

Stakeholder pressure to obtain world-class status among Indonesian universities

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Abstract

The growing influence of global rankings drives higher education institutions (HEIs) across the globe to conform to the indicators and implement changes to obtain world-class status. We examine why HEIs in similar institutional environments are structured and processed differently on the ranking issue with different outcomes. By employing a qualitative method, we engaged in a 44-month study period from September 2015 to April 2019. The main data sources were interviews with 75 informants from among the various stakeholders at the Indonesian Top 11 AHEIs (autonomous HEIs) and other available secondary data. The findings show that the factors driving the change initiatives in Indonesian universities can be categorised into institutional and market pressures, respectively. Our findings also indicate that changes to obtain world-class status are highly driven by external stakeholders for the Indonesian AHEIs outside the World University Ranking (WUR) Top 500, while the AHEIs which have entered the Top 500 highly are influenced by the internal stakeholders. We conclude that different stakeholders and pressures determine the differences of change process as well as the outcomes. Therefore, these findings suggest that pressures from external stakeholders are needed for the changes among AHEIs with lowlevel WUR, while pressures from internal stakeholders are needed to maintain and increase the ranking among high level WUR.

 $\textbf{Keywords} \ \ University \ ranking \cdot Organisational \ change \cdot Stakeholder \ theory \cdot Qualitative \ study \cdot Indonesia$

Introduction

Higher education has experienced governance reforms in the last two decades, which has increased autonomy and pressure for accountability (Christensen, 2011). The growing influence of global rankings represents a new global standard for "performative accountability" (Oancea, 2008) to become a world-class university (Bak and Kim, 2015; Marques and Powell,

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2020). Despite on-going debates and critiques of "ranking regimes" (Gonzales and Nunez, 2014), it has triggered the universities to develop new performance-based systems (Sauder and Espeland, 2009; Bak and Kim, 2015), as well as implement changes ranging from internal practices to organisational structures (Marques and Powell, 2020).

The primary audience of rankings are potential students and parents, but there is a growing trend that all stakeholders are influenced by rankings (Hazelkorn, 2011). The massive attention of the media at national and global levels on rankings form opinions that affect policy making, academic behaviour and stakeholder opinions (Hazelkorn and Gibson, 2017). This is the first perspective which argues that rankings influence stakeholder opinions on the universities' performance. The second perspective argues that stakeholders provide legitimacy to the organisation and, thus, they can influence its direction (Freeman, 1984). Further, Frooman (1999) proposed that stakeholders, either internal and/or external, are altogether involved prior, during and post the change process. Therefore, it is important to understand stakeholders as sources of change in the university to obtain world-class status (Paradeise and Thoenig, 2013). Several studies have investigated stakeholders' roles on this issue, such as the faculties' disappointment on the dropping of their university ranking, forcing administrators to emphasise more on ranking (Ginsberg, 2011); the internationalisation strategies shaped by internal and external stakeholders (Castro et al., 2014); the external stakeholders' roles on universities to become institutions of excellence or, at least, reputable ones (Paradeise and Thoenig, 2013); and that governments make budget allocation based on global rankings (Hazelkorn, 2011). However, what kind of pressures and from which stakeholders (internal or external ones) that lead to the organisational changes to obtain world-class status lack of investigation, which is the purpose of this study.

Becoming responsive and proactive in satisfying stakeholders' needs is important for the universities' management to improve university reputation (Alarcón-del-Amo et al., 2016). A lack of stakeholders' support is a major determinant why organisational changes fail (Trader-Leigh, 2002), without, however, understanding the types of pressures from which stakeholders could generate lack of support from them. Further, all industries have unique indices of each stakeholder's needs (Cheng et al., 2006), and higher education also has unique types of needs to support successful changes. Therefore, by understanding these issues it could offer a different perspective for the university administrators as well as stakeholders on developing an organisational change programme to obtain world-class university status.

To answer the research question, firstly, we review the stakeholder and institutional theories in higher education and conceptualise them in the context of university ranking. Further, we introduce the research context of our study, the 11 autonomous higher education institutions (AHEIs) in Indonesia, mandated by the government to obtain world-class status. Secondly, we discuss the study's data and methods. We conducted expert interviews complemented with various sources of news articles and government sources. Thirdly, we reconstructed the stakeholders' pressures by using Gioia's methodology (Gioia et al., 2013). Further, we categorise the findings into four quadrants to illustrate the different level of stakeholders' pressures and the consequences on ranking performance of 11 AHEIs.

There are several contributions of our study. First, by investigating what kind of stakeholders' pressures are faced by the universities, we extend the stakeholder theory on the global ranking of universities (Dobija et al., 2019; Freeman, 1984). Specifically, we answer the call of Parmar et al. (2010) to address why universities in similar institutional environments are structured and processed differently on the ranking issue with different outcomes. Second, we complement prior studies that merely identify internal and/or



external stakeholders' pressures on university rankings and lack of specifications (e.g., Paradeise and Thoenig, 2013; Castro et al., 2014). Third, many studies have been done to determine stakeholders' pressures, particularly from the government, on increasing world-class university status in South-East Asia, such as Singapore (Sanders, 2018), Malaysia (Tan and Goh, 2014), Thailand (Rungfamai, 2016), and Vietnam (Nguyen et al., 2016). As the largest country and biggest young population in the region, understanding the strategy of Indonesia's universities to obtain world-class status based on stakeholders' perspectives is an important contribution of our study to the literature.

