


The Influence of the Government Internal Control System and Internal Audit on Corruption Prevention Mediated By Implementation of Actuals-Based Accounting

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<p>*Corresponding author <i>Haryono Umar</i></p> <p>Article History <i>Received: 11.03.2018</i> <i>Accepted: 21.03.2018</i> <i>Published: 30.03.2018</i></p> <p>DOI: 10.21276/sjbms.2018.3.3.16</p> 	<p>Abstract: This study aims to analyze the influence of internal control system and internal audit performed by the government on the prevention of corruption mediated using accrual-based accounting. The research is descriptive and causal using survey method by gathering questionnaire from the whole population. There were 102 respondents who are civil servant employees of the Government of North Sumatra Province. For data analysis, the study used PLS SEM aided by software program SmartPLS version 3.0. The results of this study revealed that the government internal control system has a positive effect on the implementation of accrual based accounting, while internal audit has no effect on the accounting implementation. For implementation of accrual-based accounting has a positive effect on prevention of corruption. Likewise, the government internal control system has a positive effect on corruption prevention and also internal audit positively affects the prevention of corruption. The government internal control system influences the prevention of corruption through the implementation of accrual based accounting while the internal audit has no effect on the prevention of corruption through the implementation of accrual-based accounting.</p> <p>Keywords: Government internal control system, internal audit, implementation of accrual-based accounting, corruption prevention.</p>
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INTRODUCTION

The number of heads of districts who are involved in legal issues is increasing and this phenomenon hinders regional and national development. Credibility of the state organizers decreases with increasingly widespread misconduct of regional heads in performing and implementing their responsibility. Constantly, we are inundated with the news about heads of localities who are arrested, detained, and prosecuted by law enforcement officers due to their involvement in corruption, Umar [1]. It is at least accounting for 75 regional heads already investigated by Corruption Erradication Commission (CEC).

Rampant corruption scandals in local government should be concerned by any parties including Government Internal Supervisory Apparatus (APIP). APIP functions is to ensure compliance with applicable standards, rules and regulations [39]. APIP's more effective performance will result in better quality of the financial statement. Meanwhile, the Government Internal Control System (SPIP) is currently an important issue for local governments, especially to provide assurance of reliability and accuracy of financial statements. Margareta [2] said that central and

local governments need to have clear authority of APIP in order to help government manage local financial and budgeting.

Before 2015, government applied cash-based towards accruals in preparing financial statement. The enactment of Government Regulation Number 71 of 2010 obliged that accrual-based accounting is mandatory for central and local governmental to enhance credibility of financial information. The change of accounting base is mandatory to provide a complete figure of the financial position of organization performance.

Based on the description above, the authors will examine to what extent that the government internal control system (SPIP) and internal audit influence to prevent corruption at local government and to implement accrual-based accounting as the intervening variable.

LITERATURE STUDY

Agency theory

Agency theory describes the relationship between shareholders as principal and management as agents. Since shareholders contract and select

management to work for their interests, the management must be accountable for all its work to shareholders. Scott [3] stated on agency theory that "agency theory is a branch of the theory that the design of contracts to motivate a rational agent to act on behalf of a principal."

In the governmental sector, elected and appointed government officials (e.g. governors) are temporary agents of the electorate (community) as principals. Officials in the government as the parties to provide public services have more information and authority by which, they can probably make decisions or policies only for their own interests yet ignore those and welfare of the people. To bring down the problem, the local government have to strive to present the financial statements in a transparent and accountable manner.

Entity theory

The entity theory was put forward by Paton Suwardjono [4], stating that "an organization is regarded as an independent entity or economic entity, acting on its own behalf, and its position is separate from the owner or other party who invests funds in the organization". The economic unity becomes the center of attention or the point of view of accounting. Moreover, accounting has an interest in financial reporting of a non-owner business entity. On the other hand, the business entity is the party that is responsible to report to the owner. Unity of business is the center of accountability while the medium of accountability is the financial statements.

Contingency theory

According to Etzioni [40] in Kristiawati [5], in a book entitled "Modern Organization", the theory of contingency, which is also called the theory of interest is an environmental theory to overcome the theory of the situation. The Kotijensi theory is based on the idea that organizational management can work well and smoothly when organizational leaders are able to pay attention and solve the particular situation at hand and each situation must be analyzed by itself. The emergence of contingency theory in government accounting was insisted by the need to reform of the government accounting system instead of the traditional one into a more informative system.

Government internal control system

Glance [6] stated that the internal control system refers to local government processes and procedures established for the purpose of achieving objectives. Local governments should provide adequate internal control systems assisting towards achieving the objectives. Similarly, the internal control system also serves as a process that guides an organization to achieve its stated objectives, Amudo & Inanga [7] Baltaci & Yilmaz [8] Jokipii [9]. Internal control system

is about the provisions that are expected to assist in the achievement of objectives. Therefore, the purpose of this effective internal control system research refers to effective control measures established by the organization with the aim of: (a) maintaining their assets; (b) ensuring the reliability of financial and non-financial records; (c) complying with relevant procedures and policies in ensuring the goals achievement.

