintaining commitment organization through better collaboration in the audit team.

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Organizational Ethical Climate for Reduce Fraud Behavioral

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Abstract. This study aims to examine and analyze the effect of organizational ethical climate and self awareness on fraud behavioral, and analyze the role of moderating self awareness on the influence of organizational ethical climate on fraud behavioral. The study was conducted on cooperatives in Bali, which numbered 4,151 units spread across 9 (nine) districts / cities. The number of samples used as research objects was determined by Slovin formula at a precision level of 10%, so that the number of samples was 98 cooperative units. The determination of the cooperative which is the place of research is determined proportionally random sampling. The results showed that organizational ethical climate had a significant negative effect on behavioral fraud, whereas self awareness did not significantly influence behavioral fraud and also did not act as a moderating effect on organizational ethical climate on behavioral fraud. So in this study, it can be suggested that an ethical organizational climate plays a very important role in reducing the behavior of deviations that occur.

Keywords: organizational ethical climate, self awareness, fraud behavioral

1 Introduction

The cooperative institution is believed to be very in accordance with the culture and order of life of the Indonesian nation, because it contains the main meaning of cooperation for mutual interests (mutual cooperation). In its development, the system in cooperatives has management that helps. In reality there are deviations in the management of cooperatives, especially savings and loan cooperatives. This can hamper the development of cooperatives, so that it will affect the public trust in savings and loan cooperatives. Various problems that occur in cooperatives are not infrequently caused due to the management implemented running poorly, giving rise to various phenomena that we know such as fraud. States that fraud is a practice that can be done by people from inside and outside the organization, to gain benefits, both personal and group, which directly or indirectly, these actions can harm others [1].

In fact fraud can harm the company's finances. Fraud perpetrators are usually carried out by individual employees who work in an organization or company where he works, and even the perpetrators are from people whose task is to operate the operating system of the agency/company and also run an internal control system.

Some studies state that ethical behavior is an important function in organizational management [2]. Ethical behavior is important in a variety of life activities, although in some cases ethical deviations still occur. This needs to be rethought the efficiency of existing ethical strategies. Among them are still cases of fraud in various companies. Fraud is an interesting issue to study, because it is an unethical behavior in company activities

Based on observations, some of the possible causes of fraud are less ethical organizational environments and low individual awareness levels. Ethical behavior is behavior that is in accordance with social norms that are generally accepted in relation to right and good actions. This ethical behavior can determine the quality of individuals (employees) that are influenced by factors obtained from outside which then become the principles that are lived in the form of behavior

Based on the background described, the purpose of this study was to determine the role of organizational ethical climate and self-awareness in reducing fraud behavior in cooperatives in Bali.

2 Literature Review

2.1. Fraud Behavioral

Lexical fraud behavioral means fraud / fraudulent behavior (English-Indonesian Dictionary). According to [3], fraud is any illegal act characterized by deception, concealment or violation of trust. Fraud is an intentional act involving fraud perpetrators who can harm others [4]. According to [5], Fraud can be termed fraud which implies a deviation and illegal act, which is done intentionally for certain purposes such as deceiving or misleading to other parties , which is done by people both from within and from outside the organization.

Fraud practices that often occur include misuse of interests, bribery, illegal acceptance and corruption [6]; [7]; [8]. Fraud is designed to exploit opportunities in an dishonest manner, which directly or indirectly harms others. Fraud can be interpreted as dishonest, corrupt, or unethical behavior. Fraud is an unethical act that is even considered very bad because it can have a negative impact not only for one individual but also for an organization or environment in which fraud is carried out [9].

[10] states fraud as a misinterpretation of the truth or concealment of material facts that causes a person to act adversely to another party. Fraud can occur either individually or in groups. This behavior can occur due to pressure, chance, and rationality. [11] describes the three causes in a chart shown in Figure 1, as follows:

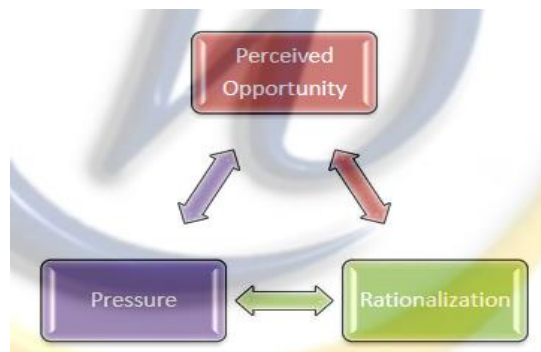


Figure 1. Causes of Fraud
Source: Priantara (2013:48)

Some research findings found that fraudulent behavior (fraud) can be caused by several factors such as a less ethical organizational climate (Organizational Ethical Climate), a person's low personal awareness (self awareness).

2.2 Organizational Ethical Climate

The first ethical climate theory was proposed by Victor and Cullen. This is a concept to understand the normative system of an organization. Organizations need to create an ethical situation / climate in order to avoid organizational members' behavior deviating from the prevailing rules [12]. Organizational Ethical Climate (organizational ethics climate) is defined as a normative system that guides organizational decision making and systemic responses to ethical dilemmas [13]. According to [14], states that an ethical climate is a work climate that reflects organizational procedures, policies, and practices with moral consequences. According to [15], organizational ethics climate is a psychological perception structure that focuses on ethical behavior of organizational members that are used to increase members' understanding of shared values to address and resolve ethical problems and awareness of personal responsibility.

The organizational ethical climate indicators refer to [16] which consists of egoism, benevolence, and principle. A better organizational ethics climate will minimize the occurrence of irregularities in the form of fraud and fraud. Research results show that organizational ethics cannot be separated from organizational life. [17] suggests that basically the dimensions and factors that influence organizational ethics originate from organizational life, including structure, individuals and the environment.

The function of ethics in the organization develops not only on individual behavior at work. [18] explain the ethical climate in organizations influencing decision making. [19] say that organizational climate will develop human resources in healthy organizations. [13] in his research stated that climate influences the ethical behavior of individuals in business organizations. An ethical climate that develops in organizational life is social capital that will direct the behavior orientation of employees to work on the basis of ethics so as to avoid deviant behavior.

2.3 Self Awareness

According to [20] and [21] state that self awareness is an understanding of physical characteristics, personality, character, and temperament by recognizing the natural talents that they have and having a picture of a clear concept of oneself with all its strengths and weaknesses . [22], self-awareness is an embodiment of one's identity, can be referred to as a person who lives when the person in question is reflected in appearance, feeling of creativity and intention, value system, perspective, and behavior that he has. Self-awareness consists of two dimensions according to [23], namely personal self-awareness (private self awareness), and general self-awareness (public self awareness). Private self awareness is related to mood, perception, and feelings, while public self awareness is related to appearance and social action.

Increasingly improved awareness can reduce the possibility of fraudulent behavior, whereas an increasingly poorer level of awareness can reinforce fraudulent behavior. A number of studies have shown that a person with an improved level of awareness means cheating / deceiving behavior will diminish, including [24] and [25] found there is a negative influence between the effectiveness of self-awareness and fraudulent tendencies in the government sector. [26] shows that the effectiveness of internal self-control negatively affects the tendency of accounting fraud. So, with good self-awareness, it will minimize fraud committed by employees. But the lack of self-awareness will open opportunities for fraud.

3 Framework for Research Concepts and Hypotheses

3.1 Framework for Research

Based on theoretical studies and supported by a number of research results, the research conceptual framework was constructed as shown in Figure 2, as follows:

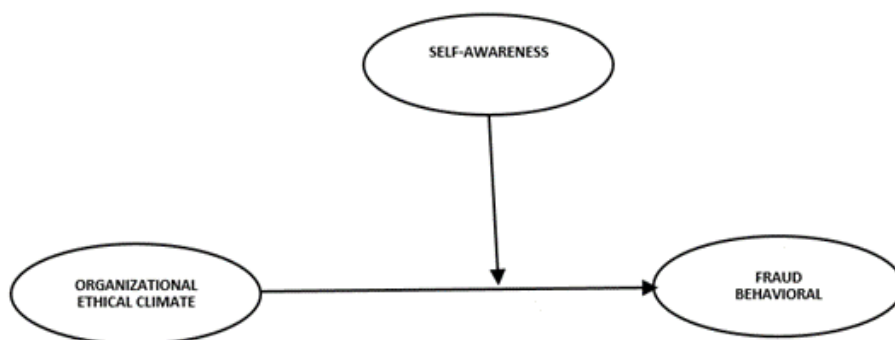


Figure 2. Research Concept Framework

3.2 Hypotheses

Referring to the conceptual framework as shown in Figure 2, the research hypothesis can be made as follows:

Hypothesis 1: Organizational ethical climate has a significant negative effect on fraud behavior

Hypothesis 2: Self Awareness has a significant negative effect on fraud behavior

Hypothesis 3: Self Awareness moderates the influence of Organizational ethical Climate on fraud behavior

4 Research Methods

4.1. Location, Population, and Research Samples

This research was conducted on cooperatives registered with the Cooperative Department in 2018 which numbered 4,151 cooperative units. The research sample was determined based on the Slovin formula with a precision level of 10%, so that the number of samples was 98 units. The population distribution and sample of cooperatives in Bali are shown in Table 1.

Table 1. Population, and Research Samples

No	Regency/City	Total	
		Population	Samples
1	Denpasar	1,158	27
2	Buleleng	300	7
3	Karangasem	206	5
4	Bangli	214	5
5	Klungkung	107	3
6	Gianyar	1,018	24
7	Badung	529	12
8	Tabanan	413	10
9	Jembrana	206	5
Total		4,151	98

Source: Depkop.go.id. 2018

4.2 Research Data

Data collection is done by interviewing cooperative leaders who are the research samples based on prepared questionnaires. The research data is in the form of a Likert perception scale with a range between 1 to 5. Answer 1 shows the perception of "very disagree", while 5 shows the perception of "strongly agree" to the statement contained in the questionnaire.

4.3 Analytical Method

Data that has been collected, then tabulated, then analyzed with the SmartPLS 3.0 program. The analysis was carried out in 3 (three) stages, namely: the stage of evaluation of the measurement model / outer model, the stage of evaluation of the structural / structural model / inner model, and the stage of testing the significance of the path.

Evaluation of the measurement model / outer model, including tests of validity and reliability through outer loading, Cronbach's Alpha and / composite reliability. Indicators can be said to be valid, if the value of outer loading is significant > 0.50, and is said to be reliable if Cronbach's Alpha and / composite reliability > 0.60. Evaluation of structural / structural model / inner model includes R-square (R²), Q-Square (Q²), and Goodness of Fit (GoF). Evaluation of testing the significance of the path (path) is based on a 5% error level, so that a path can be said to be significant if p-value < 0.05 or t-statistic > 1.96.

5 Results and Discussion

5.1 Characteristics of Respondents

Table 2. Characteristics of Research Respondents by Gender, Age, Education Level, and Working Period

Classification		Frequency	Percentage
Gender	Men	81	83,00
	Women	17	17,00
	Total	98	100,00
Age (Year)	21 - 32	28	28,50
	33 - 44	58	58,50
	45 - 56	12	13,00
	Total	98	100,00
Level of Education	Senior High School	14	14,00
	Bachelor	84	86,00
	Total	98	100,00
Working Period (Year)	1 - 5	10	10,00
	6 - 10	39	40,00
	11 - 15	42	43,00
	16 - 20	7	7,00
	Total	98	100,00

Source: Data processed, 2019

5.2 Validity dan Reliability

The results of the SmartPLS analysis show the value of outer loading, cronbach's Alpha / Composite Reliability of each indicator in Table 3.

Table 3. Validity and Reliability Test Results

No	Variable	Dimension	Indicator	Outer Loading	Composite Reliability
1	Organizational ethical climate		Egoism	0,699	0,766
			Benevolence	0,698	
			Principle	0,767	
2	Self Awareness	Private Self Awareness	Mood	0,901	0,904
			Perception	0,870	
		Public Self Awareness	Feeling	0,839	
			Appearance	0,911	
			Action	0,911	
3	Fraud Behavioral		Pressure	0,694	0,712
			Chance	0,682	
			Rationality	0,642	

5.3 Accuracy of The Model

5.3.1 R-Square (R^2)

The PLS analysis results show the influence of Organizational Ethical Climate and self awareness on fraud behavioral by 0.316, meaning that 13.6% of fraud behaviors are influenced by organizational ethical climate and self awareness, the rest are other factors. That big influence is quite large.

5.3.2 Discriminant Validity

The results of discriminant validity analysis show the AVE root of each variable greater than the correlation between variables, as shown in table 4.

Table 4. Discriminant Validity

Variable	AVE	$\sqrt{\text{AVE}}$	OEC	SA	FB
OEC	0,522	0,722	1		
SA	0,596	0,772	0,588	1	
FB	0,552	0,743	0,553	0,407	1

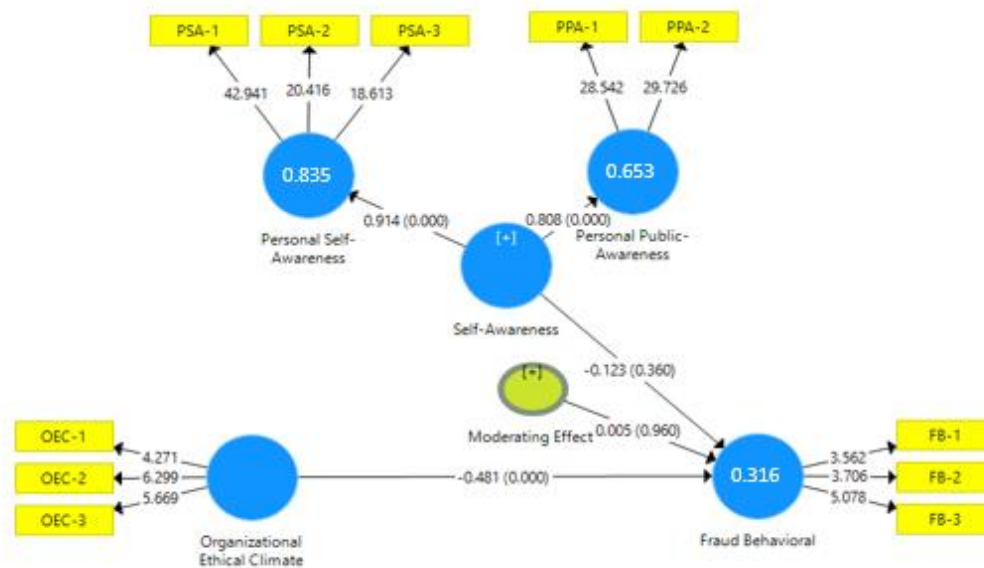
The table shows where the root of AVE is greater than the value of the correlation between other variables, so all variables can be said to be discriminately valid.

5.3.3 Goodness of Fit (GoF)

Calculation of Goodness of Fit (GoF) is done with the GoF formula = $\sqrt{(\text{AVE} \times R^2)}$. The result is $\text{GoF} = \sqrt{[(0,522+0,596+0,552)/3 \times 0,316]} = 0,419$ (large). The results of fit model testing, both seen from the values of R^2 , discriminant validity, and GoF, show a large value, so it can be concluded that the model has a high level of accuracy.

5.3.4 Evaluation of the significance of influences between variables

Testing the influence between variables can be shown through Figure 3, and Table 5.

**Figure 3.** Processing results with Smart PLS**Table 5.** Inter-variable Path Coefficients

No	Variables			Coeff. path	p-value	Info
	Independent	Moderation	Dependent			
1	Organizational Ethical Climate		Fraud Behavioral	-0,481	0,000	sig
2		Self-Awareness	Fraud Behavioral	-0,123	0,360	Non sig
3	Organizational Ethical Climate	Self-Awareness	Fraud Behavioral	0,005	0,960	Non sig

5.4 Discussion

5.4.1 Organizational ethical climate has a significant negative effect on fraud behavior

The results of hypothesis testing indicate that the organizational ethical climate has a significant negative effect on fraud behavioral. This is indicated by the path coefficient value of -0.481, with P-Value 0.000 <0.05. These results give meaning that the real increase in organizational ethical climate can reduce fraud behavioral. These results can confirm a number of theories and the results of previous studies from [19] say that climate serves to develop human resources in healthy organizations. [13] stated that climate influences the ethical behavior of individuals in business organizations. [18] explain the ethical climate in organizations influencing decision making. An ethical climate that develops in organizational life is social capital that will direct the behavior orientation of employees to work on the basis of ethics so as to avoid deviant behavior. Every organization is responsible for trying to develop an organizational behavior that reflects honesty and ethics that is communicated in writing and can be used by all employees. The culture must have roots and have noble values that form the basis for the ethics of managing an organization or an entity [27].

5.4.2 Self-awareness no significant negative effect on fraud behavior

The results of hypothesis testing indicate that self awareness has a negative but not significant effect on fraud behavioral. This is indicated by the path coefficient value of -0,123, with P-Value 0,360 > 0,05. This result gives a meaning that an increase in self awareness can not significantly reduce fraud behavioral. These results are unable to confirm the results of the study, among others, by [28] which states overall ethical behavior in organizations, will be part of culture, then employees will accept the cultural aspects to be adopted, because culture is a system of assumptions that can have influence strong in directing the behavior and beliefs of followers. It can be explained that fraud behavior can occur even in conditions that have self-awareness but cannot be avoided, as well as due to opportunities and conditions that support. This condition can be described according to the fraud triangle theory which states that there are three factors that cause a person to commit fraud namely pressure, opportunity and rationalization.

5.4.3 Self-awareness unable to moderate the influence of the Organizational ethical Climate towards fraud behavior

The results of hypothesis testing indicate that Self-awareness has a non-significant negative influence on fraud behavior. This is indicated by the path coefficient value of -0.123, with P-Value 0.360 > 0.05. These results mean that a real increase in self-awareness is not able to reduce fraud behavior. Thus, this result also illustrates that Self-awareness is not able to moderate the influence of the organization's ethical climate on fraud behavior. Statistically this is indicated by the path coefficient value of 0.005 with p-value 0.960 > 0.05.

The results of this study are not fully in accordance with the opinion of [8], which states that efforts to prevent fraud can start from internal self-control. Fraud generally occurs because of pressure to commit fraud or an urge to take advantage of opportunities and justifications (generally accepted) from this action [29].

The reason for committing fraud cannot be entirely caused by social pressure and individual behavior. This result also contradicts [30] who argues that behavioral factors are at the root of the problem regarding fraud. A person's behavior in committing fraud is not solely due to the factors of self-awareness that influence it [31]; [32].

6 Conclusions and Recommendations

6.1 Conclusions

Referring to the results of the discussion, as already explained, it can be concluded as follows:

- a. Organizational ethical climate has a significant negative effect on fraud behavioral. This means that a good ethical organizational climate can reduce fraud behavior in cooperative employees in Bali.
- b. Self awareness has no significant negative effect on fraud behavioral. This means that good self-awareness can't reduce fraud behavior in cooperative employees in Bali.
- c. Self awareness is not able to moderate the relationship between the organizational ethical climate to fraud behavioral significantly. This means that good self-awareness is unable to increase the

influence of ethical organizational climate on decreasing fraudulent behavior in cooperative employees in Bali.

6.2 Recommendations

Based on the results of this study, several things can be suggested, namely:

- a. In general, organizational ethics are good, but a number of factors need to be encouraged to be improved to become better, such as behavior, which is always trying to increase self motivation to achieve better goals. In addition to this, it can also be suggested to further enhance moral behavior or quality as a foundation of principles in a better direction.
- b. Judging from the self-awareness factor, in general it is good, but several other things need to be considered to be improved, such as self-reflecting behavior in the sense that no one likes to be treated badly. Another thing, which is related to the need to increase perceptions / positive thoughts in realizing positive behavior as well.

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Increasing Capability of Local Government Internal Auditors in Detecting Fraud Through Strengthening Professional Commitments and Organizational Commitments

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Abstract. Various efforts have been made by the government in eradicating and preventing corruption. However, it does not significantly reduce the number of corruption cases every year. Reforms in regional financial management were found to be unable to increase accountability in regional financial management. In the midst of the strong demands of accountability from the community, there are still many cases of fraud in financial management. In this case, a problem arises as to why the internal auditor, in this case, the regional inspectorate as an internal supervisor can miss fraud cases and all forms of irregularities in the financial management of the area. Fraud cases that the auditor cannot detect cause a perception of the auditor's ability to detect fraud. Various improvements have been made and continue to be carried out to improve the auditor's ability, but the focus point has not been known so that it cannot provide satisfactory results. This paper tries to offer a research-based approach to individual factors in this case professionalism commitment and organizational commitment, to determine its influence on the internal capacity of local government auditors in detecting fraud. The aim is to get a clear and comprehensive picture so that it can make a positive contribution to improving the role of internal auditors in local government in detecting fraud in the future.

Keywords: professionalism commitment, organizational commitment, detecting fraud, internal auditors, local government

1 Introduction

The implementation of regional autonomy now requires local governments to conduct financial management that is clean, fair, transparent and accountable to create good governance. One element in financial management is an internal monitoring function carried out by the Government's Internal Supervisory Apparatus (called APIP). APIP consists of the Financial and Development Supervisory Agency (called BPKP), the inspector general, and the regional inspectorate. According to the Government Regulation of the Republic of Indonesia No. 41 of 2007 and Regulation of the Minister of Home Affairs of the Republic of Indonesia No. 64 of 2007, elements of regional supervision were the regional oversight body consisting of the provincial inspectorate, the district inspectorate, and the city inspectorate. Inspectorates are organizations that have an internal audit function. Organizations that have an internal audit function will be better able to detect and reduce the possibility of fraud (Coram, et al. 2006 and Hogan, et al. 2008).

The Regional Inspectorate is a functional supervisory device that is under and responsible to the regional head and administratively receives guidance from the Regional Secretary. The role of the regional inspectorate has now shifted, one of which is related to an audit by the regional inspectorate as of the internal auditor of the local government who conducts internal audits. As stated in the Government Regulation of the Republic of Indonesia Number 60 of 2008 article 50 paragraph (1), it is explained that the inspections carried out by the inspectorate consist of performance checks and examinations with the specific purpose of several or all programs or activities funded by the regional budget (called APBD) so that it produces advice or input for improvement and progress in the administration of government affairs in the region.

The regional inspectorate is an internal auditor who is an institution that has the authority to oversee the running of government in the region. The Inspectorate is also the spearhead in increasing

accountability and transparency in financial management in the region. Accountability can be realized through internal audits (Togiman 2000 and Sawyer et al. 2006). In the Minister of Home Affairs Regulation Number 64 of 2007 it is stated that in carrying out the task of supervising government affairs, the Inspectorate has the following functions: first, planning a monitoring program; second, formulating supervisory policies and facilities; and third, inspection, investigation, testing and assessment of supervisory duties. To support the implementation of the tasks of the Regional Inspectorate in carrying out its oversight function so that it can run optimally, more intensive performance is needed from the Regional Inspectorate to optimize the tasks and responsibilities it carries out. As an internal control institution, before irregularities occur, the Inspectorate should be able to detect it quickly, and management can respond or follow up on the existence of these weaknesses correctly (Russell and Regal 1996) so that weaknesses can be corrected and not repeated again.

Until now, corruption is still a serious problem that must be faced by the Government of Indonesia. The impact of widespread corruption is very detrimental to state finances. Corruption can also hamper national development which results in damaging the social and economic rights of the wider community. Fraud in government agencies does not only involve people who have high positions but can also involve people who are under it. This fraud can occur in both the central government and regional governments. Forms of fraud that are often carried out include manipulating financial statements, removing transaction documents, shopping mark-ups, and misappropriation of revenue realization that can harm the State / regional finances. These actions are carried out with motives for both personal and group interests. This is reinforced by data in 2017 from a survey conducted by a corruption observer, Transparency International, that Indonesia was ranked 96th out of 180 countries surveyed. Among ASEAN countries, Indonesia is still ranked 5th under Singapore, Brunei, Malaysia, and Timor Leste. Until 2016, out of 541 regional heads in Indonesia, there were 360 regional heads trapped in corruption cases (Tjandra, 2017). This figure is a legal case that befell the head of the region, has not shown the number of corruption cases at the level of officials and local government employees. Cases of fraud occurred even though the regional government had a system of internal government supervision in the form of regional inspectorates. This internal supervision system complements the external supervision carried out by the Supreme Audit Agency and supervision by the public. However, it turned out that this internal supervision system proved to be ineffective in preventing corruption in the region. Rahardjo (2017) said that corruption cases that occurred in the regions did not appear to be based on the Inspectorate's report. The handling of corruption cases actually originated from public reports.

