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## Teaching performance at private universities in Medan City: Analysis of factors affecting university governance

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### Abstract

The purpose of this research is to find out what factors influence the performance of tertiary institutions in obtaining accreditation. A structural Equation Model (SEM) is used for data analysis. The data processing tool in the buying and selling model in this study uses Partial Least Squares (PLS). The research design is causal research and the variables used are the performance of private universities governance, funding, internal audit, participation in budgeting and risk management. The results of the study show that internal audit has an impact on university governance. Budget participation and risk management have a positive effect on good university governance while financing and internal audit have a negative effect on university performance. Empirical evidence analyzes the effect of risk management on university performance at private universities in Medan City.

**Keywords:** Budget participation, Funding, Good university governance, Internal auditor, Performance, Private universities, Risk management.

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### 1. Introduction

Higher education is an educational institution that can also be used as a means of business by individuals, corporations or other organizations. This can be proven by the growing number of universities in North Sumatra especially in the city of Medan. In Medan, there are several private universities that look very large especially in terms of accreditation which is a benchmark in the achievement of higher education assessments to get government recognition. Few universities are accredited (A, B) and there are still many universities that have received accreditation while (C) is not yet accredited. The accreditation data for private universities in terms of the number of study programs for S-2, profession, S-1 and D-3 is shown in [Table 1](#).

**Table 1.**

The accreditation value of private universities institutions and study programs in Medan City in 2020.

No	College name	Status	Accreditation institution	Number of study programs	Accreditation study program-A	Accreditation study program-B	Accreditation study program- C	Not yet accredited
1	Univ. Al-Azhar	Active	C	8	-	4	4	-
2	Univ. Al-washliyah	Active	C	8	-	3	5	-
3	Univ. Amir Hamzah	Active	C	7	-	1	6	-
4	Univ. Budi Dharma	Active		6	-	-	-	-
5	Univ. Great Dharma	Active	C	26	-	20	6	-
6	Univ. Dharmawangsa	Active	C	12	-	10	-	2
7	Univ. Hope	Active	-	14	-	5	5	4
8	Univ. HKPBNommensen	Active	B	34	-	30	3	1
9	IBBI University	Active	-	5	-	-	-	-
10	UISU	Active	B	35	-	28	3	4
11	Univ. Catholic St. Thomas	Active	B	16	-	15	1	-
12	Univ. Terrain Area	Active	B	21	5	14	1	1
13	Univ. Methodist Indonesia	Active	B	14	1	10	1	2
14	UMSU	Active	A	38	15	20	1	2
15	UMN Al-Washliyah	Active	B	18	-	16	1	1
16	Univ. Nahdlatul Ulama	Active	-	10	-	1	9	-
17	Univ. Lamp of Hope	Active	B	12	-	4	1	7
18	Univ. Panca Budi	Active	B	15	2	12	1	-
19	UPMI	Active	C	13	-	5	7	1
20	Univ. Main Potential	Active	C	23	-	7	11	5
21	Univ. Prime Indonesia	Active		41	-	28	6	7
22	Univ. Pearl Sari	Active		22	1	15	6	2
23	University Sisingamangaraja-XII	Active		10	-	-	10	-
24	Univ. Tjut Nyak Dhien	Active	-	16	-	10	4	2
Amount %					7.9%	66.78%	16.44%	8.88%

**Source:** Higher education service institute (2020).

Study programs that are accredited (A) are only worth 7.9%. The total value of this percentage is very small compared to the percentage values of other accreditations. This can be interpreted that only a few universities are accredited (A). Accreditation is a benchmark for people in choosing, registering and studying at tertiary institutions with the highest accreditation because accreditation can give the idea that the university concerned has standardization from the government. The national accreditation board for higher education must actually carry out academic processes and provide academic support. A good academic process and academic support can be demonstrated by the implementation of the Tridharma of higher education.