Literature review

Stakeholder theory

Stakeholder theory has developed significantly in terms of explaining the nature of the interactions between stakeholders in relation to the decision-making in an organisation (Mitchell et al., 1997). Stakeholders are groups or individuals who can influence or be influenced by the strategic outputs of an organisation (Freeman, 1984). They have an interest in the organisation's activities and influence them (Savage et al., 1991). From the perspective of higher education, stakeholders are all of the internal and external parties who influence or are influenced by the actions, behaviour and policies of the university (Burrows, 1999).

Studies note that there are various categories of stakeholders. Mitchell et al. (1997) identified three types of stakeholder based on their attributes, namely power, legitimacy and urgency. The strength of each stakeholder's influence depends on the extent to which the stakeholders match these three attributes. Jongbloed et al. (2008) put forward an example of the government, which is a definitive stakeholder in a tertiary institution by having power, legitimacy and the urgency for HEIs. Further, Mainardes et al. (2012a) categorised stakeholders into regulatory stakeholders, controller stakeholders, dependent stakeholders, passive stakeholders and partner stakeholders. In addition, they explained that regulatory stakeholders and controller stakeholders have a stronger influence on tertiary institutions than dependent stakeholders and passive stakeholders, while partner stakeholders exert a balanced force over HEIs. Any study of the ranking in an HEI needs to be done by including all of the relevant stakeholder elements (Goglio, 2016), because each stakeholder has different interests related to the ranking of the HEIs.

Institutional theory

Institutional theory is based on the process of homogenisation, namely isomorphism (DiMaggio and Powell, 1983; Paauwe and Boselie, 2003). There are three institutional isomorphic mechanisms (DiMaggio and Powell, 1983): coercive, mimetic and normative. Further, they state that coercive isomorphism is a pressure caused by the impact of formal and informal pressure, which results from the dependence of the organisation on other organisations. The pressure comes from stronger organisations, such as the government, to act in accordance with certain specified behaviours; therefore, coercive pressures can originate from law/legal, which influence the university (Dobija et al., 2019).

Mimetic isomorphic is a process of imitation of an organisation towards other organisations or modelling other organisations against their own organisation (DiMaggio and



Powell, 1983). It relates to the uncertainty faced by the organisation, such as ambiguous goals and environment, then emerges the need to imitate other organisations that are perceived more legitimate and successful (Li and Ding, 2013). According to van Vught (2008), ranking instruments provided by ranking agencies result in pressures for higher education institutions with mimicking behaviours to institutions that have a better position. Normative pressure is pressure stemming from norms of conduct of professionalisation and is related to expectations of how organisations and individuals within a profession have a certain behaviour (DiMaggio and Powell, 1983) by strengthening norms and values and internalise it through formal training of their members (Paauwe and Boselie, 2003).

Research context

Since 2014, the government of Indonesia has altered the status of 11 state universities by declaring them to be AHEIs. The universities are Universitas Indonesia (UI), Institut Teknologi Bandung (ITB), Universitas Gadjah Mada (UGM), Universitas Airlangga (UNAIR), Institut Pertanian Bogor (IPB), Universitas Padjajaran (UNPAD), Universitas Diponegoro (UNDIP), Institut Teknologi Sepuluh Nopember (ITS), Universitas Brawijaya (UB), Universitas Hasanuddin (UNHAS) and Universitas Sebelas Maret (UNS). Having AHEI status ensures autonomy for these tertiary institutions, allowing them to manage their academic and non-academic activities, including financial matters, more independently, transparently and in a more accountable way. The autonomous status also grants the 11 AHEIs control over managing their human resources in terms of both academic and non-academic staff, as a business entity, through endowment funds, as well as through academic appointments, including managing the opening and closing of their study programmes.

The mandate to be in the world university ranking (WUR) Top 500 for these 11 AHEIs is expected to be a stimulus for HEIs in Indonesia to increase their global reputations through the QS WUR, the ranking institution used as the standard. The President of the Republic of Indonesia, through the Ministry of Research, Technology and Higher Education (MRTHE), has set out a Strategic Plan whereby five universities in Indonesia had to be included in the WUR Top 500 in 2019. The other six universities are expected to enter the WUR rankings in 2024 (Ristekdikti, 2017).

The progress of the change initiatives of the AHEIs focusing on reaching WUR status can be tracked through the number of publications and the performance of each AHEI in terms of ranking from 2015 to 2018. Table 1 presents the productivity of the AHEIs in the Scopus database and shows that changes have been made in the level of scientific productivity for each AHEI. Table 2 shows that, in 2018, only three universities were included in the top 500, namely UI (292), ITB (359) and UGM (391). This means that the eight other universities have not yet entered the WUR Top 500 ranking as mandated by the government.

Research method

Case studies are used to explore a contemporary phenomenon in-depth and in real-world contexts, especially when and where the boundaries between the phenomena may not be clear. The data collection for a case study method is usually done by combining archives, interviews, questionnaires and observations (Yin, 2018). We used longitudinal data from 2015 to 2018 which reflected the changes in the 11 AHEIs aimed at obtaining a WUR in Indonesia.



