

HIGHER EDUCATION SECTOR IN INDONESIA

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List of abbreviations

| | |
|---------|--|
| ASEAN | Association of South East Asian Nations |
| BAN-PT | <i>Badan Akreditasi Nasional Perguruan Tinggi</i> , National Accreditation Agency for Higher Education |
| BKN | <i>Badan Kepegawaian Negara</i> , National Civil Service Agency |
| DGHE | Directorate General of Higher Education - MoEC |
| GER | Gross Enrolment Ratio |
| MoEC | Ministry of Education and Culture |
| MoF | Ministry of Finance |
| MoRA | Ministry of Religious Affairs |
| PTN | <i>Perguruan Tinggi Negeri</i> , Public university or Government's implementation unit |
| PTN BH | <i>Perguruan Tinggi Negeri – Badan Hukum</i> , Autonomous university |
| PTN-BLU | <i>Perguruan Tinggi Negeri – Badan Layanan Umum</i> , Public university - Government's implementation unit with a certain autonomy in financial management |
| QA | Quality assurance |
| UU | Law or Act |

1 Higher education landscape

Indonesia is a large country with a population of almost 235 million, covering an area of 1,910,931 square km. The country comprises more than 17,504 islands, makes it the largest archipelago in the world. The population is still dominated by young generation, whereby 44.72% of its population is younger than 25 years. This is particularly important due to the increasing needs to provide education and employment for the young.

As an emerging economy, Indonesia is considered as a low middle-income country entering the third stage of economic development, called the “efficiency driven economy” by the World Economic Forum (WEF 2012). Indonesia needs to address many complex issues to improve its competitiveness as it makes the transition to a new phase of economic development. In 2014 Indonesia is ranked at 34th by the World Competitiveness Index. Well-educated human resources, excellence in scientific research and better linkages to industry and government are regarded as key policy priorities in nearly all countries in this stage.

Higher education system in Indonesia is largely influenced by the American (Anglo Saxon) model except in some areas such as medical and vocational education where some forms of European (continental) model were adopted. Prior to the adoption of the American model in late 70s, the old Dutch system was implemented. The higher education system here is referred to all post secondary education, constitutes vocational, academic, and professional education. The term university is also used in this document to represent all types of higher education institution, i.e. university, institute, polytechnic, college, and academy.

1.1 Higher education providers

Higher education programs are offered by five types of institution namely: academy, polytechnic, college, institute, and university. The first two are specializing in vocational education stream, whilst the last three are more comprehensive and allowed to offer all education streams. A college (Sekolah Tinggi) is a specialized institution focusing on one particular academic discipline. Unlike universities, institutes are specialized in a particular group of disciplines such as sciences and technologies, arts, or agriculture.

Universities in Indonesia are largely offered by the private sector. Out of around 3,500 institutions, only around 150 institutions are public (established and operated by the government). The public institutions are mostly under the MoEC (98 institutions) and MoRA (52 institutions)¹. In the last five years, the government has also established a number of new public institutions by converting the status of existing private institutions.

| | University | Institute | College | Polytechnic | Academy | Total |
|----------------------|------------|-----------|--------------|-------------|---------|--------------|
| Public | 55 | 8 | 2 | 33 | | 98 |
| Private | 440 | 52 | 1463 | 158 | 1240 | 3,353 |
| Islamic ² | 52 | | | | | 52 |
| Open University | 1 | | | | | 1 |
| TOTAL | 546 | 60 | 1,465 | 191 | | 3,502 |

Table-1: Distribution of higher education providers [DGHE 2013]

The distribution of institutions is highly skewed toward Jawa (43.7%) and Sumatera (29.1%) island, whilst Maluku and Papua island only 3.4%. Therefore these new public institutions are mostly established in remote or isolated area, e.g. Musamus University in Merauke – Papua, Nusa Utara

¹ All staff in public institutios have civil servant status, as elaborated in section 4.1

² Islamic institutions under MoRA are UIN (public Islamic university) and IAIN (public Islamic Institute).

Polytechnic in Morotai island – North Sulawesi, and Borneo University in Tarakan island – South Kalimantan.

Around additional 200 institutions under technical ministries, other than MoEC and MoRA, are established to serve specific needs of the respective ministries. In most cases students in these institutions receive full fellowship, live on board, and have to work as civil servant after graduation for a certain period of time. Such institutions are called service institutions, as they are established to provide specific technical services for the respective ministries. The best examples of such institutions are the Military Academy under the Ministry of Defence and the Institute of Accountant under the Ministry of Finance.

