



Research Article

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The Influence of Good University Governance and Intellectual Capital on University Performance in Indonesia

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Abstract

University has the main task to develop science and technology to increase Indonesian competitiveness in the world. Researchers conduct the study based on the condition that the university governance and intellectual capital are not optimal to help achieve the expected performance at universities in Indonesia. The study aims to examine the influence of the Good University Governance and Intellectual Capital toward Performance in State-Owned Universities-Legal Entity (SU-LE) and State-Owned Universities-Public Service Agency (SU-PSA) in Indonesia. Researchers use quantitative methods and questionnaire instruments to collect data. The study concludes that good university governance and intellectual capital each positively and significantly influence SU-LE and SU-PSA performance in Indonesia. Moreover, good university governance has a positive and significant influence on the intellectual capital of SU-LE and SU-PSA in Indonesia.

Keywords: Good University Governance (GUG), Intellectual Capital (IC), Universities Performance (UP)

1. Introduction

Innovation is an essential factor to increase economic growth and (Performance Report of the Ministry of Research, Technology, and Higher Education of the Republic of Indonesia/PR, 2018, p.124). University is the primary organization in the national innovation system (Nelson, 1993). Academic research is a driving force to create innovations for the industrial sector (Lundvall, 2016). However, Indonesia is still ranked 85th under ASEAN countries such as Singapore, Malaysia, Vietnam, Thailand, and Philippines (Global Innovation Index, 2019).

The Government of Indonesia provides performance targets for universities to become world-

class universities (WCU). However, several indicators, such as graduates' reputation and the number of paper citations, are still low to achieve the top 100 WCU ranking (QS Ranking, 2020).

Creating IC is the mission of education and research organizations (Secundo et al., p.152). IC has a significant role in obtaining competitive advantage and organizational capacity. (Peltoniemi, 2006, p.4; Petty & Guthrie, 2000, p.156). IC classification in universities consists of human capital (HC), structural capital (SC), and relational capital (RC) (Corcoles et al., 2011, p.359). Universities in Indonesia have several problems related to HC, including the percentage of lecturers with doctoral qualifications (16.41%), which is still lower than Malaysia (34%) and Japan (100%) (PR, 2018, p. 68). The results of the QS Ranking (2020) assessment show that universities in Indonesia get low scores for indicators: international publications, international students, international lecturers, and the number of lecturers compared to the total students (QS Ranking, 2020). Moreover, universities in Indonesia also have problems related to RC, namely the low number of research collaborations with other universities dan institutions (PR, 2018, p. 65).

However, Maditinos et al. (2011) concluded that there was no significant relationship between IC as measured by a value-added intellectual coefficient and three measures of financial performance such as return on equity (ROE), return on assets (ROA), grow revenue. Also, Firer & Williams (2003) failed to find a relationship between IC and company performance measured using ROA and ROE.

GUG is one of the key elements to improve outcomes (Jaramillo, 2012, p.3). Altbach & Salmi (2011, p.3) reveal that the essential characteristics of WCU are leadership, policy, funding, ability to remain focus on achieving institutional goals, developing an academic culture, and the quality of academic staff. Good leadership and strategic planning are key elements to create GUG (Jaramillo, 2012, p.16). In Indonesia, the universities' leadership problem is the lack of commitment to achieve the top 500 WCU ranking (PR, 2018, p.61).

OECD (2004) explains that to create good governance, organizations have to increase information disclosure by improving the availability and quality of information. The Central Information Commission (2018) conducts an assessment of information disclosure at state universities in Indonesia. The result is that only one university obtains the excellent information disclosure category.

The responsibility is compliance with laws and regulations and contributes to improving the society's welfare Wijatno (2009, p.120). Researchers in Indonesia have high motivation to conduct research, but they lack disseminating research results for the community (PR, 2018, p.78).

Accountability is the clarity of functions, structures, systems, and responsibilities of administrative organs (OECD, 2004). The internal quality assurance system is one of the accountability indicators. It is not yet optimal, which hinders the increasing number of internationally accredited study programs (PR, 2018, p.43). Moreover, Wahab (2016) states that the problems of university governance in SU-PSA are negligence, non-compliance, and irregularities by management in managing finances and activities, causing ineffectiveness and inefficiency.