Local governments have to ensure that the existing internal control system can assist the Government Internal Supervisory Apparatus in achieving organizational goals. Companies that disclose ineffective internal control systems tend to experience greater management errors in their operations than those reporting effective internal control systems Feng *et al.*, [10]. One of the government control systems is the government internal control system (SPIP). In addition, another one is the government external control system. Inspectorate through APIP (Government Internal Supervisory Apparatus) and *BPKP* (*Badan Pengawasan Keuangan dan Pembangunan* or Finance and Development Supervisory Agency) implement government internal control system in Indonesia. Meanwhile, the executor of government external control system is performed by *BPK* (*Badan Pemeriksa Keuangan* or the Audit Board of Indonesia), Police, *DPR/ DPRD* (Central or Regional People's Representative Council), attorney, *KPK* (*Komisi Pemberantasan Korupsi* or Corruption Eradication Commission) and other judicial institution.

Government internal control system elements

In Government Regulation Number 60 Year 2008 Article 3, it is mentioned that SPIP consists of a number of elements, such as control environment, risk assessment, control activities, information and communication, and monitoring internal control. The government's internal control system not only establishes administrative mechanisms but it also endeavors to change the behavior and the attitude (soft factor). The existing regulation is the first step of improvement; therefore, the implementation of the government's internal control system is greatly influenced by the commitment, leadership examples and intentions of all elements including officials of government agencies.

Internal audit (APIP)

Under article 1, paragraph 46, Law 23 of 2014 "The government internal supervisory apparatus is the inspectorate general of ministries, the supervisory unit of non-ministerial government institutions, provincial inspectorate, and regency/ city Inspectorate. Furthermore, in article 216, paragraph 2, the government internal supervisory apparatus (APIP) is the regional inspectorate, which has the task to assist the regional head to foster and supervise the

implementation of government affairs which is the regional authority and the co-Administration tasks by the regional devices. Internal supervision is conducted by the Government Internal Supervisory officers through: (a) audit; (b) review; (c) evaluation; (d) monitoring; and (e) other supervisory activities.

Implementation of internal audit in governmental affairs is enforced by officials who have qualified competence of expertise as an auditor and have the duty to supervise, independent and objective. According to Yohanes *et al.*, [11], the effective role of the Government Internal Supervisory Apparatus (APIP) refers to Government Regulation Number 60 of 2008 on government internal control system Article 11, namely:

- Provide reasonable assurance on the compliance, efficiency, and effectiveness of the objectives achievement of the administration of the government agencies' duties and functions;
- Provide early warning and improve the effectiveness of risk management in the implementation of duties and functions of government agencies;
- Maintain and improve the quality of governance of the tasks and functions of government agencies.

A supervision is considered effective if it meets the following requirements, Sarwoto [12]: (a) the existence of an element of accuracy, i.e. data must be valid and can be used as a guide; (b) timely, that is collected, submitted and evaluated promptly and appropriately where improvement activities are to be performed; (c) objective and comprehensive, that is easily understood; (d) centered, focusing on the most frequent areas of deviation; (e) realistic economical, i.e. the cost of the supervisory system should be less or equal to the benefits gained; (f) organistically realistic, that is, in accordance with the facts of the organization; (g) coordinated with the workflow, as it may lead to the success or failure of the operation and must arrive at the employee who needs it; (h) flexible, as it must be able to adjust to the conditions at hand, so that if there is a change of condition, it is not necessary to make new system; (i) as a guide and operation, which shall indicate deviations from the standards in order to determine the corrections to be made; and (j) accepted by members of the organization, as well as directing the implementation of the work of the organization members by promoting the role of responsibility, autonomy, and achievement.

Accrual-based government accounting

Accrual-based accounting, as concluded by the KSAP (200:3), is an accounting basis in which economic transactions and other events are recognized, recorded and presented in the financial statements at the time of the transaction, regardless of when cash or cash equivalents are received or paid Satrio *et al.*, [13]. The timing of the recording in accrual basis accounting is in

accordance with the time of the transaction, thus providing the most comprehensive information since records are logged over the entire flow of resources. The government accounting standard (SAP) is the first accounting standard in Indonesia governing the accounting of Indonesian government. With this standard, it is expected that the government's financial report as the result of the accounting process can be used as a communication tool between government and stakeholders in order to create accountable and transparent state financial management, Margareta [2].

Halim and Kusufi [41] in Basri *et al.*, [14] concluded that the reporting objectives which cannot be met by cash basis, but it can be by the accrual basis. The purpose of reporting in question is managerial objectives and supervision.

- Surepno [15] stated that it is not easy to apply the accrual basis in a country's accounting system. More specifically, in a paper entitled "Accrual Budgeting and Accounting in Government and Its Relevance for Developing Member Countries", the Asian Development Bank (ADB) highlighted the problem pertaining applying an accrual basis in developing countries. Yet, it provided seven recommendations for developing countries for accrual basis implementation.
- Choosing a strategy for applying the accrual basis has to be carefully considered. Based on the implementation, there are two main models in applying the accrual basis of the big bang and the gradual model. The advantage of big bang approach is that it can support organizational culture change, quickly reach the goal, and avoid the risk of interest. On the other hand, the advantages of a gradual approach is that it can detect the problems that may arise and how to solve them during the transition period, in which, the cash basis can still be performed simultaneously to reduce failure.
- Political commitment is one important key in accrual basis implementation for developing countries. The commitment is also demanded to eliminate the incompatible interests.
- Communicate the goals to be achieved. Expectations on the outcomes and benefits to be achieved with the implementation of government accrual-based accounting have to be intensively communicated with the interested parties.
- The need for a qualified accountant. It is a necessity that professional accountant carries out recruitment and gain adequate training. Shortage of accountant personnel can lead to delayed implementation of accounting-based government accruals.
- Accounting information system should be adequate. Cash-based accounting information is a critical point during the transition period to accrual basis system. If a reliable cash-based accounting

system is not owned by a country, then it should focus first on improving the existing processes and systems before considering migrating to accrual-based accounting.