The number of institutions has been increasing every day, particularly in private sector, resulted in proliferation of new institutions with small number of students. This is problematic as small private institutions with low enrolments have to entirely dependent on tuition fees and have to struggle to survive as well as maintain the quality standards. The number of private institutions has multiplied to more than 3,353 [DGHE 2013]. With less than 5.4 million student enrolment, the number of providers is considered far too many to be efficient.

1.2 Relevance

The issue of relevance is deemed important in a country in a transition toward efficiency driven economy. Although the national figure on the rate of unemployment shows a decreasing trend in 2007-2012, the graduates unemployment (Diploma and Bachelor) is still above 6.9%. Employability is also strongly affected by externally driven factors, such as economic growth, investment, and technological trend.

| Unemployment rate (%) | 2007 | 2008 | 2009 | 2012 |
|-----------------------|-------|-------|-------|------|
| Diploma | 15.38 | 15.71 | 11.59 | 7.50 |
| Bachelor | 12.94 | 14.24 | 9.95 | 6.95 |

Table-2: Unemployment rate by education attainment³ [BPS, 2013]

There was a sharp decrease in graduates unemployment between 2009 to 2012, but similar positive trend was also seen in secondary school graduates. It might indicate that the trend was driven more by external factors rather than improvement of relevance in higher education. The disturbing trend was the unemployment rate for Diploma graduates (including polytechnics), which has been consistently higher than Bachelor graduates. It is clear that the bulk of short cycle (Diploma) vocational education is not serving its initial purpose of providing employment relevant education. In general a serious problem is found with the link between universities and employers, particularly in understanding their needs of skills needs, ranging from more obvious ones such as English and computing skills, to behavioral and thinking skills such as leadership, problem solving, and creativity.

1.3 Quality

The higher education system is highly diversified in term of quality. Three Indonesian higher education institutions have been ranked within the top 500 in the world ranking, as presented in table 3. As few established universities are ranked as world class institutions, many have not even been accredited by the National Accreditation Agency (BAN-PT).

Some study programs in the professional stream in more established universities have also acquired the accreditation status issued by international professional organizations such as ABET (Accreditation Board for Engineering and Technology) and WFME (World Federation of Medical Education). In order to prepare itself for the implementation of ASEAN Economic Community in 2015, Indonesia is currently in the process of developing its Qualification Framework.

³ Diploma is a 3-year program and focus on vocational education, whilst Bachelor is a 4-year program and provides more general education

| Institution | THES - 2009 | QS - 2012 |
|---------------------------------|-------------|-----------|
| University of Indonesia | 201 (34) | 273 (59) |
| Gadjah Mada University | 250 (63) | 438 (118) |
| Institute Technology of Bandung | 351 (80) | 555 (113) |

Table-3: Institutional ranking according to THES and QS⁴ [THES 2009, QS 2012]

1.4 Research

As Indonesia is entering the efficiency driven economy, research and innovation should take more eminent role in higher education. This is particularly true for avoiding the curse of “middle income trap”. Unfortunately activities related to research and innovation in universities are still far from expectation, as support for funding is less than satisfactory.

In 2012, university researchers published 16,139 articles (ranked 63rd in the world), and 126 patents were awarded to them. Although the number of research outputs is increasing, it still lags significantly behind neighboring countries. According to the Global Innovation Index, Indonesia is grouped between “under performers” (Venezuela and Algeria) and “learners” (Malaysia and Thailand) [GII 2013]. The relatively low number of research outputs is directly correlated with the low level of budget allocated for research. In 2012 Indonesia only allocates 0.09% of its GDP for research; this is far behind Malaysia (0.7%), India (0.85%), or China (1.6%) [Battelle 2012]. In 2012, the government allocated only 0.75% of its budget for research, and DGHE allocated less than 1% of its budget for supporting research activities in universities.