Table 1 Scientific productivity of the 11 AHEIs in Indonesia

No.	Higher Education Institutions	2015	2016	2017	2018	Total (2015– 2018)	Total publications (1990–2018)	2015–2018 output as a % of total output 1990–2018
1.	Universitas Indonesia	661	1105	2429	3283	7478	11,226	67%
2.	Institut Teknologi Bandung	1027	1404	1716	2018	6165	12,674	49%
3.	Universitas Gadjah Mada	567	1062	1264	1656	4549	7490	61%
4.	Universitas Padjadjaran	231	340	559	903	2033	2937	69%
5.	Institut Pertanian Bogor	476	614	741	872	2703	4730	57%
6.	Universitas Airlangga	126	238	467	754	1585	2466	64%
7.	Universitas Diponegoro	241	399	1019	1688	3347	4310	78%
8.	Institut Teknologi Sepuluh Nopember	406	559	1011	1274	3250	4503	72%
9.	Universitas Brawijaya	371	438	683	1037	2529	3485	73%
10.	Universitas Sebelas Maret	147	419	711	1157	2434	2833	86%
11.	Universitas Hasanuddin	175	237	378	731	1521	2345	65%

Retrieved date accessed; October 14, 2018 from https://www.scopus.com

We employed multiple data sources, including people involved in the change processes themselves as well as publicly available documents and publications. The primary data source was semi-structured interviews with stakeholders from 11 AHEIs in Indonesia, including lecturers, AHEI administrators (Deans, Vice Deans, Department Heads and Study Programme Coordinators), alumni and students. The process involved setting up interviews, which required the research team to formally request the involvement of each AHEI. This was then followed up by setting a time and place for the interviews. The total number of participating stakeholders was 75 people. The interviews were conducted in each AHEI, and each interview took 30–45 min. We obtained consent from informants, either written or verbal. Verbal consent is considered culturally appropriate in Indonesia, especially among senior management team members of the 11 AHEIs that discussed about their organisational change issues (Grubbs, 2001). During the interviews, the informants discussed the current challenges and changes in their university with regard to obtaining world-class status.

The secondary data source was online news media as an initial step of this research. Referring to Funk's (2016) observations of media analysis, we started with a pilot search by conducting a review of the articles relevant to the topic and observing what keywords were used in the studies. There were 4 years to focus on, namely 2015–2018. For the next step, the 10 most popular online media outlets in Indonesia based on the Alexa rankings were selected (Table 3). We continued by searching each online media database for certain specified keywords (i.e., world-class universities, top universities, ranking universities and university strategies), followed by short-listing the collected articles and creating a database. The articles were then compared and contrasted for analysis. In total, there were 244 collected news articles highly relevant to the issue of stakeholder pressures. A second analysis was then undertaken, which focused on the online versions handled through NVIVO.



n/a

No.	Higher Education Institutions	2015	2016	2017	2018	2019
1	Universitas Indonesia	358	325	277	292	296
2	Institut Teknologi Bandung	439	405	331	359	331
3	Universitas Gadjah Mada	555	525	401-410	391	320
4	Universitas Padjadjaran	n/a	n/a	n/a	651-700	751-800
5	Institut Pertanian Bogor	837	803	751-800	701-750	601-650
6	Universitas Airlangga	824	820	701-750	751-800	651-700
7	Universitas Diponegoro	701-750	701-750	701-750	801-1000	801-1000
8	Institut Sepuluh Nopember	701-750	701-750	701-750	801-1000	801-1000
9	Universitas Brawijaya	701-750	701-750	701-750	801-1000	n/a
10	Universitas Negeri Sebelas Maret	n/a	n/a	n/a	n/a	n/a

Table 2 Ranking of the 11 AHEIs in Indonesia—QS World University Ranking

Retrieved date accessed; July 20, 2019 from https://www.topuniversities.com/qs-world-university-rankings

n/a

n/a

n/a

n/a

We also employed a third data source, consisting of government sources, WUR task force team meeting minutes and internal email correspondences. These documents make up a history that captures how certain strategies develop and change over time (Sonenshein, 2010). Table 3 summarises the data used in this study.

The NVIVO programme was used to assist the analytical process. The data analysis was informed by grounded theory in which the coding process follows certain steps from Gioia's methodology (Gioia et al., 2013). Open coding was done by identifying, labelling and categorising the common phenomena described in the text. This was continued by axial coding linking the categories to the sub-categories, in addition to testing the relationship to the data and selective coding. This was conducted by pooling the categories around the core categories (Corbin and Strauss, 1990). Selective coding was then carried out only on the variables related to the core variables used in parsimonious theory. The coding process consisted of several iterations and repetition categories and was stopped when each category was sufficiently supported by the coding results and when no new information emerged from the data.

Results

11

Universitas Hasanuddin

The results indicate that there are several important concepts for the stakeholders to grasp to be able to drive change within the AHEIs; these are regulatory, competitive, reputational and employability pressures, as shown in the following data structure (Fig. 1).

Regulatory pressures

One of the pressures identified in the analysis is regulatory pressure, which represents factors emanating from government in the form of regulations, which push all AHEIs to improve their ranking achievements. Within the context of this pressure, two main factors are perceived to be influential: financial pressures and academic pressures.



Table 3 Data inventory

No	Data type	Quantity	Original data source
1	Semi-structured interviews	75 informants	University administrators (Deans, Heads of Department, Heads of Study Programmes), students, educational staff and alumni from the top 11 universities in Indonesia.
2	Online media	244 articles	CNN Indonesia, detik.com, kompas.com, kumparan.com, liputan6.com, merdeka.com, okezone.com, sindonews.com, tempo.co, tribunnews. com (2015–2018)
3	Government documents and minutes from the meetings	72 Archives	Official government letters, minutes from meetings and the monitoring of the Special Task Force of World Class University (WCU) Team, in addition to the Ministry of Research, Technology and Higher Education (2015–2018)

Financial pressures

The biggest pressure comes from the government, because the AHEIs are under MRTHE. Since 2015, the government has allocated an annual budget to the 11 AHEIs to create a work programme for them to improve their ranking. If the ranking does not increase, then the budget for the AHEIs will be transferred to other AHEIs. As stated by the National Task Force Leader of WUR:

The friends who have been given the opportunity and who have not reached the goal... their budget will be deducted and given to friends who have a better delta. This is done in order to maintain and improve the ranking towards the 500 top WUR version of OS. (Government document).