- The highest audit body should have the proper and adequate resources. In order to apply accrual-based accounting, the audit body plays a very important key. It may take several years to professionally conduct audit.
- Implementation of the accrual -based auditing should be part of a comprehensive bureaucratic reform. The adoption of accrual-based accounting should not be seen solely as a matter of accounting technique and requires an organizational culture.

Nasution *et al.*, [16] in their research stated that human resources and supporting facilities (hardware, software, and network) are the main obstacles faced in the implementation of accrual-based SAP at LG level. Inadequate quality of human resources of the regional government creates problems in the implementation of accrual-based SAP, on the other hand, the support facilities are also very important for the accrual-based SAP implementation to run smoothly. Another obstacle to take into account is the lack of incentives from the government as a stimulant spirit in implementing accrual-based SAP. Regional Work Unit (SKPD) is needed to commit to implementing accrual-based SAP. With the commitment of SKPD, the accrual-based SAP implementation is expected to run well since commitment is instrumental in strengthening the achievement of success.

Corruption prevention

Umar [1] stated the notion of acts of corruption can be viewed from a narrow sense or in a broad sense. Pavarala [17] divided the two groups of meaning of corruption namely a narrow legal sense and a broad understanding that concerns morals and ethics in addition to issues of legality. In a narrow sense, corruption is seen only in legal aspects such as bribery, misappropriation of public resources, commissions (kickbacks commissions), embezzles, and grants beyond the allowable values (gifts beyond a certain value). Corruption can be defined as abuse of office and power for personal gain in public organizations, the abuse of office to generate money for the benefit of family, friends, classes, tribes, and parties, which is very secretive to others outside the circle itself. With this understanding, we can translate that indeed corruption is a crime committed by the holder of power through betrayal of public trust, to whom the power has been handed over, Umar [1].

Manegeng [18] said that the dimension of eradication of corruption is an urgent issue that Indonesia must address, so that stretching and healthy economic growth can be achieved. From both printed and electronic mass media regarding various records of

corruption, it indicates the development and improvement of corruption models. Anti-corruption rhetoric alone will not be enough to terminate this disgraceful practice. Legislation the government has made as part of legal politics is meaningless if it is not accompanied by the seriousness of actualizing and existing regulations and legislation. Still according to Manegeng [18], the revelation of corruption cases is often not dealt with seriously, so that in the process of legal trial, such cases frequently do not satisfy communities' expectation in the sense of justice.. This 'seriousness' is essentially inseparable from two things: (a) the magnitude of power and political intervention; and (b) the integrity and morale of the relatively weak law enforcement apparatus.

Umar [1] stated, in relation to corruption, three deviations in the fraud triangle Murdock [19] deal with pressures, opportunities, and rationalizations. In addition, there are also four aspects that encourage the act of deviation or fraud diamond Wolfe and Hermanson [20]. The third aspect is coupled with the power (capability).

Hypothesis

In this research, the author will try to examine the influence of government internal control system (SPIP) and internal audit to implementation of accrual based accounting and Its impact on prevention of corruption. There are seven hypotheses in this research to examine in which government internal control, internal audit mechanism, implementation of accrual-based audit were assigned as independent variables while prevention of corruption was dependent variable.

The hypotheses of this research are:

- H1. Government internal control system has a positive effect on the implementation of accrual-based accounting.
- H2. Internal audit positively affects the implementation of accrual-based accounting.
- H3. Implementation of accrual-based accounting has a positive effect on corruption prevention.
- H4. Government internal control system has a positive effect on corruption prevention.
- H5. Internal audit positively affects prevention of corruption.
- H6. Government internal control system has an effect on prevention of corruption through the implementation of accrual-based accounting.
- H7. Internal audit affects the prevention of corruption through the implementation of accrual-based accounting.

RESEARCH METHODS

This research used a descriptive and causal method in order to find out and determine the effect of several variables on other variables. The research was

conducted within the Government of North Sumatra Province.

Population and sample

The population from which the research took some samples is government agencies (SKPD) in North Sumatra Province, Indonesia. The respondents are the government employees and users of the SKPD budget in the same province. This study used saturated sampling method, by which whole members of the population were taken as respondents.

Research variable

In this research, independent variables consist of government internal control system and internal audit, while the dependent one is prevention of corruption. Meanwhile, the implementation of accrual-based accounting is assigned as intervening variable.

Variable measurement

Likert scale was used to quantify the questions of each variable in the questionnaire. The respondents' answers were measured from a strongly disagreed to strongly agreed statement, each of which was transformed into 5 Likert scale points.

Method of data gathering

Sources of data are an important factor; thus it is taken into high regard to determine the method of data collection. In this study, only primary data which is obtained directly from the original source was used as data sources Indriantoro and Supomo [21]. Respondents' data was collected by using questionnaires as research instruments. Questionnaires were designed in such a way so as to obtain the required data and disseminated to SKPD officials in the Provincial Government of North Sumatra. The list of questions was prepared so that the statements or questions in the questionnaires are in accordance with the objectives of the study. There were 102 respondents who responded the questions in 102 total questionnaires.