Higher education performance can be measured based on four dimensions: students, research, staff or human resources and finance performance [1]. These indicators can be used as a measurement of the performance of national higher education accreditation by the government through the independent accreditation institute as evidenced by the government formation of an independent institution called the national accreditation board for higher education assessment includes seven criteria before 2020 and nine criteria that will be implemented in 2021. The meaning of accreditation is limited to fulfill obligations. In fact, accreditation is a form of the university's external quality assurance system and from that accreditation; universities can push themselves further and take opportunities to improve the quality of their tertiary institutions. For the accreditation of study programs based on the decision of the accreditation council with the provisions of criteria and determination of assessment [2]. The performance of higher education institutions can be measured by the higher education institution according to the ministry of education and culture number 754/P/2020 and their success in increasing the number of assets they have compared to the rest according to the minister of finance regulation. The high weight of the accreditation instrument must be achieved by universities. In order for higher education accreditation performance to be achieved, higher education reform is needed in University Governance (UG) often called Good University Governance (GUG) [3]. GUG is considered an important element of higher education in anticipating, designing, implementing, monitoring and also assessing the effectiveness and efficiency of policies [4]. If the implementation of the GUG is implemented, then the aim is to accommodate the internationalization of higher education, increase competitiveness, improve the quality of the learning process and the quality of internal management and achieve the expected performance [4, 5].

Fielden [1] suggests that the financial performance of higher education is reflected in operational revenues (which do not come from government revenues), the percentage of salary expenditures, building maintenance and financial health ratios while Indrajit, et al. [6] suggest that financial performance is reflected in operating performance financial position, college grades and financial order. From these financial performance measures, it can encourage the performance of higher education institutions by creating a surplus so that funds are available for going concern certainty. Sumarni [7]; Abed, et al. [8]; Evaluandia and Sulistyowati [9] explain that universities can obtain sufficient funds from the remaining business results by implementing GUG in a cost-efficient and effective way through intellectual capital management to generate

income. The theory of financial performance measures in higher education [1] can be seen in minister of finance regulation No. 80/PMK.03/2009 regarding the remaining excess received or obtained by universities. One of the elements of achieving performance is the adequacy of funding. Sardjoko [10] revealed that at a macro level, educational funding sources make a significant contribution to improve the quality of higher education as well as the category of higher education funding sources have an influence on the quality of higher education but funding sources from the government and the community have a greater influence on the improvement of higher education compared to funding sources from assistance and cooperation.

Adequacy of funds is the major means of supporting private higher education. Finance is a benchmark in the sustainability of higher education operations because it is an important part of the implementation of teaching and learning activities and other activities carried out by universities as stated in the Tridharma of higher education [10]. The overall funding of higher education is very large in the learning process in order to improve the quality of education. A *Higher University State-Owned* Legal entity has the largest source of funding. This indicates that the burden on the community to acquire education is very high. As an alternative, universities must optimize various sources of higher education funding, both internally (optimizing asset management) and externally (optimizing cooperative relationships) without compromising the quality standards expected by universities. In accordance with BAN-PT Regulation Number 2 of 2019, the performance of private universities can be seen in three groups: accreditation, number of students, excess remaining or asset growth.

The findings of this research show that performance achievement depends on several factors such as ownership structure [11], the role of internal audit [12-14], budget participation [15] and risk management [16-18]. Since the performance of higher education institutions is generally measured by accreditation, the assessment criteria in the standard instrument must be met so that the highest score can be achieved. As a result, universities should develop financial internal control by establishing and taking advantage of the role of internal audit in universities. Internal audit activities are a form of monitoring and supervision carried out to achieve the targets set in the strategic plan, especially accreditation. Many universities have sufficient funds from excess or from the placement of funds by the owners or in terms of financial performance, they are still experiencing a decline and even discontinuation of operations if they are not managed properly. A good accreditation is not obtained such as being accredited (A) or superior. One of the important factors in not achieving financial performance and university accreditation is the university's governance. The importance of good governance will certainly be a problem in the development of higher education itself if domestic private universities are still low on accreditation. This needs to be addressed by universities by improving the quality of education through the achievement of accreditation instruments. Referring to the problems and developing phenomena, this research is important to explore and find the factors that affect the performance of universities in achieving accreditation.