One of the responsibilities of internal auditors is to detect misstatements caused by errors or fraud. According to Lisa and Barry (1997), the function of internal auditors is to assist management in preventing, detecting and investing fraud. However, so far the position of regional inspectorates has been weak and has become the legitimacy of regional heads for their work (Suhartanto, 2014). The occurrence of cases of irregularities and fraud in regional financial management shows the weak role and performance of the internal auditors of the local government. Even though the relationship between the role of the Regional Inspectorate as an internal auditor and prevention of fraud is very strong (Taufik, 2011). According to Rozmitha and Apandi, (2012) internal government auditors play a role in detecting fraud. The internal auditor's failure to detect fraud caused a loss of public confidence in the internal auditor.

In the current era of bureaucratic reform, organizations in regional governments face many challenges in terms of human resource management. Organizations are faced with conditions relating to the low professional level of employees and high dissatisfaction which is almost certainly both will be antecedent variables of the low work performance of employees in carrying out their duties. Therefore, effective handling is needed so that the existing human resources can be professional so that they contribute positively to the formation of the image of the organization (Martak, 2015). Professional attitudes and actions are demands in various fields of profession, including the profession as an internal auditor. An auditor is said to be a professional if in carrying out an examination, he produces an audit that meets the stipulated provisions and in accordance with the code of ethics or professional standards. Professionalism is a work attitude. Low employee attitudes can be seen from the employees' indifference to their work. Work is done carelessly, there is no effort to improve the way of working and not respecting the results of his own work. The professionalism of accountants includes the standards of

professionalism, knowledge, and skills, human relations and communication, continuing education, and professional accuracy (Sawyer, 2006).

The study of the level of professionalism of the profession of auditors has not been done much by academics. However, it is fully realized that professionalism is a must so that the profession will survive in the future. Professionalism of a professional will become increasingly important if the professionalism is related to the work of the individual, so that in the end it can contribute work to companies or professional organizations where they work. For companies or organizations, if empirically there is a relationship between the level of professionalism of individuals and the results of individual work, then this will be a value for the company in maintaining personal professionalism. Aranya (1981) in his study emphasized that professional commitment shows a situation where an employee has the same values and goals as the work or profession that is being undertaken, is involved in achieving professional goals and intends to maintain membership in professional associations.

The professionalism of an auditor is needed to examine what information is needed in making a quality audit assessment. Auditors will always be required for professionals to do every profession. Professionalism can also be reflected in the internal auditor's compliance with the applicable professional code of ethics. The code of ethics sets standards of behavior as guidelines for all internal auditors. The principles of professional behavior provide guidance for members in carrying out their professional responsibilities and express the basic principles of ethics and professional behavior. These principles require a strong commitment to respectable behavior despite sacrificing personal gain.

2 Literature Review

Professionalism is associated with the view that work shows a number of characteristics required by the profession (Goode, 1957; Kalbers and Fogarty, 1995). This traditional analysis is often criticized by scholars today who oppose the effectiveness of a number of characteristics, question the generality of models taken from one or two cases of history (eg law and medicine) and systematically underestimate the role of power and social conflict (Kalbers and Fogarty 1995). An alternative view of the emergence and success of professionalism is based on the maximum sociology of Weber and Karl Marx. For this purpose, the goal of professionalism for accountants can be considered as an alternative to motivated personal market control or as a means of maintaining a capitalist socialist structure (Roslender, 1990).

An alternative view of the profession failed to develop any systematic empirical evidence. In addition, the inconsistency of expectations for individual-level analysts has been developed by Roslender (1990) who studied the role of accountants in this perspective. The results concluded that most practitioners lacked political awareness and the distributional implications of the accounting profession. Because professionalism as an important individual attribute is difficult to implement outside the conventional functionalist tradition. The researchers use many concepts of professionalism as developed by Hall (1968) to measure the professionalism of the profession of auditors as reflected in attitudes and behavior. There is a reciprocal relationship between attitude and behavior, namely the behavior of professionalism is a reflection of the professionalism and vice versa.

Research on the influence of professionalism on performance has been carried out in Indonesia. However, research that focuses on examining the effect of professionalism on the auditor's ability to detect fraud has not been done much. The use of professionalism in carrying out its duties is a minimum requirement that must be owned by the auditor so that the tasks carried out are in accordance with the rules of the profession. Research carried out by Surnardi (2002), Tirta and Sholihin (2004), Ardini and Sawaljuwono (2005), Lastanti (2005) and Koroy (2008) use the object of research by government external auditors. While Alim's research, et al. (2007) use independent auditors who work in the Public Accounting Firm (KAP). For this reason, it is necessary to conduct research by using a sample of internal auditors to determine their influence on their ability to detect fraud for internal auditors of the local government.

Internal auditors in local governments have been given an important role and better regulatory support. The internal auditor's role in the region which was originally only repressive has developed into preventive action. In addition, the regional inspectorate was also given a role as a consultant, so that Regional Organization Organizations (called OPD) in their regions could consult on the use of regional budgets so as not to cause practices of lawlessness. However, increasing roles and arrangements in practice does not significantly reduce the level of corruption in the region (Katharina, 2017). There are

still regions that have obtained reasonable audit results (accepting unqualified opinions) in the financial statements, but their regional heads are involved in corruption cases. This shows that regional internal auditors have not been able to secure state assets from corruption. If the internal auditors of the local government have the ability to detect fraud, then the occurrences of fraud in financial implementation in the local government can be avoided.

The important role of the internal auditor in detecting fraud will only be a slogan if the leadership of the organization in the local government does not provide support in the form of commitments and actions that encourage the functioning of the internal auditor's role. Aranya, et. al (1982) in his study analyzed the effect of organizational commitment and professionalism on the job satisfaction of accountants. By using organizational commitment and professional commitment as predictors of job satisfaction, this study found a statistically significant correlation between organizational commitment and auditor performance.

In addition to professionalism, organizational commitment is one of the individual factors that influence performance improvement. Organizational commitment can be created if members of the organization are aware of their rights and obligations as members without seeing their position or individual position. According to Bariyima (2012), the success and performance of a person in a field of work are largely determined by how much organizational commitment he has. High organizational commitment will increase high performance too.

Commitment is defined as the power of identifying individuals who are in an organization (Curtis et al., 2001). Commitment can be said as the identity and need for service in a job that has high responsibility (Osinsky and Mueller, 2004). A person who has a commitment to his organization is a person who has loyalty and a sense of pride with his organization so he has the desire to work and complete his tasks well (Ghorbanpour et al., 2014). The existence of organizational commitment owned by an employee will have a positive influence on the organization because employees with high organizational commitment will have a sense of belonging to the organization (Putri, 2015). Meyer et al. (1989) and Fernando et al. (2005) suggested that organizational commitment has a positive relationship with performance.

Organizational commitment can be built on the basis of job trust in organizational values, the willingness of members of the organization to help realize organizational goals and high loyalty to remain a member of the organization. A good relationship will be established if the auditor has a high sense of loyalty and can identify himself with the place he works. The existence of organizational commitment owned by the auditor will have an impact on auditor performance. Siders et al. (2001) state that commitment affects performance.

3 Conclusion

Many factors are the drivers of corrupt behavior that occurs in local governments. One important factor that needs to be considered is the lack of supervision by internal auditors. Therefore, the role of the inspectorate must be increased as an effort to prevent irregularities in financial management in the local government. Internal auditor's weaknesses in preventing corruption, especially in terms of its role in detecting fraud in local governments, need to be studied more deeply, especially related to the factors that influence it. This needs to be done so that it can be used as a material consideration for policymakers to be used as a basis for decision-making related to efforts to increase the internal auditor's ability to local governments in detecting fraud.

Auditors with high professional attitudes will have an influence on their performance so that the auditor can work better and be able to provide audit results that can be trusted by interested parties both internal and external parties of the company (Halim, 2008). The results of research conducted on external auditors state that auditors who behave professionally are more trusted as auditors who have good competence so that the results of the audits will be better. The higher the professionalism of an auditor, the better the performance of the auditor (Prabhawa et al., 2014).

Employees who have a high commitment to the organization will show a positive attitude and will try to make a positive contribution to the organization so that organizational goals can be achieved. An auditor who has a high organizational commitment will work well and provide the best for his organization and there will be a sense of ownership of the organization so that the commitment that is owned will result in increased auditor performance (Prabayanthi, 2018).

This research will contribute to efforts in combating corruption in the implementation of governance in the regions related to the internal role of regional government auditors. The results of this study can be used as consideration in an effort to improve the internal capabilities of auditors in detecting fraud while they carry out their duties in internal supervision.

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Custom Mat as A Local Wisdom of Whistleblowing Mechanism of Village Funds in East Sumba

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Abstract. This study aims to determine the role of culture in the implementation of whistleblowing system in Kuta Village, East Sumba. This research is a qualitative research using interviews for data collection technique. The speakers in this study were village officials, custom chiefs, and village communities involved in managing village funds. Based on the results of interview analysis, it can be concluded that the local culture of Sumba namely “custom mat” is the local wisdom of whistleblowing mechanism and the philosophy of “*Mbola Mapabolung, Lipit Mapakahang*” encourages individuals to have high intention for whistleblowing. Village officials and the community have high desire to conduct whistleblowing because the customary values they adhere to encourage awareness that fraud and corruption are bad things and must be stopped.

Keywords: whistleblowing, village funds, local wisdom

1 Introduction

Fraud in Indonesia is ranked 89th out of 180 countries internationally (Humas, 2019). Wells (2011) argues that fraud can occur because of the three conditions known as “fraud triangle” i.e. individual’s opportunity, pressure, and rationality. Fraud is a wrong and irresponsible action by doing anything for personal gain and it results losses to others (Yulifah & Irianto, 2014) . Fraud includes a variety of irregularities and illegal actions which prelude the fraud. Situational pressure can trigger someone to commit fraud (Singleton & Singleton, 2010). A situational pressure can be described as condition of financial difficulty experienced by a company or organization (Beasley, Hermanson, Carcello, & Neal, 2010).

Fraud in Indonesia is also rampant in the management of village funds. Village funds should be used for improving the welfare of rural communities, improving public services for the even distribution of village development, improving the village economy, reducing the gap of inter-rural development, and strengthening village communities not as objects but as subjects in the development (Republic of Indonesia, 14b). The phenomenon shows that there is a lot of manipulation in the use of village funds in various regions in Indonesia. In 2018, there were 96 corruption cases related to village funds and 65 of them were carried out by the village heads (Primayogha, 2018). The most recent case occurred in the Kepuhanyar-Mojokerto area. Agung Priyanto as the head of Kepuhanyar Village allegedly committed corruption for the Kepuhanyar annual budget in 2016 amounted to Rp 690,922,390. Another fraud case occurred in Labuan Tangga, Riau which Jumadi as the village head in Labuhan Tangga of Bangko Sub-District of Rohil Regency was implicated in a corruption case of village funds of Rp. 399 million from the Rohil village budget in 2015 (Budianto, 2018).

Agusyani, Sujana, & Wahyuni (2016) explained that the effort to expose fraud can be done by opening whistleblowing channels. There are a lot of efforts of corruption uncovering by whistleblowers in Indonesia, especially in government agencies. The latest case was revealed by the former Minister of Energy and Mineral Resources (ESDM), Sudirman Said. Sudirman revealed the fact that the chairman of the House of Representatives (DPR) carried out unethical actions with a businessman from a large company. From various cases that occurred in Indonesia, not a few of reporters experienced ironic dilemmas and conditions. This has led to the re-issuance of the Witness and Victim Protection Act No.13/2006 (Nurhidayat, 2017). In Indonesia, the whistleblowing system that has been carried out by the

government includes, among others, the Ministry of Finance that opens a website as a fraudulent reporting channel in the Ministry of Finance of the Republic of Indonesia (Kemenkeu, n.d.). A whistleblower is someone who exposes unethical actions and gives information about illegal activities in public or private organizations (Vandekerckhove & Lewis, 2012).

Cases of village funds abuse occur in various places in Indonesia. Corruption cases in the use of village funds have also occurred in Sumba Island, especially in East Sumba. Some village heads have been arrested in connection with this abuse (Ropo, 2019). East Nusa Tenggara is a province in the eastern part of Indonesia which has 21 districts with a population of 5,456,203 in 2019. NTT Province consists of approximately 550 islands which the three main islands are Flores Island, Timor Island and Sumba Island. East Nusa Tenggara is placed at the third rank as the poorest province in Indonesia. This research will focus on Kuta Village, East Sumba district. Kuta Village is the focal point of coastal tourism development by the East Sumba Regional Government.

The Kuta village as one of the villages that has strong customs currently faces the misuse of village funds. Village funds should be received by village officials and managed for village development. Unfortunately, in fact, this has not been implemented properly. By custom law, the values of commitment have been upheld in Kuta village in carrying out government's duties. The existence of abuse cases in various villages, including in Kuta village the courage of individuals to do whistleblowing as one of factors to detect fraud has prompted initiation of this research.

Utami, Utami, & Hapsari (2016) in their research on village financial management in Central Java explained that local wisdom has a pivotal role in disclosure of fraud. Some people still feel reluctant to report fraud because some of the perpetrators are also their relatives that may cause problem on the family relationship and as a result when a fraud or misuse of village funds occurs; it will be settled in a family manner without involving legal processes.

The purpose of this study is to explain the mechanism and philosophy of the local wisdom of the Sumba region that encourages individuals to do whistleblowing. This study is useful for the village government and the government of Waingapu City of East Sumba to gain deeper knowledge about the role and influence of East Sumba's local culture on individuals and communities in the desire to act whistleblowing. The results of this study are also expected to provide an introduction and implementation of a whistleblowing system for the village officials, government and community in East Sumba, especially in Kuta village. This study provides a theoretical contribution in explaining a whistleblowing mechanism in the context of fraud associated with local wisdom in a village.

2 Literature Review

2.1 Village Fund

Based on Act No. 6 of 2014 concerning Villages, villages are given the authority to regulate and manage their own authority in accordance with their needs and priorities. Anwar (2012) said that village is a legal community unit that has the authority to manage and regulate the interests of the local community based on the origins and customs adopted in the national government system and located in the district. The village government is run by the village head or village apparatus as an element of village administration. In addition to the village apparatus, there is also a Village Consultative Body (BPD) which is an institution that carries out a government function whose members are representatives of the village community and based on regional representation and are chosen democratically (Nafidah & Anisa, 2017).

The Home Ministerial Decree No. 113 of 2014 concerning Village Finance Management states that the management of village funds is based on transparent, accountable and participatory principles and is carried out orderly and in budgetary discipline. The village financial management includes several activities, namely: (1) Planning as the initial stage of management of village funds which it comprises activities and budgeting for 1 (one) budget year and in which at this stage the village head together with the community conduct *musrembang* (a village development planning meeting); (2) Implementation which in a form of budget realization and planning of activities that have been jointly arranged in the *musrembang*, which the implementation is carried out by the village community in self-management in accordance with the principles of activity implementation. (3) Administration which in carrying it out the village head can determine the treasurer whose job is to save, deposit, and to be accounted for the receipt and expenditure of village fund management and the determination is made before the fiscal year and all

based on the decision of the village head. (4) Reporting that is carried out by the village head to the mayor or regent and that is also reported to the BPD, which the reporting of the use of village funds consists of first semester report for the end of July of the current year and the final semester report for the end of January of the following year. (5) Responsibility of village fund that is carried out by officials authorized to make accountability reports to the community in the form of accountability reports prepared in accordance with the village financial reporting standards. The period of management of village funds is one year budget from 1 January to 31 December of the current year.

2.2 Fraud in Managing Village Funds

Fraud according to Hall (2011) is an inappropriateness of material facts made by certain parties in order to deceive and harm other concerned parties. Fraud occurs because of the existence of three conditions called the “Fraud Triangle” i.e. there are opportunity, pressure and rationalization (Wells, 2011). In managing the village fund, the three conditions have great potential to occur. Considering this reason, the government and the community must be active in preventing the fraud of village funds and conflicts of interest. This can be realized by joint monitoring in the process of village development.

The regulation regarding village guarantees communities to actively participate in the monitoring and village development processes. Act No. 82 concerning the Village dictates that the general public has the right to obtain detailed information about village funds and the right to actively participate in monitoring the development process. Various evidence of frauds or indications of frauds that are found in the form of findings or complaints in the process of village development can be submitted to the village head or to the Village Consultative Body. Efforts to monitor the development of village management and village development are expected to increase the accountability of the village government. Monitoring of village funds can be carried out indirectly through organizations or institutions that are indirectly related to village management.

In the supervision of village funds, one sometimes does not have the courage to disclose fraud. In a study conducted by Taylor & Curtis (2013), there are several aspects affecting this condition. First is the concern of retaliation from the reported parties. The risk of retaliation threat from the perpetrators who threaten reporters and their families causes a reluctance to report any frauds. Second, the lack of adequate support and facilities from organizations for whistleblowers can be another factor not to disclose any frauds.

2.3 Whistleblowing

Miceli & Near (1985) state that whistleblowing is an act of disclosure by a member of an organization about illegal and/or immoral practices in the organization. Individuals who report fraud or carry out whistleblowing are referred to as whistleblowers. The whistleblowing action needs to get support from various parties so that it can run well. The whistleblowing in this study is the reporting action carried out by member(s) of an organization (active and non-active) regarding violations, frauds, as well as illegal, unethical and immoral actions to the village government or to the parties outside of the village government. Previous research by Widiyarta (2017) indicates that whistleblowing has a positive influence on prevention of fraud in managing village funds. There are many cases of whistleblowing which officers report their organizations they work for due to fraud or unethical activities. Sweeney (2008) also reveals that reports carried out by a whistleblower proved to be more effective in uncovering fraud compared to other methods such as internal control, internal audit, and external audit.

Factors causing fraud such as opportunity, pressure, and rationalization of greed are the reasons why a whistleblowing system is implemented in an organization. A whistleblowing system is used not only as a fraud reporting channel, but also as a form of supervision. Workers will be afraid to commit fraud because this system can be used for all workers, so that fellow workers will supervise each other. This will help in preventing potential fraud in the management of village funds.

It is necessary to understand the factors that can influence the intention of village officials to carry out whistleblowing actions so that organizations can design the most effective whistleblowing system. It is important for whistleblowers to participate in a whistleblowing system or this system will not be useful if no one uses it to report any fraud. Based on data issued by the Association of Certified Fraud Examiners Indonesia Chapter (2017) the best and most effective method of prevention of fraud is through

a whistleblowing hotline mechanism than other methods such as on-site audits and external audits upon financial statements.

Elias (2008) stated that there are two types of whistleblowing, namely internal and external whistleblowing. Internal whistleblowing occurs when an officer discovers a fraud committed by other officers; he reports the fraud to the village head or to a higher government body. External whistleblowing occurs when an officer finds out about fraud committed by the office where he works then discloses it to the public for he consider that the fraud can harm the community. A person's decision to become a whistleblower can be influenced by individual variables or organizational contexts. Examples of individual variables are costs and benefits, age, marital status, and education. While, the organizational context includes cultural ethics, ethical climate, organizational size, organizational structure and communication channels.

Relativism is the rejection towards attitude of moral values that is directed to individual behavior. In this case, individuals still consider some values that come from within themselves as well as from their environment (Forsyth, 1980). Ethical relativism is a theory stating whether an action can be said to be ethical or not, right or wrong, depends on the community's perspective. If staffs or employees have high realism, they will tend not to conduct unethical behavior and they will assume that internal whistleblowing is an important action to avoid unethical attitudes and actions that can put an organization in danger position (Husniati, 2017). The study conducted by Yulianto (2015) found that an orientation towards ethical relativism influences government apparatuses to conduct internal whistleblowing.

Another factor that influence internal whistleblowing is moral intensity. Moral Intensity can be associated with the concept of perception of behavioral control in the theory of planned behavior. Research conducted by Kreshastuti & Prastiwi (2014) found that moral intensity has a positive influence on internal whistleblowing. Organizational commitment also has an influence in internal whistleblowing. This research is supported by the results of study by Nurkholis (2015) which shows that organizational commitment affects civil servants' interest in conducting whistleblowing. A person who upholds professional identity will foster a character of compliance with the legal basis and rules of conduct. A sense of professionalism from someone will create a sense of responsibility towards the place where he works. When there is a violation of the applicable regulations, the intention to do a whistleblowing will come up (Husniati, 2017).

2.4 Local Wisdom and Whistleblowing Mechanism

Local wisdom is one of the external factors that influence a person's behavior (Maheswara & Shavitt, 2000). The factor of local wisdom or local culture is one of the variables that influence the intention to do whistleblowing. Previous research by Tavakoli, Keenan, & Crnjak-Karanovic (2003), MacNab, Galperin, & Lituchy (2007), Park, Blenkisopp, & Oktem (2008) and Hwang, Chen, & Staley (2013) use Hofstede's cultural dimensions to compare cultures in two more countries that have different cultural dimensions.

Review of literature by Gao & Brink (2017) focuses on determinants of the desire for whistleblowing including the characteristics of whistleblower, characteristics of the recipient of report, characteristics of the perpetrators of fraud and characteristics of the organization. The success of an effective whistleblowing is determined by the policies of an organization. In a hierarchical organization, there is no culture that shows freedom for employees to express their opinions, especially when there are differences of opinion. Organizations that do not take feedback and advice seriously indicate that they are not successful in implementing an effective whistleblowing policy (Teen, 2004).

Besides organizational culture, there is also a broader corporate culture and the culture of society that influence employees in the future. In some countries, cooperation in corporate community is very close and if they generally view whistleblowers negatively, whistleblowers not only will lose their job, but also they will suffer risk of losing other employment opportunities.

The opportunity for fraud and corruption by the village officials comes from the lack of a good control system and lack of reward system for each person. The local culture also plays an important role in helping or hindering the progress of whistleblowing system. In fact, sometimes individuals do not want to be whistleblowers because of their personal or cultural values. Unfortunately, whistleblowers are labeled as "bad things", referred to as traitors, and individuals who commit fraud are labeled as "family"

or “friends”. A culture that provides a room for individuals to express their opinions and an appreciation of their actions can prompt someone to become a whistleblower.

The whistleblowing mechanism can be in a form of an anonymous suggestion box, e-mail, website, telephone, or letter. A whistleblower may include his name when he reports or chooses to report anonymously. Reporting can be done to internal or external parties. Reports over suspected violations can be notified through a whistleblowing system, if according to the reporter, complaints through formal channels are ineffective or dubious.

3 Research Method

This study is a qualitative type study using in-depth interviews. This study was conducted in Kuta Village, Waingapu City of East Sumba of East Nusa Tenggara. Data collection was conducted in October 2018. Informants were stakeholders in the Village Fund consisting of elements from the village government, namely the Village Head and Village apparatus, community organizations (members of the Village Consultative Body), Customary Leaders, Non-Governmental Organizations, and journalists of village funds.

The results of the interviews were recorded and documented systematically. Information that has been obtained was then reviewed by combining and grouping information into a format that is appropriate and explained in more detail. The analysis technique was done by organizing data; sorting it into manageable units; finding pattern and what is important and what can be learned, then deciding what can be conveyed to readers. The process of data analysis begins by examining all available data from various sources; observations are written in field notes, personal documents, official documents, pictures, photographs and so on.

