The Influence of Internal Control System on the Financial Accountability of Elementary Schools in Bandung, Indonesia

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Abstract
This study aims to find out the effect of internal control components on financial accountability of schools. Using convenience sampling, the sample of this study is 168 respondents. Path analysis is used to test the effect of internal control on financial accountability. The result shows that, partially, control environment, control activity, and supervision significantly affect financial accountability. On the other hand, risk assessment, information and communication don't significantly affect financial accountability. Simultaneously, control environment, risk assessment, control activity, information and communication, and supervision significantly affect financial accountability.

Keywords: control environment, risk assessment, control activity, information and communication, supervision, financial accountability.

1. Introduction
Internal control is an integral process of continuous actions and activities of leaders and staffs for assuring achievement of an organization's objectives in operational effectiveness and efficiency, reliable financial reporting, security of state assets and compliance with laws, regulations and policies thoroughly run in an education unit. As a public organization, school is an education institution that is responsible to promote compulsory education and provide education service for all students. Article 34 verse (2) Act Number 20, Year 2003 on National Education System states that the Government and local governments guarantee the implementation of compulsory education at least for basic education free of cost. Whereas verse (3) states that compulsory education is the State’s responsibility, which is provided by the Government, the local governments, and the community. As a consequence, the Government and local governments are required to provide educational service for all students at the basic level (primary and secondary) and other equivalent educational units. This encouraged the Indonesian government to hold Bantuan Operational Sekolah (BOS) or School Operational Assistance program started in July 2005. As a government's program, BOS serves to provide funding for basic education units as the implementers of compulsory education. BOS funds are intended to help schools provide education free of cost while maintaining quality of education service.

In accounting perspective, every headmaster is required to disclose the financial statements of the school to the School Committee and Government. Hence, financial accounting standards are applied to every reporting prepared by school management. This secures public accountability, especially for the users of education service (Indra Bastian, 2007). In addition, Indra Bastian (2007) also states that in the perspective of public administration, the purpose of financial management of educational organizations is to help manage funding sources and create an appropriate control mechanism for financial decision making to realize the transparent, accountable and effective educational organization. A good control on financial management will provide a good social accountability to all stakeholders (Sutedjo, 2010: 20). Based on BPK report, it is found that the management of BOS funds, both by the Department of National Education and Department of Religious Affairs has to be improved significantly. It means

1. the internal control on the allocation, use and accountability of the BOS funds has not been sufficed.
2. The funds have not been distributed in an appropriate amount, time and procedure,
3. And have not been implemented according to the guides.
4. The objective of providing free education for poor students is still not fully achieved. (Media Pendidikan, 30/7/2012)

Mardiasmo (2004) states that the main purpose of accountability is to encourage an accountable performance of school as a requirement to realize a good and reliable school. School administrators should be able to account for all components of the management to the community. Accountability does not only involve learning process, but also financial management and output quality.

Financial accountability can be measured from the diminishment of irregularities in the financial management. The source of funding, its amount and allocation can be accounted by the management (Haryanto, 2007). The accountable financial management will earn the trust of the school community and public.

Several studies on internal control have been related to other variables, such as financial performance (Mawand, 2008; Chebungen and Kwasira, 2014), framework for ethics initiatives (Schneider and Becker, 2010), study process (Verdina and Kasetiene, 2014), financial accountability (Godfrey, 2013; Aramide and Bashir, 2015), the efficiency of the management of school funds (Otieno, 2013).
In Indonesia, the concern on government internal control system begins with the issuance of Government Regulation Number 60 Year 2008 on Government Internal Control System. It has been socialized since 2010. So far, in Indonesia, study on internal control system is mostly conducted in government sector. Aristanti (2009), Pilipus Ramandei (2009) and Armando (2013) conduct a study in local governments by relating it to variables of accountability, quality of financial information, regional financial supervision, and regional managerial performance. On the other hand, a study on the implementation of internal control on financial accountability of schools in Indonesia has not ever been conducted. Based on all descriptions above, the problem identification is as follows: Does the implementation of internal control system (which consists of control environment, risk assessment, control activity, information and communication, and supervision) affect partially and simultaneously on the quality of financial accountability?