Data analysis method

Data analysis in this research was performed by using SEM (structural equation model) analysis technique to perform relationship test. Moreover, the data was then analyzed using structural equation

modeling tool with partial least squares method using SmartPLS 3.0 software. The SEM method has better predictive and analytical capabilities than multiple path and regression analysis because this method is able to extensively analyze variables or models studied to the deepest level. In addition, it has much more comprehensive explanation in revealing the research phenomenon. On the other hand, both multiple path and regression analysis are only able to reach the level of latent variable so that using these methods will encounter difficulties in analyzing or unraveling empirical phenomena that occur at grain levels or indicators of latent variables Haryono and Wardoyo [22]. In Addition, the use of PLS does not require normal multivariate assumptions and allows for the modeling of structural equations with relatively small sample sizes. Besides, the method can be applied to any data scale, in which, sample size does not have to be large and does not require many assumptions. Therefore, the main requirement of using SEM is to construct a hypothetical model consisting of structural model and measurement model in the form of path diagram based on the justification of theory.

Model of measurement and structural model

PLS-SEM analysis generally consists of two sub-models, namely measurement model or often referred to as outer model and structural model or better known as inner model. The measurement model shows how variable manifest or observed variables represent latent variables to be measured, while structural models show the strength of estimation between latent variables or constructs Ghozali [23]. The latent variable indicator formed in PLS-SEM can be either reflective or formative. The reflective indicator or often referred to as Mode A is a constructive manifestation of the construct and corresponds to the classical test theory which assumes that the variance in the latent variable's score measurement is a function of the true score plus the error. Meanwhile, the formative indicator or often also called Mode B is an indicator that defines the characteristics or explains the constructs. The use of PLS allows researcher to use both reflective and formative indicators.

Based on each of the variables in this study, we can draw the path diagram shown in the Figure Structural Chart Line Diagram below.

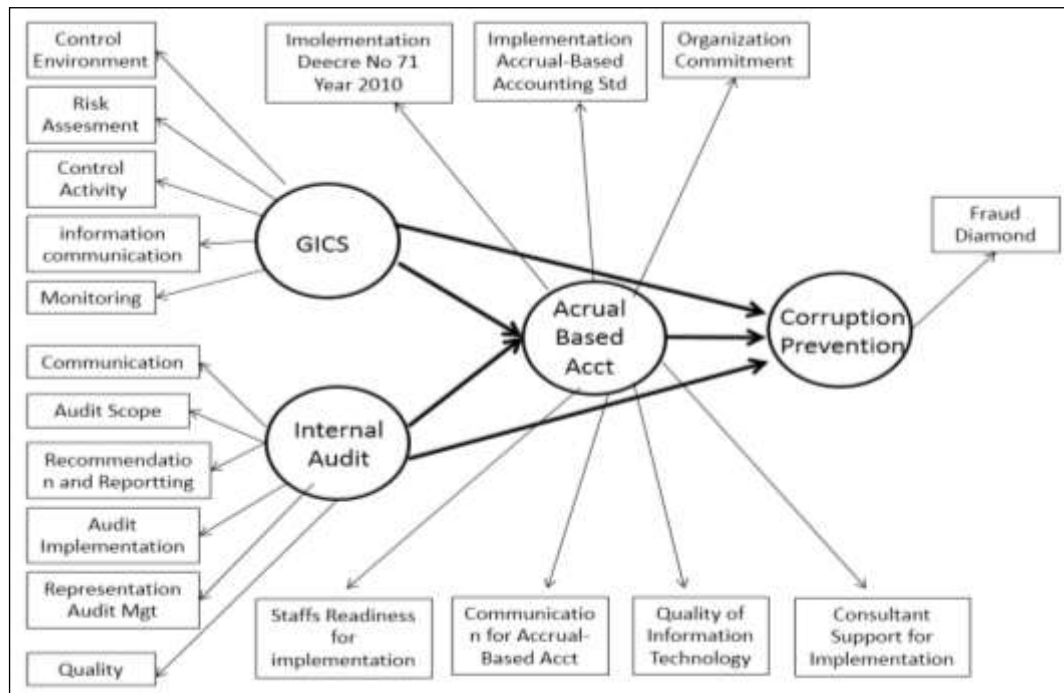


Fig-1: Path diagram

Measurement model/outer model

Measurement model or outer model connects all indicators (variable manifest) with the latent variable. In a PLS framework, one manifest variable can only be associated with one latent variable only. All manifest variables or indicators associated with one latent variable are referred to as a 'block', so it can be said that each latent variable has a variable block manifest. A block must contain at least one indicator.

How to link a block with a latent variable can be reflective (manifest variables act as indicators influenced by the same concept and underlying) or formative (indicators that shape or cause changes in latent variables) Wijanto [24].

Structure model test (inner model)

Structural models or inner models, all latent variables are linked to each other based on the theory of substance. Latent variables are divided into two types, namely exogenous and endogenous latent variable. Exogenous latent variables are variables whose values are not specified or influenced by other variables within the model; while the endogenous ones are those whose values are determined or influenced by other variables within the model. The purpose of testing the structural model is to determine the percentage of variance of each endogenous variable in the model described by the exogenous variable by analyzing R-squares is the value of square multiple correlation. Structural model evaluation can also be done by looking at the significance of the probability value as the basis for accepting or rejecting the null hypothesis. The significance value used is 5% or P is less than 0.05 and the value of CR is greater than 1.96 Latan [25].

Goodness of fit (GoF) test

Following testing the measurement model testing and structural model, it is assessing the overall model or overall fit model based on the value of goodness of fit as an indication of the comparison between models specified with covariant matrices between indicators or observed variables. If the GoF obtained is good, the model is acceptable; on the other hand, if the GoF obtained is poor, the model should be rejected or modified Latan [25].