4 Results And Discussion

4.1 General Description of Kuta village of Kanatang Subdistrict

Administratively, Kuta village is one of the traditional villages located in the southern part of City of Waingapu, which on the north bordering with Hambapraing village, on the south bordering the Temu village, on the east bordering the sea, and the west bordering with Ndapayami village.

Kuta village has a population of 1,074 people consisting of 539 men and 535 women. This population occupies 16 RTs and 8 RWs with a size of 49.9 km² (Waingapu City Central Bureau of Statistics).

Most of the population work as animal farmers, Sumba fabric farmers and weavers. Some also work in formal and informal sectors in the City of Waingapu or at the village hall. In Kuta village, groups of workers have been formed, including a cooperative with 50 members; a Combined Farmer Group with 40 members, a SPP Group with 20 Members, Village-Owned Enterprises (BUMDES) with 20 members and a Village Women Farmer Group with 56 Active members. In addition, in Kuta village, a group of female goat and cow farmers has been created.

Village fund was firstly given by the government for Kuta village in 2015. A number of people formed a work team and a support team as supervisors of activities related to village fund management. In 2018, Kuta village implemented pre-development plan meetings and development plan meetings. Each outcome of these meetings will cover 4 things, namely: 1) administration of government, 2) construction of facilities and infrastructures, 3) community development, 4) empowerment. Those meetings involve various elements of the society including community institutions, community leaders, and village communities to jointly discuss and plan the types of activities that will be carried out by the village.

4.2 Village Management Mechanism

Planning is an activity carried out in the management of village funds; this phase includes planning and budgeting. Planning activities begin with the preparation of a Village Government Work Plan (Village RKP) which is a description of the Village Medium Term Development Plan (Village RPJM) for a period of 1 (one) year. In the RPJM and RKP, the village government organizes village meetings attended by the village government, the village council and the community. In village meetings, all things needed by each community will be conveyed and discussed, and they will determine the prioritized activities.

The implementation phase is realization of all planned activities related to the management of village funds that have been agreed upon by the village government, Village Consultative Body (BPD) and elements in the community. In implementing the stipulated village budget, it creates transactions in the form of village receipts and expenditures, which all transactions are made through the village treasury account. All transactions must be supported by complete proofs and the implementers of activities must carry out each the mandatory activities must supply necessary documents, i.e. the Budget Plan verified by the village secretary and authorized by the Village head.

The Village Head appoints the Village Treasurer to conduct village finance management before the budget for the current year begins. His task is to receive, save, pay, deposit and administer and account for the management of village funds.

The treasurer of the village head reports in the form of a report on the realization of the use of village funds budget at each phase and the realization of the budget usage report for regent/mayor for 1 (one) budget year that must be calculated by the village head. All reports on the realization of the budget can be accessed by the community and are used as evidence of the use of village funds in carrying out activities.

The Village Act No. 82 states that the public and the community have the right to know and have all detailed information about village funds and actively participate in the development process. Planning transparency in Kuta village can be seen from invitations to all villagers and elements of the community and village government to jointly conduct pre-development plan meeting and development plan meeting. The following are the results of interviews with informants, namely Mr. KP and Mr. SH who showed transparency in the village fund planning management:

“Kuta village has 3 funding sources, namely the National Budget, the Regional Budget (village budget allocation and tax distribution) before the funds are disbursed at the beginning of the year, which the pre-development plan meeting will be held to accommodate all proposals from the institutional components of the community, namely schools and integrated health posts. In the development plan meeting of city government (Municipal Planning Agency, Waingapu City Empowerment Agency, the finance department and the city Inspectorate) were present to monitor the village development plan meeting directly”

“In 2018, we have held village development plan meetings in April and the realization also took place this year. So the village development plan meetings are always carried out involving government, religious leaders, youth leaders, environmental groups, PKK (family education) groups and other women's groups, which all are involved in giving opinions in the meeting.”

From the results of the interview, it can be seen that transparency in planning has been done well, because the discussion on village development (*musrebang*) involves villagers to be able to participate in village development planning. Transparency and systematic planning to involve the concerned parties have been well planned. This is in accordance with the statement of Hanifah & Praptoyo (2015) that deliberation in planning must be conducted openly for all stakeholders.

Planning for village fund management for 2018 in Kuta Village focuses more on education, community empowerment and assistance in the construction of 5 housing units. Every activity proposed in the *musrebang* (development plan meeting) must be in accordance with the medium-term village development plan (RPJM). Mr KP added:

“Yes, in the development discussion, we have proposed a budget for education and empowerment. Everything is done openly in the discussion, so that the people of Kuta village know the details of fund that is received and allocated”.

Based on interviews, the carried out activities were in accordance with the needs of the village community so that this will enable the village vision and mission for the welfare of village community to be achieved. This is in accordance with the statement of Sumpeno (2011) saying that accountability in village governance involves the ability of village officials to be responsible for the carried out activities, which in this case is the development and village government.

The village development plan must be in accordance with the village priority scale based on the needs of the village community. Therefore, independence is an important factor in decision making which means free from the influence of certain parties, and this decision is agreed by the village head together with the village consultative body. The following is the result of interviews with several village officials about independence in the village fund planning:

“During the musrembang, the things that we propose are all stated in the RPJM. Most planned things have been realized well and evenly. However, problems still arise, namely the village fund for Kuta village always arrives late. In 2018, the village fund was received in August. The village fund is not given immediately for 50% is given first and then the remaining 50% will be given in October.”

The results of interviews indicate that village officials in decision making were not influenced by other parties. Planning has been done carefully and realization has been done well also, but the disbursement of village funds has not been given on time. This is in line with the statement of Agoes & Ardana (2014) stating that the decision making by village officials must be free from influence or pressure from any party.

The Act of Village No. 3 of 2015 regulates the village assistance which aim to increase the capacity, effectiveness and accountability of village governments and village development. The Kuta village has an assistance team that serves to assist the village in implementing the program. Village facilitators must understand the village RPJM and also have the task of assisting the local government in coordinating village development planning and facilitating collaboration between villages and third parties related to village development. The following is the result of an interview with Mr. NM regarding the village assistance team to manage village funds:

“Every village has an assistant. Kuta Village has 3 (three) assistances. However, one of these assistants made an incorrect report about the use of village funds”.

The interview above shows that the assistance team for Kuta village has not done a good job in assisting the village government in planning village funds. This is not in line with the statement of Susanti (2014) that the village assistance functions are to increase the capacity, effectiveness and accountability of the village government and village development.

Implementation is the most important part of an activity or program. In the Kuta village, a special team is assigned to carry out and manage activities funded by village funds. In this stage, the roles of various parties, both from the village government and the Kuta Village community are needed to participate in the implementation of village fund management. However, the obstacle in Kuta Village is the lack of quality of human resources to be included in village development, especially in infrastructure development. It can be seen that the village fund managers still use third parties for the physical development process without involving the village community. The following is the result of an interview with Mr. BP as a village official:

“All village funds are indeed used in full for all families who receive assistance from the village. All of them are divided into groups, such as the KWT (Farmer Women Group), Anggur Merah (people who receive village funds in the form of livestock such as horses, buffalos, cows and goats) and assistance in the form of seeds such as corn, rice and beans.”

“However, in the infrastructure sector, it is the responsibility of village assistance who will manage it. For example, currently, a village monument inscription is being built which the village government gives money to the village assistant for that project. Another example is the stone fence which was built not by using village funds but from the local government”.

The results of that interview explains that the use of village funds had been carried out and prioritized to meet community needs and improve the village welfare through empowering and developing village infrastructure. This finding is in line with the statement of Meutia & Liliana (2017) that village funds are prioritized for the development and empowerment of rural communities.

Openness is needed by the Kuta village community regarding all the development processes that are being carried out. The implementing team implements it by putting up an information board containing the name of the activity, the amount of the budget and the schedule for carrying out physical activities. This information already exists in Kuta Village. The following is the result of an interview with Mr. RR:

“All funds and allocations that the village can and receive have been written on the board and MMT concerning details of the funds received that are placed in the village hall. By doing that, everyone may be able to know the details of the funds earned by the village”.

Based on the results of the interview, the informant acknowledged that there had been direct control from the community and implementation of transparency phase had been provided by the activity management team. since the implementation of activity accompanied by a bulletin board, this is in line

with the statement of Renyowijoyo (2013) that transparency is built on freedom in obtaining information relating to the public interest and can be directly obtained by those in need.

Village officials understand that the community service and village development are the things that must be done optimally and that community interests must be a priority. Therefore, village officials strongly decline if there are violations of regulations or misuse of village funds carried out by parties involved in the community service and village development. This is supported by interviews with Mr. KP: *“Providing the best for the Kuta village community has become a necessity for us. Providing maximum service for the community is by hearing their aspirations and their needs. It is the providing of the best service and assistance for schools, healthcare or businesses of the Kuta Village community. After the village community conveys all of aspirations, the village apparatus will accommodate and deliver it in the Musreimbang”.*

The giving of services to the community and channeling aspirations of village community is the main concern for the village officials. All aspirations will be conveyed in the *Musreimbang*. In terms of the accuracy and consistency of the Accountability Letter (SPJ) and realization of development, the government represented by the Regional Employee Agency (BKD) is supervised when the SPJ is completed. BKD is assigned to check the SPJ and the physical results of construction. This is in line with the results of an interview conducted with Mr. SH:

“Village funds cannot be handled carelessly by us, because all of those funds are supervised, from the sub-district level and above. They will check whether we have SPJ and the actual results. If they are not in accordance with applicable standards, they are will certainly be questioned and investigated. If it turns out that there is an abuse in the use of funds, legal action must be taken.

Village apparatuses believe that the abuse of village funds is an awful act, for it will create a negative impact on the village community. The village head always urges village officials and communities who acknowledge of the abuse of village funds to immediately report them to the village head so that they can be followed up in a discussion forum with other village officials. This is in line with the statement of Rasul (2003) that any organization will require accountability to provide answers to community in general.

4.3 Culture and Mechanism of Whistleblowing

There are various risks emerging in handling village funds. The biggest risk is the opportunity to do fraud. Accuracy and transparency play an important role in this issue because they will help reducing opportunities to do fraud or reducing weaknesses in managing funds. Below is the result of an interview with one of the village officers named Mr. KP and Ms. YLW:

“All officials in the Kuta village office are native of Kuta village. This made all officials aware and care about village development, so that they cannot carelessly handle village funds. It is implemented by informing about funds that are received and used in detail to the village community”.

Mr. Kp also added:

“Our village is a role model for other villages in East Sumba. Therefore, we strive to give our best to the village and the community. Errors were only misstatements or typos in the village financial statements. These errors were immediately corrected by us. The government level above us is always careful about all written income and expenses and in the form of tangible work”.

From the result of the interview, it is concluded that village officials carefully handled village funds and understood the importance of funds for village development. This is in line with the statement of Huslina, Islahuddin, & Syah (2015) and Agusyani et al. (2016) that the competencies possessed by human resources affect the prevention of fraud. However, fraud can be done not only by village officials but also by individuals who receive the village funds. This is supported by an interview with one of the villagers:

“Sometimes corruption is not only in the form of cash. There were some villagers who received village funds who did not use the funds properly. For example, some villagers received assistance in the form of corn and bean seeds. For example, if they are lazy, the seeds will be used as animal feed and thus, the provided fund will no longer be useful”.

The result of the interview indicates that the opportunity to commit fraud not only owned by officials but also by those who accept it. This proves that in-depth knowledge about fraud is not owned

by the village community and it is not in line with the statement Rahimah, Murni, & Lysandra (2018) that individuals who have high moral level will be able to prevent fraud because they will obey the rules in accordance with universally accepted ethical principles. Therefore, the village head and village officials always give advice and go directly to the community to observe the development.

The competency of village officials has a major influence in preventing fraud. The competency can be shown if the village officials have competency that in line with the needs of village management and carry out their duties properly in accordance with the applicable SOPs.

Fraud prevention can be done not only in terms of the competence of village officials, but also in the mechanism of whistleblowing. Unfortunately, the community is not ready to report fraud in Kuta village. It is shown from interviews with all village officials in Kuta village:

“For reporting tools in this village, nothing has yet been implemented. If something happens, usually residents will come directly to one of us, as village office workers. regarding the approach carried out by the village head and village officials only with meetings at the village hall.”

The result of the interview show that there was a good reporting mechanism and the community was given opportunity to make and carry out reports. However, the reporting system for indications of fraud is limited to reporting directly to officers. The whistleblowing mechanism has not been implemented in Kuta village. This is not in line with the statement of Titaheluw (2011) that whistleblowing is one of the methods used for prevention of fraud.

Village officials and the Kuta Village community have two ways to solve the fraud problem in management of Kuta village funds. First, “custom mat” is used to solve the fraud problem. The village officials and the community sit together on a “custom mat” which they sit on an original Sumba woven cloth that is used only at certain events. They then perform a “*potong babi* (pig slaughter)” ceremony with aims to make the perpetrator not to repeat the fraud and to give deterrent effect to him. Second, solution using legal channels if the perpetrator does not cooperate and the losses made by the perpetrator are material losses.

Culture is one of factors affecting a person to become a whistleblower. Sometimes, some people are afraid or hesitant to report frauds in the use of village fund. There are several reasons of this. First, people who commit fraud are their colleagues or families, so they only give a warning not to commit further fraud in the future. Second, it is because they don't want a bad family relationship caused by whistleblowing. Third, there is no support provided by the government to protect whistleblowers.

The local culture is one of determinants of someone's desire to do whistleblowing. The custom values for Sumba people influence them in carrying out whistleblowing. Sumba's philosophy is “*Mbola Mapabolung, Lipit Mapakahang*” which means the village communities although are diverse, they must remain in unity to build Kuta village to be better in the future. This value teaches people to be aware that acts of fraud in Kuta Village are bad things and must be stopped. It encourages people to do whistleblowing.

The people in Kuta village still have a strong sense of familiarity. However, it will not reduce the professionalism of the village officials. For officials, the world of work and personal relationship are two different things and they must be separated. This statement is supported by the result of an interview with Mr. KP as the village head:

“If there is fraud, we will report and investigate it immediately. This cannot be tolerated because it can disrupt the village development. If it is unchecked, surely, the villagers will no longer trust us as the village officials. Thus, the fraud must be handled fairly and transparently.”

The officials will give a direct response when a fraud occurs to maintain the trust of the village community because they also realize the importance of public trust in the apparatus. This awareness must also be accompanied by maintaining village funds properly and giving courage to the villagers to disclose fraud. This can be realized by educating villagers regarding the management of village funds and the impact that they will get if the frauds occur and if the funds are not properly managed. This fact is in harmony with the statement of Auditya, Lucy, Husaini, & Lismawati (2013) that the community must be given the opportunity to know about the honest and correct accountability.

Other factors that also influence a person's decision to become a whistleblower are individual variables such as cost & benefit, education, age and marital status. These factors are triggered because consequences will arise when someone becomes a whistleblower. The community still has no courage to report fraud because of insufficient channels of reporting and lack of protection for the reporter/informant.

The risk of retaliation is one of factors that reduce a willingness to report a fraud. This makes the reporter feels threatened and considers that reporting any frauds will not give benefits for him. In addition to the risk of retaliation, the reporter's action can also be hampered because there is an assumption that it is an unethical act.

Relativism is a rejection of moral principles in general because of the belief that there are no ethical standards that are absolutely true. This includes the role of professional organization as a guide for making of actions. Individuals who have low relativism tend not to do whistleblowing, because whistleblowing is seen as an unimportant thing. The desire to become a whistleblower is a personal factor, which refers to professional commitment. The higher of professional commitment, the higher of view that whistleblowing is important.

The Kuta village funds have been used to meet community needs related to community development, i.e. health, hygiene, education and community empowerment. The importance of the role of village funds for the community will encourage them to participate in supervising the use of funds so as not to hamper village development. Besides, it also encourages the community to report any potential problems and to participate directly in village development in order that the development can be completed on time. The village officials, especially village head, have responsibility to the national government to report the use of village funds. A sense of responsibility will prompt the village head to give mandates to village officials in making of accountability reports properly and correctly in accordance with the implementation of village development.

In running their government, village officials are required to provide their best efforts for the village community both in terms of community services and in the use of village funds. The village head requires his officials to prioritize community interests and minimize misuse of village funds. The village head is also responsible for giving approaches to the village officials to participate in monitoring of fund usage and to report any village fund abuses. The approach does not come only from the village officials, but also comes from the Inspectorate and advocates of Waingapu.

Village fund is the main source of village income so that its usage needs transparency from the communities and government who gives the authority to manage it. The village community's accountability is carried out through evaluation of village fund management led by the village head. In Kuta village, the village head conducts an evaluation together with his people related to the village fund management. This is shown by the results of an interview with Ms. YLW:

“Every time new funds come in, new received information will soon be socialized. For example, currently there are changes in the APBS and we will immediately publish it too.”

Result of the interview indicates that the reporting of realization has been known to the Kuta Village community because the village manager has provided information about it, and it is in line with the statement of Mamuaya, Sabijono, & Gamaliel (2017) that the village community must be informed about the accountability report.

The village officials work with traditional leaders and traditional villages in distributing funds and carrying out activities in Kuta village. Village funds that have been received are used to build villages and introduce woven fabrics and customs in Kuta village. The traditional leader does not directly involve in the planning of the Kuta Village Budget. This is shown by the result of an interview with a traditional leader:

“Regarding the amount of received funds, we knew it. However, we did not mix those money with all money from the village office. This is the work of the village officials who work at the village office”.

From the result of the interview, it can be concluded that by excluding traditional leaders in village budgeting proves that local customs and traditional elders do not influence the village budgeting. This is in line with the statement of Widiyarta (2017) that the role of parties outside the village government, namely village leaders, religious leaders, traditional leaders must be involved in managing village funds rather than in village budgeting.

The sense of familiarity owned by the village officials and the community does not reduce the awareness and desire of individuals to report fraud. The growing individuals' awareness and courage is prompted by awareness about the adverse effects from the abuse of village funds, and as it results growing individuals' desire to do whistleblowing. Solving of fraud problem is done through village customs and in family manner without interference from the authorities or legal agencies.

5 Conclusion, Limitation and Recommendation

5.1 Conclusion

This study aims to determine the role of culture in the implementation of a whistleblowing system in Kuta village of East Sumba. Based on the result of interview analyses, it can be concluded that the local culture of Sumba, namely “custom mat” and the philosophy of “*Mbola Mapabolung, Lipit Mapakahang*” influence individuals to do whistleblowing. The village officials and the community have enthusiasm to conduct whistleblowing because the custom values they adhere to encourage awareness that fraud and corruption are bad things and must be stopped.

5.2 Limitation and Suggestion

The limitation of this study is the limited number of speakers or informants who were only around the village, which are village officials as managers, the community and traditional leaders.

The suggestion for Desa Kuta is to maintain the values of local wisdom as a whistleblowing mechanism that supports village development. The results of this research are also useful for the related agencies who conduct guidance and supervision on the use of village funds. The future research can examine other cultural factors such as leadership in implementing village fund management.

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Do Forensic Expertise, Professional Skepticism and Time Pressure Affect Fraud Detection?

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Abstract. Indonesia's score in the 2017 Corruption Perception Index (CPI) Index has stagnated with a score of 37 since 2016, meaning that the quality of eradicating corruption is low. The role of auditor, especially government internal auditor, has not been optimal in detecting fraud. Therefore, fraud detection is very important for auditors to reduce corruption in Indonesia. The purpose of this research is to find the influence of forensic expertise, professional skepticism and time pressure to fraud detection. This research was done in The Finance and Development Supervisory Agency (BPKP) of the Daerah Istimewa Yogyakarta Province (DIY). In this research, sample of 55 respondents were selected using convenience sampling method. Eighty eight questionnaires administered then 60 questionnaires were returned and 55 questionnaires were feasible to use and were examined using the multiple linear regression model. Analysis tool used in this research was the SPSS 21. The result of the research showed that forensic expertise and professional skepticism affect significantly on fraud detection. While the time pressure does not affect to fraud detection.

Keywords: Forensic Expertise, Fraud Detection, Professional Skepticism, Time Pressure

1 Introduction

Indonesia's Corruption Perception Index (CPI) score based on the Transparency International survey, Indonesia's score in the 2017 Index (CPI)[1] has stagnated with a score of 37 since 2016. In terms of ranking, Indonesia is ranked 96 out of 180 surveyed. The results show that there was no improvement in Indonesia in eradicating corruption from the previous year.

Based on a survey conducted by Transparency International Indonesia in 12 major cities in Indonesia in 2017, North Jakarta had the highest GPA with a value of 73.9 points. It can be concluded that business operators in North Jakarta rate the commitment of local governments in eradicating corruption is very well. While the lowest GPA of the city of Medan with a value of 37.4 points, where there is still a lot of corruptions.

Presidential Instruction (Inpres) No. 5 of 2004 concerning the Acceleration of Corruption Eradication contains the government's actions that instructs all central and regional authorities to carry out any steps to eradicate corruption. The designation of corruption as an extraordinary crime makes the government feel it is necessary to form a special body that is independent and free from any power. The special body is the Corruption Eradication Commission (KPK) which is authorized to conduct coordination and supervision, including conducting investigations. In addition, the government also gave the power to the The Financial and Development Supervisory Agency (BPKP) to handle cases that are indicated corruptions.

In order to follow up on the various frauds that have occurred, the role of the forensic auditor is needed to detect fraud. DIY is one of 10 provinces which this year has become the location of efforts to prevent corruption, from 2016 to the end of 2017. However, in the last three years the KPK RI has received complaints from the public about 192 reports of corruption. This happens because most auditors do not yet have the knowledge and ability to take preventative actions. Therefore we need forensic expertise in detecting fraud in order to create a government that is free of corruption. The skills and abilities required are forensic expertise and professional skepticism that must be possessed by the auditor.

Skepticism is a critical attitude in assessing the reliability of assertions or the evidence obtained, so that in conducting the audit process an auditor has sufficiently high confidence in an assertion or evidence that he has obtained and also considers the adequacy and suitability of the evidence obtained. Each auditor has expertise in finding fraudulent cues in detecting different frauds due to several factors,

for example the expertise possessed by each auditor differs with a different skepticism and the situation that the auditor must face in working is the presence of time pressure. Auditors are not only required to work professionally, but also must be in accordance with the stipulated time budget. Limited time budget of course becomes a special pressure for the auditor. Time budget pressures produce poor results for the auditor's performance.

Several studies have been conducted to examine how the influence of forensic expertise, professional skepticism and time pressure on the detection of fraud. However, previous studies have varied results. Verwey and Asare's (2016)[2] research results showed that auditors who had forensic expertise given high risk assessments and under budget pressure when planning audit procedures, were more effective than auditors without forensic expertise. According to research conducted by Ramadhany (2015)[3] showed that auditor professional skepticism had a significant effect on the auditor's ability to detect fraud. According to research by Anggriawan (2014)[4] which showed that time pressure negatively affects the ability of auditors to detect fraud. However, different research results were found in a study conducted by Pangestika (2014)[5] that time budget pressure had no effect on fraud detection. And the results of different studies conducted by Rustiarini (2013)[6] who found that time pressure had no effect on auditor job satisfaction and dysfunctional behavior that could influence auditors in detecting fraud.

The purpose of this study is to examine the extent of the influence of forensic expertise, professional skepticism and time pressure on the detection of fraud on auditors working in the Financial and Development Supervisory Agency in the Yogyakarta Special Representative.

2 Literature Review

2.1 Attribution Theory

Attribution theory is first put forward by Heider (1958)[7]. This theory suggests that when observing an individual's behavior, we try to determine whether the behavior is caused by internal factors or external factors. Internal behavior is behavior that is believed to be influenced by an individual's personal control, such as ability and effort. While the behavior caused by external factors is considered as a result of external causes, namely the individual has behaved in such a way caused by certain situations, such as task difficulties (Kreitner, 2014: 203)[8].