Aghion et al. (2010, p.1) state the importance of autonomy in creating innovation and developing WCU. The factors that correlate with WCU are independent budgets, freedom of admission, performance-based payment incentives, independent recruitment of staff, autonomy for curriculum development, and the ability to obtain many competitive grants (Aghion et al., 2010, p.9-10). A clear vision definition and alignment between vision, mission, and objectives are essential factors in GUG (Altbach & Salmi, 2011, p.37). GUG also requires the stakeholders' participation and the concept of deliberation that underlies the university's internal relations in making a decision (Henard & Mitterle, 2010, p.56).

The researchers conduct the study at SU-LE and SU-PSA in Indonesia due to wider academic and non-academic autonomy and financial support from the government to achieve the top 500 WCU ranking than other universities in Indonesia.

Based on the factual phenomena and empirical research above show inconsistencies with the underlying theory. It indicates that there are factors that cause these differences (contingency factors). The contingency approach provides the idea that the GUG and the IC influence SU-LE and SU-PSA performance in Indonesia. Based on researchers' knowledge, the research topic is one new study, so the researchers expect the research to add insight into the UP in Indonesia.

2. Literature Review

2.1 Good University Governance

Governance is a system of decision making, resource allocation, and university relationship patterns with stakeholders to create value (Marginson & Considine, 2000, p.16). Also, Gayle et al. (2003, p.2) define university governance as the structure and process of authoritative decision-making across significant issues for stakeholders. Moreover, Shattock (2013, p.1) defines university governance as the constitutional forms and processes through which universities govern their affairs. Governance is how an organization uses power and authority to allocate and manage resources (Carnegie & Tuck, 2010, p.431).

The dimensions of GUG are vision, mission, dan objective (Altbach & Salmi, 2011), fairness (OECD, 2004), transparency (OECD, 2004), leadership (Jaramillo, 2012; Northouse, 2016), responsibility (OECD, 2004), participation (Henard & Mitterle, 2010), accountability (OECD, 2004), and autonomy (Aghion et al., 2008 and 2010).

2.2 Intellectual Capital

Intellectual capital is an asset in the form of knowledge (Al-Ali, 2003; An et al., 2011; Dzikowski, 2000; Gorgani, 2014; Huang et al., 2007; Maditinos et al., 2011; Shih et al., 2010; Sullivan, 2000), experience (Al-Ali, 2003) thinking ability of employees (Al-Ali, 2003; Shih et al., 2010), organizational knowledge resources in the form of databases, systems, work mechanisms, culture, and management philosophy owned by an organization (Al-Ali, 2003) to create value (An et al., 2011; Edvinsson, 1997; Maditinos et al., 2011; Shih et al., 2010; Sullivan, 2000) and competitive advantage (An et al., 2011; Rastogi, 2000). The dimensions of IC are HC, SC, and RC (Corcoles, 2013; Gorgani, 2014; Sanchez et al., 2009).

2.3 Universities Performance

The creation of value is the essence of performance (Carton & Hofer, 2006, p.3). Similarly, Verweire et al. (2004, p.6) define organizational performance as the value that an organization creates using its productive assets compared to asset owners' expected value. The universities will continue to exist if they make a greater or equal value to the value expected by stakeholders. Organizational performance is measured by productivity as the ratio of all outputs to all inputs (Manzoni & Sardar, 2009, p. 160). Also, Shield (2015, p.20) explains that outcomes can be measured using corporate profitability, market share, and customer satisfaction.

The dimensions of UP are as follows: The performance of financial service (Fielden, 2008, p.57; Kassahun, 2010, p.45; Wang, 2010, p.50), the performance of learning and student affairs (Fielden, 2008, p.57; Lanvin et al., 2019, p.4) and the performance of research, development and innovation and community service (Fielden, 2008, p.57; Lanvin et al., 2019; Lundvall, 2016; Wang, 2010, p.50).

2.4 Good University Governance and Intellectual Capital

Keenan & Aggestam (2001) state that corporate governance is responsible for ensuring, mobilizing, and orientating people, culture, innovation, external structures, and internal capital structures to achieve corporate goals and values.

The board of directors' characteristics positively affects IC performance (Attarit, 2016; Abidin et al., 2009; Swartz & Firer, 2005). Makki & Lodhi (2014) provide empirical evidence that good corporate governance increases IC efficiency. Mulyani & Arum (2016) reveal that the leadership style affects increasing the accounting information system's success. Further, Mulyani & Fettry (2016) conclude that GCG (audit committee diligence) significantly affects financial statements' quality.