In addition to insufficient funding, university research is mostly irrelevant to the development of local industrialization. A recent study revealed the following weaknesses in university operation that hamper their ability to develop industrial partnerships [Moeliodihardjo et.al 2013]:

- lack of mutual trust - universities see industry as too profit oriented and lacking idealism, while industry see universities as ivory towers and too bureaucratic to provide useful assistance;
- inflexible financial management and cumbersome bureaucratic procedures in universities are incompatible with the rapid responses required in the dynamic industrial world;
- lack of institutional support for individual academics who initiate industrial partnerships; and
- universities are segregated by academic disciplines, whilst most industrial problems are so interdisciplinary in nature that a mono-disciplinary approach to solutions is inappropriate.

Nevertheless a few champions in some universities proof that individual initiatives could make difference. The aforementioned study found that regardless of lack of institutional support and insufficient funding, these individuals have successfully fostered research collaborations with industries, producing revenue, innovations, and patents. Most of these champions have earned their degree from overseas universities, and have successfully capitalized the experiences and their network acquired during their study.

2 Governance and regulation

Unlike the 12 years basic education which is decentralized to district and provincial government, the higher education system is centrally managed by the DGHE, under the MoEC. The prevailing regulations exclude institutions under MoRA jurisdiction from decentralization. Therefore all Islamic institutions from basic to higher education are centrally managed by MoRA. Public universities also have to comply with the prevailing regulations applied for all governmental units, including

⁴ The numeric value indicates its world ranking, whilst its Asian ranking is indicated by the value between brackets

regulations on financial management issued by the MoF and regulations on personnel management issued by the National Civil Service Agency (BKN).

2.1 Autonomy

It has been globally realized that innovation and creativity within universities could only flourish when autonomy is guaranteed, as also recommended in the European Commission's Communication in 2006. The recommendation was later adopted by the European Council in 2007 [Estermann and Nokkala, 2009]. The wave of change has also significantly changed the governance and organization structure of higher education in many Asian countries, such as Japan, Thailand, the Philippines, China, and Indonesia as well.

Under the prevailing regulations, institutional autonomy could only be granted to a university when it changes its legal status. In 2009 a bill allowing public and private universities to convert its status into legal entity, Law 9/2009 on Education Legal Entity (BHP), was passed by the Parliament. The law, while providing a clearer framework for improving management and governance, was challenged in the constitutional court by the Association of Private Universities (APTISI) and was revoked in 2010. The law was considered unconstitutional by the court on the grounds that it tends to impose a uniform legal status and governance system for public as well as private institutions, undermining the role of Foundation in private institutions.

After the cancelation of the Law 9/2009, the higher education system lingered for almost 3 years without a solid legal basis. A new Law on Higher Education 12/2012 was finally enacted in August 2012. It provides a fairly comprehensive legal basis for higher education development, covering key elements such as, institutional autonomy, wider and equitable access, qualification framework, quality assurance system, as well as strengthening of vocational education and training.

Nonetheless university autonomy is still interpreted differently by different concerned parties. In Indonesia, even within the academic community many interpret university autonomy as freedom in financial management only. In fact institutional autonomy, as defined by the European Council, should comprise financial autonomy, human resources autonomy, organizational autonomy, and academic autonomy [Estermann and Nokkala 2009].

| Autonomous | In the pipeline |
|----------------------------------|-------------------------------------|
| University of Indonesia | Padjadjaran University |
| Bogor Agricultural University | Diponegoro University |
| Institute Technology of Bandung | 10 Nopember Institute of Technology |
| Gadjah Mada University | Hasanuddin University |
| University of North Sumatera | |
| Indonesia Educational University | |
| Airlangga University | |

Table-4: Universities with autonomous legal status⁵

In term of its legal status, public universities are now grouped into three categories: autonomous public universities (PTN-BH), public universities with a degree of financial management flexibility (PTN-BLU), and public universities as government implementing unit (PTN). Since the establishment of an autonomous public university (PTN-BH) requires government regulations, new legal instruments have been issued for conversion of 7 public universities to autonomous institutions, as illustrated in table-4. A separate government regulation (PP 58/2013), regulating financial management in autonomous universities has also been issued. Currently 4 additional public universities are in the pipe line to be converted to autonomous universities.

In autonomous universities, the Board of Trustees is the highest authority. The trustees represent the university stakeholders, namely MoEC, teaching staff, administrative staff, employers, industries, and community at large. The responsibility of the Board includes, but not limited to, oversee the general

⁵ All autonomous universities are located in Jawa, except University of North Sumatera and Hasanuddin University

operation, budgetary control, and appointment of the Rector. The Rector appoints Deans after considering nominations from the respective Faculty's Senate. Institutions with BLU and PTN status do not have such Trustees, and the Rector is appointed by, and report to the Minister of Education and Culture after considering nominations from the respective University Senate.