This theory refers to how a person explains the causes of other people's behavior or himself which will be determined whether from internal factors such as nature, character, attitude, or external such as the pressure of certain situations or circumstances that will affect the behavior of individuals. Attribution theory explains the understanding of a person's reaction to events around them, by knowing their reasons for the events experienced. Attribution theory also explains that there are behaviors related to individual attitudes and characteristics, so it can be said that only by looking at their behavior will be known the attitude or characteristics of the person and can also predict a person's behavior in dealing with certain situations (Sastiana, 2016)[9].

In this study attribution theory is used to explain how the internal auditor's influence are forensic expertise and professional skepticism of the auditor, and external factors namely time pressure can affect the auditor's actions in detecting fraud. As has been explained above where the three things above are factors that encourage an auditor to achieve the effectiveness of the implementation of audit procedures in disclosure of fraud.

With the forensic expertise possessed by the auditor, the auditor must use his/her forensic expertise to include consideration in finding fraud findings and be able to formulate his/her opinion properly so as to maximize the auditor in detecting fraud. To achieve the expected results, the auditor must also use his/her professional skepticism so that he/her can obtain and evaluate sufficient evidence to provide an appropriate and impartial audit opinion in the detection of fraud. And there are time pressures that occur, whether there is influence for the auditor in carrying out effective audit procedures to detect fraud

2.2 Fraud Detection

According to W. Steve Albrecht and Chad D Albrecht (2004)[10] in the book of Fraud Examination fraud and Prevention, fraud is a common understanding and includes a variety of ways that can be used by means of violence by one person to benefit from others through improper conduct. There are no definitions or rules that can be used as a general understanding in interpreting fraud which

includes ways that contain a sudden, deceptive, clever, and dishonest nature that is used to trick someone. The only limit to knowing the above understanding is that it limits the nature of human dishonesty. Fraud is an act that is contrary to the truth that was made intentionally, with the aim to obtain something that is not the right of the culprit (Pangestika, 2014)[5].

According to the International Standards on Auditing (ISA)[11] section 240 fraud is defined as an intentional act by members of the company's management, parties who play a role in corporate governance, employees or third parties who deceive or cheat to obtain unfair or illegal profits. The two main categories of fraud are fraudulent financial reporting and misuse of assets (Arens et al., 2006: 430)[12]. Fraudulent financial reporting is a misstatement or omission of the amount or deliberate disclosure with the intention of deceiving the users of the financial statements, while the misuse of assets is fraud involving the theft of the entity's assets (Anggriawan, 2014)[4].

According to the 2006 Examination Manual of the Association of Certified Fraud Examiner (ACFE)[13], fraud consists of four major groups namely:

1. Fraud in financial statements

Fraud in financial statements includes actions taken by officials or executives of a company or government agency to cover up the actual financial condition by conducting financial engineering in the presentation of financial statements for profit.

2. Corruption

This type of fraud is the most difficult to detect because it involves cooperation with other parties such as bribery and corruption. This type of fraud often cannot be detected because the parties who collaborate enjoy the benefits. Corruption includes bribery, conflict of interest, illegal gratuity, and economic extortion.

3. Misuse of assets (asset misappropriation)

Misuse of assets includes the misuse / theft of assets or property of companies or other parties. This is the easiest form of fraud to detect because it is tangible or can be measured / calculated.

4. Computer-related fraud

Cheating caused by the development of crime in the field of computers. For example 1) Adding, removing, or changing false entries or data entry, 2) Damaging the program by taking money from many accounts in small amounts, 3) Incorrectly posting or posting only part of the transaction.

Detecting fraud is a process to be able to find or reveal deviant actions that are done intentionally and result in a misstatement of a financial statement. Not all auditors can detect and find fraud. Because in general evidence of fraud can only be known through signs, symptoms or signals from actions that are suspected of causing the fraud. Most of the evidence of fraud is evidence that is indirect. Clues to cheating are usually indicated by the appearance of symptoms such as changes in lifestyle or behavior, suspicious documentation, complaints from customers or suspicion from coworkers (Anggriawan, 2014)[4].

Initially, this fraud will be reflected through the emergence of certain characteristics, both those that are environmental conditions as well as one's behavior. Characteristics that are specific conditions or situations, behavior or condition of a personal person is called the Red Flag indicators. Although the emergence of the red flag is not always an indication of fraud, but this red flag usually always appears in every case of fraud that occurs (Pangestika, 2014)[5]. The ability to detect fraud is related to the ability to understand the symptoms of fraud (red flags). To understand the symptoms of cheating (red flags), an auditor must have sufficient expertise in identifying indicators of fraud (Muchlis, 2015)[14].

Karyono (2013: 92)[15] explained the detection of fraud as having stages in it, the initial stage in detecting fraud is studying the activities of organizations and business units. At this stage the aim is to find out whether an organization has implemented internal controls. An internal control function to prevent fraud also functions in detecting fraud. After studying the activities of the organization we can identify frauds that occur. The next stage is to learn the signs of fraud, which are oddities, anomalies and deviations. After the two stages, analysis and evaluation are carried out. If there is a large indication of fraud then an investigative exercise will be carried out.

Fraud detection includes the identification of fraud indicators that require the auditor's follow-up to investigate. Ramadhany (2015)[3] stated that the detection of fraud was not an easy task carried out by the auditor. Based on the available literature, four identified factors can be mapped that make fraud

detection difficult to do so the auditor fails to detect. These causative factors are characteristics of fraud, understanding auditing standards regarding fraud detection, an audit work environment that reduces audit quality, and audit methods and procedures that are not effective in detecting fraud.

2.3 Expertise

The meaning of expertise in the Big Indonesian Dictionary is proficiency in a science (intelligence, work). Expertise is an important element that must be possessed by an auditor to work professionally. This is confirmed in the first general standard of SA Section 210 that the audit must be carried out by someone or more who has sufficient expertise and technical training as an auditor (Indonesia, I. A. P., n.d)[11].

Expertise can be concluded as a positive basis owned by a forensic auditor to support his assignment in calculating state losses, disclosure of hidden cases, as well as expert witnesses in court that require critical thinking, deductive analysis, communication skills in oral and written, etc. other.

Karyono (2013: 140)[15] explains that forensic auditors must have sufficient knowledge about knowledge of cheating, knowledge of laws and regulations, competent in investigation, understand psychological theory, understand other important theories about criminal behavior, understanding control theory, communication skills, formulation of professionalism, independence and objectivity (PIO Formulation), and right personnel under review.

Basically a forensic auditor has extensive knowledge of applicable accounting standards and their application and legal knowledge as necessary, both civil and criminal law. This knowledge must be obtained not only from college, but also from experience in practice in the field and through continuous professional training and education. This emphasizes the importance of forensic auditor expertise in conducting audits and assessing the risk of fraud (Kayo, 2013: 22)[16].

Bhasin (2013)[17] elaborated or extended some of the knowledge and skills revealed by DiGrabriele (2008)[18] as a basis for research by using nine items of competence of forensic auditor expertise used in assessing differences in perceptions of accounting academics, accounting practitioners, and users of forensic auditor services, namely :

1. An important skill for a forensic auditor is deductive analysis which is the ability to analyze discrepancies that occur in financial statements, i.e. events that are not in accordance with reasonable conditions.
2. The expertise that is important for a forensic auditor is critical thinking which is the ability to distinguish between opinions and facts.
3. An important skill for a forensic auditor is solving unstructured problems which is the ability to approach each situation (especially unnatural situations) through an unstructured approach. In this case the auditor must be able to provide solutions to solving unstructured problems.
4. An important skill for a forensic auditor is investigation flexibility which is the ability to conduct audits outside the applicable provisions or procedures.
5. The expertise that is important for a forensic auditor is analytic expertise which is the ability to check what should be (what should be available) is not what already exists (what is already available).
6. An important skill for a forensic auditor is oral communication which is the ability to communicate effectively verbally through expert testimony and general explanations about the basics of opinion.
7. An important skill for a forensic auditor is written communication which is the ability to communicate effectively with writing through reports, charts, pictures and schedules about the basics of opinion.
8. The expertise that is important for a forensic auditor is legal knowledge which is the ability to understand basic legal processes.
9. Expertise that is important for a forensic auditor is composure which is the ability to maintain a calm attitude even in stressful situations.

2.4 Forensics

Webster's dictionary describes the word forensics like objects used in court. According to Priantara (2013)[19] Forensics means relating to, used in, or appropriate for legal institutions or for public discussion or for argumentative evidence or relating to the application of science to legal matters.

So the term forensics in the accounting profession is related to the relationship and application of financial facts with legal issues. The rapid growth in the forensic accounting profession is inseparable from fraud or corruption that has never been lost even until now has not been sharply reduced but instead became complex. Forensic science is the application of science to criminal investigation in order to find evidence that can be used in solving criminal cases (Sudaryati, 2010)[20].

2.5 Forensic Auditor

According to the BPKP forensic audit is a combination of expertise in accounting, auditing and law. Forensic audit results are used in litigation or other forms of law. A forensic auditor must have academic and empirical expertise relating to the litigation process and relating to investigative audits, calculation of losses and providing expert statements at court proceedings (Priantara, 2013)[19].

Forensic auditors are defined as the science of gathering and presenting information in a form and format that is acceptable to the legal system in court against economic offenders (Kayo 2013: 46)[16]. Thus, forensic audits can be defined as the act of analyzing and comparing conditions in the field with criteria, to produce information such as how long the fraud was committed, how to commit the fraud, how much is it, where it was done, and who the perpetrators or quantitative evidence could be used before the court (Alabdullah et al. 2013)[21].

The purpose of forensic auditing is very specific so that the preparation of the program and the implementation of the audit is very different from the usual audit. The forensic audit program must be directed to gather sufficient and competent evidence so that the criminal case being handled can be revealed. Therefore, in its implementation, auditors with special characteristics are needed. Therefore, in its implementation, auditors with special characteristics are needed. A forensic auditor is required to be able to look out and trace beyond the visible numbers, and be able to relate it to a developing business situation in order to reveal accurate, objective information, and to find irregularities (Sudaryati, 2010)[20].

The purpose of a forensic audit is to detect or prevent various types of fraud. The techniques used in forensic audits have been specifically directed to find fraud. Many of these techniques are detecting fraud more deeply and even to the level of finding out who perpetrators of fraud. Therefore, forensic audit techniques are similar to the techniques used by detectives to find perpetrators of criminal acts (Sastiana, 2016)[9].

2.6 Professional Skepticism

Tuanakotta (2015: 323)[22] explained professional skepticism is the auditor's obligation to use and maintain professional skepticism, throughout the assignment period. Especially vigilance over the possibility of fraud.

Professional skepticism is interpreted as an attitude that does not easily believe audit evidence presented by management, an attitude that always questions and evaluates audit evidence critically. Professional skepticism is very important to be owned by the auditor in order to obtain strong information, which will be used as a basis for relevant audit evidence that can support the provision of opinions on the reasonableness of the financial statements (Adnyani et al., 2014)[23].

Professional skepticism needs to be possessed by the auditor especially when obtaining and evaluating audit evidence. The auditor must not simply assume that management is dishonest, but the auditor must also not assume that management is entirely honest. In ISA No. 200 said that the attitude of professional skepticism means the auditor makes a critical assessment, with a mind that always questions of the validity of the audit evidence obtained, be alert to audit evidence that is contradictory or raises questions regarding the reliability of the document, and provide responses to questions and other information obtained from management and related parties (Noviyanti, 2008)[24].

Auditors' professional skepticism is influenced by many things, such as experience, ethical awareness, audit situation and professionalism. Professional standards require that auditors not simply assume that management is dishonest, but also may not assume honest management. So the auditor is asked not to have too high a level of trust in his client. But in practice, an auditor often encounters conflicts related to the level of trust in the client (Ramadhany, 2015)[3].

The auditor evaluates audit evidence by conducting an audit test to obtain the truth about the symptoms of possible fraud (fraud). In gathering evidence and evaluating audit evidence, the auditor

uses his/her knowledge, expertise and abilities carefully and thoroughly. Because auditors are required to have a high attitude of professional skepticism over the possibility of fraud, even though such fraud is not necessarily the case (Noviyanti, 2008)[24].

Noviyanti (2008)[24] said that auditor's professional skepticism is influenced by social factors (trust), psychological factors (assessment of fraud risk) and personal factors (personality).

1) Trust

Independent auditors who conduct audits in the field will carry out social interactions with clients, management and client staff. This social interaction will give rise to the trust of the auditor to the client. Noviyanti (2008)[24] states that trust in the auditor-client relationship will affect professional skepticism. The auditor's low level of trust in the client will increase the auditor's skepticism, while the auditor's level of trust that is too high will reduce his professional skepticism.

2) Fraud Risk Assessment

Noviyanti (2008)[24] proves that auditor professional skepticism is influenced by fraud risk assessment provided by the auditor's supervisor (auditor in charge) as a guide in conducting audits in the field. Auditors who are given a low fraud risk assessment become less skeptical compared to auditors who are given a high fraud risk assessment.

3) Personality

A person's personality type is also thought to influence his professional skepticism. Noviyanti (2008)[24] recognizes that attitudes have a genetic basis. Attitudes that have a genetic basis tend to be stronger than attitudes that do not have a genetic basis. So it can be said that individual personality differences form the basis of a person's attitude including his attitude of professional skepticism. Personality is defined as a person's characteristics and inclinations that are consistent which determine a person's psychological behavior such as ways of thinking, feeling, and acting.

Auditors tend to be more careful and careful in examining financial statements, so the failure to detect fraud will be low.

2.7 Time Pressure

According to Stainley & DeZoor (2006)[25] time budget pressure is a form of pressure that arises from limitations on the resources that can be allocated to carry out and complete audit tasks. Limited resources for various situations, including profitability issues, personnel limitations, and cost constraints (Verwey & Asare, 2016)[2].

Anggriawan (2014)[4] explains that time budget pressure is a situation that is indicated for the auditor in implementing efficiency over the time that has been prepared or there are very tight and rigid time and budget constraints. The time pressure will make the auditor have a busy time because it adjusts the tasks that must be completed with the available time. Problems will arise if it turns out that the planned time does not match the actual required time. If this happens someone will ignore the little things that are considered not important so that the time planned according to what is needed. Little things that are overlooked will certainly reduce the auditor's level of confidence that the audited financial statements are in accordance with the truth, thus allowing a gap for fraud. Someone who works under the pressure of time will lose less level than those who work without pressure.

Time pressure is defined as a constraint that occurs at the audit engagement because of limited resources in the form of time allocated to carry out all audit tasks. Time Budget Pressure is a condition where the auditor is required to make efficiency on the time budget that has been prepared, or there are time restrictions in a very tight budget (Pikirang, 2017)[26].

Indicators to measure the time pressure variable adopted from Anggriawan's (2014)[4] study with modifications, namely:

- a) Functional type, states that the attitude of the auditor who uses the audit time.
- b) Dysfunctional type, states the auditor's attitude to reduce attention to the qualitative aspects of indications of misstatement.

Auditors who have a functional type are better able to detect fraud. Auditors with dysfunctional types tend to miss audit evidence that shows the existence of fraudulent cues. Time budget pressures faced by professionals in the field of auditing can cause high levels of stress and affect the attitudes, intentions, and behavior of auditors. The auditor must be able to address the time budget given in conducting the audit to detect fraud. Auditors who feel burdened because of an unrealistic time budget

might be able to easily trust the information and statements provided by the client. Although under the pressure of the budget when the auditor still must be careful in examining reports, information presented and statements by clients (Anggriawan, 2014)[4].

The auditor must be able to estimate his time especially in dividing time to work quickly in auditing and to collect audit evidence that supports the audit report. If the time allocated for completing the audit is not enough, the auditor will work quickly by not paying attention to existing audit procedures. Thus enabling the auditor can not detect fraud. Time budget is very important for planning and controlling audit tasks, therefore the auditor must be able to address the time budget given in conducting the audit so that the auditor can detect fraud.

2.8 Hypothesis Development

2.8.1 Effect of Forensic Expertise on Fraud Detection

Expertise is as a positive basis owned by a forensic auditor to support his assignment in the calculation of state losses, disclosure of hidden cases, as well as expert witnesses in court that require critical thinking, deductive analysis, communication skills in oral and written, etc. (Priantara, 2013)[19].

Forensic auditors must have academic and empirical expertise related to litigation processes and those related to investigative audits, calculation of losses and providing expert statements at court proceedings (Priantara, 2013)[19]. The auditor expertise component consists of 1) the knowledge component, which is an important component in an expertise, this component includes knowledge of facts, procedures, and experience. Experience will produce results in gathering and advancing knowledge. 2) psychological characteristics, such as the ability to communicate, creativity, the ability to work with others. Trust, communication and the ability to work together are the most important elements for audit expertise.

Research on forensic expertise conducted by Verwey & Asare's (2016)[2] which states that consulting with forensic specialists can increase the possibility to detect the risk of fraud. Under time budget pressure, auditors without forensic expertise plan ineffective procedures. But for forensic specialists, time budget pressure does not affect the auditor's performance in planning audit procedures. Forensic expertise has an influence on fraud risk assessment. The study was strengthened by Bhasin research (2013)[17] which states that there was an effect between forensic expertise in detecting fraud.

The relationship of forensic expertise to the detection of fraud that the forensic expertise possessed by the auditor must be able to assist the auditor in conducting audits in order to find indications of fraud either caused by an error or fraud. Based on the description above, the researchers propose the following hypothesis:

H1: Forensic expertise positively affect the detection of fraud

2.8.2 Effect of professional skepticism on fraud detection

According to research conducted by Noviyanti (2008)[24] in her study entitled "Auditors' skepticism in detecting fraud" regarding auditor's professional skepticism in detecting fraud, the results showed that an auditor with an identity-based confidence level if given a high risk assessment of fraud has a significant effect. In this case, personality type will affect significantly the attitude of professional audit skepticism.

Another study conducted by Ramadhany (2015)[3] results of her research stated that professional skepticism had a positive and significant effect on the detection of fraud. The study was strengthened by the research of Adnyani et al.(2014)[23] which showed that there was a partial influence between the auditor's professional skepticism on the auditor's responsibility in detecting fraud and misrepresentation of financial statements.

Professional skepticism needs to be possessed by the auditor especially when obtaining and evaluating audit evidence. The auditor applies a professional skepticism when asking questions and carrying out audit procedures, not easily satisfied with less persuasive audit evidence that is only based on the belief that management and related parties are honest and have integrity (Noviyanti, 2008)[24].

The use of the auditor's professional skepticism can be used when the auditor reviews existing evidence, then detects visible or perceived fraud. Based on the description above, the authors propose the following hypothesis:

H2: Professional skepticism positively affect the detection of fraud

2.8.3 Effect of time pressure on fraud detection

Time pressure is a condition that occurs when the budgeted time is less than the time available to complete the specified audit procedures. In other words, the auditor is under pressure to complete the work on time. Auditors who are under more time pressure will be less sensitive to fraudulent cues so it is less likely to be able to detect fraud

According to research conducted by Anggriawan (2014)[4] shows that time pressure negatively affects the ability of auditors to detect fraud. Auditors who are given limited time in conducting audits have a low success rate in detecting fraud.

The time pressure will make the auditor have a busy time because it adjusts the tasks that must be completed with the available time. Problems will arise if it turns out that the planned time does not match the actual required time. If this happens someone will ignore the little things that are considered not important so that the planned time is in accordance with what is needed (Anggriawan, 2014)[4].

The emergence of possible problems that occur resulted in the auditor must be able to address the time budget given in conducting the audit to detect fraud. Based on the description above, the authors propose the following hypothesis:

H3: Time pressure negatively affect the fraud detection

3 Research Method

3.1 Population and Sample

Population is a generalization area consisting of; objects / subjects that have certain quantities and characteristics determined by researchers to be studied and then drawn conclusions (Sugiyono, 2017)[27]. The population in this study were auditor employees who worked at BPKP Yogyakarta Special Province Representative. The sample is a portion of the population to be studied that can be considered to be able to describe the characteristics of the population. The sampling technique in this study is to use convenience sampling.

The reason for sampling with convenience sampling method is because it covers a wide variation in the procedure of selecting respondents where the sample units drawn are easy to contact, not troublesome, easy to measure and are cooperative in nature. So that in this study the sample chosen was the auditor who was willing to fill out the questionnaire at BPKP Yogyakarta Special Province Representative.

The data collection technique used was questionnaire. Questionnaire is a data collection technique that is done by giving a set of written statements to respondents to be answered (Sugiyono, 2017)[27]. The questionnaire distributed had been arranged in a structured manner in accordance with the object of research to be studied. Distribution of questionnaires was also included with a cover letter with an explanation of the purpose of the study. The questionnaire also includes clear filling instructions to make it easier for respondents to provide correct answers. The results of the questionnaire were measured using an interval scale with a 4-point scale ranging from strongly disagree (1), disagree (2), agree (3), strongly agree (4).

3.2 Data analysis Method

This study uses multiple linear regression analysis method which aims to examine the relationship of the influence of the influence of independent variables on the dependent variable. The calculation analysis used is multiple linear regression analysis with the dependent variable being the detection of fraud and the independent variables are forensic expertise, auditor professional skepticism and time pressure. Multiple linear regression to measure the effect of more than one independent variable on the dependent variable (Ghozali, 2013: 101)[28]. The equation model can be described as follows:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + e$$

Y : Detection of fraud

X1: Forensic expertise

X2: Professional Skepticism

X3: Time Pressure

- a : Constants
 b : Regression coefficient
 e : Error

4 Result

This research was conducted on auditors working in the Financial and Development Supervisory Agency (BPKP) of the Yogyakarta Special Province Representative. The process of licensing, distributing and returning the questionnaires was carried out from April 17, 2018 until May 22, 2018. The questionnaires distributed amounted to 88 pieces and the number of returned and can be processed amounted to 55 pieces. An overview of sample data is presented in table 1.

Table 1. Research Sample Data

	Number	Percentage (%)
Questionnaire spread-off	88	100
Questionnaire return	60	68.2
Questionnaire is not return	28	31.8
Defect	5	5.6
Questionnaire processed	55	62.5

(Source: processed data 2018)

This study uses the average value (mean), maximum value, minimum value and standard deviation to describe the statistical description of each variable. Statistical descriptions of the descriptions are presented in table 2.

Table 2. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
forensic expertise	55	27	36	32.69	2.559
professional skepticism	55	24	32	29.25	2.92
time pressure	55	8	16	11.58	2.507
Fraud Detection	55	30	40	34.8	3.106

(Source: processed data 2018)

The results of testing the validity carried out showed that all variables have a value correlated item-total correlation > R table (0.1975) so that the indicators for all variables can be said to be right (valid) as a measurement tool. While the results for reliability testing show that for all variables have a Cronbach Alpha value > 0.60. This means that the question items in the questionnaire for all variables can be said to be consistent or reliable as a measurement tool. The reliability test results are presented in table 3.

Table 3. Reliability Test

Variable	Cronbach's Alpha
Forensic expertise (X1)	0,755
Professional skepticism (X2)	0.881
Time pressure (X3)	0,825
Fraud Detection (Y)	0,841

(Source: processed data 2018)

The normality test results also show that the regression model obtained is normally distributed, which shows that the data distribution is around the diagonal line. In addition, normality test results can also be seen using the Kolmogorov-Smirnov Test One Sample method. The basis for decision making is based on probability (Asymptotic Significance), namely: if the probability is > 0.05 then the distribution of the population is normal, and vice versa. Based on the calculation results show that the Kolmogorov-Smirnov value can be known that all variables have sig values. > 0.05, this means that all data are normally distributed. The results of the normality test are presented in table 4.

Table 4. Normality Test

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		55
Normal Parameters a,b	Mean	0
	Std. Deviation	0.250000332
	Absolute	0.074
Most Extreme Differences	Positive	0.063
	Negative	-0.074
Kolmogorov-Smirnov Z		0.549
Asymp. Sig. (2-tailed)		0.924
a. Test distribution is Normal		
b. Calculated from data		

(Source: processed data 2018)

Multicollinearity test results showed that all independent variables had a VIF value <10 and had a Tolerance value > 0.10. Thus, it can be concluded that there are no symptoms of multicollinearity. The results of multicollinearity testing are presented in table 5.