Safieddine et al. (2009) conclude that corporate governance and IC are interrelated and attract, maintain, and improve IC at the American University of Beirut (AUB). Moreover, Wahid et al. (2013)

also reveal a positive relationship between corporate governance and IC at the universities in Malaysia. Based on these reviews, the statement of the hypothesis as follows:

H₁: There is a positive and significant influence of GUG toward the IC.

2.5 Good University Governance and University Performance

Altbach & Salmi (2011) report that the essential characteristics of a WCU are leadership, university policy, funding, the ability to always focus on clear objectives and institutional policies, the development of a strong academic culture, and the quality of academic staff. D'Egmont (2006) develops the concept of autonomy, allowing universities or faculties to have the flexibility to manage resource skills and respond more quickly to the demands of a rapidly changing market. Aghion et al. (2010) highlight the importance of autonomy to develop WCU, such as independent budgets, freedom in student admissions, incentives for faculty based on performance, recruitment of resources, human independence, autonomy in curriculum preparation, and highly competitive grants.

Christensen & Laegreid (2007) and OECD (2008) state that good governance influences managerial performance. There is a positive relationship between university leaders' past research performance and the success of the universities they lead in the future (Goodall, 2009). Moreover, a university's core business is research and teaching, but its quality differs between various universities. The universities with the best research quality will obtain extensive funding from the public and private sectors (Gulbrandsen & Smeby, 2005).

The GUG has a positive effect on university performance (Brown Jr, 2001; Muhi, 2010; Muktiyanto, 2016). It will improve university human and financial resources (Fielden, 2008) and the expected performance (Clark et al., 2014; Liu et al., 2014). In realizing academic quality, GUG encourages universities to strive to achieve academic service performance (El-Hilali et al., 2015). Research performance will increase if university autonomy is consistently applied (Higgins, 1989). The GUG is an essential driver of change to achieve university goals (Jaramillo, 2012, p.3). Based on these reviews, the statement of the hypothesis as follows:

H₂: There is a positive and significant influence of GUG toward the UP.

2.6 Intellectual Capital and Universities Performance

IC can create value (An et al., 2011; Edvinsson, 1997; Maditinos et al., 2011; Peltoniemi, 2006; Shih et al., 2010; Sullivan, 2000) and increase competitive advantage (An et al., 2011; Rastogi, 2000; Barney, 1991). Further, CIMA (2001) states that IC is the possession of knowledge, experience, professional skills, good relations, and technological capacity, the application of these attributes will give the organization a competitive advantage.

The IC is an essential factor in creating a competitive advantage and improving organizational performance (Petty & Guthrie, 2000; Bontis et al., 2000; Cabrita & Bontis, 2008; Hosseinzadeh et al., 2015; Gruian, 2011; Chen, 2005; Komnemic & Pokrajcic, 2012; Maditinos et al., 2011).

Moreover, the IC has a positive relationship with innovation performance. (Wu & Sivalogathan, 2013; Zerenler et al., 2008). The knowledge and skills are essential and contribute to giving customers creativity and innovation (Amiri et al., 2010). Further, organizations can develop good relationships with consumers and understand their needs to achieve higher performance (Bontis, 1998, p.67).

Corcoles (2013) states that universities generate knowledge, either through technical and scientific research or teaching. Stakeholders such as academics and non-academics, students, parents, and industry are aware of the university's quality for future generations. In this case, IC contributes to ensuring that learning institutions have academic excellence in providing future leaders (Wahid et al., 2013, p.64). Further, Sanchez et al. (2009) state that an adequate IC framework helps universities manage and disseminate the knowledge creation they process to stakeholders and society. Based on these reviews, the statement of the hypothesis as follows:

H₃: There is a positive and significant influence of IC toward the UP.

3. Materials and Methods

3.1 Research Methods

The objects in this research are the GUG, IC, and UP. Based on its purpose, this is explanatory research that aims to test the hypothesis based on a particular theory (Cooper & Schindler, 2014, p.22). The data are distributed by respondents using a questionnaire given to the chief/auditor of the IAD in universities. The time horizon of this study is cross-sectional, that is, research at a specific period. The analysis unit examined are 41 SU-LE and SU-PSA in Indonesia.

3.2 Variable Operationalization

The operationalization of variables is the act of formulating variables to determine the indicators attached to these variables.