This study found that budget cuts are not the only financial pressure. In one of the AHEIs, the university administrators can reduce the bonus of the study programme leaders who do not meet their target performance. In another example, the compensation of one of the deans was reduced due to a lower number of academic publications than the expected target. The deduction is also experienced by individual lecturers. The Regulation of the MRTHE Number 20 of 2017 threatens the termination of a professional allowance and honours for the professors (associate and full professors) if they do not publish at least three scientific works in international journals or at least one scientific work in a reputable international journal within three years.

Efforts to improve the quality of research have been encouraged by the MRTHE Circular Letter No. 039/M/III/2016. This explains the obligations of each AHEI to allocate for research purposes a minimum of 25% of the tuition fee payments received by the AHEIs. Through this regulation, every AHEI can increase its research funds without depending on government funding. This enables every AHEI to improve the quality of its research, especially in relation to achieving WUR.

Academic pressures

According to the Law of the Republic of Indonesia No. 12 of 2012, each HEI has to perform the tridharma services: education, research and community services. Since research has greater



weighing on university ranking, then all of the AHEIs emphasise on boosting research publications, which previously have been less supported. As stated by the Minister of MRTHE:

At the professorial level, we require that every professor conducts an international publication once a year. The associate professor must have been internationally published once every two years (okezone.com).

In addition, according to the Minister of Education and Culture No. 49/2014, professors who do not manage to publish articles in reputable journals cannot be the main supervisor for doctoral students. This creates pressure for the professors because their credibility is brought into question. In accordance with the Ministry of and Bureaucratic Reform Number 17/2013 (which applies to all Indonesian lecturers) concerning lecturers who want to be promoted as an assistant, associate or full professor, they must have articles published in international scientific journals.

Apart from the types of regulatory pressure, this study found that those involved in the decision-making processes at the national level also contribute to the academic pressures involved. Certain AHEIs have lecturers that are assigned to work in government ministries, even the minister him/herself. This creates pressure, as these people dominate the decision-making processes. The conditions applied to UI, UGM and ITB; where many existing and former high-ranking officials serve as internal stakeholders (either Board of Trustees or lecturers) and demand for world-class status with position increases every year. In contrast, in other AHEIs who have fewer high-ranking officials, the academic pressures from internal stakeholders are less demanding.

Competitive pressures

For HEIs, the rankings in the QS WUR can be seen of as a proxy for a university's position compared with other universities. The high achievers set a benchmark for the others to follow or mimic to achieve equal or even better position every year. This mimicking process creates competitive pressures related to the way that the HEIs need to improve their perceived academic quality based on the global performance standards.

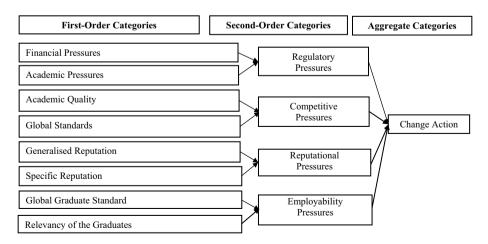


Fig. 1 Data Structure



Academic quality

The ranking position shows the difference in quality based on pre-established criteria, of which stakeholders are aware. As stated by one of the alumni in an AHEI:

As an alumnus, I feel... for example, when IPB has a good ranking, we are proud, and spread our reputation out like that. When IPB has a poor ranking, we are angry, even though in our hearts we are still proud of our alma mater (Informant 67).

From the stakeholder perspective, the ranking shows the position or perceived academic quality of a focal university relative to competing universities. We found that university leaders pushed the units within the university by implementing performance-based management with clear performance contracts that refer to WUR indicators. The pressure to fulfil the expected WUR Top 500 target not only drives the entities within the 11 AHEIs to align their programmes and activities on ranking but is also perceived as having a greater impact on the way the universities and its units operate their core activities.

This highlights the fact that rank is used to represent quality. Each tertiary institution is assessed using the same criteria that are applied globally. The university ranking makes it easier for the universities to see and observe the academic quality of other universities as well. In summary, the 11 Indonesian AHEIs continuously compare and compete with each other and other global universities to obtain higher perceived academic quality—world-class status.

Global standards

The ranking institution explains the ranking methodology and publishes the university ranking annually; then, universities around the globe mostly have similar programmes due to global standards of performance indicators, with different priorities depend on the resources and strategy that they employ. This applies in an AHEI, as stated by one of the lecturers:

We have to conduct internationalisation... to introduce ourselves and then to follow them when they are playing games. They have QS indicators ... and so on, whether we want to or not (Informant 73).

For universities, the ability to improve on these indicators represents their ability to be "up to the game" to lift their reputation globally. QS WUR's indicators have become a standardised measurement that drives them to implement any necessary changes. For example, before the MRTHE launched the WUR programme, 11 Indonesian AHEIs had few numbers of international staff and students (less than 1000 international students in total). Recently, the number of international students increased substantially to more than 10,000 for 11 AHEIs. The obvious example is academic publications, which, from 2015 to 2018, contribute from 49 to 86% of the total academic publications for the entire years since the inception of AHEIs. The success depends on the ability of the 11 AHEIs to implement changes based on these performance indicators.