The purpose of this study is to gain an overview of the progress of internal control system implementation and its relation to financial accountability of primary schools in Bandung. The objective of this study is to measure the effect of internal control system implementation (which consists of control environment, risk assessment, control activity, information and communication, and supervision) partially and simultaneously on the quality of financial accountability of schools.

2. Literature Review

2.1 Internal Control System

The Committee of Sponsoring Organizations of the Treadway Commission (COSO) states that internal control is defined as a system of policies and procedures a firm employs to safeguard the firm’s assets, ensure accurate and reliable accounting records and information, promote efficiency, and measure compliance with established policies (Charles A. Saia, 1992: 16). Government Regulation Number 60 Year 2008 on Internal Control System also defines internal control as an integral process of continuous actions and activities of leaders and staffs for assuring achievement of an organization's objectives in operational effectiveness and efficiency, reliable financial reporting, security of state assets and compliance with laws.

David M. Walker (2000: 6) states the same thing:

“An integral component of an organization’s management that provides reasonable assurance that the following objectives are being achieved:

• effectiveness and efficiency of operations,
• reliability of financial reporting, and
• compliance with applicable laws and regulations.”

The purpose of internal control is stated by James A. Hall (2004: 143), as follows:

“The internal control system comprises policies, practices, and procedures employed by the organization to achieve four board objectives: (1) to safeguard assets of the firm; (2) to ensure the accuracy and reliability of accounting records and information; (3) to promote efficiency in the firm’s operations; (4) to measure compliance with management’s prescribed policies and procedures”.

This statement is in accordance with Indra Bastian's (2006: 450) statement that the purpose of internal control system is: (1) to safeguard assets of the organization; (2) to ensure the accuracy and reliability of accounting data; (3) to promote efficiency; (4) to encourage the compliance with management’s policies”. Government Regulation Number 60 Year 2008 on Internal Control System aims to assure achievement of an organization's objectives in operational effectiveness and efficiency, reliable financial reporting, security of state assets and compliance with laws.

According to Rittenberg (2005) in Asante Effah (2011), the importance of internal control is as follows:

1. To detect fault and fraud By improving internal control structures, including the establishment and improvement of control environment, appropriate control system and program, the probability of fault and fraud can be diminished up to the minimum level.
2. To diminish illegal actions Organizations have to comply with regulations applied. If they recklessly violates the laws, not only they will ruin their own public image (reputation risk), but also face difficulties in running their activities. Internal control may help diminish illegal actions.
3. To improve the competitiveness of enterprise A well-built and efficient internal control system contributes to the success of enterprise. In a very competitive market, it may prevent the enterprise from failure. On a small scale, it may improve the employee's comprehension on the objectives and goals of the enterprise and build internal control concepts. The employees will want to comply with the enterprise's policies and programs so that the operational efficiency will improve thoroughly. A good control means the risks are effectively identified and handled.
4. To improve the quality of data. A strong internal control should lead to a more efficient activity and better quality of data management, so directors and shareholders can rely on it to make decisions.
5. To help create business infrastructure. Lots of new businesses fail because they don't build control infrastructure to match the business vision of their founders.
6. To reduce auditor fee. An effective internal control allows auditor to rely on it and by reducing time and efforts for auditing, the fee may be reduced.

Indra Bastian (2006: 450) states that the principal elements of internal control are as follows:
1. An organizational structure that separates the functional responsibility explicitly
2. An authority system and recording procedure that provide adequate protection for wealth, debt, revenue, and expense
3. A robust practice in carrying out the duties and functions of every organizational unit
4. Competent employees

Based on Government Regulation Number 60 Year 2008 on Internal Control System, to develop the internal control, the Government should consider the aspects of cost and benefit, human resources, clear criteria for measuring effectiveness, and information technology development as well as comprehensive actions. The following components of internal control system refer to ones applied in many governments in many countries:

2.1.1 Control Environment
Control environment is a component of internal control. This includes many factors, such as integrity, ethics, employees' competence and management philosophy in the organization. All of these are components that become the foundation of other components to build a system of financial internal control (COSO, 2005). International Organization of Supreme Audit Institutions (INTOSAI) states that control environment will color an organization, influence the control consciousness of its employees. This is the foundation for all other internal control components that provide discipline and structure. The elements of control environment are:
(1) personal and professional integrity and ethics of management and staff, including supportive attitude towards internal control throughout the organization at all times;
(2) commitment to competence;
(3) leadership role model
(4) organizational structure;
(5) human resources policies and practices.