Table 1: Variables Operationalization

Variable	Dimension	Indicator
Good University Governance (GUG)	Vision, Mision, and Objective (GUG1) (Altbach & Salmi, 2011)	<ul style="list-style-type: none"> • Linkages between the vision, mission, and goals. • Understanding of academic staff on vision. • Vision and mission are used as work guidelines.
	Fairness (GUG2) (OECD, 2004)	<ul style="list-style-type: none"> • Having objective KPI. • Fair remuneration system. • Fund allocation for underprivileged students.
	Transparency (GUG3) (OECD, 2004)	<ul style="list-style-type: none"> • Criteria for information transparency. • Procurement of goods and services transparency.
	Leadership (GUG4) (Jaramillo, 2012; Northouse, 2016)	<ul style="list-style-type: none"> • Charisma leadership. • Inspiration leadership. • Intellectual stimulation leadership. • Individualized consideration leadership. • Contingent reward. • Management by exception.
	Responsibility (GUG5) (OECD, 2004)	<ul style="list-style-type: none"> • Compliance with laws and regulations. • Follow-up on audit findings. • Conducive academic atmosphere. • Monitoring and evaluating. • Codes of ethics. • Social responsibility.
	Participation (GUG6) (Henard & Mitterle, 2010)	<ul style="list-style-type: none"> • Academic senate participation. • Board of trustees' participation. • Alumni participation.
	Accountability (GUG7) (OECD, 2004)	<ul style="list-style-type: none"> • Job description and analysis. • Quality assurance system. • Satisfaction survey. • Systems and procedures in learning process systems and procedures. • Systems and procedures in student development. • Systems and procedures in research and innovation development. • Systems and procedures in community service. • Integrity zone program.
	Autonomy (GUG8) Aghion et al., 2008 and 2010)	<ul style="list-style-type: none"> • Academic autonomy. • Financial autonomy. • Human resources autonomy. • Asset management autonomy.

Variable	Dimension	Indicator
Intellectual Capital (IC)	Human Capital (IC ₁) (Corcoles, 2013; Gorgani, 2014; Sanchez et al., 2009)	<ul style="list-style-type: none"> • Percentage of associate professors and professors compared to total permanent lecturers. • Percentage of doctorates compared to total permanent lecturers. • The ratio of lecturers to the students. • Frequency of visiting professors teaching. • The ratio of international students to total students • Academics qualifications. • Funds for improving staff competencies. • Research collaboration. • International publications indexed Scopus. • National publications indexed Sinta. • Community service activities.
	Structural Capital (IC ₂) (Corcoles, 2013; Gorgani, 2014; Sanchez et al., 2009)	<ul style="list-style-type: none"> • Financial statements opinion. • Online learning system. • University accreditation. • Internationally accredited study programs. • Excellent accredited study programs. • Efforts to improve the welfare of the staff. • Facilities and infrastructure conditions. • Learning process information systems. • Academic and non-academic information systems.
	Relational Capital (IC ₃) (Corcoles, 2013; Gorgani, 2014; Sanchez et al., 2009)	<ul style="list-style-type: none"> • Relations with other universities. • Relations with the business entity. • Relations with professional associations and public sector organizations.
University Performance (UP)	Financial Performance (UP ₁) (Fielden, 2008, p.57; Kassahun, 2010, p.45; Wang, 2010, p.50)	<ul style="list-style-type: none"> • Percentage of non-tuition fee funds to total university income. • Ability to finance programs and activities. • Ability to meet short obligations. • Research income from industry.
	Learning and Student Affairs Performance (UP ₂) (Fielden, 2008, p.57; Lanvin et al., 2019, p.4)	<ul style="list-style-type: none"> • Level of graduates with entrepreneurship. • Level of graduates directly employed.
	Research, Development and Innovation and Community Service Performance (UP ₃) (Fielden, 2008, p.57; Lanvin et al., 2019; Lundvall, 2016; Wang, 2010, p.50)	<ul style="list-style-type: none"> • Level of citation per paper published. • Level of patents per lecturer. • Level of innovative research and development products. • Level of community service performance.

4. Result and Discussion

4.1 Descriptive Analysis

The data description of respondents' responses can be used to explain the condition of each dimension and indicator variables studied. The interval distance = [maximum value - minimum value]: $5 = (5-1) : 5 = 0.8$.

Table: Guidelines for Respondent Response Score Categorization

Average Index			Category
4,21	-	5,00	Excellent
3,41	-	4,20	Good
2,61	-	3,40	Fair
1,81	-	2,60	Poor
1	-	1,80	Bad

Table 2 below presents the summary scores of respondents' answers obtained from SU-LE and SU-PSA.