## **2. Literature Review**

### *2.1. Agency Theory*

The management of the company whether it is the manager of the company or the board of directors will always increase the company's revenue and measure the company's performance (corporate performance). In agency theory, quality financial reports are needed by external parties. Therefore, accounting information contains two purposes: the first is to be used for decision making by the principal or agent and the second is to evaluate and share the results in accordance with the work contract that has been made or approved [19, 20]. This is called a "performance evaluation role" which can motivate agents to try their best [21]. This theory is based on the concept of a contractual relationship between the principal and the agent (the manager). Thinking about financial performance in the form of quality financial reports rests on this theory, company management is carried out in compliance with applicable rules and regulations Rachmad [22]. Jensen and Meckling [23] stated that the agency relationship will rise when the principal works with the agent where the principal providing facilities and delegating decision-making authority and policies to the agent. Stice, et al. [24] stated that in an agency relationship, agents are required to provide periodic financial reports on their performance to the principal and then the principal will assess the agent's performance based on the financial statements submitted. There is an effect on carrying out company policies where on the one hand, company managers increase revenue or profits.

The principal gives regulatory authority and the available resources to the agent as the manager. As the embodiment of the agent to the principal, the agent carries out good governance which leads to good management and improves company performance. Jensen and Meckling [23] said that the agency relationship is an image of the relationship between agents based on a contract or agreement of the principal delegating all operational decision-making authority to the manager where agency theory can help explain the role of internal audit, the nature of internal audit, its functions and the specific approach adopted by the internal auditor.

### *2.2. Private College Performance*

Performance is a measurement of the growth and success of a company or organization in a predetermined period both monthly and annual performance. Higher education performance can be measured by the comparison of the number of students annually, the growth of assets owned and the development of accreditation achieved. The financial performance of private universities can be seen from the financial reports issued to stakeholders or from the use of the excess regulated in the Minister of Finance Decree or the Director General of Taxes Decree Law No.44/PJ.3 /2009 concerning the excess received or obtained by non-profit institutions engaged in education and development that are exempt from income tax. Research by Machmuddah [25] examines the relationship between the role of good university governance in higher education performance and finds evidence that transparency, accountability and fairness are significantly related to higher

education performance but accountability and independence are not related. This means that higher education institutions must implement good university governance to improve performance in the future.

### 2.3. Good University Governance

Good governance in the organization will facilitate the achievement of the goals of the organization [26]. In higher education organizations, it is important for the complexity of administrative and academic activities, a concise and fast bureaucratic process leading to a more open university, good communication and understanding and an academic culture [27]. The rationale for implementing good university governance is:

- The implementation of good university governance must come from the higher education institution itself, so that universities can use the autonomy given to them properly.
- The adoption of good university governance in higher education must be in line with the philosophy of new public management.
- The implementation of good university governance will be able to protect the institution from fraud or mismanagement.

Research by [Risanty and Kesuma \[28\]](#) provide evidence that good university governance serves as the basis for regulating organizational structures, business processes, as a program of planned activities to achieve university success in achieving the goals of the university itself with the principles of transparency, accountability (owner) and independent in decision making such as fairness, quality, relevance, effectiveness and efficiency for non-profit-oriented businesses [29]. The need for the implementation of management activities in the form of good and correct governance is not only needed by go-public companies but also by non-go-public companies or public private companies and for other institutions in the form of education. [Gaston, et al. \[30\]](#); [Hanum, et al. \[31\]](#) explain that good governance can ensure that organizations:

- Able to provide goods, services or programs effectively and efficiently.
- Able to create a good performance.
- Able to meet legal requirements.

Universities can be used as a moral guard to maintain the noble values adopted by a nation including its culture and customs. In terms of legal status, higher education institutions (HEIs), are grouped into three categories [3].

- State higher education institutions in the form of public service agency and State Universities with legal entities where universities receive funds from the state.
- Private higher education institutions are established based on private initiatives (usually in the form of foundations) that rely on funding sources from users and donors.
- Higher education institutions, community organizations and other legal entities that rely on funding sources from the state, users and donors.