Article 4 Government Regulation Number 60 Year 2008 states that the head of government agencies shall create and maintain internal control that leads to positive and conducive attitudes to the implementation of internal control in the work environment, through:
  a. integrity and ethics enforcement;
  b. commitment to competence;
  c. conducive leadership;
  d. appropriate organizational structure creation;
  e. appropriate authority and responsibility delegation;
  f. appropriate creation and implementation of policy on human resources development;
  g. role embodiment of effective government internal supervision officials; and
  h. good relationship with relevant government agencies.

2.1.2 Risk Assessment
According to COSO (2004) risk assessment is a component to identify risks in a system. To make an effective risk assessment, preventive measures must be put in place by establishing clear objectives. This component identifies and analyzes risks both internally and externally. It manages risks by developing appropriate procedures to achieve consistent objectives of the organization. Risk assessment is always taken into account in the prescribed objectives. International Organization of Supreme Audit Institutions (INTOSAI) states that risk assessment is a process to identify and analyze relevant risks in achieving the objectives of the entity and deciding the appropriate responds.

Article 13 Government Regulation Number 60 Year 2008 on Government Internal Control System states that the head of government agencies shall perform risk assessment, including risk identification and analysis. To assess risk, they set the objectives of the agencies and of activities compliant with regulations. Based on Article 16 Act Number 60 Year 2008 on Government Internal Control System, risk identification shall be implemented by:
  a. using appropriate method for the objectives of government agencies and comprehensive activities;
  b. using appropriate mechanism to identify risk in external and internal factors; and
  c. assessing other factors raising risk.

Whereas risk analysis aims to define the effect of identified risk on the realization of the objectives of government agencies. The head of government agencies applies the precautionary principle in defining the level of acceptable risk.
2.1.3 Control Activities
Control activities consist of policies, procedures and practices which are developed to improve strategy of risk management. Special control activity consists of separation of duties, verification, reconciliation and physical security of assets. The policies are designed to ensure that management directives are carried out (COSO, 1992). According to INTOSAI (1992) control activities are policies and procedures to face risk and to realize the objectives of the entity. To be effective, control activities must function accordingly and be consistent with the plan within the period, and spend cost effectively, comprehensively, reasonably and directly related to control objectives. They occur throughout the organization, at all levels and functions. Detective and preventive control activities cover (INTOSAI, 1992):

1. authorization and approval procedures;
2. separation of duties (authorizing, processing, recording, reviewing);
3. access to resources and records;
4. verification;
5. reconciliation;
6. review on operational performance;
7. review on operations, processes and activities;
8. supervision (assigning, reviewing and approving, guiding and training).

2.1.4. Information and Communication
Information shall be identified, caught and communicated on time and effectively and it's achieved through internal control components. This component is designed to make the employees able to fulfill their responsibilities in the best way. Information also needs to be communicated externally to all parties involved in the entity. This way makes supervision activities and employees accountability more effective (COSO, 1992) in Effah (2011). Information and communication are essential to realize all objectives internal control. A prerequisite for reliable and relevant information is a quick recording and proper classification for transactions and events. Relevant information should be identified, caught and communicated in time that allow staff to implement internal control and carry out their other duties (the right-time communication with the right people). Therefore, the internal control system and all transactions and important events should be fully, quickly documented (INTOSAI, 1992). Information system generates an operational report containing financial and non-financial, and relevant information on compliance and one that makes it possible to run and control activities. They not only deal with internally generated data, but also information on external events, required activities and conditions to enable decision-making and reporting. The management's ability to make right decisions is affected by the quality of information. It implies that the information should be relevant, punctual, up-to-date, accurate and accessible (INTOSAI, 1992: 45).