Measurement of goodness of fit model was performed by using R-square dependent latent variable with the same interpretation as regression. To validate the model as a whole, Goodness of Fit (GoF) was used. The GoF index was introduced by Tenenhaus [26] used to validate the combined performance between the outer and the inner model. The GoF index value is derived from the averages communalities index multiplied by the R² model. The GoF values range from 0 to 1, in which the value of 0.1 is interpreted as small GoF, 0.25 as moderate GoF, and 0.36 is interpreted as large GoF [42] in Yamin and Kurniawan [27].

The GoF values in PLS-SEM are computed using the following formula:

$$GoF = \sqrt{AVE \times R^2}$$

Where GoF refers to goodness of fit, AVE is average variance extracted, and R² is assigned as coefficient of determination.

Hypothesis evaluation

The value of R^2 is the coefficient of determination in the endogenous construct, used to measure the level of variation of the independent variable changes to the dependent variable. According to Chin [43] in Ghozali [23], R^2 value of 0.67 is considered strong, 0.33 is moderate while 0.19 is considered weak. While testing the hypotheses, the value of t-statistics generated from the PLS output was compared with the t-table value. The PLS output is the estimation of the latent variable which is the linear aggregate of the indicator. Testing criteria with 5% significance level were determined as follows:

Referring to t table and t statistic; hence, we can see the comparison as follows:

- If t statistics > t table, then H0 is rejected and H1 accepted;
- If t statistic < t table, then H0 is accepted and H1 is rejected.

Meanwhile, the effect of significance between variables can be seen in the following criteria:

- If sig (P values) < 0.05, there is a significant influence;
- If sig (P Values) > 0.05, the influence is not significant.

During testing the effect of mediation (intervening), the output of significance test parameters is found in the total effect table, not in the coefficient one because the mediation effect of testing is performed for direct relationship of independent variables to dependent ones and indirect variable independent to dependent relationship through mediation.

RESULTS AND DISCUSSION

Descriptive statistics for the overall variables used in this study are presented in the following table.

Table-1: Descriptive statistics of research variables

	Govt Internal Control System	Internal Audit	Accrual-Based Accounting	Corruption Prevention
Values	The highest 5 and the lowest 1	The highest 5 and the lowest is 1	The highest 5 and the lowest 1	The highest 5 and the lowest 1
Means	3.57	3.50	3.54	3.55
Answer likeliness	Agree	Agree	Agree	Agree
Standard deviation	0.68	0.72	0.67	0.68

Analysis of research results

The research was done by structural equation model (SEM) approach, one of which was using partial least square (PLS) analysis. Structural model testing in PLS was performed with the aid of SmartPLS software ver 3 for Windows. Meanwhile, the evaluation of PLS

model was carried out by assessing outer and inner model. The test is an analytical requirement to ensure that the measuring tool used is valid and reliable in accountability. The figure below represents a structural model formed from the formulation of the problem.

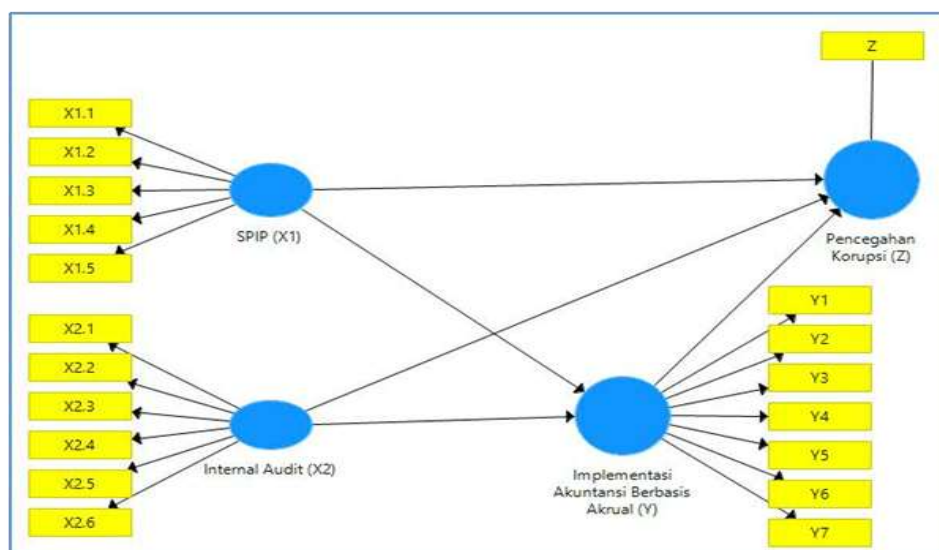


Fig-2: Structure model (data processing Smart PLS 3)

Testing measurement model (outer model)

Prior to testing the structure model, the measurement model or outer model of each latent variable test was first carried out. By observing the results of measurement model test, it will be noticed which indicators are significant in reflecting the latent variables. The overall equation model for the influences of government internal audit system (SPIP) and internal audit on the implementation of accrual-based accounting and its impact on corruption prevention can be explicitly expressed in the following structural equations.

$$Y = 1,424X_1 - 0,547X_2$$

$$Z = 0,282X_1 + 0,227X_2 - 0,522Y$$

Where X_1 denotes for SPIP, X_2 is internal audit, and Y is assigned for accrual-based accounting and Z is for corruption prevention

Measurement of latent variable

Testing latent variables of the model was carried out by considering several factors, such as convergent validity, discriminant validity, average variance extracted (AVE), composite reliability (CR)

and Cronbach alpha. The value convergent validity refers to loading factor in latent variable with its indicator. Convergent validity is judged on the correlation between the score/ compound score item with the construct score calculated by the PLS. The reflective size is said to be high if it correlates more than 0.70 with the measured constructs. However, loading score between 0.50 and 0.60 is considered sufficient [43] in Ghozali and Latan [23]. Meanwhile, the value of discriminant validity refers to that of cross loading factor which is useful to determine whether the construct has an adequate discriminant. The determination of adequacy of determinant is performed by comparing the loading value on the intended construct which must be greater than the value of loading with other constructs.