### 2.4. Funding

Based on government regulation number 4 of 2004, it is stated that private universities can be established by the community on a non-profit basis but must take permission from the minister. The private higher education agency in question is a foundation, association or other non-profit legal entity in accordance with the provisions of the applicable laws and regulations. Based on Law Number 28 of 2004, amendments to Law Number 16 of 2001 explain that foundations have an obligation to prepare financial statements in accordance with applicable financial accounting standards. The non-profit entity funding obtained from various sources of income is classified into elements of net assets which are divided into 3 (three) types: unrestricted net assets (net assets), temporarily bound assets and permanently bound assets. According to the [Indonesian Accountants Association \[32\]](#) in Statement of Accounting Standards Number 45, unrestricted net assets generally include income from services, sales of goods, donations, dividends or investment results, less expenses to obtain such income. Temporarily restricted assets consist of assets from donations in the form of certain operating activities, investments for a certain period of time, use during a certain period in the future or the acquisition of property, plant and equipment. Temporary restrictions on assets can be in the form of time or usage. Net assets consist of assets such as land donated for a specific purpose to be cared for and not for sale as well as assets donated for investments that generate income permanently and can be presented as a separate item.

### 2.5. Internal Audit

Internal audit is an examination carried out by the company's internal audit department on both financial reports and accounting records, monitoring activities and compliance with predetermined management policies [33-35]. Examinations conducted by internal auditors are usually more detailed than general examinations carried out by the relationship between internal auditors at index between Public Accounting Firms (PAF) because parties outside the company consider the internal auditors to be employees of the company and therefore not independent [36]. The internal auditor's report contains audit findings regarding fund irregularities and fraud, internal control weaknesses and suggestions for improvement (recommendations) which will be reported to the internal company. The audit committee commonly referred to as the internal control unit in higher education is a unit formed by the chancellor. The main task of this audit is for private universities in order to assist in the implementation of their duties and functions such as supervision mandated by foundations or owners of private universities as well as the function and purpose of the internal control system, namely compliance with leadership and management policies (safeguarding) [37]. Behind this mandate are the interests of shareholders or owners that must be protected. These interests include ensuring that when the company's management

submits financial statements, they contain financial statements that are accurate, complete, reliable and timely as determined by the results of the audit by the public accounting firm [38]. To improve the implementation of good university governance, it is necessary to implement an internal control system through the implementation of policies and procedures carried out by the university supervisory board, the chancellor and all agencies and institutions involved in university operational activities.

### *2.6. Budgeting Participation*

The budget, also known as predetermined control is an instrument of accountability for the management of public funds and the implementation of programs financed with public money [39, 40]. In tertiary institutions, funding sources consist of student education donations and government assistance which must be accounted for by describing the financial condition of an organization which includes income, expenditures and activities. The budget planning function is carried out continuously for re-planning and for making new plans [41]. In planning new activities, it is necessary to provide the necessary feedback for:

- Fix poor performance.
- Coping with action-inspired and detrimental events.
- Benefit from the development of new plans.

Jackson, et al. [42] argued about the benefits of the budget. The budget preparation process must be fully communicated for the success of organizational goals. The budgeting process is the focus of management for future goals and does not explain organizational issues [43]. The budgeting process can assist management in identifying and determining problems that can lead to contradictions before they become bigger problems. The budgeting process can increase coordination in organizational activities and place good facilities as a part of the implementation of organizational goals which provides confidence that the goals of personnel and managers are aligned to get closer to organizational goals.

### *2.7. Risk Management*

Risk management is an activity or the establishment of a supervisory and inspection unit whose task is to monitor every activity that will be carried out or is being carried out in order to run the organization in line with the direction that has been set at the beginning. Jafari, et al. [44] and Nurlinda, et al. [45] found that the implementation of the internal control system had no effect on performance as proxied by the quality of financial reports. The adoption of government accounting standards had a positive effect on financial reports and management commitment had a positive effect on report quality [46]. Management commitment as a moderating variable has a very strong effect on risk management in the process of improving the quality of financial reports. Risk management can be defined as “the order in which an activity is managed as early as possible to be monitored such as budgeting and preparation of activities that lead to the vision-mission and strategic objectives to be achieved both short-term and long-term.” If risk is interpreted as uncertainty, causing losses (unfavorable uncertainty) where losses are interpreted as financial losses while losses can be caused by the value of money itself (purchasing power).[47].