Table 2: Descriptive Statistics of GUG Variable

Variable and Dimension	Real Score	Ideal Score	Average Score	% Real Score to Ideal Score	Gap	Category
GUG Variable	5746	7380	3,89	78%	22%	Good
1 GUG1	502	615	4,08	82%	18%	Good
2 GUG2	503	615	4,09	82%	18%	Good
3 GUG3	277	410	3,38	68%	32%	Fair
4 GUG4	992	1230	4,03	81%	19%	Good
5 GUG5	1113	1435	3,38	78%	22%	Fair
6 GUG6	477	615	3,88	78%	22%	Good
7 GUG7	1275	1640	3,86	78%	22%	Good
8 GUG8	607	820	3,70	74%	26%	Good

Based on table 2 above, the average score of respondents' responses is 3.89, which means that the universities have good governance on average. The highest assessment is on the fairness dimension, with an average score of 4.09. The lowest score is on the transparency dimension, with an average of 3.38.

Table 3: Descriptive Statistics of IC Variable

Variable and Dimension	Real Score	Ideal Score	Average Score	% Real Score to Ideal Score	Gap	Category
IC Variable	3303	4715	3,50	70%	30%	Good
1 IC1	1408	2255	3,12	62%	38%	Fair
2 IC2	1440	1845	3,90	78%	22%	Good
3 IC3	455	615	3,70	74%	26%	Good

Furthermore, the average score of respondents' responses is 3.50, which means that the universities have good intellectual capital on average. The highest assessment is in the structural capital dimension, with an average score of 3.90. The lowest score is in the human capital dimension, with an average of 3.12.

Table 4: Descriptive Statistics of UP Variable

Variable and Dimension	Real Score	Total Score	Average Score	% Real Score to Ideal Score	Gap	Category
UP Variable	1093	2050	2,67	53%	47%	Fair
1 UP1	559	820	3,41	68%	32%	Good
2 UP2	197	410	2,4	48%	52%	Poor
3 UP3	337	820	2,05	41%	59%	Poor

The average score of respondents' responses is 2.65, which means that the universities have a fair average performance. Moreover, the highest assessment is on the financial performance dimension with an average score of 3.4, while the lowest score is on the research performance and community service dimension with an average of 2.05.

4.2 Structural Equation Model (SEM) PLS Analysis

4.2.1 Measurement Model Test (Outer Model) Test

The CFA test results for all indicators are valid as a measurement tool for each latent variable. Further, the convergent validity test results for all dimensions and indicators are valid as a measurement tool. Moreover, the discriminant validity test result for all dimensions and indicators have good discriminant validity.

Moreover, the measurement results with composite reliability are that each indicator has consistency in measuring the construct.

4.2.2 Structural Model Test Results (Inner Model)

In this study, the structural model is related to three research hypotheses that hint at latent variables' causality relationship. The following figure presents the estimation of the full structural model using the latent variable score.

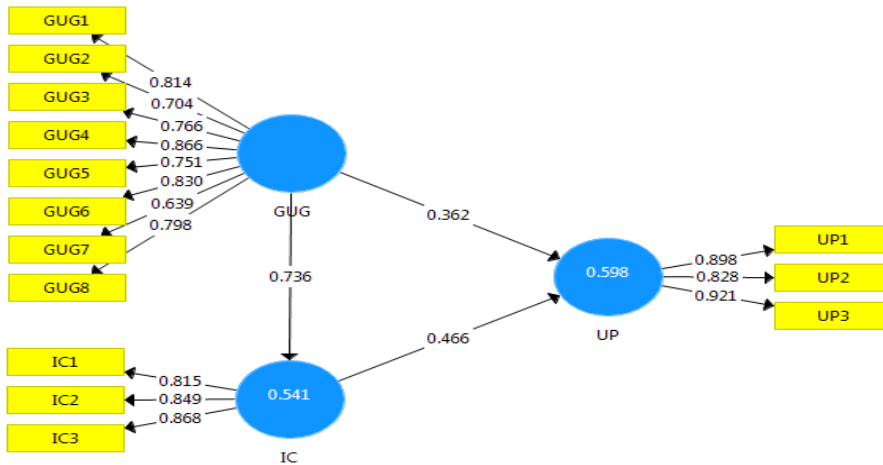


Figure 1: Structural full model results (Standardized)

Based on the test results in the picture above, each standardized coefficient (path) between variables shows positive results. Then to find out the significance of the relationship between variables obtained by the bootstrapping method with the following results.