The average variance extracted (AVE) method can also be used to test discriminant validity. If the square root of AVE construct is greater than the correlation with all other constructs, it is regarded to have good discriminant validity, while AVE value must be greater than 0.5. The value of composite reliability (CR), Cronbach alpha and AVE for all variables are presented in Table-2 below.

Table-2: Composite reliability (CR), Cronbach alpha and AVE

	Govt Internal Control System	Internal Audit	Accrual Based Accounting	Corruption Prevention
Composite reliability (CR)	0.842	0.893	0.922	1.000
Cronbach's alpha	0.766	0.852	0.896	1.000
Average variance extracted (AVE)	0.521	0.586	0.637	1.000

Source: Data Processing by SmartPLS 3

The value of composite reliability (CR) and Cronbach's alpha for all latent variables is greater than 0.7, indicating the level of conformity of indicators in reflecting the latent variables. AVE value of all variables are greater than 0.5 which indicates that the latent variables used in this study are valid.

Structure model test (inner model)

The structural model (inner model) is used to analyze the influence among latent variables. Inner model evaluation can be performed in three ways, in which the third way is to look from R^2 , Q_2 and GoF. The structural model is evaluated by using R-square (R^2) for the dependent variable. Meanwhile, the path coefficient value was evaluated for the independent variable which then assessed its significance based on

the t-statistic value of each path. This study is aimed to evaluating the hypothesis, which states influence of SPIP and internal audit to implementation of accrual-based accounting and its impact on prevention of corruption using a t test with a critical value of 1.96.

R-quarse (R^2)

The coefficient of determination (R^2 adjusted) is used to show how much the influence of variables which affects the imposed variables. The greater the value of R^2 , the greater the influence of certain exogenous latent variables on endogenous variables. With the aid of R program, the direct effect of certain exogenous variables on the endogenous ones can be determined.

Table-3: The value of R-Square

	<i>R-Square</i>
Accrual-based accounting (Y)	0.912
Corruption prevention (Z)	0.969

Source: Data Processing by SmartPLS 3

Stone-Geisser Q-square test (predictive relevance)

Stone-Geisser Q-square test is performed for predictive relevance and t test as well as the significance of the structural path parameter coefficients. The test measures how well the observation values are generated by the model and its parameters. A larger Q-Square value of 0 (zero) indicates that the model has predictive relevance, while that less than 0 (zero) indicates that the model lacks predictive relevance. To calculate Q², the following formula can be used : Q² = 1 - (1 - R12) (1 - R22) ... (1 - Rp2) ...

By entering the value of R, Q² can be obtained.

$$Q^2 = 1 - (1-0.912) (1-0.969)$$

$$Q^2 = 0.9973$$

From the above calculation, the value of Q² is greater than 0 (zero) which indicates that the model has predictive relevance value. Goodness of fit is calculated

by using equation (1). Since the value AVE and R² are known, the GoF can be calculated as follows.

$$GoF = \sqrt{(((0.521+0.586+0.637+1.000))/4) \times ((0.912+0.969)/2)}$$

$$GoF = \sqrt{(0.6860 \times 0.9405)}$$

$$GoF = \sqrt{0.6452}$$

$$GoF = 0.8032$$

From the calculation results, it can be seen that the value of GoF is 0.8032 Thus, it is considered sufficiently large since the value is greater than 0.36.

Intermediate latent relationship

Outputs that explain the relationship between latent variables are presented (Table-4).

The influence of latent variable

Outputs that explain the influence of latent variables can be seen in the table 5 below.

Table-4: Latent variable correlation

	Internal audit (X₂)	SPIP (X₁)	Accrual-based accounting (Y)	Corruption prevention (Z)
Internal audit (X ₂)	1.000			
SPIP (X ₁)	0.908	1.000		
Accrual-based accounting (Y)	0.747	0.927	1.000	
Corruption prevention (Z)	0.873	0.972	0.953	1.000

Source: Data Processing by SmartPLS 3

Table-5: Path coefficients

	Internal Audit (X₂)	SPIP (X₁)	Accrual-based accounting (Y)	Corruption prevention (Z)
Internal Audit (X ₂)			-0.547	0.227
Internal Audit (X ₂)			1.424	0.282
SPIP (X ₁)				0.522
Accrual-based accounting (Y)				

Source: Data Processing by SmartPLS 3

RESULTS AND DISCUSSION

To evaluate the hypothesis, the value of t-statistics generated from the PLS output is compared with the value of t-table. PLS output is an estimate of

the latent variable which is the linear aggregate of the indicator. The summary of evaluation results on hypotheses can be seen in the following table.

Table-6: and research coefficients

Correlation between variables	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
SPIP (X ₁) → accrual-based accountancy implementation (Y) (H ₁)	1.424	1.417	0.113	12.644	0.000
Internal Audit (X ₂) → accrual-based accountancy implementation (Y) (H ₂)	-0.547	-0.536	0.137	3.985	0.000
accrual-based accountancy implementation (Y) → prevention of corruption (Z) (H ₃)	0.522	0.522	0.076	6.898	0.000
SPIP (X ₁) → prevention of corruption (Z) (H ₄)	0.282	0.288	0.121	2.325	0.020
Internal Audit (X ₂) → prevention of corruption (Z) (H ₅)	0.227	0.218	0.073	3.122	0.002

Source: Data Processing by SmartPLS 3

From the table above, it shows that all the variables have a significant effect since the value of Sig (P values) is less than P table (0.05).