At a national level, to help to achieve this standard, MRTHE set up a task force responsible for developing, disseminating, and executing programmes considered to be relevant to improving the ranking of the 11 AHEIs in Indonesia. Different priorities for AHEIs have been set up by the task force team, in which the Top < 500 AHEIs focus on developing



reputation indicators, while the Top > 500 AHEIs focus on fulfilling the minimal threshold to be as good as the Top < 500 universities (especially on academic publications and internationalisations indicators).

Reputational pressures

Having high university ranking is desirable due to positive reputation not only for the internal stakeholders but also external stakeholders, particularly the alumni and their parents. We found there are two reputational pressures engendered by stakeholders, generalised and specific reputations.

Generalised reputation

We found that being a reputable university is proxied by the university's position in the QS world rankings. As stated by the Secretary General of MRTHE, the expectation to be ranked among the 500 top universities is expected to be visible globally. Similarly, one of the students in an AHEI stated:

In my opinion, whether I want it or not, it must have a good reputation ... This is one of the ways to get a good reputation... by entering the global market (Informant 10).

Prior the collaboration, the focal university will seek information as to whether their potential partner has equal or higher ranking, and, of course, higher ones are preferable. When the potential partner has lower ranking, then its academic quality is perceived lower by the focal university and reduces the willingness to engage in collaborations. For students as well as the graduates, it will open up opportunities for them to do exchange programmes or in pursuing graduate level studies in global HEI partners or doing an internship or even getting hired by multinational corporations when their university enters the WUR Top 500.

Specific reputation

With regard to organisational reputation, we found that the AHEIs also equally emphasised being globally reputable for particular attributes. For example, UGM being known for Development Studies, since the QS WUR by Subject ranked it #51-100 in the world, while ITB reached #101-150 in the world for Art and Design. The university ranking by subject is also believed to improve the AHEIs' reputation, particularly on a particular subject that the university excels in. As stated by one of the deans of an AHEI:

That ranking ... even though we do not like it, it is one of the ways for them to know us, including being known to the world ... When we display expert A and expert B, this is the proof (Informant 59).

This implies that the higher ranking on a particular subject could attract the best talents, either faculties or students, from Indonesia and around the world. The ranking on a specific attribute also facilitates research donors as well as philanthropists as to which university and specific subjects they can donate their money. In addition, world-class researchers can use the ranking to find potential research partners who are recognised and acknowledged globally by other academics. Consequently, once their expertise and qualifications are acknowledged globally, the reputation held by the AHEIs improves.



Employability pressures

One of the crucial findings relates to the competitiveness of the graduates. The ranking of each university reflects the fact that the university's graduates are on a par with other HEIs that are ranked at a similar level. In this study, the employability pressures consist of global graduate standards and relevancy of the graduates.

Global graduate standards

Quality education was found to be a crucial issue for a university aiming to become a WUR. For the stakeholders, holding the status of a world-class university represents a high academic quality as good as other highly ranked universities in abroad. As stated by one of the lecturers in an AHEI:

The essence of our mandate as a university is that of ... (to educate) ... the graduates can compete and have a level of international competitiveness. That is why it must be a world-class university because.... has good competitiveness later on internationally (Informant 22).

For the 11 AHEIs, they agreed that students are one of the most important stakeholders for universities in which all of the stakeholders are responsible for utilising the best process to produce the expected outcomes (competences). The employer's reputation indicator encourages the universities to conduct quality educational processes to produce graduates that can be accepted in both the national and international markets.

For the student stakeholders, getting a quality education is important and, more importantly, being able to work in a global setting becomes a plus point. Crucially, since the global rankings are emphasised more on internationalisation, then the graduates are expected to be equipped with global perspectives and global networks. In addition, since the criteria of QS WUR include surveys among employers, thus higher university ranking represents greater favourability and preferences of the employers regarding a university's graduates. In summary, stakeholders pressure for world-class status to increase the employability of its graduates, either in the national or global job market.

Relevancy of the graduates

To become a world-class university, the graduates need to be acknowledged not only nationally but globally as well. This study found that the 11 AHEIs have engaged not only with their global partners but also with various industries, both nationally and globally. As stated by one of the Head of Study Programmes:

The quality of the graduate students is adjusted to the international trend. For example, we are with BISI (BISI International Co.). What kind of product does BISI want... to produce the product, of course, the research must be good. What kind of technology, then the teaching method ... all three of them have to be changed. I think I have to globalise ... so I know what the progress is to balance the graduates' competitiveness (Informant 36).

One effort to encourage the change towards becoming a WUR is through adjusting the tridharma services to align with the needs of the internationally recognised industry



sectors. To that end, universities should harmonise their teaching, research and community services in order to meet the needs of the industrial sector. This encourages the 11 AHEIs to accommodate industrial aspects into the teaching-learning process by inviting business actors, either local or global ones, into their classrooms as well as encouraging them to introduce a more practical curriculum. It would also enhance the community services by elaborating on the technology applied in the industrial sector in the setting. When the education processes execute well and are highly relevant to the society and the industry, then the highly ranked universities reflect this.