The new law does not regulate private institutions, and almost allows individual foundations to develop their own internal regulations. Private providers should be established by a foundation, and a separate law on Foundation regulates its operation. The Rector is appointed by the Foundation after considering nomination from the Senate.

2.2 Quality assurance

In order to measure quality some kind of standards is required. Even if not all institutions can be judged by the same set of criteria, a minimum threshold is required to assure quality. One of the parameters used for defining quality is the result of accreditation, which basically represents external quality assurance. Accreditation is mandatory by Law, and conducted by the National Accreditation Agency (BAN-PT). In 2012 the majority (78.26%) of 3-year Diploma programs in public universities is rated A or B, whilst only 56.67% in private institutions⁶. The figure is 85.82% and 55.53% for 4-year Bachelor programs, whilst for graduate programs the figure is 91.54% and 66.93%. It shows that the proportion of programs offered by public institutions is significantly higher in term quality compared to programs offered by private institutions. However the accreditation process only measures the quality against the minimum standard that performance above that level is difficult to be rated against each other using this indicator.

The Law 12/2012 emphasizes the implementation of the national quality assurance system for higher education which includes external (accreditation) and internal systems to be implemented by individual institutions. Since any effort aims to implement quality assurance should basically be an internally driven initiative, the DGHE requires all institutions to establish its own quality assurance unit. Although internal quality assurance unit is more or less in operation in all institutions, its effectiveness varies and some might still need a lot of improvement

A national qualification framework is currently being developed to provide stronger basis for establishing standards. In order to shift the paradigm from infrastructure to learning outcome assessment, the MoEC is developing descriptors for qualification of each study program. As to date draft descriptors for 75 study programs in 29 subjects/professions, within the 8 priority sectors has been developed.

In addition to standard of competencies, the qualification framework will also establish a system of recognition of prior learning. Such system is particularly important for credit transfer (inter institutions as well as cross borders) and recognizing industrial experiences as a qualification to conduct academic works. This system will systematize and articulate the links between education pathways (academic, vocational, and professional) and facilitate more flexible movement of students in, out, and across different pathways.

3 Funding structures

The structure of the funding in each institution widely varies. Although budget allocation from the government takes the central role in most public institutions, in few elite public universities the government role has been decreasing in the recent years. In private universities almost the entire budget comes from student in term of tuition and fees.

⁶ The accreditation result is rated as A = Excellent, B = Good, C = Passed. The percentage indicates the proportion of programs of all programs which have been through the assessment process. The assessment is conducted by independent assessors and evaluates among others the quality of staff, facilities, infrastructure, learning process, governance and management, as well as the employability of its graduates.

3.1 Government funding

The allocated public fund for education has been steadily increasing in the last few years, particularly after the Supreme Consultative Assembly (MPR) amended the Constitution in 2005 by imposing 20% of the government budget allocation for the education sector. Under the decentralization policy, the lion share of the education budget goes to the districts and provincial government to support basic education. Budget allocation for MoEC is approximately 25%-30% of the total budget for education sector, and the share of higher education within the MoEC budget is close to 50%, as illustrated in figure-1.

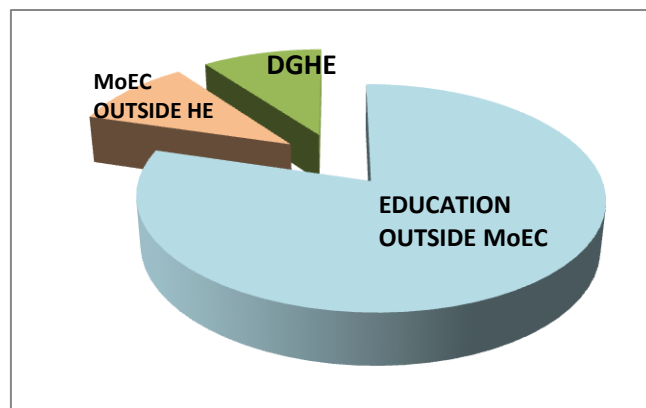


Figure-1: Allocation of education budget [MoEC 2014]

The government budget for higher education is steadily increasing over the last five years, rising from Rp 14,058 trillion in 2009 to Rp 32,605 trillion in 2012. More than 70% of the budget is absorbed by personnel costs, particularly allowances (incentives) for certified lecturers and active professors, as mandated by the Law on Teachers and Lecturers. In 2012 the DGHE introduced a type of formula funding for public institutions, whereby the operational (recurrent) budget is allocated based on enrolment, field of study, geographical location and special affirmative policy. This allocated budget aims to top up revenue from student tuition, to enable public universities cover its operational expenses. Although DGHE does not formally apply a cap on student enrolment, the proportion of poor students is set at 20% (minimum) in the admission process in each public university.