Direct / indirect linkage between variables research

This result of data analysis shows the direct and indirect relationship between research variables which will reveal how the relationship or the role of intervening variable (implementation of accrual-based accounting) that mediate the relationship between independent variables (government internal control system and internal audit) with dependent variable (prevention of corruption). The output of the significance test parameter in evaluation of the mediation effect (intervening) is found in the total effect table, not in the coefficient table. It is because the mediation effect of the test is performed for direct relation of independent variable to dependent and indirect variable independent to dependent relationship through mediation.

The determination of the intervening variable depends on the theoretical variable, in the model $X \rightarrow Y \rightarrow Z$, where $X \rightarrow Z$ is not necessarily through Y, X to Y is significant, and Y to Z is also significant, then Y is the intervening where X to Z is not directly past Y.

- Direct influence, exogenous variable (independent) to endogenous variable (dependent): influence of government internal control system on prevention of corruption with coefficient of 0.282 at t-stat $1.949 < 1.96$ effect of internal audit on prevention of corruption with coefficient of 0.227 at t-stat $3.301 > 1.96$
- The indirect effect of exogenous (independent) variables, namely government internal control system (X_1) and internal audit (X_2) on endogenous variable, corruption prevention (Z) through intervening variables, which is implementation of accrual-based accounting (Y) calculated by multiplying the path $X_1 \rightarrow Y$ with the path $Y \rightarrow Z$, and $X_2 \rightarrow Y$ with the path $Y \rightarrow Z$.
- Examining the effect of total, exogenous (independent) and mediation (intervening) variables on endogenous variables (dependent). In the last test, it is by looking at the total effect, not referring to the coefficient table. It is because the mediation effect of testing is done for the direct relation of independent variable to dependent and indirect variable independent to dependent relationship through mediation.

Table-7: Direct and indirect influence

Variable	Influence				
	Direct		Sig.	Indirect	
	Accrual-based accounting (Y)	Corruption prevention (Z)		Accrual-based accounting (Y)	Corruption prevention (Z)
SPIP (X_1)	1.424	0.282	0.020	$1.424 * 0.522 = 0.743$	$0.282 * 0.743 = 0.210$
Internal audit (X_2)	-0.547	0.227	0.000	$-0.547 * 0.522 = -0.286$	$0.227 * -0.286 = -0.065$
Accrual-based accounting (Y)		0.522	0.000		0.522

Source: Data Processing by SmartPLS 3

Hypothesis evaluation

H1: Positive influence of SPIP to the implementation of accrual-based accounting.

The results of the research as described above show that the government internal control system (SPIP) has a positive effect on the implementation of accrual-based accounting, the hypothesis rejects H0 and accepts H1. SPIP has a positive effect on the implementation of accrual-based accounting evidenced by the research coefficient of 1.424, t-statistics of 12.644 and significance level of 0%. In fact, the results of this study are in line with Putra and Amar [28]. In addition, according to the the BPK RI, the government financial statement of North Sumatra Province in 2015 achieved unqualified opinion. Local government is expected to have implemented accrual-based accounting at the latest for the financial statements of fiscal year 2015. For some estimates in the financial statements, there are still some records relating to the

implementation of accrual-based accounting that have not been fully undertaken. Based on the interview results with observers, the actual accrual-based in almost all local governments in North Sumatra, Aceh and some districts in West Java, is still partially implemented. For example, the practice of vehicle insurance expenses is still on cash basis. There are also some cases in revenue-based implementation accruals, such as in Garut District, for some levies and local taxes in accounting policy is still applying cash-based.

H2: Internal audit positively influence the implementation of accrual-based accounting.

The results of the research show that internal audit has a negative and significant impact on the implementation of accrual-based accounting. The hypothesis test accepts H0 and reject H1, indicating that internal audit has no effect on the implementation of accrual-based accounting. It is proved with the research

coefficient of -0.547, indicating that internal audit has a negative influence on the implementation accrual-based accounting. The value of t-statistics of 3.985 is greater than the value of t table = 1.96 at the 5% significance level.

Based on the regulation, prior to the submission of financial statements to BPK, it should be reviewed by the internal auditor, particularly the regional Inspectorate. According to the interviews with several information sources, the review process of financial statements is considered not effective since it is interfered with the process of preparing the financial statements at the end of the year. It is because when the accounting department prepares the financial statements to be on time, at the same time, the Inspectorate also checks the transaction. It should be done continuously from the initial to the final budget execution. The Inspectorate in North Sumatera Province is necessary to increase both the number and competency of internal auditor so that the internal control can effectively be performed.

H3: Accrual-based accounting implementation positively influence prevention of corruption.

Based on the result of the research, it shows that there is a positive effect of accrual-based accounting implementation on prevention of corruption; thus, the hypothesis reject H₀ and accept H₁ which states that accrual-based accounting implementation has positive effect on prevention of corruption. It is proved with research coefficient of 0.522, t-statistics value of 6.898 and significant rate of 0%. This finding of the research is in line with Santoso [29] which proved that improved implementation of accrual-based accounting will enhance prevention of corruption. Accrual-based accounting system is a systematic sequence of procedures, organizers, tools and other elements to realize accounting functions from transaction analysis to financial reporting within government organizations. If all the principles, methods and policies set forth in the government accounting standards have been properly implemented, corruption can also be detected earlier so that prevention can be done, especially if supported by SPIP and internal audit. Implementation of accrual-based accounting system will result in better accounting system and better information so that it will be able to prevent misconducts and acts of corruption.