Discussion

Institutional vs. market pressures

We regard stakeholder pressures as the internal and external stakeholders who influence the organisational changes to obtain world-class status among Indonesian AHEIs. Our findings indicate there are two pressures generated as well as used by the stakeholders to influence the 11 AHEIs, namely institutional and market pressures. For institutional pressures, these are originated from regulatory and competitive pressures. Even though the status as autonomous institution means there is bigger flexibility on academic and non-academic issues, to a certain degree they remain dependent on the government as related to public funding, which is consistent with the regulatory stakeholders' concept of Mainardes et al. (2012a). Further, since the human capital becomes the strategic resources for the nation, thus academic pressures from controller stakeholders (Mainardes et al., 2012b) become one of the major pressures faced by Indonesian AHEIs to change to obtain world-class status. These regulatory and controller stakeholders (Mainardes et al., 2012b) form the regulatory pressures and are similar to coercive pressure (e.g., DiMaggio and Powell, 1983). In terms of competitive pressures, stakeholders expect the 11 AHEIs to imitate other HEIs perceived as more legitimate and successful (Li and Ding, 2013), and are akin to mimetic pressure (e.g., DiMaggio and Powell, 1983). The university ranking is the obvious and legitimate performance measurement to enter the WUR Top 500 with clear performance indicators (van Vught, 2008). In other words, by increasing the position in the university ranking, it pressures the AHEIs to copy ideas, actions, systems, processes and implementations of changes (März et al., 2017) to be perceived as high academic quality and follow the global standards (Fig. 2).

For market pressures, we identify pressures from stakeholders related to reputational and employability issues. The outcomes of the university are knowledge and graduates able to contribute to the development of society, locally and globally. To do so, stakeholders believe that the WUR Top 500 enables AHEIs to have generalised and specific reputation, which forms reputational pressures. It is consistent with the concept of recognition from Merton (1973) that university status (in this case world-class status) reflects the honorific needs of the university, department, or members of the faculty from their stakeholders (Paradeise and Thoenig, 2013). Both external and internal stakeholders demand reputation (recognition—Merton, 1973) as the source of university value from a given university to the society (Whitley, 2011). In addition, we regard generalised reputation as equal with "prominence" (Rindova et al., 2005) or "being known" of organizational reputation (Lange et al., 2011). Since reputation is embedded within outsiders' familiarity and judgement, it can be enhanced by influential third parties, in this case ranking institutions (Rindova et al.,



2005). Specific reputation, on the other hand, represents the "componential perspective on organizational reputation" (Fischer and Reuber, 2007) in which stakeholders' judgements with respect to "the firm's demonstrated ability to create value" (Pfarrer et al., 2010) on a specific issue, context or process (Mahon, 2002) are classified as 'being known for something' (Lange et al., 2011). In terms of employability pressures related to global graduates' standard and relevancy of the graduates, the needs for graduates to be employed in reputable and prestigious institutions, either nationally or globally, becomes the global need and university ranking provides an easy and legitimate tool for the employers to recruit the most capable ones (Miotto et al., 2020).

Internal vs. external stakeholders pressures

We identified that external pressures come from government, society and the alumni, while internal pressure comes from the administrators, lecturers and students. We found that there are differences in the sources of pressure for the top 500 AHEIs and those that are not in the top 500. The top 500 institutions were identified as having higher internal pressures, while the non-top 500 institutions were more characterised by external pressures.

Lecturers, students and administrators play different roles when creating internal pressure. Using UI as an example, its strongest internal pressure was related to the lecturers not only those on the board of trustees but also those who currently serve as ministers, director generals or the governor of the Indonesian Central Bank. This is in addition to lecturers who serve or who are assigned to various ministries in Indonesia. These highly positioned individuals dominate the UI's strategic decisions. As for the students, having a good academic reputation is important when they are applying for jobs and when continuing their studies.

We also found that the non-top 500 AHEIs are perceived to experience higher external pressures. For example, this could be in the form of the alumni's negative responses to their alma mater if the AHEI's ranking decreases. This is because industries—when the alumni are looking for a job—will pay attention to the reputation of the AHEI. The better the reputation, the better the chance of the graduate being hired. In addition, higher external pressure comes from the government in the form of financial pressure where the non-top 500 AHEIs are more dependent on the state budget than those in the top 500.

The strategic change of several AHEIs has not been as expected, as the pressure in the AHEIs has not been high enough. The strategic changes have, thus, been less successful. Other factors which inhibit AHEIs are decisions taken in the past–*path dependent* (Stensaker et al., 2012) of the top 500 and non-top 500 AHEIs. Studies on path dependency (Sydow et al., 2009; Garud et al., 2010) indicate that learning effects, such as accumulated skills and expertise of faculty members, are such matters. For example, publications that represent accumulated expertise of faculties on UNAIR, as a non-top 500 AHEI in 2015, are accounted by only having 623 publications. At the same time, a top 500 AHEI, UI, had 5,797 publications, UGM had 3,605 publications and ITB had 6,107 publications. The accumulated networking skills among faculties is also poorly formed, especially globally oriented skills. For example, IPB in 2015 had only 197 foreign students and 106 foreign lecturers. While some progress has been made, as IPB now has almost 532 full-time international students and over 322 international staff, this still shows that the non-top 500 university skills and expertise are far below the necessary threshold.