Table 5. Multicollinearity Test

Model	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
forensic expertise	0.668	1.497
professional skepticism	0.701	1.427
time pressure	0.845	1.184

Dependent Variable: Fraud detection
(Source: processed data 2018)

Hypothesis testing is done by determining the coefficient of determination, multiple linear regression, and t model tests. First, the determination coefficient test which aims to determine how much the independent variable (forensic expertise, professional skepticism and time pressure) can explain the dependent variable (fraud detection). The results of testing the coefficient of determination is presented in table 6.

Table 6. Result Determination-Coefficient

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.593 ^a	0.352	0.314	2.572

a. Predictors: (Constant), Time pressure, e Professional skepticism, Forensic expertise
b. Dependent Variable: Fraud Detection

(Source: processed data 2018)

Based on table 5 above, the coefficient of determination (R²) of 0.314 means that forensic expertise, professional skepticism and time pressure have an effect of 31.4% on the detection of fraud, while the remaining 68.6% is explained by other variables outside the study. Second, multiple regression testing and t test were performed. The results of multiple linear regression testing and t tests are summarized and presented in table 7 below.

Table 7. Result Summary

	B	t	Sig
(Constant)	9.569	1.968	.055
Forensic Expertise	.358	2.138	.037
Professional Skepticism	.357	2.492	.016

Time Pressure	.267	1.757	.085
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(Source: processed data 2018)

The results of testing the first hypothesis shows the value of tcount is 2.138 > of the ttable value of 2.006 with a significance probability of 0.0377 <0.05. This means that the first hypothesis namely forensic expertise positively affect the detection of fraud, so the first hypothesis is accepted.

The results of the second hypothesis test show the value of tcount is 2.492 > from the table value of 2.006 with a significance probability of 0.016 <0.05. This means that the second hypothesis namely professional skepticism positively affect the detection of fraud, so that the second hypothesis is accepted.

The results of the third hypothesis testing showed a positive coefficient of 0.267, a calculated value of 1.757 <from a table value of 2.006 and a significance probability of 0.085> 0.05. This means that the third hypothesis namely time pressure negatively affect the detection of fraud is rejected.

5 Discussion

5.1 Forensic Expertise Positively Affect Fraud Detection

Forensic expertise has a positive effect on the detection of fraud. The results of this study are in line with the results of previous studies conducted by Bhasin (2013)[17] which concluded that there is an influence between forensic skills in detecting fraud. The results of the study are also in line with the results of research conducted by Verwey & Asare (2016)[2] which states that there is a positive influence in consulting with forensic specialist in increasing the risk of fraud.

In the theory of attribution of forensic expertise possessed in an auditor can detect fraud. This is an internal factor that comes from within an auditor. The higher forensic expertise in the auditor will increase the ability of auditor in detecting fraud.

5.2 Professional Skepticism Positively Affect Fraud Detection

Professional skepticism positively affect the detection of fraud. This means that the higher the level of professional skepticism an auditor has, the auditor's ability to detect fraud tends to be higher. Conversely the lower the experience possessed by an auditor, the auditor's ability to detect fraud tends to be lower. The results of this study support research conducted by Ramadhany (2015)[3], Adnyani et al. (2014)[23], Widiyastuti (2009)[29], Noviyanti (2008)[24] who found that professional skepticism had a positive effect on the detection of fraud. Auditors should have a high attitude of skepticism because a high attitude of skepticism will make the auditor have a great desire to find information related to symptoms of fraud, skepticism is needed especially if there are indications of fraud in the entity being audited and without professional skepticism fraud tends to be ignored, because fraud usually hidden by the perpetrators (Ayu et al., 2016)[30]. With professional skepticism the auditor automatically has questions, and the awareness that fraud can occur at any time and place. This study found that auditor's professional skepticism influences the detection of fraud, so in conducting the auditing process the auditor must be able to maintain his professional skepticism so as to make it easier for auditors to find fraud in a financial statement that they examine. The auditor should not immediately trust all the evidence he gets in the auditing process. By having a high attitude of skepticism, the auditor tends to expand the area of his examination so as to find evidence that is competent enough to convince him that the financial statements examined are free from any indication of fraud. This shows that the higher the attitude of professional skepticism that auditors have, the more it can help in detecting fraud.

5.3 Effects of Time Pressure on Fraud Detection

Time pressure has no effect on fraud detection. The results of this study are in line with research conducted by Pikirang (2017)[26], Pangestika (2014)[5], Rustiarini (2013)[6] and Fitriany (2011)[31], that time budget pressure does not affect fraud detection. The results of the study are not in line with research conducted by Anggriawan (2014)[4] which states that time pressure negatively affects the ability of auditors to detect fraud. Time pressure in conducting an audit affects the success of the auditor in detecting fraud. This is because in carrying out every assignment given by an auditor, he/she already has a time allocation that is adjusted to the complexity of the tasks given so that the auditor must be able to carry out the tasks given efficiently (Pikirang, 2017)[26]. This result also shows that although the auditor

is faced with the problem of time pressure, the auditor actually gives a positive response by doing the best work within the time limit given (Rustiarini, 2013)[6]. In this case the time budget would encourage and provide challenges for auditors to work more actively, actively, and selectively in evaluating information so that it can detect fraud.

In the theory of time pressure attribution which is one of the conditions that can affect auditors in detecting fraud. This is an external factor originating from outside or circumstances that can affect the auditor in detecting fraud. From the results of the study indicate that external time pressure factors do not affect the auditor in the detection of fraud.

6 Conclusion and Implication

6.1 Conclusion

The ability of auditors to detect fraud is needed in order to prevent fraud in the future. Based on the discussion of the results of data analysis in this study it can be concluded that forensic expertise and professional skepticism positively affect the fraud detection. However, time pressure does not affect auditors in detecting fraud.

6.2 Implication

This proves the importance of training related to forensic knowledge for auditors working at BPKP Yogyakarta and also the experience of doing audit of auditors is necessarily needed to raise the sense of skepticism. If all auditors already have forensic expertise, it is very useful to detect fraud. So this will improve the performance of the government's internal auditors and easily assist the Corruption Eradication Commission or the KPK in eradicating fraud perpetrators. In addition, auditors who work at BPKP in order to maintain professional skepticism that is owned by an auditor and always be careful in order to obtain evidence.

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Ethical Climate, Seriousness of Wrongdoing, Personal Characteristics and Whistleblowing-Intention

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Abstract. Whistleblowing is an anti-fraud strategy that is expected to be able to prevent fraud in various organizations. The effectiveness of whistleblowing can be influenced by organizational factors (ethical climate), situational factors (seriousness of wrongdoing) and individual factors (personality characteristics). This study aims to examine the causality relationship regarding ethical climate, seriousness of wrongdoing and personality characteristics towards the intention to conduct whistleblowing. The design in this study is by carrying out laboratory experiments between subjects with 2×2 factorial design on 93 subjects of Accounting Study Program from two universities in Surabaya and Yogyakarta, Indonesia. The results of this study indicate that the ethical climate affects whistleblowing-intention. The results of this study also show that the seriousness of wrongdoing affects whistleblowing-intention. Individual factor namely personality characteristics also influences whistleblowing-intention.

Keywords: ethical climate, seriousness of wrongdoing, personality characteristics, whistleblowing intention

1 Introduction

The great losses suffered by many organizations today shows that organizations and stakeholders must take serious about acts of fraud and other unethical practices (Vadera et al 2013). It would be much better to report any frauds in organizations via whistleblowing mechanism (Miceli et al 2012). This is because whistleblowing has been recognized as a control mechanism to prevent unethical behavior, to protect the long-term welfare of an organization, and to ensure a good corporate governance (Eaton and Akers 2007). In line with this, Steifert et al (2014) said that whistleblowing is a means of preventing fraud that has gained more support in the past ten years.

Scandals that involve whistleblowing are prevalent in the corporate environment. Some cases of whistleblowing that arose in Indonesia include the tax evasion case of PT Asian Agri Group (Kompas 2014), the corruption case of PT Ganda Sari (Antara 2012), and the corruption case of PT Sarinah (CNN 2015). Cases of whistleblowing can help organizations and government to disclose fraudulent cases to these entities (Nawawi and Salin 2018). The mechanism of whistleblowing must be maintained within an organization, because whistleblowing is considered a mechanism that is effective in detecting fraud in a timely manner (Ghani 2011). Therefore, whistleblowing is an interesting topic to study in this behavioral accounting field.

Gao and Brink (2017) described that the whistleblowing-intention is influenced by three factors, namely organizational, situational, and individual factors. This study examines these three factors. The organizational factor uses ethical climate variables, situational factor with seriousness levels of wrongdoing variable and individual factor with personality characteristics variable. These three variables have the potential to influence the whistleblowing-intention. This is because the ethical climate influences ethical decision making (Zhang et al 2009). The seriousness of wrongdoing also has the potential to influence the whistleblowing-intention because of personal responsibility to report high wrongdoings (Schultz 1993). In addition, personality variables also have the potential to influence the whistleblowing-intention because personality characteristics are key antecedents of human intention and therefore have the potential to influence individual desires (Matzler 2008).

The first factor that influences the whistleblowing-intention is the ethical climate. This is in line with KNKG (2008) which states that more than 50% of people in organizations that are aware of fraud choose to remain silent and do nothing. This means that the ethical climate in an organization affects the intention to do whistleblowing. On the other hand, the results of research by Rothwell and Baldwin (2007), Perdana and Hasan (2018) revealed that an ethical climate does not affect a person's intention to do whistleblowing. Perdana and Hasan (2018) stated that the ethical climate has no effect on the intention to do whistleblowing because the ethical climate is culture-specific, so that what is considered ethical in one culture can be considered unethical elsewhere.

The second factor that influences the intention to do whistleblowing is the seriousness of the wrongdoing. Curtis (2006) said that the seriousness of wrongdoing affects an individual's intention to report a fraud. This is because the sense of responsibility arises because the resulting impact is even greater for his organization. In contrast to Curtis (2006) research, Kaplan and Whitecotton (2001) said that the seriousness of wrongdoing is not related to the auditor's intention to report fraudulent behavior from colleagues.

The third factor is personality characteristics. Individual personality characteristics influence attitudes to risk taking in various areas of one's life, including social decisions, gambling and investment (Soane 2010). The personality characteristics variable in this study will be measured by the big five factor model. Migliore (2011) argues that the big five factor model is one of the strongest models in psychology that explains the taxonomy of five personality characteristics. This is in line with the results of Franklin's research (2017) which shows that the big five personality has an effect on the attitude of sharing knowledge and behavior of individuals.

The purpose of this study is to examine the nature of the causality relationship regarding the ethical climate, the seriousness of the wrongdoing and the personality characteristics of the intention to do whistleblowing. The results of this study are expected to provide benefits for the development of science in behavioral accounting and as a reference for various parties who will conduct studies on the influence of the ethical climate, the seriousness of wrongdoings and personality characteristics on the intention to do whistleblowing and also help organizations to design and pay attention to these three factors as a whole in carrying out the mechanism of whistleblowing.

2. Literature Review and Development of Hypotheses

2.1 Literature Review

2.1.1 Theory of Planned Behavior

Planned Behavior Theory (TPB) states that humans tend to act in accordance with the intentions and perceptions of control through certain behaviors, where intention is influenced by attitudes toward behavior, subjective norms, perceptions of controlling behavior, subjective norms and behavioral control (Ajzen 1988). This theory postulates that attitudes toward behavior, subjective norms, perceptions of behavioral control, together form one's intention to act and one's behavior (Ajzen 1988). Thus, TPB is the valid theory to examine the whistleblowing-intention (Park and Blenkinsopp 2009).

The tendency to behave and intention in ethics has a correlation (Parboteeah et al 2008). Organizational and individual ethics have a significant influence on ethical intentions (Elango et al 2010). Zhou (2018) also stated that ethical predictors in organizations influence ethical behavior. In addition, organizational and individual ethics have a significant influence on ethical intentions (Elango et al 2010). The results of this study confirm that propositions in ethical behavior can explain the factors that influence a person's ethical behavior in organizational life.

2.1.2 Whistleblowing-Intention

The intention of behavior specifically in this context is the whistleblowing-intention and there is a possibility that someone will choose to do whistleblowing in certain circumstances (Ghani 2011). Bouville (2008) defines whistleblowing as an act of an individual to reveal what he believes as an illegal or unethical behavior to higher management/top management (internal whistleblowing) or to authorities outside of the organization and to the public (external whistleblowing). Whistleblowing is related to the possibility that someone will perform whistleblowing as his/her behavior in an organization or company (Chiu, 2002). Behavioral intention is specifically interpreted as the whistleblowing-intention and this is the probability that someone will choose to do whistleblowing in certain circumstances. Whistleblowing

involves many ethical points and individual evaluation of ethics and whistleblowing is a necessary first step, of which the results will influence his decision about whether to be involved or not to engage in the practice (Zhang et al 2009). Companies that implement effective whistleblowing regulations will get financial benefits such as increased opportunities to detect fraud better and non-financial benefits such as developing good behavior in organizations (Lee and Fargher 2013)

One of the most commonly used methods for detecting fraud is to improve the disclosure system effectively (Dyck et al 2010). Whistleblowing involves many ethical points as well as individual evaluation of ethics and thus whistleblowing is a necessary first step, which its results will influence one's decision about whether to be involved or not to engage in the practice of whistleblowing (Zhang et al 2009). Given the importance of the role of whistle-blowing in disclosing financial fraud, it is very important to understand the factors underlying the intention to report fraud or to report misuse of assets (Bame-Aldred 2013).

2.1.3 Ethical Climate

The theory of organizational ethics climate developed by Victor and Cullen (1988) has an influence in management literature and business ethics. Martin and Cullen (2006) conducted a review and meta-analysis of more than 40 studies published using this theory between 1987 and 2005. They concluded that there is substantial support for the effect of an ethical climate on affective outcomes such as organizational commitment and job satisfaction, as well as dysfunctional behavior e.g. engaging in actions that are generally recognized as unethical (Parboteeah et al 2008). In line with this, Steinke et al (2015) said that the climate reflects employees' perceptions of policies, practices, and procedures that are expected, supported and valued related to human resources in the organization.

Garcia (2015) said that the ethical approach is a perspective that explains ethical decisions. The ethical climate includes: being selfish, helpful, having principles and reflecting concern for self-interest, group interests, and for universal ethical standards (Rothwell and Baldwin 2007). Duuh et al (2010) stated that the climate influences ethical behavior of individuals in business organizations. Studies show that individuals in organizations with a strong team or friendship climate, or a democratic climate that tend to do whistleblowing when individuals see wrongdoings (Vadera et al 2013).

2.1.4 Seriousness of Wrongdoing

Someone will make observation on his environment as a separate entity from him that creates a work environment that has ethical things and freedom to commit fraud, of which it causes him to do whistleblowing. This is the organizational factor that influences one's intentions in carrying out whistleblowing (Cho and Song 2015). Curtis (2006) said that the seriousness of wrongdoing is the evaluation of a problem influenced by the characteristics of situation and other people who are involved, including concerns such as the possibility of danger to others, the significance or magnitude of potential hazards, the certainty of negative results and the frequency of this wrongdoing. The seriousness of wrongdoing can be seen from the produced financial impact (Miceli and Near 1985) and the frequency of fraud (Callahan and Dworkin 2000). Organizational members who observe suspected fraud will be more likely to do whistleblowing if the fraud is serious (Miceli and Near 1989). Thus, the seriousness of wrongdoing variable affects the whistleblowing-intention.

2.1.5 Personality Characteristics

Personality refers to the way of an individual interacts, reacts and behaves with others and is often shown through measurable traits (Crysel et al 2012). Personality influences risk taking attitudes in various areas of one's life, including social decisions, gambling, and investment (Soane et al 2010). In this study, BFF model is used to explain personality characteristics. Among personality models, the Big Five Factor (BFF) model is the taxonomy that is most commonly used.

The Big Five Model combines five personality traits. First, an extrovert is friendly, sociable, warm and not bound by rationality or principles (Pak & Mahmood, 2015). The second characteristic is agreeableness refers to good personality, wanting to have an impact on the environment, and having sympathetic character (Bhatti et al 2014). Third, is someone who has a high sincerity, achievement oriented, self-motivating, and task oriented (Gupta 2015). Fourth is openness to experience. The fifth is

emotional stability which will help an individual to deal with cultural differences and socialize with the environment.

2.2 Development of Hypotheses

2.2.1 Effects of the Ethical Climate on Intention to Conduct Whistleblowing

Organizations that have a good ethical climate will increase the capacity of employees in moral justification (Zhou et al 2018). In line with this, it is said in TPB that subjective norms would provide social pressure to do or not do perceived actions. (Ahmad et al 2014). One element in TPB is the perception of behavioral control. Perception of behavioral control refers to social pressure given to conduct or not to conduct a behavior. This can be interpreted that the intention to do something depends on the pressure that arises from within an organization. This also refers to the ethical climate in the organization in putting pressure on its employees. This means that the ethical climate is a variable that affects the whistleblowing-intention.

Zhou et al (2018) also said that a weak ethical climate causes employees to provide wrong ethical justification, allows employees to commit fraud. On the other hand, organizations that have a climate of strong ethical climate will prompt employees to be aware about organizational concern for the benefit of employees that increases psychological attachment of employees and organizational commitment (Elango et al 2010). This can save the organization from making mistakes that cause harm and can be considered as loyalty or reward for organizational benefits. A weak ethical climate is considered to cause employees to have wrong ethics (Zhou et al 2018). Based on the arguments and previous researches, a hypothesis can be formulated as follows:

H₁: Subject who is in a high ethical climate will have higher intention to do whistleblowing than subject who is in a low ethical climate.

2.2.2 The Influence of the Seriousness of Wrongdoing on Whistleblowing-Intention

As predicted in the Graham model, the research result of Schultz et al (1993) shows that auditors are more likely to report a wrongdoing when they consider that this is a relatively serious action (Schultz et al 1993). This is due to their increase personal responsibility to report a wrongdoing. It results a higher intention of an auditor to do whistleblowing. For example, cases of serious fraud at Enron and WorldCom. In contrast, Near (1989) claimed that individuals will not perform whistleblowing on a low seriousness of wrongdoing because they consider that the whistleblowing will not change the situation.

Erkmen et al (2014) stated that someone would perform whistleblowing when he is aware of a serious fraud in his workplace. This is in line with the research of Nawawi (2018) which states that the higher the seriousness of wrongdoing, the higher of intention to disclose fraud. Graham's model also says that the seriousness of wrongdoing is positively related to reporting trends. In line with this, the seriousness of wrongdoing is the most consistent factor in its influence on the intention to do whistleblowing (Ahmad et al 2014). The results of Ayers and Kaplan's (2005) study also show that the seriousness of wrongdoing is related to the whistleblowing-intention.

The first element of TPB that shapes one's intentions is attitude toward behavior. The attitude towards behavior refers to the extent to which a person has an evaluation of behavior that is beneficial or unfavorable. The attitude towards behavior is the same as the seriousness of wrongdoing. If individuals are faced with high severity fraud, then they have the intention to disclose it. This is because they judge that the intention will be profitable and because they can carry out their responsibilities at work. Based on the above arguments and previous research, a hypothesis can be formulated as follows:

H₂: Subject who is in a situation with a high seriousness of wrongdoing will have the high whistleblowing-intention than subject who is in a low ethical climate

2.2.3 Interaction among Ethical Climate, Severity of Wrongdoing, Personality Characteristics and Intention to Conduct Whistleblowing

Individual and environmental factors play a role in influencing conditions, and the resources available for decision makers, and the rational economic behavior that (Kalantari 2010). This is in line with Woiceshyn (2011) research which states that individual ethical decision is influenced by factors from factors of organization, situation, and individuals. Thus, individuals who are in high ethical climate,

high seriousness of wrongdoing and have five high personality characteristics, they will have the high intention to do whistleblowing as well.

Gao and Brink (2017) explained that organizational, situational and individual factors influence one's intention in expressing whistleblowing. This also is applied to the profession of internal auditors. An internal auditor will reveal fraud if supported by these three factors (Curtis and Taylor 2009).

TPB states that human intention is influenced by three elements, namely attitude towards behavior, subjective norms, and perception of behavioral control. The first element of TPB is attitude towards behavior. This element is reflected in the seriousness of wrongdoing. The third element of TPB is the perception of behavioral control that refers to an ethical climate. The three independent variables in this study are in accordance with the TPB which as a whole influence individual intention to express whistleblowing. Based on the arguments and previous research, a hypothesis can be formulated as follows:

H₃: Subject who is in high ethical climate, high personality characteristics and high seriousness of wrongdoing will have high intention to perform whistleblowing.

3 Research Method

3.1 Research Design

The data collected in this study is primary data. The data is obtained by conducting laboratory experimental tests with students of accounting study programs at Widya Mandala University in Surabaya and Atma Jaya Yogyakarta University who have taken auditing courses. Auditing courses teach accounting students about the principles of working in the professional world that those students must do. Therefore, students who have taken auditing courses are considered to have knowledge of the principles of work so that they have a basis in attitude. Students will be asked to act as internal auditors. This is based on the argument that students can do work like internal auditors. Students can be accepted as professional educators (Nahartyo and Utami 2014). In addition, Fatoki (2013) also said that students are potential leaders in the future in the private and public sectors that will see the whistleblowing-intention as important. This research was conducted in class when students finished attending lectures so that they participated in quite atmosphere and participated with caution.

The experimental research was performed in six stages. The first stage is to distribute four modules to randomized subjects. The second stage is to guide the subjects to fill out their identities. The third stage is to ask the subjects to act as internal auditors and to answer questions to check manipulation of the roles and conditions that have been requested. The fourth stage is to guide the subjects in filling out the modules given regarding the factors that influence the whistleblowing-intention to the auditor. Research subjects were asked to determine the whistleblowing-intention to the given module. The audit assignment module was presented with a Likert scale of 0 to 100, which means that the higher of intention to do whistleblowing, the higher of assessment. The fifth stage is to collect modules. The last stage is to debrief, which means returning of the subjects to their initial condition and explaining the conditions that occurred during the experiment. This research was conducted in class, when students finished taking lectures so that they took part in the experiment in quite atmosphere and in did it cautiously.

3.2 Methods of Data Collection

The data in this study were collected by conducting laboratory experiments to the subjects of the study. Previously, a pilot test was conducted to ensure that the research instruments can be used in real experiments. The following is the experimental matrix in this study:

Table 1. Experimental Matrix

		Seriousness of Wrongdoing	
		High	Low
Ethical Climate	High	Cell 1	Cell 2
	Low	Cell 3	Cell 4

Table 1 shows 4 experimental groups consisting of cells 1 to cells 4. Cell 1 presents a high ethical climate and a high seriousness of wrongdoing. Cell 2 presents a high ethical climate and a low seriousness of wrongdoing. Cell 3 presents a low ethical climate and a high seriousness. Cell 4 presents a low ethical climate and a low seriousness of wrongdoing.

The design of this study is an experiment between subjects with factorial 2×2 . The subjects will be manipulated according to the experimental matrix. A high ethical climate will be presented to the subjects of research by referring to the opinion of Cullen et al (2006) which said that a high ethical climate will be shown in behavior of workers who want to do anything and sacrifice their intentions to maximize the fulfillment of company needs, which will improve alternative company decisions. Whereas, a low ethical climate refers to the research of Victor and Cullen (1988) who said that a bad ethical climate can be seen by the fulfillment of personal intentions that are greater than fulfilling tasks and responsibilities as workers, such as employees and shareholders. Considerations about the seriousness of wrongdoing can be aligned with the resulted financial impacts (Marliza 2018). The high seriousness of wrongdoing will be presented in the presence of wrongdoing related to material financial matters. Meanwhile, the low seriousness of wrongdoing will be presented with financial cases that are not material in nature.