H4: SPIP positively influence the prevention of corruption.

The results findings reveal that there is a positive influence of government internal control system (SPIP) on prevention of corruption, the hypothesis reject H₀ and accept H₁, SPIP has a positive effect on prevention of corruption It is proved with the research coefficient of 0.282, t-statistics of 2.325 and a significance level of 0.2%. The results of this study are in line with Hermiyetti [30], Arfah [31], Hendriani [32],

Nurhasanah [33], and Zulkarnain [34].

The Government's effective internal control system can reduce or even close the opportunities for corruption so that it can be prevented. The results of this study have similarities with the theory of fraud triangle which argues that an opportunity is stimulating factor to employees to conduct fraud. When there is an opportunity, an employee who initially has no intention to commit corruption will tend to corrupt. Opportunities arise through weaknesses in the supervision of an agency's internal control system. In order to run effectively, an internal control system must have good quality and supported by the compliance of employees to the control system. The more effective the existing government internal control system, the better the prevention of corruption that can be performed.

H 5: Internal audit positively influence the prevention of corruption.

From the study results, it was revealed that there is a positive influence of internal audit on prevention of corruption. The hypothesis test rejects H₀ and accepts H₁ that internal audit has positive effect on prevention of corruption. This statement is proved with the research coefficient of 0.227, t-statistics of 3.122 and significance level of 0.2%. Furthermore, the results show that more effective internal audit will result in better prevention of corruption. The prevention of corruption will be more effective if the internal audit is able to identify the causes and possibilities of corruption. The study findings are in line with Karokaro [35], Theresa *et al.*, [36], Beawiharta [37].

Some factors this study assessed which affect the effectiveness of the implementation of internal audit function are capability and capacity as well as professionalism. In terms of human resource capacity, the regional inspectorate generally encounters the limited number of auditors. The regional inspectorate also experiences the constraints of varying competence and quality of personnel. The GOI internal audit standard [44] requires that internal auditors be certified to carry out internal audit assignments. Furthermore, such a situation is also exacerbated by the stigma that inspectorate auditor is not competent. Efforts to strengthen APIP's roles and institutions, including regional inspectorates are still underway by the government, one of which with the formulation of the bill on the SPIP. In the bill, the regional inspectorate is no longer under the head of the region, as it is currently regulated in PP. 60 of 2008. Instead, inspectorate is in the new unit, the National Inspectorate, directly responsible to the president. Thus, it is expected to be more independent and professional.

H6: Government Internal Control System (SPIP) positively influence the prevention of corruption through the implementation of accrual-based accounting

The results of the research show that the government internal control system influences the prevention of corruption through the implementation of accrual-based accounting, the hypothesis reject H0 and accept H1. Thus, it approves that SPIP has a positive effect on prevention of corruption through the implementation of accrual-based accounting.

H7: Internal audit influence the prevention of corruption through the implementation of accrual-based accounting

From the the results of the research, it is found that internal audit does not affect the prevention of corruption through the implementation of accrual-based accounting. Thus, the hypothesis test accepts H0 while rejects H1 which found that internal audit does not affect the prevention of corruption through the implementation of accrual-based accounting. The overall test results in this study are shown in the following table.

Table-8: Hypothesis test result

	Hypothesis	Decision
H1	SPIP positively influence the implementation of accrual-based accounting	Accepted
H2	Internal audit positively influence the implementation of accrual-based accounting.	Rejected
H3	Accrual-based accounting implementation positively influence to corruption prevention	Accepted
H4	Government Internal Control System (SPIP) positively influence prevention of corruption.	Accepted
H5	Internal audit positively influence to prevention of corruption	Accepted
H6	Government Internal Control System (SPIP) positively influence prevention of corruption through the implementation of accrual-based accounting	Accepted
H7	Internal audit influence prevention of corruption through the implementation of accrual-based accounting	Rejected

CONCLUSIONS

Based on the results of the discussion and testing of data conducted by researchers, it can be drawn a conclusion as follows:

- Government internal control system (SPIP) positively influence the implementation of accrual-based accounting. This finding is in accordance with Putra and Amar [28].
- Internal audit positively influence the implementation of accrual-based accounting. The author has not found any research on the influence of internal audit on the implementation of accrual-based accounting.
- Implementation of accrual-based accounting positively influence prevention of corruption. The results of this study are in line with Santoso [29].
- Government internal control system (SPIP) positively influences corruption prevention. The results of this study are in line with Hermiyetti [30], Arfah [31], Susi Hendriani [32], Nurhasanah [33], and Zulkarnain [34].
- Internal audit positively influences prevention of corruption. The results of this study are in line with Karo-karo [35], Theresa *et al.*, [36], Beawiharta [37], and Widilestariningtyas [38].
- Government internal control system (SPIP) positively influence prevention of corruption through the implementation of accrual-based accounting. The author has not found any research on the influence of SPIP on prevention of corruption through the implementation of accrual-based accounting.
- Internal audit has no influence on prevention of corruption through the implementation of accrual-

based accounting. The author has not found any research on the influence of internal audit on prevention of corruption through the implementation of accrual-based accounting.

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