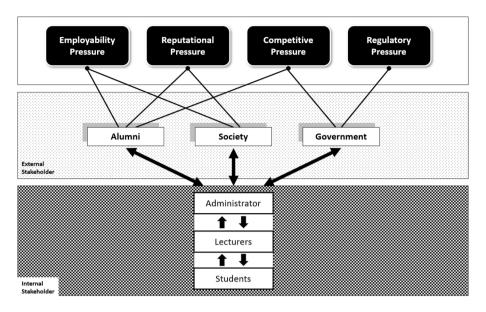


Fig. 2 Stakeholder Pressures Model

Internal vs. external stakeholders and institutional vs. market pressures

Figure 3 summarises the relative importance of internal vs. external and market vs. institutional pressures. Quadrant I describes a situation of higher internal stakeholder pressure than external stakeholder pressure, in addition to high institutional pressure, but low market pressure. The higher internal pressure comes from the internal stakeholders, namely the lecturers who currently have structural positions in various institutions and ministries. In accordance with the Government Regulation on lecturers No. 37/2009, the government can appoint lecturers as structural officials outside of tertiary institutions. Through these structural positions, lecturers have a greater influence over the organisation. This is because they have more power, legitimacy and a sense of urgency (Mitchell et al., 1997). These stakeholders dominate a particular role in the AHEI's strategic decisions, and they have authority in terms of allocating the budget in the agencies and ministries that are used to push the programme forward, thus encouraging AHEIs to obtain world-class status. This causes the AHEIs to be less dependent on the government budget (especially from MRTHE). This situation has occurred among the top 500 universities, namely UI and UGM for 5 years (2014–2018). The amount of the budget from the government through the state budget on average is only equal to 24% and 32%, respectively. This percentage shows as having a low number among all of the AHEIs in Indonesia. It also shows that regulatory pressure in the form of financial pressure is not so strong in the top 500 AHEIs. As a flagship university in Indonesia, UI, together with UGM and ITB, maintains superior position and less market pressure.

Quadrant II describes a situation where there is more external pressure than internal pressure, in addition to high institutional and high market pressures. A higher external pressure comes from the government and it is related to financial pressure, namely the budget allocation for AHEIs. Most public universities are still dependent on the national budget (APBN) provided by the government for their operational activities. This



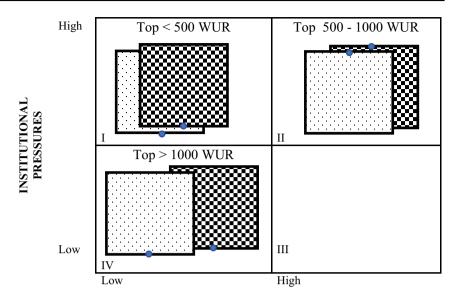
dependency puts pressure on the AHEIs to meet the set performance targets. In most countries, like Indonesia, the government remains the main funding provider (Marginson and van der Wende, 2016) especially for state universities, where the government is the definitive funder (Mainardes et al., 2012a). Therefore, each year, the administrator enters into a contract with MRTHE regarding the amount of budget and the performance targets that are set. The more that the AHEIs depend on the government budget from the national budget (APBN), the stronger the pressure placed on the AHEIs. For example, for 5 years (2014–2018), UNAIR had a budget amount from the government that was, on average, 41%. This shows that the regulatory pressure originating from the government has a greater role. Quadrant II also explains that the high market pressure is where the WUR Top > 500 are driven by the alumni's negative responses to their alma mater if the AHEI's ranking falls. This is because the alumni have an interest in the AHEI's reputation when they are looking for a job. The higher market pressure in this quadrant is also caused by the SKALU category (Sekretariat Kerjasama Antar Lima Universitas-Secretariat of Cooperation Between Five Universities), which, founded in 1976, consists of the five top universities in Indonesia: UI, ITB, UGM, UNAIR and IPB, that represent the top ranking in Indonesia. When the AHEI was previously included in the SKALU, there is a high expectation to enter the Top < 500; consequently, the market pressure is high.

Quadrant III does not explain the situation of the AHEIs' pressures in Indonesia, which is representing private HEIs in Indonesia (with lack of financial support—low institutional pressure) which are generally more expensive, thus the market requires better reputation and employability among its graduates. Finally, Quadrant IV explains a situation where the internal and external stakeholders' pressures are low, in addition to low institutional as well as low market pressure. AHEIs who occupy this quadrant include UNS and UNHAS, respectively. Even though they are highly dependent upon national budget, for 5 years they have had an average of 50% and 48%, respectively; the path dependency played a major role in their current position. For example, Hasanuddin has enjoyed the status of the best university in eastern Indonesia since its inception and, thus, market pressure from the alumni as well as society is low. Further, greater dependency on the government's budget is regarded as the government's obligation to make equal development between Java island the top 10 AHEIs are on this island (where the Indonesian capital has been located since Independence Day with more than 80% of economy size) and others (16,671 islands). In the case of UNS, in close location with UGM (Top < 500 WUR) and UNDIP (Top < 800 WUR), it creates less pressure from the market (since the alumni as well as the society understand the condition). Although highly dependent upon national budget, understanding the condition (faculties and supporting facilities) makes the government permissive on their achievement (low institutional pressure). In addition, these two AHEIs are never included in the SKALU category, and, thus, market pressure is found to not be high.