2.1.5. Supervision
Supervision serves to assess internal control components performance to ensure they operate effectively. The components include clear guidelines for responsibilities that allow managers to work effectively. They also include evaluation by auditor and other independent parties to ensure that the company run the business correctly (COSO, 1992) in Effah (2011). The internal control system should be supervised to assess the quality of its performance from time to time. Supervision is conducted through routine activities, separate evaluation or the combination of both. The supervision on internal control is conducted in routine and normal activities of an entity. This includes regular management and supervisory activities, and other personnel’s actions. The supervision activities cover internal control on all components involved, such as irregular unethical, uneconomical, inefficient, and ineffective actions (INTOSAI, 1992: 49).

2.2 The quality of Financial Accountability
Financial accountability is accountability of financial integrity, disclosure and compliance with laws and regulations (Ismail Muhammad, 2004: 43). This is in line with Premchand's statement (1999: 18) that: “the main instruments of financial accountability are government budgets, periodically published data on public finances, annual accounts, and the investigative and other general reports prepared by independent agencies”. To prepare financial accountability containing reliable and useful information, to assess the performance of government officials and to use as a consideration in making decisions, the following characteristics of effective accountability should be taken into account:

a. It must be whole and complete (including responsibility for the duties, agency functions, development programs covering management of BUMN/D in relevant jurisdiction).

b. It covers financial integrity, economical and efficient, effectiveness and procedure aspects.

c. It is a part of management system to assess individual and organizational performance.

d. It has to be built on a reliable information system to ensure validity, accuracy, objectivity, and punctuality.
Management responsibility to implement government programs and activities reveals several issues related to the implementation of the budget, such as revealing the causes of differences between the actual budget, the level of achievement of the targets that have been agreed between the legislative and executive and in compliance with laws and regulations, the presentation of the current year's budget realization and last year's, and the punctual financial accountability disclosure (Government Regulation No. 24 Year 2005). Financial accountability not only shows how public money is spent, but also shows that it is spent economically, efficiently and effectively (Mardiasmo, 2002: 121). Thus the financial accountability should include the disclosure of financial performance from the economical aspects, efficiency and effectiveness as well as the disclosure of the achievement of objective (output) funded and its benefit (outcome). Financial accountability is built on a reliable information system. Reliable information is required to evaluate performance and identify risk. The reliability will grow if errors in data presentation decrease, adherence to regulations increase, and the disclosure is neutral (Ismail Mohamad, 2004: 271). Mardiasmo (2002: 31-32) states that Governmental Accounting Standards Board (GASB) in Concepts Statement No. 1 on Objectives of Financial Reporting states that accountability is the foundation of governmental financial reporting. Accountability is the highest purpose of governmental financial reporting. GASB explains the relevance of accountability and financial reporting as follows:

... Accountability requires governments to answer to the citizenry to justify the raising of public resources and the purposes for which they are used. Governmental accountability is based on the belief that the citizenry has a “right to know”, a right to receive openly declared facts that may lead to public debate by the citizens and their elected representatives. Financial reporting plays a major role in fulfilling government’s duty to be publicly accountable in a democratic society. (par. 56)

The statement indicates that accountability includes the provision of financial information to the public and other users making it possible for them to assess the government accountable for all activities undertaken.

2.3 The Effect of Internal Control System on Financial Accountability

Accountability emerges as a logical consequence of the relationship between the agent and the principal. Agency relationship is a contract in the form of a delegation of authority in decision-making provided by the owner (principal) to the company or organization (agent). Agency Theory is the framework of accountability. Accountability is the obligation to provide required information (including the financial information) or calculation (reckoning) on actions undertaken by the organization (Gray et al., 1996). Accountability is the obligation of the fiduciary (government) to provide, present, report and disclose all of their duties to the mandate giver (public) who has the right to request it (Mardiasmo, 2002). Accountability requires organization to comply with all applied laws and ethical standards; the mission of organization, personnel and accounting policies; to protect members' rights; to prepare and submit annual financial statements accordingly and to make the reports available to all board members and all public members. The development and preservation of organizational internal control will help ensure accountability (Andrew Cuomo, 2005). The basic idea of control in public sector is to ensure that an organization operates in line with legals, policies and prescribed objectives. Control system provides assurance that management system works properly. Furthermore, control and accountability are mechanisms that interact each other (OECD, 2005).