## **3. Method**

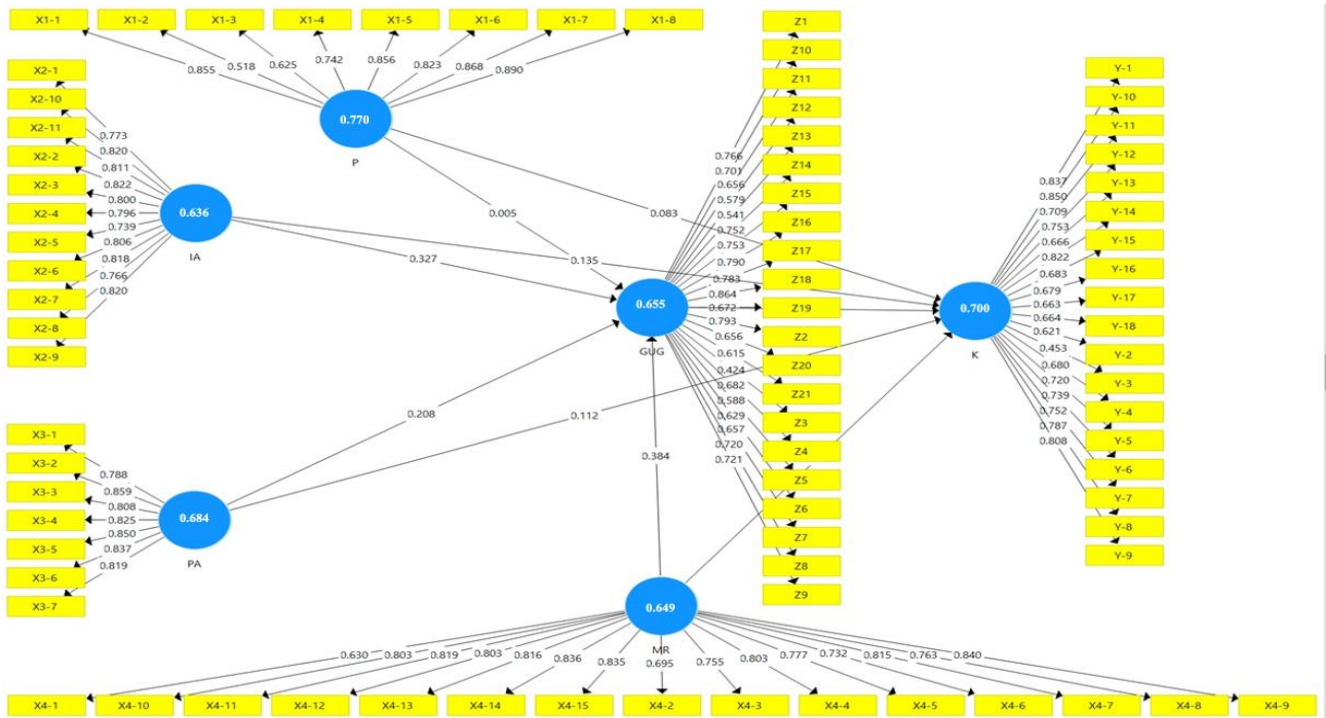
This research is causal research. Causal research is research that examines the analysis of factors that influence university governance and its impact on higher education performance. This research was conducted at a private university in the city of Medan. The analysis uses a Structural Equation Model (SEM) and Partial Least Squares (PLS).

## **4. Results and Findings**

### *4.1. Result*

In the data analysis, each variable consists of funding ( $X_1$ ), internal audit ( $X_2$ ), budget participation ( $X_3$ ), risk management ( $X_4$ ), good university governance ( $Z$ ), higher education performance ( $Y$ ), respondents with 80 statements where the number of statements in each variable was good university governance ( $Z$ ) with 21 statements, college performance ( $Y$ ) with 18 statements, funding ( $X_1$ ) with 8 statements, internal audit ( $X_2$ ) with 11 statements, budget participation ( $X_3$ ) with 7 statements and risk management ( $X_4$ ) with 15 statements. The results of descriptive statistical analysis explain all variables have an average value (mean) of 354.705 with an average of 4.434, the mean value (mean) is 375 with an average of 4.688, the smallest value (minimum) is 168 with an the average of 2.1, the largest (maximum) value is 400 with an average of 5 and the standard deviation value (deviation standard) is 1,048 with an average of 13.10.