Almost the entire higher education budget is allocated for public institutions under the MoEC auspice. Islamic institutions are administered and receive budget from the MoRA, and the same scheme is also implemented for institutions administered by other line ministries. Considering that the private institutions are housing two third of the student enrolment, they are beginning to also enjoy government subsidy in recent years, although only less than 7% of the total DGHE budget. The support covers among others, partial salary for teaching staff, laboratory equipment, fellowship for teaching staff, and grants acquired through competition.

3.2 Fund channeling

The amount of government budget allocated for higher education is only one aspect in the funding structure. The way the fund is channeled is equally, or even more, important. Financial management in universities becomes more complex as the various sources of fund include the government, students, individuals, philanthropies, and private enterprises. The channeling of government funds is carried out through a rigid and line-itemized budget, whereby the budget is pre-allocated; reallocation between budget components is prohibited, and the standard procedure is uniformly imposed for all government entities.

In the January – December government fiscal year, the budget cycle begin with the solicitation of proposal from public university as early as June, and final decision could be announced close to December. Since the consolidated government budget requires the Parliament's approval, it is not uncommon that the public debate needs 3-6 months before the final approval is acquired and the Bill

on Budget for the respective year is passed by the Parliament. Budget changes also require the Parliament's approval, as the law needs to be amended. Thus changes should be carried out before the commencement of the respective fiscal year, or around November.

Even fund channeling in research grant is carried out through a contract between the government and the principal investigator, whereby line-itemized budget has to be strictly adhered. Such practice significantly limits the effectiveness of using the fund in achieving the intended objective. In the field, the spirit to follow the procedures in the government financial management is so strong that the "compliance mentality" becomes much stronger than the "innovation spirit" that commonly characterized an academic community.

In 2012 university researchers published 16,139 articles (ranked 63rd in the world), and 126 patents were awarded to them⁷. Although the number of research outputs is increasing in the last 5 years, it is still significantly lagged behind the neighboring countries. The relatively low research outputs is directly correlated with the insufficient budget allocated for research. Indonesia only allocates 0.09% of its GDP for research, way behind Malaysia (0.7%), India (0.85%), or China (1.6%) [Battelle 2012]. In 2012 the government allocated only 0.75% of its budget for research, and the DGHE allocated less than 1% of its budget for supporting research activities in universities.

Private providers have to comply with the accounting procedures set by the foundation and the Law of Foundation, and have to be annually audited by public accountant. Private institutions receiving public fund need to comply with the government financial procedures in using the fund.

3.3 Private contribution

In addition to the government budget, public universities also generate revenue from various sources, mostly from students in term of tuition and fees. However in few more established universities contract with outside agencies has also a significant share. The sources of revenue in private institutions are more limited, and in almost all cases students are the primary source of revenue.

The Law on Public Finance stipulates that self-generated revenue in public universities is considered as State revenue and must be deposited to the State Treasury, and can only be used after acquiring MoF approval for its budget proposal. The PTN-BLU universities are exempted and given a certain level of autonomy in managing their revenue, i.e. directly use the fund without first deposit it to the State Treasury. The autonomous universities or PTN-BH have the privilege of using their self-generated revenue in a much more flexible manner, as stipulated in the recently issued government regulation (PP 58/2014). Only private and autonomous universities can accumulate reserves; whilst other public universities must deposit any unspent budget back to the State Treasury at the end of the fiscal year. Private universities must adhere to the regulations issued by their foundation, although they still have to comply with the relevant regulations in using government subsidy.

In the last 10 years the proportion of revenue acquired from students is steadily increasing, particularly in public universities. In some large public universities, the share of government allocation was dwarfed to less than 20%. The trend triggered public outcry, and the Parliament inserted an article in the Law 12/2012 limiting the proportion of budget acquired from students not to exceed 30% in any public university.