Ray and Pany (2001) in Mawanda (2008) state that control activities as a component of internal control is a policy and procedure that help ensure that management directives are implemented. Control activities within an organization basically consist of: performance assessment (compare actual performance with budget, forecast and performance of the previous period), information processing (necessary for checking the accuracy, completeness, and authorization of transactions), physical control (which is necessary to provide security record-keeping and other assets), and separation of duties (where one should not deal with all aspects of the transaction from beginning to end). An effective internal control procedure encourage management efficiency (Otieno, 2013). Internal control system is a process in which an organization manage its activities to achieve effectiveness and efficiency, a reliable financial accountability and compliance with laws and regulations (Aramide and Bashir, 2015). The relationship between internal control and the implementation of good corporate governance in the sense of accountability has been studied by An Nissa Surya Sumunar (2004). It shows a positive relationship and significant effect. The same thing is also studied by Godfrey (2013). The result shows that the condition of internal control environment in regencies is greatly influenced by the integrity of the administrators and the ethical commitment of the employees. However, integrity is the ground for good governance in most organizations. There's a strong positive relationship between internal control environment and financial accountability in which internal control environment is a strong predictor for financial accountability. The
findings of Aramide & Bashir (2015) show that internal control system positively and significantly realizes a good financial accountability.

**Hypothesis:** Based on the frameworks described, the hypothesis is as follows: Does the implementation of internal control system (which consists of control environment, risk assessment, control activity, information and communication, and supervision) affect partially and simultaneously on the quality of financial accountability?

3. **Research Method**

This is an exploratory study that aims to clarify the relationship among variables through hypothesis testing (Singarimbun, 1995: 5). The prescribed hypothesis is then tested. The population of this study is all primary schools in Bandung. The sampling technique used is convenience sampling. Usable response rate of this study is 16.08%. The data collected for this study are primary data. The data are collected through questionnaires for respondents. Both questionnaires is developed entirely by using Rensis Likert scaling model. To generalize and answer the collected for this study are primary data. The data are collected through questionnaires for respondents. Both questionnaires is developed entirely by using Rensis Likert scaling model. To generalize and answer the structured internal control system, whether by control environment, control activities and effective supervision, may increase financial accountability of schools. The result is in line with a study conducted by Aramide & Bashir (2015) that states social threats are derived from a poor internal control system. Therefore, a well-structured internal control

4. **Findings and Discussions**

To test if control environment (X₁), risk assessment (X₂), control activities (X₃), information and communication (X₄), and supervision (X₅) simultaneously affect financial accountability (Y), F test statistics is applied, where Ho rejected if Fₜₐₓₐₜ is bigger than Fₜₐₜₐₜ and on the contrary Ho accepted if Fₜₐₓ is smaller or equal to Fₜₐₜ. From table for significance level of 0.05 and free degree db₁ = 5 and db₂ = 168-5-1 = 162, it is obtained \( F_{0.05(5,162)} = 2.26996 \). Since Fₜₐₓ > Fₜₐₜ, then Ho rejected at significance level of 0.05. Thus, based on test result, it can be concluded that control environment, risk assessment, control activities, information and communication, and supervision simultaneously affects financial accountability. After the simultaneous testing procedure where Ho is rejected, and concluded that there's a simultaneous effect, partial testing is conducted to seek the significance of independent variables (X₁, X₂, X₃, X₄, and X₅) on dependent variable (Y) by applying t test. Then the result is compared with the value of \( t_{table} \) for \( n = 168 \) with error level of 5% and \( dk = n-k-1 = 168-5-1 = 162 \) is 1.974716. Whereas in path analysis model, correlation value among exogenous variables is needed. The comparison between \( t_{count} \) and \( t_{table} \) and path coefficient is as follows:

<table>
<thead>
<tr>
<th>No.</th>
<th>Coefficient Path</th>
<th>( T_{count} )</th>
<th>( T_{table} )</th>
<th>Conclusion Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.350</td>
<td>3.356</td>
<td>&gt; 1.974716</td>
<td>Ho rejected, there's an effect of control environment on financial accountability</td>
</tr>
<tr>
<td>2</td>
<td>-0.392</td>
<td>-2.258</td>
<td>&lt; 1.974716</td>
<td>Ho accepted, there's no effect of risk assessment on financial accountability</td>
</tr>
<tr>
<td>3</td>
<td>0.383</td>
<td>3.854</td>
<td>&gt; 1.974716</td>
<td>Ho rejected, there's an effect of control activity on financial accountability</td>
</tr>
<tr>
<td>4</td>
<td>-0.115</td>
<td>-0.577</td>
<td>&lt; 1.974716</td>
<td>Ho accepted, there's no effect of information and communication on financial accountability</td>
</tr>
<tr>
<td>5</td>
<td>0.391</td>
<td>2.716</td>
<td>&gt; 1.974716</td>
<td>Ho rejected, there's an effect of supervision on financial accountability</td>
</tr>
</tbody>
</table>

**Table 1. Partial Influence Hypothesis Testing**

Based on the values above, it can be seen that \( t_{count} \) of X₁, X₃, and X₅ is bigger than \( t_{table} \) of 1.974716, while \( t_{count} \) of X₂ and X₄ is smaller than \( t_{table} \) of 1.974716. Thus, the result shows that, with the level of trust of 95%, only control environment, control activities, and supervision affects financial accountability significantly. On the other hand, based on statistics test result, the effect of risk assessment and information and communication on financial accountability is not significant. Based on analysis, it is found that a well-implemented internal control system, whether by control environment, control activities and effective supervision, may increase financial accountability of schools. The result is in line with a study conducted by Aramide & Bashir (2015) that states that social threats are derived from a poor internal control system. Therefore, a well-structured internal control

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system is the only way to create transparency and accountability and detect fraud and irregularities in public fund allocation. Control system provides assurance that management system works properly. Furthermore, control and accountability are mechanisms that interact each other (OECD, 2005). This study supports the previous ones conducted by Godfrey (2013) and Aramide & Bashir (2015).

5. Conclusions
Based on the findings and discussions on the implementation of internal control system of schools on BOS funds as an effort to build good corporate governance, through testing on the effect of control environment, risk assessment, control activities, information and communication, and supervision on financial accountability, it can be concluded that:

1. The findings of descriptive analysis show that in general: (a) the implementation of internal control in primary and secondary schools in Bandung is considered high, except on information and communication dimensions; (b) and the quality of financial accountability of primary and secondary schools in Bandung is also considered high.
2. The simultaneous test result shows that internal control system of schools (which consists of control environment, risk assessment, control activity, information and communication, and supervision) affects financial accountability significantly.
3. The result shows that, partially, control environment, control activity, and supervision significantly affect financial accountability. Whereas risk assessment, information and communication dimensions does not affect significantly.

The result indicates that an effective internal control system of schools may increase the quality of financial accountability.

6. Suggestions
Based on the findings, discussions, and conclusions above, to make internal control system of schools more effective and financial accountability more qualified, the writer proposes the following suggestions:

1. Internal control supervision should be implemented continuously or evaluated periodically through continuous supervision, separate evaluation, and follow-up recommendation on audit result and other reviews. It is meant to increase compliance with regulations.
2. To make intensive improvement on the preparation of financial statement of BOS funds and to earnestly implement the best internal control in all divisions compliant with regulations on state finance requires a great commitment from the leaders and conducive work culture.
3. For the next researcher, it is needed a further study on other factors that affects the quality of financial accountability, such as accrual accounting system, quality of information in financial statements, and organizational behavior.

References