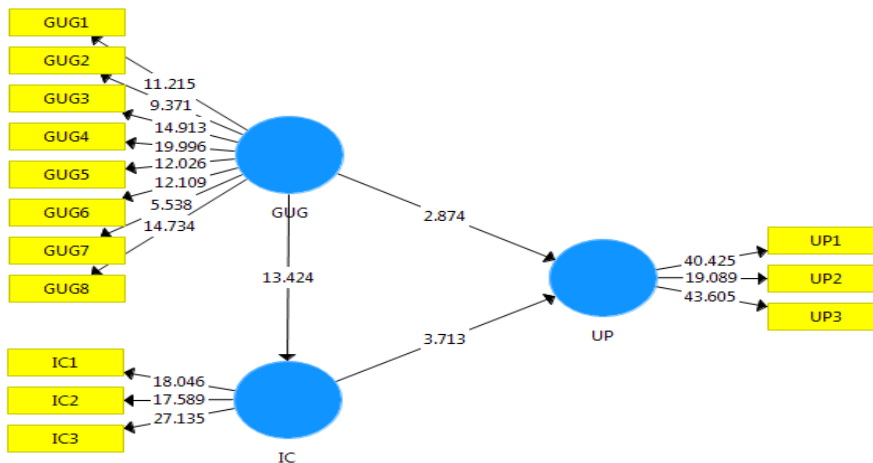


Figure 2: Structural full model results (Bootstrapping)

The following summarizes the results of the structural model estimation of the relationship between latent variables through the path coefficient test:

Table 5: Summary of Estimated Results of Path Coefficients and Statistical Tests

Relationship	Path Coefficient	t-statistic	p-value	R-Square Partial	R-Square Simultan
GUG -> IC	0.736	13.424	0.000	-	0.541
GUG -> UP	0.362	2.874	0.002	0.256	0.598
IC -> UP	0.466	3.713	0.000	0.342	

Based on table 5, GUG has an influence of 54.1% on IC. Moreover, GUG and IC have an effect of 59.8% on UP. The most dominant variable sequentially in influencing UP is IC with a path coefficient of 0.466 (34.2%), then GUG with a path coefficient of 0.362 (25.6%).

4.2.3 Hypothesis Test

4.2.3.1 Hypothesis Test 1

The path coefficient between the GUG to IC is 0.541 in a positive direction. Further the t-statistic (13.424) is higher than t-table (1.65), and the p-value (0.000) < 0.05, then at a 5% error rate (one-tail), it is decided to reject H_0 and accept H_1 . So its means that the GUG has a positive and significant influence on IC.

4.2.3.2 Hypothesis Test 2

The path coefficient between the GUG and UP is 0.256 in a positive direction. Moreover t-statistics (2.874) is higher than the t-table (1.65) and p-value (0,002) < 0.05, then at a 5% error rate (one-tail) it is decided to reject H_0 and accept H_2 . Hence it means that the GUG has a positive and significant effect on UP.

4.2.3.3 Hypothesis Test 3

The path coefficient between the IC and UP is 0.342 in a positive direction. Further t-statistics (3.713) is higher than the t-table (1.65) and p-value (0,000) < 0.05, then at a 5% error rate (one-tail) it is decided to reject H_0 and accept H_3 . Hence it means that the IC has a positive and significant effect on UP.

4.3 Discussions

4.3.1 The Influence of GUG on IC

The IC is a compelling strategic asset for improving the quality of the university. Universities need transformational leadership, namely leaders who value outstanding lecturers and education staff, impose sanctions on employees who violate regulations, provide motivation, and find positive things from the problems that arise. Transformational leadership can increase HC, namely the number of doctors and professors, national and international research publications with a high reputation, and community service. Increasing this HC also requires a fair remuneration system, and key performance indicators can be measured objectively, and conduct monitoring and evaluation. University must give appropriate rewards to those who strive to achieve excellence in research and teaching (Wahid et al., 2013). Leaders must change mindsets to create effective IC management that includes innovating (Bradley, 1997). Universities need leaders who have intelligence, creativity, and innovation in developing universities by encouraging lecturers and education staff to create innovative learning and

research systems, encourage qualifications and competency improvement and facilitate research collaboration with other universities and industry. Human resources increasingly expect challenging work assignments, competitive compensation, and promotion and development opportunities (Abbasi & Hollman, 2000). Job satisfaction will increase employee commitment and make them more open to changes and new ideas (Birdi et al., 1997). Organizations must provide adequate and appropriate training to build employee capabilities and increase job satisfaction (Bontis & Serenko, 1997).