3.3 Operational Definition

This study has 3 independent variables and 1 dependent variable. The independent variables in this study are: ethical climate, seriousness of wrongdoing and personality characteristics, while the dependent variable in this study is the whistleblowing-intention. Ethical climate is an affective outcome such as organizational commitment and job satisfaction, and dysfunctional behavior such as engaging in action is generally recognized as unethical (Martin and Cullen 2006). In this study, the ethical climate is measured using an interval scale. Characteristics of personality itself refer to the way individuals interact, react and behave with others and are often shown through measurable traits (Crysel et al 2012). Curtis (2006) said that the seriousness of wrongdoing is the extent of the impact caused by the wrongdoing. Personality has 5 components that will be tested in this study. The five components are extroversion, openness to experience, agreeableness, conscientiousness, and neuroticism. In this study, personality characteristics variables are measured using the Likert scale by distributing questionnaires.

3.4 Data Analysis Techniques

The data analysis techniques in this study are performed in 5 steps. The first step is to analyze data which is the processing descriptive statistical analysis of the data obtained. The second step is to test the effectiveness of randomization using one-way ANOVA. The third step is to do manipulation checks. The fourth step is to test the hypotheses with the independent t-test for the first and second hypothesis and two-way ANOVA for the third hypothesis. The last step of the two-way ANOVA test results is to observe the average score of whistleblowing-intention and compare the significance values in the matrix as a result of the interaction between the ethical climate and the severity of wrongdoing to see the consistency of the experimental matrix.

4 Results and Discussion

4.1 Profiles of Research Subjects

The research subjects in this study were students of the Faculty of Economics and Business of University of Widya Mandala Surabaya and Atma Jaya University Yogyakarta who had taken auditing courses. In this experiment, subjects were asked to act as internal auditors in a company. This experimental research was conducted on 95 students. However, there are 2 data that are not processed in this study because the modules are not completely filled out. The profiles of the research subjects in this study are described in Table 2. Table 2 provides information that the research subjects with male sex are 22 subjects (23.7%) and female are 71 subjects (76.3%). 17 subjects (18.3%) had Grade Point Average (GPA) ≤ 3 , 41 subjects (44.1%) had GPA of 3.00 -3.49, and 35 subjects (37.6%) had GPA ≥ 3 , 50. As many as 87 subjects (93.5%) were in semester 6, 4 subjects (4.3%) were in semester 8, and 2 subjects (2.2%) were in semester 10.

Table 2. Profiles of Study Subjects

Information	Total	Percentage
Gender:		
Male	22	23,7
Female	71	76,3
GPA:		
≤ 3	17	18,3
3 – 3,49	41	44,1
≥ 3,5	35	37,6
Semester:		
6	87	93,5
8	4	4,3
10	2	2,2

4.2 Testing of Randomization Effectiveness

The results of testing of randomization effectiveness in this experimental study indicate that there is no influence between the whistleblowing-intention and the demographic characteristics of the research subjects. This can be seen in table 3 that the significance level of four demographic characteristics is more than 0.05.

Table 3. One-Way Anova Test Results

	Mean Square	Sig.	Information
Gender:			
Between Groups	0,269	0,154	No Influence
Within Groups	0,174		
GPA:			
Between Groups	0,394	0,664	No Influence
Within Groups	0,540		
Semester:			
Between Groups	0,488	0,449	No Influence
Within Groups	0,492		
General Questions:			
Between Groups	0,777	0,912	No Influence
Within Groups	1,892		

4.3 Hypothesis Testing

Testing of this hypothesis will show the whistleblowing-intention which are influenced by ethical climate, seriousness of wrongdoing, and personality characteristics. The first hypothesis was tested using independent sample t-test. In accordance with the results of testing in table 4, the hypothesis is significantly proven that there are differences in intention to express whistleblowing between participants who are in a high and low ethical climate at significance $\alpha = 5\%$ (sig 0.000 < 0.05). So it can be concluded that the first hypothesis in this study is accepted.

Table 4. Hypothesis 1 Testing Results

	Mean	Std. Deviation	T	Sig. (2-tailed)	Information
Ethical Climate					
High	8,64	1,663	6,396	0,000	Have Influence
Low	5,60	2,838			

Hypothesis 2 in this study states that research subjects who are in a state of high severity will be different from subjects who are in a low seriousness. Testing was done by testing the independent sample t-test which proves that the hypothesis is accepted with a significance level of $\alpha = 5\%$ (sig 0.000 < 0.05).

Table 5. Hypothesis 2 Testing Results

	Mean	Std. Deviation	t	Sig. (2-tailed)	Influence
Seriousness of Wrongdoing					
High	8,56	1,570	6,800	0,000	Have Influence
Low	5,36	2,838			

Table 6 shows the results of hypothesis 3 testing using two-way ANOVA. The interaction that gives rise to the highest whistleblowing-intention is the interaction on the conditions of the research subjects who are in a high ethical climate, high seriousness of wrongdoing, and high personality characteristics. Table 6 proves that the produced significance level is 0.027 which is smaller than $\alpha = 0.05$. This proves that the third hypothesis is accepted.

Table 6. Hypothesis Testing Results 3

	Mean Square	Type III Sum of Squares	df	Std. Deviation	F	Sig. (2-tailed)	Information
Ethical Climate, Seriousness of Wrongdoing, Personality Characteristics							
	25,382	25,382	1	2,766	5,064	0,027	Have Influence

4.4 Discussion

The results of the hypothesis test supports Elango et al (2010) research that an organization that has a high ethical climate will allow its employees to perceive organizational concern for the benefit of employees which at the same time, increase employee's psychological attachment and organizational commitment. The results of this study are also in line with TPB which states that subjective norms will provide social pressure to do or not to the perceived actions. (Ahmad et al 2014). In this study, subjective norms are described by a high ethical climate where every reporting of fraud is always processed and followed up to completion.

The result of the hypothesis test supports the Graham (1986) model which stated that the seriousness of wrongdoings is positively related to tendency of reporting. In line with this, Near and Miceli (1985) said that the higher seriousness of wrongdoings, the higher perception about efficiency and higher possibility for reporters to report wrongdoings, because serious wrongdoing will be considered as a potential significant change. This will make an individual to have intention of whistleblowing when he/she encounters a high seriousness of wrongdoing. The results of the test are in line with Woiceshyn (2011) research which stated that individual ethical decisions are influenced by organizational factor, situational factor, and individual factor. These three factors will strengthen the intention of an internal auditor to do whistleblowing in an organization.

The results of this study are in line with Planned Behavior Theory (Ajzen 1991) which states that one's intention will shape one's actions and behavior. TPB states that human intention is influenced by three elements, namely attitude towards behavior, subjective norms, and perception of behavioral control. The first element of TPB that shapes one's intentions is attitude towards behavior. The attitude towards behavior refers to the extent to which a person has an evaluation of favorable or unfavorable behavior. The second element illustrates the seriousness of wrongdoing that influences a person's intention to do whistleblowing. The third element is the perception of behavioral control which refers to the social pressure to do or not to do a behavior. This can be interpreted that the intention to do something depends on the pressure that arises from within the organization. This is in accordance with the ethical climate, the seriousness of wrongdoing, and personality characteristics which altogether influence an individual's intention to do whistleblowing.

5 Conclusion, Implication, and Limitation

5.1 Conclusion

This study aims to examine the causal relationship regarding the ethical climate, seriousness of wrongdoing, and personality characteristics to whistleblowing intentions. The results showed that the first, second, and third hypotheses were accepted. First, the ethical climate has a positive effect on whistleblowing intentions. When internal auditors are in a high ethical climate they have a higher intention of conducting whistleblowing than internal auditors who are in a low ethical climate. Second.

seriousness of wrongdoing has a positive influence on whistleblowing intentions. Internal auditors who are in high seriousness of wrongdoing have the intention to do a higher whistleblowing than auditors who are in low seriousness of wrongdoing. Third, internal auditors on ethical climate, personality characteristics, and high seriousness of wrongdoing have high whistleblowing intentions.

5.2 Implications

The results of this study produce findings that the three independent variables influence whistleblowing intentions, so the research implications for the development of science in behavioral accounting are as a reference for various parties who will conduct studies on whistleblowing intentions. In addition, the findings of this study can be input for organizations to design and pay attention to these three factors together in carrying out the whistleblowing mechanism.

5.3 Limitations

The limitation in this study is that the experiments conducted in large classes causes obstacles for the experimenter in presenting experimental cases. Experiments carried out after class take place also become a limitation in this study because the subject is not focused in listening to the experimental directions.

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Three Lines of Defense: Paradigm Supporting Roles of Internal Audit to Prevent Corruption in Indonesia Regional Government

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Abstract. The purpose this article is to reference an internal audit structure for Regional Government in Indonesia. This article uses literature review from previous research to build a new audit concept. This article finds the reality contradicts between the practice and theory of internal audit that it is unable to fight corruption in Indonesia. In fact, the Komisi Pemberantasan Korupsi (KPK) and Indonesia Corruption Watch (ICW) released that the most corruption cases in Indonesia were dominated by corruption of goods and services procurement. Findings reflect a new paradigm, the concept of three lines of defense as a powerful supporting the role of internal audit to prevent corruption in Regional Government in Indonesia maximally.

Keywords: internal audit, regional government, corruption, three lines for defense

1 Introduction

Internal audit in Regional Government in Indonesia is often questioned its existence to prevent fraud. It is shown by many corruption cases involving Regent, Mayor, and Governor as the main actor or taking part in it. This phenomenon illustrates that internal audit is not effective in preventing fraud, even though the role of internal audit is in the second place after report in preventing and detecting fraud [1].

A contradictive failure happens related to the concept of internal audit quality in the public [2]. Public perception leads to many critics to the professionalism of internal audit which has an important role in preventing fraud. Internal auditor sometimes needs to sacrifice their professional assessment to serve the management interests [3]. It includes their independent to serve the top management in an organization governance [4]. Moreover, the minimum quality of the audit is due to poor working experience, professional assessment, no support from senior management, and misconception of the roles of internal auditor in the organization governance [5].

Theoretically, the function of internal audit can fight against the corrupt behavior [6]. Since 1991, internal audit has a role to evaluate the operation performance, assess the adequacy of an internal control system, ensure the reliability of financial report, provide the relevant information in decision making process, and evaluate the prevention and detection of fraud [7]. A quality audit process is consistent to the three principles of independence, professional, and awareness to fight against corrupt behavior [8]. Therefore, internal audit must comply with the auditing standard, audit technique, and audit assessment to prevent and detect fraud [6]. In determining mission of audit and early risk identification, it is important to ensure the quality of audit by the auditor [9].

The reality of the practice and theory is contradictory. When the theory of internal audit can fight against corrupt behavior [6], [8], the practice says the opposite; the internal audit cannot prevent corruption cases since the auditors sacrifice their professional assessment in serving the interest of top managers [4]. They often go grey independence, where their independence is grey in giving the assurance [3].

The corruption phenomenon in Indonesia is a global trend when it reached an index of 32 in the red zone (International, 2018). 42% corruption dominated the goods and services procurement [10]. This fact shows that internal audit has failed in preventing corruption in Indonesia. What is actually happen to

the discrepancy between the theory and actual practice of internal audit? This article is re-oriented the roles of internal audit and associated it with three lines of defense concept to prevent fraud.

2 The Concept of Three Lines of Defense

The role of internal auditors who fail to protect fraud scandals is a public problem on financial accountability [25]. The public interest is also threatened when the auditors cannot provide definite statements in their audit regarding financial accountability [26]. As a result, an internal control concept emerges and create a new paradigm called three lines of defense concept [27]. This model is used as the planning of risk management strategies and risk control in organizational governance. The concept of three lines of defense is part of the internal control-integrated framework which serves as a control structure in the organization [28]. The control and risk management system cannot stand alone as a whole with the role of internal audit. Internal auditor works as a supervisor and consultant for management within the organization [3].

Looking at previous studies that internal control plays a significant role in preventing and detecting fraud [29]–[31], it turns out that the internal control system used by private or public entities is very effective to control and mitigate the risks faced by organizations [32]. The system strongly supports organizational management that include control environment, risk assessment, control, information and communication, and monitoring, in which all are capable to prevent and detect fraud [32]–[34].

Public interest in the future is important to recommend the latest supervisory structure that is better than before [28], [35] in order to create financial accountability as the responsibility of internal auditors. In [36], a more reliable supervisory structure is designed, and it is known as a concept of three lines of defense. This concept is a risk defense pattern that can be used by the entities, where the first line of defense is audit and risk management responsibility, the second line of defense is risk management responsibility, and the third line of defense is internal auditor responsibility [37]. This system collaborates risk management and internal auditor with the task and responsibility of formalizing the risk management process with internal audit, serving the interests of internal audit on risk management, and collaborating internal audit and risk management in risk assessment and audit planning. Conceptually, it can be seen in the figure below:

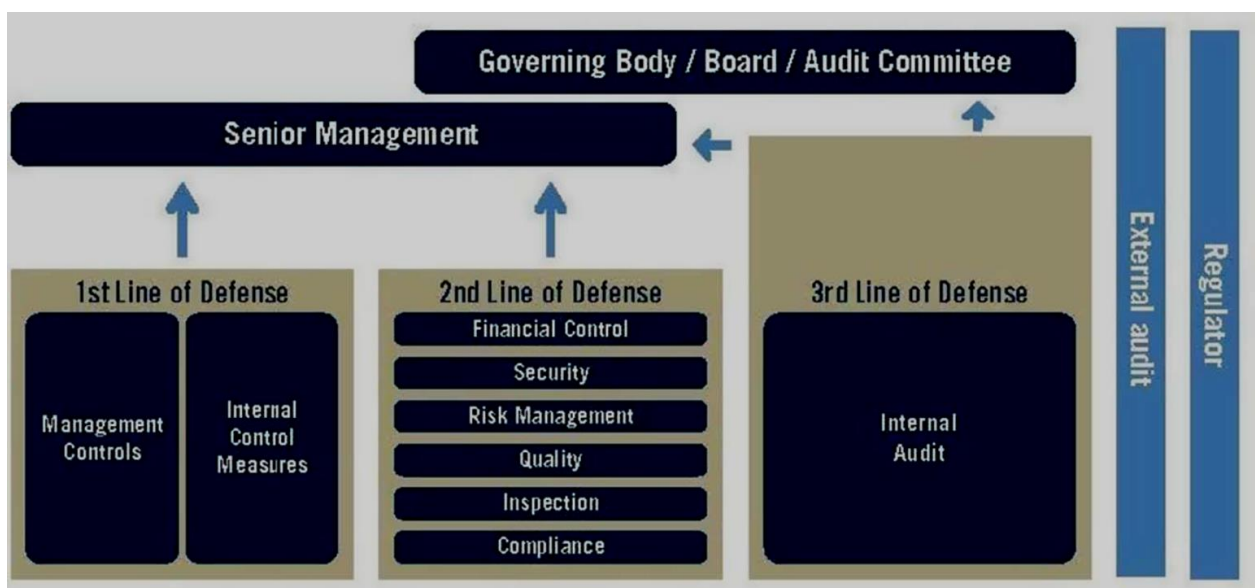


Figure 1. Structure of Three Lines of Defense
Data source: Concept of Three Lines of Defense (IIA, 2013)

The defense model as illustrated in the concept above illustrates that the first line of defense has risk management function, the second line of defense has risk management function and compliance with regulation, and the third line of defense has the function of providing an independent internal audit guarantee. This model is a new paradigm that changes the perspective of risk management in an integrated manner between risk management and internal audit [38], [39]. It is a system performance that can mitigate risk simultaneously to achieve organizational goals [40]. In conducting audit planning, auditors can communicate with the risk management to find out which post audit to be conducted. So, the risk responsibility in organizations is not only borne by internal auditors, but also by risk management who give support [26].

Audit planning and early risk detection provide objective professional assessment to notify the warning sign to the auditee in order to immediately expose the risks responsively and effectively [37]. This is not just an innovation in the control system, but also a new challenge in developing and practicing a more complex supervisory structure [25]. The new standard compiled by [36] is one of the reference forms of guidelines for audit practice and risk management as a shared responsibility [41]. Along with the complexity of organizational challenges in business orientation or serving the public interest, sometimes integral miscommunication occurs, in which hinders overall governance in the organization [42]. It is important for each element in the structure of Three Lines of Defense to establish good communication [17].

The concept of the Three Lines of Defense provides a new illustration of the supervision phenomenon that occurs in governance in Indonesia. This concept can be used as a reference for internal supervision structure development pattern. The transformation leading to institutional reform of an institution to realize effective, efficient and economical organizational governance is very important and it can be done by strengthening the role of internal audit and risk management [43]. This method is a pattern that can provide support for the role of internal audit in preventing and detecting fraud risk in the form of corruption [6]. If this model is used, it can provide significant functions starting from the efficiency and effectiveness of operation, asset security, reliability, and integrity of the reporting process, and compliance with applicable regulations [41]. Indirectly this will provide a new control phenomenon in mitigating risk [44]. Indeed, all efforts must be made to fight corruption in governance, especially in Indonesia where the level of corruption is still in the red zone.

3 Methodology

This research used the qualitative approach with literature study as the analysis materials. Literature study was chosen to analysis the previous studies on the position of internal audit in fighting corruption. Moreover, the analysis would be followed by practice phenomenon of internal audit from one of Regional Government in Indonesia. Due to the contradiction between the theory and practice, this article designed a new audit concept in order to prevent corruption in Indonesia. In the context of Indonesian bureaucratic reform, the Internal Auditor (APIP) has not yet applied the three lines of defense model (see, Law No 12 of 2017, Instruction of the Minister of Home Affairs Number 900/918/SJ, Law No.8 of 2006, Law No 60 of 2008, and Regulation of the Ministry of State Apparatus and Civil Service Reform (PermenPAN-RB) No 9 of 2009). It is because the three lines of defense system has all the aspect as an integrated unity to mitigate the risks.

4 Contradiction between Corruption and Arguments for Intern Audit

Internal audit by APIP in the Regional Government in Indonesia is unassertive to include corrupt behavior as the part of fraud concept. Therefore, the Audit Report (LHP) by the auditors never stated “corruption” or “fraud”, instead, it only stated loss and damage to the State financial. This definition has a crucial difference between fraud and corruption [11]. Consequently, when APIP do an investigation, they are afraid to include corruption in the report. In fact, corruption is under the fraud tree, including misappropriation and financial statement fraud [12].

Regulation on criminal acts of corruption in Indonesia is within the scope of public sector. Law number 31 of 1999 of article 2 and 3 reads:

“Anyone unlawfully enriching himself and/or a corporation in such a way to be detrimental to the finances of the state or the economy of the state shall be liable to life in prison (...)”
and reads:

“Anyone with the intention of enriching himself or other persons or a corporation, abusing the authority, the facilities or other means at their disposal due to rank or position in such a way that is detrimental to the finances of the state or the economy of the state, shall be liable to life imprisonment or a prison of (...)”

The highlighted phrase means that it indiscriminate any who involving with the finances of the state. Definition of corruption lies at the purpose or intention to enrich himself, other persons or a corporation which is detrimental to the finance of the state.

Definition of the regulation on criminal acts of corruption in Indonesia is in line with its article [13] stating that corruption is a form of abusing the authority, power, and available sources to enrich himself. There is a nuance of monopoly of authority without accountability in managing the finances of the State [11]. Their corrupt behavior also rationalized financial statement fraud for their own interests [14]. Corrupt behavior is influenced by political, social, and culture environments [15]. Not to mention the social-culture of corruption in Indonesia, almost all lines in the government from the central to the regional has its own means in abusing the finances of the State. Therefore, it is unsurprising that the corruption index of Indonesia is in the red zone.

Those statement above finally shows the definition of corrupt behavior leading to the severe part of fraud cases. An accumulated fraud in an overall aspect starting from the abuse of trust, intention, mistakes, levity representing the material loss, so it causes victim [16]. Meanwhile, corruption does not mean fraud only, but the abuse of authority and power which can control the financial function for the benefit and interest of himself, a group or even a corporation.

Internal audit stated in the audit report shows that APIP is generally competent in its responsibility to prevent and detect fraud, but they did not include corruption case explicitly in its report [6]. Corruption can only be revealed when the external parties enter, such as external auditors and law enforcement officers [11]. Internal auditors are required to have a good communication pattern with the auditee, external auditors, and law enforcement officers to fight against fraud in the internal organization [17]. When the internal auditors are disturbed their independence, then the assurance recommendation is not followed up by the management, the auditors have the right to communicate their findings with the external parties in order to fight the corrupt behavior within the organization.

Confirmed party from APIP of the internal auditors of Regional Government in Indonesia argue that they are often threatened by the management in conducting the professional assessment. There is a conspiracy to get rid of the findings by the auditor since it is considered disturbing the interest of management. APIP has no other way than keep it off the record the findings stated in the results for inspection points (P2HP) as a saving evidence on their desk. The argument of APIP is as follows:

“The findings concealed by the management (auditee), we save it on our desk. Someday, when it is raised as a case to the court, we will show our findings. We keep everything secret, unless BPK (external auditor) or the prosecutor ask it for a legal evidence and we will come as witnesses (Mr. Bud, APIP in a Regional Government in Indonesia)”.

Efficiency, effectiveness, and economics of the internal supervision function in Indonesia related to the copy of tiered findings communication have not been performed correctly. The tiered audit reports are submitted to the Regent as the Regional Head, Audit Board of Indonesia (BPK-RI) of Provincial Representative, National Government Internal Auditor (BPKP) of Indonesia of Provincial Representative, and Provincial Inspector, as stipulated in the Regent Regulation related to Audit Follow-Up in Regional Government. Politically, the administration has fulfilled the criteria of good governance, but it is not with the deliberately omitted findings, so it only ends on the auditor's work table.

In the authentic evidence that proves the inability of internal audits to fight corruption, there are cases of political corruption in the Regional Government implied, especially in the fraud cases of procurement of goods and services. In Indonesia, there are state financial loss records from corruption cases of procurement of goods and services by Rp. 1,133.5 trillion [10]. Procurement activity is an easy target for corruption actors due to three aspects: the majority of government financial management involving large financial resources, procurement activities that are not separated from transactional politics between providers and politicians, and frequent budget manipulation [18]. The mindset of contemporary capitalism then leads to corrupt behavior [19]. Bureaucrats (procurement parties) are an inseparable part who take part in the political corruption arena [20]. An integrated control systems are

damaged only due to is collusion between sectors that should become the responsibility of accountants and auditors [21].

Collusion between parties takes place in groups with the aim of enriching themselves and their groups [22]. Intentionally, there is a significant relationship between providers (who fund political campaigns in democracy) and politicians, and here the providers demand the projects promised by the elected politicians [19]. With the intention to collude, it shows a moral degradation that eventually becomes a culture in its territory [23]. As the elected politicians, they have authority that lacks accountability that can be accounted for. So, it is not surprising if the providers are ready to buy the politician's authority as a democracy momentum in making choices [24].

5 Conclusion

Theoretically and conceptually it is revealed that internal audit can fight corruption by preventing and detecting fraud in internal organization [4]–[7], [9]. However, the reality shows that internal audit practices in the field cannot prevent and detect fraud, especially corruption of procurement of goods and services in the Regional Government in Indonesia. In the Audit Report (LHP), the internal auditor's statement in exposing the corruption concept inside has not been found. In fact, there is a political corruption phenomenon in group to enrich themselves or others for their own sake. Therefore, this article finds a new paradigm that designs internal control structures in internal organization. The new model collaborates the risk management and internal audit. It has a function is to maximize the support assurance in mitigating risk since the early stage to finalize the audit planning process. There is a concept of Three Lines of Defense consisting of first line of defense (audit and risk management responsibility (Internal Audit Leader)), second line of defense (risk management responsibility), and third line of defense risk (internal auditor responsibility).