Conclusion

This study answers the question about what kind of pressures from stakeholders (internal or external ones) lead to the organisational changes to obtain world-class status among Indonesian AHEIs. The findings indicate that there are both institutional and market pressures originated from stakeholders influencing the Indonesian AHEIs to make changes aimed at improving their global reputation. The institutional pressures





MARKET PRESSURES

Note:

= internal stakeholder pressures
= external stakeholder pressures

Fig. 3 Institutional and Market Pressures

consist of both regulatory (financial and academic pressures) and competitive pressures (academic quality and global standards), in which the two closely correspond to coercive and mimetic pressures (DiMaggio and Powell, 1983; DeCramer et al., 2012). The market pressures consist of reputation (generalised and specific reputation) and employability pressures (global graduate standard and relevancy of the graduates). Further, we conclude that different origin (either internal or external stakeholders) and types of pressures (institutional and market pressures) have different outcomes. The lower world-class status of AHEIs occurred when the external and internal stakeholders were less intertwined, thus generating fewer institutional and market pressures The dominant pressures from external stakeholders are effective for AHEIs to initiate and implement change to obtain world-class status, since it can make the internal stakeholders conform to the pressures and perform accordingly. The findings are consistent with Sydow et al. (2020) that exogenous influence—external stakeholders creates opportunities to path-breaking, in this case, to obtain world-class status. On the contrary, our study indicates that AHEIs with dominant internal stakeholder pressures are effective to enter and maintain the world-class status (even among the WUR Top 300). Better world-class status is also the result of strong and long path dependence of those three AHEIs on conforming and practising global ranking indicators; thus, performance management systems are already in place (DeCramer et al., 2012).



Academic implications

Reflecting on the findings, there are several academic contributions that have been identified. First, we respond to Jongbloed et al.'s (2008) recommendation that more research is needed using the stakeholder theory perspective in the context of higher education. By understanding types of pressures (institutional and market pressures) generated by internal and external stakeholders, we also answer the call of Cheng et al. (2006) that higher education also has unique pressures from its stakeholders to support the successful changes.

Second, we combine the perspective of stakeholder theory (e.g., Frooman, 1999) and institutional theory (e.g., DiMaggio and Powell, 1983). As discussed by Greve and Teh (2018), the AHEI administrators are mostly aware and believe that their actions are taken for granted with less discussion about the choices that they have on implementing any change initiatives; depended upon the origin and the strength of pressures that stakeholders generated. We exhibit that there is a broad range of potential pressures for AHEIs to initiate and implement the change initiatives. Further, we explicate implementing performance management systems as part of change initiatives to ensure social legitimacy from its stakeholders, which is consistent with the neo-institutional point of view (Paauwe and Boselie, 2003; DeCramer et al., 2012).

Finally, the results of this study make different contributions, especially compared with the similar studies for other Southeast Asian countries. The Malaysian government gives freedom to its universities to allow them to determine their priorities to become a world-class status (Tan and Goh, 2014). The Thai government increases the budgetary allocation so that the universities can create their strengths in various fields of research and build their research prestige (Rungfamai, 2016). The Vietnam government prioritises university autonomy and uses English as a key element of its internationalisation strategies as well as developing partnerships with high-ranking universities (Nguyen et al., 2016). The Singapore government is encouraging its HEIs through abundant funding, and it focuses on each institution's competences in a particular field (Sanders, 2018). We offer a different experience focused on the process of obtaining world-class status among the top universities in Indonesia. Indonesia is predicted by PricewaterhouseCoopers to become the fifth-largest economy in 2030 (Brinded, 2017).

Managerial implications

The managerial implications of this study are three-fold. First, there is a need to integrate the stakeholders' preferences into the AHEIs' strategic decisions. The findings show that the drive to make changes to obtain world-class status comes from both the internal and external stakeholders, in the form of institutional pressures and market pressures. Organisations need to respond accordingly depending on which pressures and where they come from, and aligned with McKay (2001), that organisations need to respond to. The administrators may use the application of AHP/ANP (Turan et al., 2016) to prioritise which pressures and where they come from and implement change initiatives to obtain world-class status.

Second, the understanding of the stakeholders as well as the pressures' origin, either internal or external stakeholders (Fig. 3), is an important resource for the organisation that provide guidelines for the administrators. For the AHEIs outside the WUR Top>1000 (Quadrant IV), to make effective changes on obtaining world-class status, the administrators may use strong external stakeholder pressures. They can ask the help of government



to develop higher institutional pressures, such as in terms of budget, so that internal stakeholders may cooperate and support the change initiatives. The pressures from alumni, employers and the society may also become the alternatives to provide market pressures. When the change initiatives deliver promising outcomes, then the scheme in Quadrant I can be used.

Third, the AHEI leaders must establish engagement and contributions from external stakeholders, particularly the government, philanthropists, alumni and society. This is due to the fact that even though the Indonesian government grants autonomous status, it still needs a substantial investment from the government (similar to the Brain 21 project in Korea (Shin, 2009), Project 211, Project 985 and Project C9 in China (Yang and Welch, 2012) and the Accelerated Programmes for Excellence in Malaysia (Tan and Goh, 2014)). The reason is that the growing influence of global rankings increases the competitiveness among universities around the world with substantial support from the government, since the world-class status of HEIs also represents the country's prestige (Bak and Kim, 2015).

Limitations and future research studies

Although these research results are compelling, several limitations exist. First, understanding how top universities in Indonesia set up and execute the change actions required to obtain world-class status is a complex process. We may not be able to picture it comprehensively. Future studies might consider the use of a single case study of the successful AHEIs or even the less-successful AHEIs that are aiming for world-class status in order to provide a deeper understanding (e.g., Yang and Welch, 2012). Employing mixed-method is also an option. Second, understanding any cultural issues and institutional pressures in relation to determining the performance of the top universities' change initiatives and actions among the different countries might be a future avenue for study. We mainly discuss the Indonesian top universities' experience of obtaining world-class status. Finally, we address the research question mainly based on stakeholder theory (Freeman, 1984) and categorise each pressure in high or low levels. However, each stakeholder may have different degrees of impact on the organisations (AHEIs) (Frooman, 1999), thus incorporating resource dependence theory (Pfeffer and Salancik, 1978) could be an avenue of future research.

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