Based on the results of the convergent validity test of the construct indicators on each variable, it can be concluded that the construct indicators on the funding variable that do not meet the loading factor value are the construct indicators  $X_{1.2}$  and  $X_{1.3}$ . The risk management variables that do not meet the loading factor value are the construct indicators  $X_{4.1}$  and  $X_{4.2}$ . On the good university governance variable that does not meet the loading factor value is the construct indicator  $Z_{.3}$ ,  $Z_{.4}$ ,  $Z_{.5}$ ,  $Z_{.6}$ ,  $Z_{.7}$ ,  $Z_{.11}$ ,  $Z_{.12}$ ,  $Z_{.13}$ ,  $Z_{.19}$ ,  $Z_{.20}$ , and  $Z_{.21}$ . The variable of college performance that does not meet the value of the loading factor is the construct indicator  $Y_{.2}$ ,  $Y_{.3}$ ,  $Y_{.4}$ ,  $Y_{.13}$ ,  $Y_{.15}$ ,  $Y_{.16}$ ,  $Y_{.17}$ , and  $Y_{.18}$ . Provisions in convergent validity analysis at the time of the first test of convergent validity, if the loading factor is not met, then the construct indicator is eliminated and then the second test of convergent validity is carried out. Figure 1 explains the results of the two convergent validity tests after the construct indicators do not meet the loading factor value or are eliminated. For the live statistical test see Table 2.



**Figure 1.**  
The convergent validity test of the construct indicators.  
**Note:** P = Fund. GUG = Good university governance.  
 IA = Internal audit. MR = Risk management.  
 PA = Budget participation. K = Performance.

**Table 2.**  
Live statistical test results.

Variable	Original sample	t statistics	P values	Decision
Budget participation -> Good cooperate government	-0.048	0.920	0.358	H0: Accepted
Audit internal -> Good cooperate government	0.325	2.525	0.012	H0: Rejected
Budget participation -> Good cooperate government	0.278	3.912	0.000	H0: Rejected
Management risk -> Good cooperate government	0.326	2.479	0.014	H0: Rejected
Funding -> College performance	0.038	0.674	0.501	H0: Accepted
Audit internal -> College performance	0.058	0.609	0.543	H0: Accepted
Budget participation -> College performance	0.179	2.335	0.020	H0: Rejected
Management risk -> College performance	0.342	3.773	0.000	H0: Rejected
Good cooperate government -> College performance	0.257	2.753	0.006	H0: Rejected

Source: Data processing (2022).

The provisions for testing the hypothesis are the original sample value as the coefficient value, the beta value ( $\beta$ ) gives an explanation of the results of statistical testing directly. In determining whether to accept or reject the null hypothesis ( $H_0$ ) in hypothesis testing, there are two events: firstly, if the specified value of t count is greater than t table ( $t \text{ count} > t \text{ table}$ ) and secondly, the value of p value with the condition that if it is smaller than 0.05 ( $p \text{ value} < 0.05$ ), then the conclusion of  $H_0$  is rejected [49]. Thus, it can be stated that there is a significant effect between these variables and vice versa.

4.2. Discussion

This finding proves that the good university governance mechanism is very important because it includes the dimensions of effectiveness and efficiency of strategic plans and budgets for projecting the performance achievements of private universities. In general, budget participation is a top-down approach if private universities target their performance on the investment dimension, namely facilities and infrastructure and a bottom-up approach if private

universities target their performance on improving the quality dimensions of higher education graduates, the quality of higher education lecturers and the quality of curriculum and learning. Higher education funding cannot afford to incur costs to increase investment to implement good university governance and higher education performance (graduate students, quality of lecturers, curriculum, facilities and infrastructure). An entity can invest if it is in the "harvesting phase" [50] where funds obtained from income can cover expenses so that there is a surplus for investment. This means that universities are able to invest in implementing good university governance and improving university performance.

## 5. Conclusion

According to the results of this research, funding has no impact on good university governance while internal audit, risk management and budget participation have impact on good university governance. Internal audit has no impact on the performance of private universities.

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