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Retaliation, Seriousness of Wrongdoing, and Whistleblowing: An Experimental Study in Internal Governmental Auditor

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Abstract. Whistleblowing is an anti-fraud mechanism that mitigates fraud in organizations. Studies on whistleblowing largely focus on profit-seeking firms, although fraud also exists in governmental sectors. In this respect, the role of government internal auditors is potentially important to commit whistleblowing. Several factors likely affect whistleblowing intention, including retaliation and seriousness of wrongdoing as situational factors. This study aims to test the causal relationship between retaliation and seriousness of wrongdoing on whistleblowing intention. In doing so, this paper uses a 2x2 between-subjects experimental design with 45 government internal auditors as the participants. The results show that retaliation and seriousness of wrongdoing affect whistleblowing.

Keywords: retaliation, seriousness of wrongdoing, whistleblowing

1 Introduction

This study is motivated by the widespread cases of corruption, collusion, and nepotism (*KKN – Korupsi, Kolusi, dan Nepotisme*) in the Indonesian public sector. Numerous cases exist each year, and many involve accountants. A high-profile case was related to unqualified audit opinion on the 2016 financial statements of Ministry of Village, Development of Disadvantaged Regions, and Transmigration (*Kemendes PDTT – Kementerian Desa, Pembangunan Daerah Tertinggal dan Transmigrasi*). Corruption Eradication Commission (*KPK – Komisi Pemberantasan Korupsi*) named four suspects on this case, namely Sugito (the General Inspectorate of Ministry of Village), Jarot Budi Prabowo (an Echelon III Officer of Ministry of Village), Rochmadi Saptogiri (Lead Auditor III BPK or State Audit Agency) and Ali Sadli (an Echelon I Officer of BPK) (Pratiwi, 2017).

Fraud committed by individuals or groups will give significant impacts in various aspects. Dimant and Tosato (2017) explain that fraud has various negative consequences, such as suboptimal productivity levels due to inefficient fund allocation, reduced investments, economic growth slowdown, increasing income gap, and poverty rate. However, fraud can be mitigated, and fraudsters can be penalized with various methods, including whistleblowing (ACFE, 2018).

Whistleblowing is an action of members of organizations to report illegal, immoral, and illegitimate actions (Elias, 2008). Generally, whistleblower comes from internal organization however can also comes from parties outside the organization. The study of Dyck, Morse & Zingales (2010) in 216 cases of fraud showed that 17% of these cases detected as a role of the organization's employee, 13% as a role of non-financial-market regulators, and 13% as a role of media. In Indonesia, Agus Rahardjo Head of Corruption Eradication Commission (*KPK – Komisi Pemberantasan Korupsi*) assert that in a sting operation (*Operasi Tangkap Tangan*) of fraud cases begin because of the incoming reports, then studied and carried out direct monitoring (Tallo, 2018).

Whistleblowing attracts numerous discussions because it is an effective method to combat unethical behaviors. However, it is not easy to be whistleblowers. Various factors affect individuals to commit whistleblowing. A review study of Gao and Brink (2017) maps several factors that affect individuals' intention to commit whistleblowing, namely whistleblowers' characteristics, the characteristics of those who receive reports, wrongdoers' characteristics, and organizations' characteristics.

One of whistleblowers' characteristics that likely affects individuals' intention to commit whistleblowing is the retaliation consideration (Kaplan, Pany, Samuels, & Zhang, 2012). An experiment study of Liyanarachchi and Newdick (2009) tests the effects of retaliation power and moral level of New Zealand accounting students on their tendency to commit whistleblowing when they are confronted with a serious problem. The results show that participants tend to commit whistleblowing when retaliation is

weak, but not when it is strong. Bjorkelo, Einarsen, Nielsen, and Matthiesen (2011) explain that whistleblowers exhibit less work satisfaction and are subject to more bullying behavior in their workplace than non-whistleblowers. Thus, retaliation discourages members of organizations to commit whistleblowing (Kaplan, Pany, Samuels, & Zhang, 2012).

Another factor that affects whistleblowing is seriousness of wrongdoing (Curtis, 2006). Robinson, Robertson, & Curtis (2012); Brink, Cereola, & Menk (2015) examine and classify seriousness of wrongdoing into two parts, namely material and immaterial wrongdoings. Their findings demonstrate that individuals exhibit greater whistleblowing intention when seriousness of wrongdoing is material than when it is immaterial.

Previous studies (Kaplan, Pany, Samuels, & Zhang, 2012), (Curtis, 2006), (Robinson, Robertson, & Curtis, 2012) that investigate the effects of retaliation and seriousness of wrongdoing on whistleblowing intention tend to focus on auditors or accountants in the private sector. However, in the government sector, municipal or provincial inspectorate (government internal auditors) as a part of internal control also plays a crucial role in whistleblowing. In Indonesia, Government Regulation No. 60 Year 2008 on the Government Internal Control System especially article 11 mentions that inspectorates have a role in providing an early warning, in enhancing the effectiveness of risk management and in improving the governance quality. Thus, studies on whistleblowing in the public sector are still potential to extend.

This study extends Liyanarachchi & Newdick (2009) who have not taken the seriousness of wrongdoing factor in their analysis into the government inspectorate environment. Specifically, this research aims to test the causal relationships between seriousness of wrongdoing and retaliation on whistleblowing intention. It is expected that this study contributes to the whistleblowing literature and future studies. Additionally, this research also contributes to the government by helping develop fraud disclosure systems.

2 Literature Review

2.1 Theory of Planned Behaviour (TPB)

Theory of Planned Behaviour (TPB) is an extension of the Theory of Reasoned Action (TRA). In general, the Theory of Planned Behavior explains that intention is shaped and affected by certain factors. Next, intention motivates individual behavior (Ajzen, 1991). Theory of Reasoned Action suggests that two key factors affect individual intention, namely subjective norms and attitude toward behavior. Theory of Planned Behavior adds this argument by proposing three key factors that affect intention, namely, attitude toward behavior, subjective norms, and perceived behavioral control (Park & Blenkinsopp, 2009).

Attitude refers to individual assessment on whether a certain behavior is accepted or rejected (Alleyne, Hudaib, & Pike, 2013). Meanwhile, subjective norms are closely related to social pressures that likely affect individual perception. Lastly, perceived behavioral control is the perception of the strength of factors that facilitate or inhibit a certain behavior (Ajzen, 1991).

2.1 Retaliation

Retaliation is an unwanted action toward whistleblowers as a direct response of their decisions to report frauds internally or externally (Rehg, Near, Miceli, & Scotter, 2008). Retaliation can take various forms, such as demotion, authority reduction or even removal, excessive assignment, and even job dismissal (Mesmer-Magnus & Viswesvaran, 2005). Einarsen (2000) reveals that retaliation toward whistleblowers is similar to bullying behavior at the workplace. Bullying itself refers to a situation where individuals are subject to continuous psychological torture.

Leymann (1996) explains in detail that bullying behavior harms individuals by affecting their opportunities to communicate (e.g., a threat to cut information), their ability to maintain social contacts (e.g., physical exclusion or social mutation), their ability to protect their personal reputation (e.g., defamation), and even their health (e.g., assignment to dangerous jobs, sexual harassment, and physical attacks). Further, being in such a position continuously may cause individuals to have stress, trauma, and even mental health problems (Tehrani, 2004). Besides health problems, retaliation may also harm whistleblowers' financial aspects and relationship with their families and relatives.

2.3. Seriousness of Wrongdoing

Seriousness of wrongdoing refers to the characteristic of wrongdoing. The seriousness of wrongdoing concept is closely related to the materiality concept in accounting. Schultz, Johnson, & Dyrnes (1993) explain that because of its relationship with the materiality concept in accounting, seriousness of wrongdoing can be quantitatively measured. However, Curtis (2006) extensively proposes that seriousness of wrongdoing is not limited to quantitative concepts, but also qualitative ones. For example, studies can identify the extent of the negative effects of wrongdoing and the likelihood that the wrongdoing harms others.

Concerning fraud detection, materiality is worth considering. Even Wells (2003) argues that “the presence of immaterial fraud may be the ‘tip of the iceberg’ for exposing more pervasive frauds.”

2.4 Whistleblowing Intention

Whistleblowing is defined as a reporting action made by members of organizations on illegal or immoral actions within their organizations to external or internal parties that potentially affects the wrongdoings (Near & Miceli, 1985). Whistleblowing can also be defined as an action committed by responsible organizational spies who dare to act based on following their conscience (Mustapha & Siaw, 2012). One can commit whistleblowing both directly or indirectly through anonymous reporting mechanisms (Taylor & Curtis, 2013).

Whistleblowing is a reliable monitoring system to detect existing fraud (Alleyne, Hudaib, & Pike, 2013). Individuals who are aware of fraud and intent to report the fraud will give positive impacts on their organizations (Near & Miceli, 2016). In an analysis of 128 US students, Elias (2008) demonstrates that students consider whistleblowing necessary, especially in a fraud case. Employees often understand the importance of whistleblowing. However, potential whistleblowers are confronted with an ethical dilemma between reporting fraud they are aware of and keeping fraud undisclosed (Suyatno, Armstrong, & Thomas, 2017).

2.5 The Relationship between Retaliation and Whistleblowing Intention

Changes in cultural values have enabled individuals to judge and defend what they consider right. However, committing whistleblowing invites various consequences and even retaliation (Rocha & Kleiner, 2005). Elias (2008) explain that higher risks such as retaliation and potential difficulties in having future jobs in the same profession discourage individuals to commit whistleblowing. In this respect, individuals base their decisions to report frauds on the costs and benefits of these decisions (Gundlach, Douglas, & Martinko, 2003) that will change due to various factors, including the history of previous whistleblowers.

Kaplan, Pany, Samuels, & Zhang (2012) hold that the history of previous whistleblowers is a signal for potential whistleblowers to assess whether they will experience retaliation. Retaliation is a potential cost. A higher potential cost will arguably reduce one’s intention to commit whistleblowing. In other words, individuals are more likely to conceal fraud when potential risks are greater (Nickolan, Handajani, & Hermanto, 2018). The retaliation consideration is not only related to its likelihood but also the magnitude of the retaliation (Liyanarachchi & Adler, 2011).

Whistleblowers in the government sector also face potential retaliation. In turn, retaliation motivates the government to develop further the mechanism to protect whistleblowers from retaliation. For example, as an example, Minister of Research, Technology, and Education Regulation No. 3 Year 2014 article 6 on Guidelines on Management and Follow-Up of Whistleblowing in Each Institution’s Environment stipulates that whistleblowing system is compulsory to protect whistleblowers from retaliation and those who retaliate must be punished. Thus, the following is our first hypothesis:

H1: Subjects who receive low retaliation condition will exhibit greater whistleblowing intention than subjects who receive high retaliation condition.

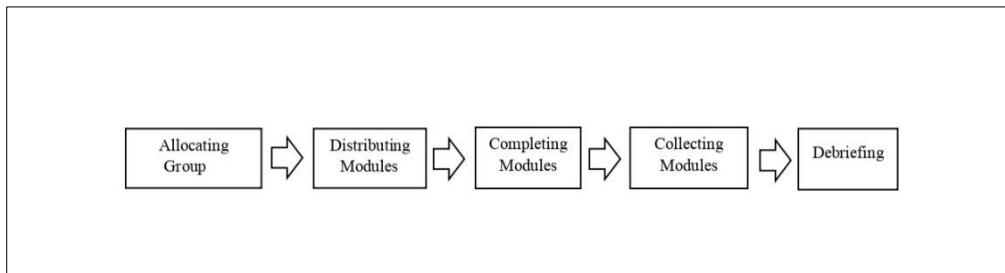
2.6 The Relationship between Seriousness of Wrongdoing and Whistleblowing Intention

Perceive behavioral control in TPB refers to the perceived ease or difficulty of committing a behavior. In turn, intention and behavior depend on individuals’ resources and opportunities to commit a certain behavior. Each inherent obstacle or risk is labeled as a control factor. Next, individuals’ beliefs on

the opportunity or obstacle are built upon and affected by various factors, including others' information and experience (Ajzen, 1991). Perceived behavioral control is the basis of actual behaviors. Thus, individuals are the judges for their behaviors.

An important control factor in whistleblowing comes from the trust of organizational obstacles that are related to the neglect of reports given. Individuals who believe that their reports will not be responded well will consider their reports will not improve their organizations (Park & Blenkinsopp, 2009). Another obstacle is a concern about potential retaliation due to their reports. Thus, it is important for individuals to understand how they will be responded to and receive legal protection.

Several previous studies demonstrate the effect of seriousness of wrongdoing on individuals'



whistleblowing intention. These papers also explain that individuals exhibit greater whistleblowing intention when wrongdoings are material (Curtis, 2006); (Robinson, Robertson, & Curtis, 2012); (Brink, Cereola, & Menk, 2015). The findings can be explained by the fact that more serious fraud involves more money and has more impacts on organizations (Curtis, 2006). Then, individuals tend to perceive that organizations are more likely to corrective actions for more serious problems.

Organizations will experience greater or more material losses from more serious mistakes. Individuals, especially as parts of organizations, perceive that they have responsibilities to protect their workplaces from losses and other negative impacts (Winardi, 2013). Thus, the study proposes the second hypothesis as follows:

H2: Subjects who receive high seriousness of wrongdoing condition will exhibit greater whistleblowing intention than subjects who receive low seriousness of wrongdoing condition.

3 Method

3.1 Research Design

This study is experimental research with a 2x2 inter-subjects factorial design. The main benefit of experimental research is that it explains the causal relationship between the observed dependent and independent variables (Utami & Nahartyo, 2013). The subjects are government internal auditors. The dependent variable is whistleblowing intention, while the independent variables are retaliation and seriousness of wrongdoing.

The experiment operationalized retaliation into two levels, namely high and low retaliation. Meanwhile, the study operationalized the seriousness of wrongdoing variable into two levels: material condition and immaterial condition. The following Table 1 displays the matrix of the experiment design.

Table 1. Experiment Matrix

		Seriousness of wrongdoing	
		Material	Immaterial
Retaliation	High	Group 1	Group 2
	Low	Group 3	Group 4

3.2 Experiment Setting

The experiment consisted of five phases that are illustrated in Figure 1. The first phase divided subjects randomly into each group, as indicated by the experiment matrix. Each group received a manipulation treatment according to each condition.

Figure 1. Experiment Flow

Subjects then received assignment modules. The module informed that subjects acted as a member of Inspectorate (government auditors) who was assigned to audit a regional education office of a city/regency as a part of a routine audit (Annual Monitoring Work Program). Then, the scenario explained that subjects found that the upper echelon of the regional education office illegally cooperated with the vendor of school textbooks with a kickback mechanism. The illegal act caused financial loss to the government. Subjects were required to assess the extent of their whistleblowing intention through the Whistleblowing System (WBS) that had been developed by the Inspectorate where they worked through the website anonymously to ensure that their identity is protected.

Subjects who received the manipulation of material seriousness of wrongdoing were conditioned that the amount of government loss was 1 billion Rupiah that was identified material. Meanwhile, for the immaterial seriousness of wrongdoing, subjects were conditioned that the amount of government loss was 10 million Rupiah, and it was immaterial. Next, subjects who received the high retaliation condition were informed that if subjects reported the fraud, it was likely that they received retaliation in the form of job dismissal and even threats to their family members. In the low retaliation condition, it was much less likely that subjects would receive retaliation.

The study ran the manipulation check by using the information test. The information test was presented in three questions for each manipulation. After each phase was completed, the debriefing session closed the experiment. The debriefing session aimed to restore subjects to their previous condition. In this session, subjects were informed that their involvement in this experiment was voluntary, and they could withdraw the results if they had the objection with the study. This debriefing session was a manifestation of researchers' ethical responsibility.

3.3 Analytical Techniques

The first phase in the analysis presented subjects' profiles by using descriptive statistics. The study then tested the effectiveness of randomization by using One-Way Analysis of Variance (ANOVA) test to ensure that subjects' whistleblowing intention was not affected by their demographic factors. The randomization was effective if the significance value was greater than $\alpha = 5\%$. Next, an Independent Sample T-test analyzed whether the hypotheses were empirically supported. Hypotheses would be empirically supported (rejected) if the significance value was less (greater than) $\alpha = 5\%$.

4 Result and Discussion

4.1 The General Description of the Experiment Subjects

Research data was collected through a laboratory experiment on government internal auditors in Kupang, East Nusa Tenggara. Forty-five subjects were allocated randomly to four groups with different conditions according to the research scenario. A participant did not fill in the questionnaire completely, leaving 44 participants who qualified into the subsequent phase. Table 2 below shows the profiles of all qualifying participants.

Table 2. Participants' Profiles

Explanation	Total	Percentage
Sex:		
Male	30	68%
Female	14	32%
Age:		
28-34 years	6	14%
35-41 years	12	27%
42-48 years	19	43%
49-55 years	6	14%

>55 years	1	2%
Working Experience:		
≤3 years	1	2%
> 3-5 years	8	18%
>5 years	35	80%

Source: Processed Primary Data

The results demonstrate that most of the participants were male (30 subjects or 68% of total participants) while the rest were female (14 subjects or 32% of total participants). Next, participants with the age range of 42-48 years dominated with 19 subjects (43%) and only one subject (2%) was above 55 years. Lastly, most participants (35 or 80%) had worked for more than five years.

4.2 Randomization Check

The study ran the randomization check before the hypothesis testing. Randomization check was performed with One-Way Analysis of Variance (One-Way ANOVA) on participants' demographic factors, namely sex, age, and years of working experience. This test aimed to analyze whether demographic factors affect the dependent variable. Table 3 displays the results of the randomization check.

Table 3. The Results of One-Way ANOVA

	Mean Square	F	Sig.	Explanation
Sex:				
Between Groups	75.346	0.165	0.687	No Effect
Within Groups	457.676			
Age:				
Between Groups	738.906	1.763	0.156	No Effect
Within Groups	419.028			
Working Experience:				
Between Groups	10.828	0.23	0.977	No Effect
Within Groups	470.148			

The results show that all three demographic factors had significance values greater than alpha (0.05), indicating that these demographic factors did not affect subjects' whistleblowing intention. Thus, the test suggested that the randomization was effective by allowing only the manipulation treatment that affected subjects' whistleblowing intention.

4.3 Test of Hypothesis 1

The first hypothesis predicts that subjects who face low retaliation condition will exhibit greater whistleblowing intention than those who face high retaliation condition. The study tested the first hypothesis by using the independent sample t-test to compare the whistleblowing intention of the two groups with different treatments (group 1 and group 2 with the high retaliation condition and group 3 and 4 with the low retaliation condition). Table 4 displays the results of the test of hypothesis one.

Table 4. The Results of the Test of Hypothesis One

	N	Mean	Std. Deviation	t	Sig. (2-tailed)
Retaliation					
High Retaliation	23	68.70	22.422	-4.308	0.000
Low Retaliation	21	91.90	10.779	-4.434	

The results in Table 4 produced a significance value of $0.000 < 0.05$ (equality of means assumed), implying that there was a significant difference between these two groups. Subjects who received high (low) retaliation had a mean value of 68.70 (91.90). The results suggest that subjects who receive low retaliation condition tended to exhibit greater whistleblowing intention (as indicated by the mean score approaching 100) than subjects who received high retaliation condition.

The results are in line with previous studies (Liyararachchi & Newdick, 2009; Fatoki, 2013) that argue that high retaliation reduces individuals' whistleblowing intention. Auditors take retaliation as a cost into consideration. A greater cost or risk motivates auditors to reject to commit whistleblowing and to cover information they have (Nickolan, Handajani, & Hermanto, 2018).

4.4 Test of Hypothesis 2

The second hypothesis predicts that subjects who receive high seriousness of wrongdoing (material) condition exhibit greater whistleblowing intention than subjects with low seriousness of wrongdoing condition. Similar to the test of hypothesis one, the study tested hypothesis two by using the independent sample t-test to compare two groups with different treatments. The first group (group 1 and group 3) received high seriousness of wrongdoing condition while the second group (group 2 and 4) received low seriousness of wrongdoing condition. Table 5 shows the results of the hypothesis testing.

Table 5. The Results of the Test of Hypothesis Two

	N	Mean	Std. Deviation	t	Sig. (2-tailed)
Seriousness of Wrongdoing					
Material	22	83.64	17.056	3.213	0.003
Immaterial	22	58.64	32.263	3.213	

Table 5 displays a 2-tailed significance value of $0.03 < 0.05$, implying that there was a significant difference between the two tested groups. Next, the mean value of subjects with high (low) seriousness of wrongdoing condition is 83.64 (58.64). The results suggest that subjects with high seriousness of wrongdoing condition were likely to exhibit greater whistleblowing condition (a mean score approaching 100) than subjects with low seriousness of wrongdoing condition.

The results are in line with (Brink, Cereola, & Menk, 2015); (Robinson, Robertson, & Curtis, 2012) who demonstrate that individuals exhibit greater whistleblowing intention when wrongdoings are material. Individuals tend to perceive that material wrongdoings increase the likelihood that their reports will be responded better. Conversely, immaterial wrongdoings lead to poor responses to reports. Individuals believe that the absence of good responses will fail to fix the problems (Park & Blenkinsopp, 2009).

Poor responses can be considered as a control factor that affects auditors' perception or perceived behavioral control as explained by the Theory of Planned Behaviour. Internal auditors' intention to commit whistleblowing depends on available resources and obstacles. Poor responses are considered an obstacle, and greater obstacles imply auditors' less intention to commit whistleblowing.

5 Conclusion, Implication, and Suggestion

This study aims to test the causal relationships between retaliation and seriousness of wrongdoing and government internal auditors. The findings demonstrate that retaliation and seriousness of wrongdoing affected whistleblowing intention. The whistleblowing intention of internal auditors as the research subjects was greater when they had low retaliation condition. Next, auditors were likely to

exhibit greater whistleblowing intention when they had high seriousness of wrongdoing condition than when they had immaterial wrongdoing.

The study contributes to the whistleblowing literature and future studies. Also, the results advise organizations, especially public sector ones, to develop effective whistleblowing systems to facilitate disclosure better and to provide better protection for whistleblowers.

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The Effect of Internal Control System, Individual Morality, and Organizational Commitments to Accounting Fraud Tendencies

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Abstract. The purpose of this research is to examine the effect of internal control systems, individual morality and organizational commitment to the tendency of accounting fraud. The samples in this study were branch leaders, branch quality assurance, sales supervisors (marketing), leaders in service office development, general and administrative supervisors, cash service supervisors, customer service supervisors. The sampling method for this research was purposive sampling, and 60 samples were obtained. This study uses the questionnaire method in collecting data. Researchers used multiple linear regression data analysis techniques to test the effect between the independent variable and the dependent variable. The test results obtained results that the internal control system, individual morality, organizational commitment have a significant negative effect on accounting fraud.

Keywords: internal control system, individual morality, organizational commitment, fraud tendency (accounting)

1 Introduction

The increasingly massive development of accounting not only provides benefits for stakeholders, but also becomes a source of accounting fraud. Fraud according to The Association of Certified Fraud Examiners can be interpreted as intentionally breaking the law committed by internal or external parties of the organization for personal or group interests.

The tendency of accounting fraud has received attention from various parties, especially stakeholders associated with the company. Cases of fraud in Indonesia occur repeatedly, the mass media reported this much so that for the public fraud cases like this are no longer a secret. Cases of accounting fraud can occur in financial institutions in the government sector or in private sector financial institutions.

Based on the Statement of Auditing Standard, fraud is defined as an action taken intentionally to produce material misstatements in the financial statements. Guidelines for stakeholders in the decision making process are financial statements. This will certainly harm stakeholders in the decision making process because the information presented in the financial statements does not reflect the real state of the company.

Fraud/crime in the banking sector is a type of crime that is a crime that includes institutions, banking products or devices, which involve the banking sector or its customers as perpetrators or victims. The bank has activities and functions to raise funds from the public in the form of savings, current accounts, and deposits, and then channel it back to the public in the form of credit. The role of banks is very important for the Indonesian economy because banks have a role to control financial stability, control inflation, and regulate the payment system. Therefore, it is necessary to implement adequate risk management in an effort to overcome the increasing complexity of products and bank activities.