Moreover, adequate systems and procedures in supporting the learning process, student affairs, research, and community service will help the university obtain excellent international and national accreditation.

University leaders who have intelligence, creativity, and innovation will allocate their thoughts for SC's development, namely improving facilities and infrastructure, information systems and learning facilities, and academic and non-academic information systems to support learning.

The university's social responsibility by disseminating and utilizing research results applied by the community and small-medium enterprises will improve RC. Also, alumni participation is very decisive in fostering university relations with the industries where alumni work.

4.3.2 *The Influence of GUG on UP*

The universities are landmarks of developing civilized because they reflect higher human learning in many scientific disciplines (Canibano & Sanchez, 2009, p.16). To achieve the vision, universities must have goals and missions that are in line with the vision. University staff must understand well and use the vision as a guide in their work.

Mano et al. (2014) reveal that the transformational leadership style has a significant effect on performance. Leaders having intelligence, creativity, and innovation will encourage lecturers and researchers to develop the industry with innovation, discovery, and consulting. As a result, it will have an impact on increasing revenue from research and consulting.

Improved learning and research performance must be supported by developing a conducive academic atmosphere such as lecturers, students, and other academicians to interact on campus to create a quality learning and research process. Universities also need systems and procedures that support improving the quality of learning, research, and innovation development. These systems and procedures will provide lecturers standards for conducting teaching and research to ensure quality and time.

The role of alumni also has a contribution to improving university performance. In terms of improving learning performance, alumni can share knowledge and experiences and prepare a curriculum that suits the industry's needs. In terms of financial performance, alumni participation in fundraising helps provide scholarships to underprivileged students, campus infrastructure, finance research, and community service activities, and opportunities for collaborative research and consultation with businesses and public sector organizations alumni are working.

The academic senate's role in formulating appropriate educational policies and overseeing university quality assurance policies and implementation will improve learning performance, research, and community service quality. Further, the board of trustees also has a role in providing considerations for implementing general policies and carrying out supervision in non-academic fields, which will undoubtedly impact improving financial performance.

4.3.3 *The Influence of IC on UP*

Sanchez et al. (2009) state that an adequate IC framework helps universities manage and disseminate knowledge creation to stakeholders and society. IC contributes to ensuring that learning institutions have academic excellence in providing future leaders Wahid et al. (2013). Universities must develop HC properly to improve learning performance, such as increasing the number of head lecturers, professors, and doctors. Lecturers who have good qualifications are significant in producing quality graduates with

competencies needed by the industries and entrepreneurial skills. Moreover, the adequacy of the ratio of permanent lecturers to the number of students following Indonesian government policies will provide comfort for lecturers and students in the learning process to produce effective learning.

The involvement of foreign lecturers from reputable universities will add global knowledge to students who improve learning performance. Furthermore, international students in the universities provide benefits to the learning process, including Indonesian students can experience international relationships, learn various cultures of other countries, and improve international language skills. Moreover, universities obtain additional benefits from international students' presence, such as increased reputation and tuition fee income.

Furthermore, lecturers have to increase the number of publications in reputable international journals to increase citations. University leaders must be consistent in facilitating research collaborations with reputable overseas universities.

SC is also an essential factor to support the learning and research process, such as computers, software, e-learning, online access to complete library collections, and integrated academic and non-academic information systems. Also, the university needs to allocate adequate funds to improve the learning and research competencies of lecturers. According to Bontis & Serenko (2007), human resources training will increase ability, commitment, and job satisfaction. Universities must prioritize lecturers' welfare by providing fair, objective, and appropriate incentives to improve learning and research performance. Also, universities must develop good relations with industry, society, professional organizations, and other universities. As a result, universities will provide significant benefits such as curriculum input, practical lecturers, and research collaboration to improve graduates' quality, research and innovation, and financial performance.

5. Conclusion

The study concludes that good university governance and intellectual capital each positively and significantly influence SU-LE and SU-PSA performance in Indonesia. Moreover, good university governance has a positive and significant influence on the intellectual capital of SU-LE and SU-PSA in Indonesia.

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