One function of the internal control system is to prevent accounting fraud, so that the financial statements presented are of higher quality. But in some cases, it turns out that the internal control system that has been implemented has not been able to function effectively. One example of a case that just happened in Indonesia is the case of the presentation of financial statements by Garuda Indonesia (Persero). Quoted from (<https://economy.okezone.com>, 2019) it was stated that Garuda Indonesia (Persero) had presented the financial statements for the 2018 fiscal year by presenting a net profit of USD 809.85 thousand or equivalent to 11.33 billion rupiah. This nominal value is far greater than the financial statements for fiscal year 2017 which recorded a loss of USD 216.5 million. Commissioners of Garuda Indonesia (Persero) namely Chairal Tanjung and Dony Oskaria assume that the company's financial

statements presented are not in accordance with Accounting Standard. On the other hand, Garuda Indonesia (Persero) refused to re-audit the financial statements for the 2018 financial year which were deemed inappropriate because it had included revenue from PT Mahata Aero Teknologi. The difference of opinion between the company and the company commissioner indicates that there is a potential for inappropriate governance and internal control systems. The existence of an internal control system is to prevent, control, and giving an early warning if there is a fraud in the company. But in reality the internal control system applied has not been able to do their function effectively. The case then ended with sanctions imposed on Garuda Indonesia (Persero) and KAP Tanubrata Sutanto Fahmi Bambang and Partners (Member of BDO International).

Another case of accounting fraud is a case of embezzlement of funds that occurred in Bali by the Director of the People's Credit Bank KS Bali Agung Sedana in the Kerobokan area, Badung. The case of embezzlement of funds is related to granting loans that are not in accordance with procedures to a number of 54 debtors worth Rp.24,225 billion (<https://ekonomi.kompas.com>, 2018).

Researchers are also interested in examining the influence between individual morality and organizational commitment to the tendency of accounting fraud. The underlying reason is because of the inconsistency of the results of the study, so it can be concluded that the results of the previous studies are not conclusive yet.

Table 1. The Result of Previous Research

Researchers	Accounting Fraud Tendencies	Internal Control System	Individual Morality	Organizational Commitment
Indriastuti (2016), Widiutami (2017)	√	(-)		
Asrifah (2018)	√	(x)		
Sanuari (2014)	√		(-)	
Dewi (2017)	√		(x)	(x)
Natasya (2017), Widiutami (2017)	√			(-)

The purpose of this study was to examine the effect of the Internal Control System, Individual Morality, and Organizational Commitment on Accounting Fraud Tendencies.

2 Literature Review

2.1 Perception

Perception is defined as the process of a person's interpretation of the environment both visually, appreciation, feeling and smell. The thing that needs to get emphasis to gain an understanding of a perception is that the perception is a unique interpretation of the situation, and not a correct recording of the situation (Thoha, 2016: 141).

2.2 Attribution Theory

Attribution theory deals with the process of a person in understanding and interpreting an event, as well as explaining the reasons and causes of a person's behavior related to the event. Fritz Heider developed this theory and further explained that that one's behavior was determined by a combination of internal factors originating from in themselves such as ability and business, and external factors such as luck (Yusra, 2016: 9).

2.3 Fraud Triangel Theory

Theory developed by Dr. Donald Cressy, co-founder of the Association of Certified Fraud Examiner (ACFE). In the Fraud Triangle Theory explained that fraud is supported by three elements, namely pressure, opportunity, and justification. The statement was developed by the Association of Certified Fraud Examiners (ACFE) and adopted from Ardianingsih's book (2018: 75) which includes indicators (1) financial statement fraud, (2) asset misappropriation, and (3) corruption.

3 Research Methods

3.1 Place and Object of Research

The place or location in this study is conducted at XX Bank Branch Office in Badung Regency. The object of this research is the Internal Control Systems, Individual Morality, Organizational Commitment and Accounting Fraud Tendencies.

3.2 Population and Sample Determination Method

Population is a generalized area determined by researchers because it has certain qualities and characteristics (Sugiyono, 2018: 80). The population used in this study were all employees who worked at 5 (five) XX Bank Branch Offices of Badung Regency, amounting to 75 people. This study uses a Non probability sampling method with a purposive sampling technique, with the criteria that the respondents in this study are branch leaders, branch quality assurance, sales supervisors, marketing leaders in service office development, administrative and general supervisors, cash service supervisors, supervisors customer service, so that the number of respondents obtained as many as 60 respondents.

3.3 Data Types and Sources

This research was conducted with quantitative research methods. The independent variables in this study are the internal control system, individual morality, and organizational commitment. While the dependent variable is the tendency of accounting fraud.

3.4 Method of Collecting Data

Data collection methods that researchers use is a questionnaire method with a Likert scale of 1-5. Likert scale 1-5 is used with the aim to measure the response of respondents. The scale shows, namely: 1) strongly disagree (STS), 2) disagree (TS), 3) disagree (KS), 4) agree.

3.5 Data Analysis Technique

The data analysis technique used to test the effect between independent variables and the dependent variable in this study is multiple linear regression.

4 Results and Analysis

4.1 Test Research Instrument

The results of the validity test of internal control system variables, individual morality, and organizational commitment show the value of the correlation coefficient > 0.30 , so it can be stated that the statement is valid. The reliability test results of the internal control system variables, individual morality, and organizational commitment indicate the Cronbach's Alpha value of each instrument is greater than 0.70. This result means that the research instrument meets to be declared reliable and can be used in this study.

4.2 Classic Assumption Test

The regression model is normally distributed as indicated by the normality test which obtains a significance value greater than 0.05. For the multicollinearity test, it was found that the tolerance value of each variable is greater than 10 percent, and the VIF value is less than 5 percent, so it can be concluded that the regression model is free from multicollinearity problems. Sig value for each variable is greater than 5 percent (0.05), which means this research model escapes the problem of heteroscedasticity.

4.3 Multiple Linear Regression Analysis

Table 2. Summary of Multiple Linear Regression Analysis Results

Model	Coefficients ^a			t	Sig.
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta		
(Constant)	5.744	.359		15.998	.000
1 Internal control system	-.325	.122	-.307	-2.674	.010
Individual morality	-.328	.105	-.333	-3.114	.003
Komiten Organisasi	-.294	.138	-.282	-2.129	.038

a. Dependent Variable: Accounting fraud tendencies

Source: Data processed 2019

Based on Table 2 can be written multiple linear regression equation as follows: $Y = -0,307X_1 - 0,333X_2 - 0,282X_3 + e$. The multiple linear regression equation shows that the Internal Control System variable (X_1) has a negative regression coefficient of -0.307, the Individual Morality variable (X_2) has a negative regression coefficient of -0.333, the Organizational Commitment variable (X_3) has a negative regression coefficient of - .282.

4.4 Model Test

This model test consists of the determination test (R^2) and the F test (F-test).

Table 3. F Test Results

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	38.444	3	12.815	26.455	.000 ^b
	Residual	27.126	56	.484		
	Total	65.569	59			

a. Dependent Variable: Accounting fraud tendencies

b. Predictors: (Constant), Komite Organisasi, Individual morality, Internal control system

Source: Data processed 2019

The statistical test results above show that the significant value of the F test is 0,000 less than 5 percent. This means that the independent variables simultaneously affect the dependent variable.

Table 4. Model Summary

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.766 ^a	.586	.564	.69598

a. Predictors: (Constant), Organizational commitment, Individual morality, Internal control system

b. Dependent Variable: Accounting fraud tendencies

Source: Data processed 2019

Based on the table it can be seen that the adjusted r square value = 0.564 or which means that 56.4% of Accounting Fraud (Y) is influenced by the variable Internal Control System (X_1), Individual Morality (X_2), Organizational Commitment (X_3), and the remaining 43.6% is influenced by other variables outside this study.

4.5 Hypothesis Testing

Table 5. T Test Results

Variabel	Unstandardized Coefficients Beta	t hitung	Sig.
Internal control system	-0,325	-2,674	0,010
Individual morality	-0,328	-3,114	0,003
Organizational commitment	-0,294	-2,129	0,038

Source: Data processed 2019

T-test was conducted to determine the difference in mean values with standard errors of the two study samples (Ghozali, 2016: 64). Based on the t statistical test, the t-value obtained by the Internal Control System variable is -2,674 with a significant level of $0.010 < 0.05$, which means that the Internal Control System has a significant negative effect on Accounting Fraud (H_1 accepted). Through the

application of a good internal control system, it can reduce the tendency of accounting fraud committed by employees. This result is in accordance with research conducted by Ahriati (2015) and Maliawan (2017) where the test results obtained indicate that the internal control system has a significant negative effect on the tendency of accounting fraud.

Individual morality variable has a t-value of -3.114 with a significant level of $0.003 < 0.05$. This means that there is a negative and significant influence between Individual Morality and Accounting Fraud (H_2 accepted). This means that the higher the level of morality of a person, then he will tend to care more about the public interest than his personal interests, so that more avoiding actions that lead to accounting fraud.

While the Organizational Commitment Variable has a t-value of -2.129 with a significant level of $0.038 < 0.05$, which means that the Organizational Commitment Variable has a significant negative effect on Accounting Fraud. (H_3 received). This means that the higher the employee's commitment to an organization, then he will tend to avoid actions that hinder the achievement of the goals of a company where he works, including one that leads to accounting fraud.

5 Conclusions and Suggestions

5.1 Conclusions

The conclusions that can be drawn from this study are adjusted to the results obtained, namely the internal control system, individual morality, and organizational commitment have a significant negative effect on the tendency of accounting fraud.

5.2 Suggestion

Suggestions that can be given to further researchers are to use other variables such as compensation suitability variables, asymmetric information, unethical behavior variables, obedience variables of accounting rules, internal audit variables and integrity variables and research can also be done by expanding the place of research so that results can be generalized.

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Fraud Frevention for Sustainable Social Enterprise Using Participative Social Governance

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Abstract. Social enterprise is not immune from fraud. As social enterprise is growing, there are some risks of fraud occurrence. Therefore, the purpose of this paper are to discuss types of frauds risks in Indonesian social enterprise and the effective ways to prevent it. This study used case study in one of social enterprise in Indonesia, that is at Panggungharjo, Indonesia. Panggungharjo has Village-owned Enterprise that manage waste management as its social business. The finding of this study indicates that there are three types of fraud occurred in Indonesian social enterprise. These types of fraud could be prevented by engaging community in decision making and monitoring process which are known as participative social governance. This study argue that participative social governance is more effective in fraud prevention rather than external audit and monitoring. The study will be useful for scholars, policy makers and regulators who are interested in Indonesian social enterprise.

Keywords: social enterprise, fraud prevention, participative social governance

1 Introduction

Social Enterprise is perceived to be more effective and sustainable to tackle complex social issues such as health, education, social and environmental issues. This model is not a new one. The history of social enterprise can be tracked more than 100 years ago, started by Florence Nightingale (Brouard, Hebb, & Madill, 2008). The development is expected to continuously grow (Dees, 1998). Social Enterprise model gained momentum after Muhammad Yunus won Nobel Prize. Social Enterprise model become world wide phenomenon, including in developing countries, such as Indonesia. Traditionally social enterprise works on education and health sector, but now social enterprises entering broader sectors such as waste management, community based tourism and sustainable energy.

Inspired by current trend of Social Enterprise, Indonesia government passed Law No 6/2014 which gave greater responsibility and authority for Village Government to manage its territory and finance. This law was oto-critic of previous empowerment model which too much emphasize on community driven approach and neglected Village government role. To support the policy, Central Government of Indonesia directly transferred fund to the Village Government, known as Village Fund to be used for various program such as infrastrucure, community empowerment and established Village owned Enterprise. Village owned Enterprise has nature of social enterprise since its ultimate goal is to increase the prosperity of Village people. The prosperity is not only measured by financial indicators but also non financial indicators such as quality of health, education and nature protection.

Since the law of Village enacted on 2014, the number of Village owned Enterprise has been increasing significantly up to 45,459 (Ministry of Village Report, 2018). As the number of Village owned Enterprises grow, so that the risk of frauds. As nascent type of organization in Indonesia Village owned Enterprise has lack of guidance and standards. There were some incident reported to police of wrongdoings indication in Village owned Enterprise. In previous year, Corruption Eradication Commission (KPK) stated that 400 of Village Head convicted of Village Fund misappropriation. Although Village owned Enterprise is a separated organisation, the misconduct send alarming concern on the risk of fraud in Village owned enterprise.

This paper discuss the risk of fraud in Village owned Enterprise based on our observation and interview with management of Village owned Entepriase in Panggungharjo. Panggungharjo is considered one of the best Village owned Enterprise in Indonesia. Panggungharjo design and implement participative social governance that effectively prevent management of Village owned Enterprise to commit fraud.

This model can be implemented to other Village owned Enterprise and Social Enterprise which operated in rural areas. This paper will be divided into following section. Introduction section will outline the issue and importance of performing Fraud Prevention Program in Social Enterprise. Literature review section will discuss previous research on social enterprise, risk of fraud, fraud prevention program, and participative governance. Method section will discuss about case study we conducted in Panggungharjo. Result and discussion section will discuss about finding and discussion based on our understanding and literature review. Lastly we outline the conclusion, limitation of study and contribution.

2 Literature Review

There is no single definition of social enterprise being agreed by scholar. European commission define social enterprise as type of business with social or societal objectives of the common good is the reason for the commercial activity, often in the form of a high level of social innovation (Braunerhjelm & Hamilton, 2012). EMES (Emergence Social Enterprise in Europe) Network summarise criteria of social enterprise which divided into two : economic dimensions and social dimensions (Defourny et al., 2008). Social enterprise has economic dimensions which are ; a continuous activity of producing goods and/or selling services, has a high degree of autonomy, has a significant level of economic risk, a minimum amount of paid of work. Social Enterprise also has social dimensions which are; an explicit aim to benefit the community, an initiative launched by a group of citizens, a decision-making power not based on capital ownership, a participatory nature and limited profit distribution.

Social enterprise is a young field of study. Although the practice can be traced back more than one hundred year ago, the research of social enterprise started to emerge in mid 1990s (Defourny et al., 2008). In the beginning the research was concern on explaining the emergence of Social enterprise. Initially, the research focus on individual level, but recently the topic of research is shifting to organizational level. On the organizational level, institutional approach is considered suitable to be a theoretical framework (Mair & Marti, 2006). Institutional approach discusses with how relationship among organisation and environment enabling and contraining organizational behaviour (Lawrence et al., 2006). Institution consists of formal such as laws and regulations, and informal insitutions such as customs and traditions (North, 2015). Research findings confirm the influence of formal institutions to social entrepreneurship and commercial entrepreneurship. However, Pathak & Muralidharan (2016) found that informal institutions namely societal collectivism and societal trust demonstrated positive influence to social entrepreneurship.

One of organisational factor that gain attentions is governance of Social Enterprise. In general governance can be defined as the relationship among various participants in determining decisions of organisation (Low, 2006). In social enterprise the participants involved in decision making do not need to have formal or legal rights to do so. For example the beneficiaries of social enterprise or community member could affect the direction of the social enterprise through social control and public participation.

Social enterprise governance is important for Social Enterprise sustainability. Many researchers concerned whether this model will be sustainable in the long term. Martin & Osberg stated that social enterprise should manage cost as number of beneficiaries rises to reduce the dependence to governmental and donor support. In doing so, social enterprise should change two features of the existing system, which are actors involved and technology applied. Changing the actors might result changing the governance system.

One of issues that might hampered the sustainability of social enterprise is fraud. Any fraud happened in a social enterprise will give double knock-down. First there might be severe finansial loss, and second the social enterprise will loose public trust. Once social enterprise loose public trust the business is over, since social enterprise is a business of trust. Therefore, we should taking the issues seriously. Entrepreneurs, including sociopreneurs, are rule breakers (Wright & College, 2011). In the goodway the rule breakers will push innovation in society, but without strong ethics they might breaking the law. Social entrepreneurs might caused significant changes to society. Refer to the institution approach, social enterprise activities run in formal an informal institutions. The formal insitution can be regulated by enacting new law or regulation. But for informal insitutions we need another mechanism to make sure that the innovation carried by social enterprise do not alter the social harmony. There is a risk of financial and non financial loss caused by dysfunctional social enterprise activities(Wright & College, 2011).

Literature suggest to promote participatory governance in social enterprise to minimize risk of fraud (Pestoff & Hulgård, 2016). Participatory governance is important to guard the social mission of social enterprise (Defourny & Nyssens, 2010). Social enterprise governance also importance in maintain public accountability and prevent mission drift (Ebrahim, Battilana, & Mair, 2014). Participatory governance also what makes governance in social enterprise different with commercial enterprise.

3 Research Method

We used case study in Panggunharjo Village of Yogyakarta, Indonesia. Panggunharjo established Village owned Enterprise which collecting and processing waste from community waste banks. We conducted observations, interviews and focus groups discussions to Village-owned Enterprise management, Head of Village Government, Village Government staff, board of commissioner and beneficiaries. We also done triangulation by checking Village-owned Enterprise documents and interview external party for confirmation.

The study have extensive information on risks of fraud and strategy implemented to prevent fraud in Village-owned Enterprise. We tabulated the data using EMES framework of Social Enterprise. We focus on efforts on organisational level of designing and implementing participative governance for fraud prevention program.

The detailed stages of the study done in four stages as follow:

1. Preliminary investigation: (a) identify the history and background of establishment of Village-owned Enterprise, (b) study the organisation structures and governance
2. Observation, interview and focus groups discussion to identify risk of frauds in Village owned Enterprise
3. Investigate practice of participatory governance as a major strategy to prevent fraud in Village-owned Enterprise
4. Triangulation and write-up result. Using multi-source of data to formulate model and key factors of successful fraud prevention program using participatory governance.

We measure risks of fraud using risk matrix of consequence and likelihood. We identify and score the risk using our understanding of magnitude and likelihood of such risk occurred. The score is one until three of low, moderate and high. We then multiply the score of consequence and score of likelihood as risk score. Based on our result we went back to Village-owned Enterprise and Village Government Head and Staff for confirmation and discussion.

4 Result and Discussion

Based on our literature review and data collection, we can group risk of frauds in Social Enterprise into three groups. First the misappropriation of asset, fraudulent in financial reporting and mission camouflage. We found that asset misappropriation is the most likely happened in social enterprise compare with other two.

“risk (in managing social enterprise) do exist. For example the risk of asset misappropriation or abuse of authority (in social enterprise) are alot” Eko Pambudi, Director of Panggun Lestari.

The blurred lines between social mission and commercial mission gave opportunity for management to act not accordance to general principle of internal control. Management could make excuse of any inefficiency or asset misappropriation as part of empowerment. For example, some expenses are over budget due to intention to expand beneficiaries coverage or some irregularities are accepted due to maintain social cohesiveness. Those intentions are goods, but provide loopholes for management to covered up their fraudulent acts.

The second groups risk is fraudulent in financial statement. Fraudulent in financial statement happened when management purposively understated or overstated figures in financial statement. Social Enterprise must achieve financial and social goals. Financial goals usually measured by revenue and profit and social goals measured by coverage of services. To survive the performance evaluation by board, management of Social Enterprise might alter the presentation of financial and non financial reporting to have proper evaluation result.

The last group of risks are mission camouflage. Mission camouflage is deceiving donor or stakeholder that the activities are for social mission, but the fact is the activities just only for benefit of individual or small groups. The act of deceiving public to have source of fund is a serious risks. As social

enterprise gain popularity and coverage, many entrepreneurs jump into this model. If their intention is pure this will be very good, but if they do that just for ‘marketing gimmick’, this will alter social enterprise reputation in general.

Panggunglestari implement some internal controls to prevent and minimise such risk to happen:

Table 1. Summary of Social Enterprise Internal Control

No	Control Activities
1	Building public trust through transparency on financial reporting (Panggung Lestari use third party web based accounting software. Public can see the report and detail of transaction of each Panggung Lestari Business Unit)
2	Inviting public participation to monitor the performance and compliance of Panggung Lestari management, since the Board of Commissioner alone would not sufficient to oversee all of Panggung Lestari Business Unit.
3	Preparing business plan to minimise risk of business failure. Before started each business unit, Panggung Lestari management previously prepared business plan to minimise the risk of bankruptcy.
4	Always conducting sound and healthy business practice.
5.	Preparing monthly and weekly plan as guideline for employee to work.
6.	Implementing level of authority of cash disbursement. Head of Business unit only allowed to approved below Rp5 million. He/she need to have approva first from director for above Rp5million spending.
7	Preparing financial and performance reporting and discuss with Head of Village and Board of Commissioner each three months.

Source: Interview and observation of documents in Panggung Lestari

Interestingly in preparing for business plan, management of Panggung Lestari do not only present how the business unit will have how much profit, but also how can the business unit give benefit to Village people. How the business unit will give benefit to the Village people is the ultimate goal. Based on our interview, Agus Subagya one of Commissioner explain that board of commissioner have more focus on benefit rather than profit. Based on this condition, how to maintain the balance between pursuing profit and give benefit is the key of social enterprise to have long term sustainability.

“ We understand that we need to have cross-subsidy to our customer. We need to understand with whom we are dealing. If we deal with our community member we try our best to deliver our service at reasonable price, but if we are doing business with outsider we do take normal profit”.

Eko Pambudi, Director of Panggung Lestari.

We also found the risk of cash flow. Social Enterprise tends to perform their business in thin margin. Once there is fluctuation in business, their cashflow management might be severely affected. Manangement of Panggung Lestari always very cautious in spend their fund. They will try to maximise the usage of working capital to short term activities, and rely on Village Government and Local/Central Government support for long term investment. This is important finding since most of Social Enterprise management lack of financial management.

Panggung Lestari management always try to conduct their business in sound and healthy business practice. Although they have some privilege from Village Government , it doesn’t means that they can act loose. They have accountability of performance and financial for each three months and yearly. In the Village People General Assembly, the Head of Village must report the benefit and profit of Panggung Lestari within the year. Head of Village will held accountable by public if there is shadowy transactions. General Assembly will have the highest authority to determine whether they will accept the accountability report, approve strategic initiative and pick up social enterprise management. This mechanism is a very effective check and balance process, because even Head of Village will be held accountable if there is anything bad happended in Panggung Lestari.

Panggung Lestari also have implement some best practice of modern business, such as remuneration, performance evaluation, information systems and participative budgeting and evaluation. When we asked this during interview, how the can learn such things, they said that they learn by

themselves and they also hired profesional and consultants to help them prepared for the documents and SOP.

5 Conclusion, Limitations, and Contributions

Based on our finding and discussion we can conclude that there are two level of Social Enterprise management. First is the management of holding/board and management of unit business/operational. The management of businesss unit is the same with management of other type of business. But the management of Social Enterprise holding is very different with commercial business. In the Social Enterprise holding with consist of Head of Village, Board of Commissioner and Management, the discussion is more on how social enterprise can give direct impact and benefit to village people. Once this expectation cannot be met by management, management will be put in dire situation. To avoid this management of social enterprise should maintain balance of multiple stakeholder expectations and profit vs benefit. The failure to achieve such balance will increase the risk of fraudulent of social enterprise financial report. We can learn on how Panggung Lestari management to maintain such balance and lowering the risk of financial fraudulent reporting.

There is also good example on how to increase public awareness and participation to monitor social enterprise financial management. The risk that can lead of social enterprise cannot deliver their service is the risk of cash flow management. The risk of cash flow management is relatively high in social enterprise since they operate in very thin margin. This situation might be worsened by wrong budget allocation. Panggung Lestari can give us example how to tied up business and social goal into business plan dn break it down into operational and weekly plan. By using better planning, Social Enterprise might reduce the risk of cash flow management.

In conclusion there is potential of Panggungharjo model to be implemented to other Village-owned Enterprise or social enterprise operated in rural areas. Engaging communities and local groups are more effective in preventing fraud occurred. The risk of reputation and social repudiation are more frightening for Villager compare to formal sanctions.

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