To implement the Law, MoEC issued decree 55/2013 regulates student tuition fees in public universities, preventing over commercialism in public universities, which was considered as alarming in the last few years. By international standard, the decree is considered as an intervention of institutional autonomy, and suggested to be revoked in appropriate time. Flexibility is given however in setting the student tuition fee for postgraduate and non-regular programs. The appropriate balance between the public interest and the need to cover the ever-increasing cost of higher education will eventually be found. In an attempt to compensate the deficit, DGHE introduced the formula based budget allocation for operational cost in public universities, as elaborated in section 3.1.

⁷ Only registered patents funded by DGHE

4 Academic profession and performance measurement

The social status of university teachers is closely related to the dynamics of social economic development of the local community. Before 1960s, teaching profession was highly respected and teacher training institutions attracted the brightest students. As the economy develops and new opportunities created, the allocated budget for education and the incentive for teaching profession could not keep up with the demand for new technology and the appetite for personal consumption. The respect for teaching profession has been gradually fading and bright students chose more glamorous fields such as engineering, finance, and management.

The turning point was when the Supreme Consultative Assembly ammended the Constitution imposing 20% of the national budget to be allocated for the education sector. In the last few years the teaching profession has attracted many bright students to enter the teacher training college. Nevertheless it is not enough to return back the respect toward the teaching profession. The teachers themselves have to proof that they deserve to be respected by demonstrating their dedication, integrity, and performance. This might need more time than simply increasing the budget.

4.1 Employment status

All teaching staff in public universities are civil servants, and have to fully comply with the Law on Civil Service applicable universally to all civil servants. The civil service status limits the human resources management in public universities, since all civil servants are centrally managed by the National Civil Service Agency (BKN). Under this Law only the BKN has the authority to recruit and terminate a staff's employment, and mobility across insitutions requires a long bureaucratic procedure. All staff acquired tenured after only 1-2 year probation period. Since all appointments and terminations of staff are in the hands of BKN, the authority of the Rector is limited to the submission of recommendation to the BKN. Horizontal recruitment is extremely rare, and staff has to climb up the ladder from the lowest rank. Although staff promotion is mainly under the responsibility of the respective Rector, promotion to the rank of professorship is in the hands of the central authority or DGHE. Together with the fund channeling, the civil servant status have become the two most profound problematic matters in managing public universities.

Recognizing this problem, a new Law on Civil Aparatus was recently passed by the Parliament, allowing some flexibility in managing teaching staff in public universities. In the future teaching staff in public universities could have a contract based employment with up to 5 years extendable probation period. The new regulation allows the Rector to exercise his/her authority and provides more flexibility in managing lecturers, e.g. mobility across institutions and horizontal recruitment. However the implementation requires further government regulations that it might require some time before this Law is effective.

Since the proportion of permanent teaching staff is an important indicator in the accreditation process, there is a strong motivation for private universities to convert their staff into permanent status. Previoulsy private universities tend to enjoy employing teachers from public university on part time basis. Nowadays many public universities have disciplined their staff to compensate the salary increase and the provision of performance based incentives, leaving small private institutions in difficult situation. In order to assist the private sector, the government supports private providers by providing scholarship for staff to pursue advanced degree, and provide civil servants status to some of its teachers.

4.2 Qualification

The 2005 Law requires all university teachers to hold at least Master degree. However more than a quarter of the currently 175,000 teachers, particularly in private universities, do not have this qualification. Nationally only around less than 12% of the teaching staff in universities hold doctorate degree, and the majority of them are teaching at the few elite universities. Although the improvement of quaification illustrated in table-5 is encouraging, the transition period given until 2015 might not be adequate to allow those teachers to upgrade their qualification.

| | Bachelor | | Master | | Doctorate | |
|------|----------|--------|---------|--------|-----------|--------|
| 2009 | 69,770 | 43.70% | 76,455 | 47.89% | 13,435 | 8.41% |
| 2012 | 48,125 | 27.50% | 106,225 | 60.70% | 20,650 | 11.80% |

Table-5: Qualification of teaching staff [MoEC 2014]

The regulation finds difficulty in its implementation, particularly for vocational education. Polytechnic requires teachers with rich industrial experience, and most of such instructors do not hold Master degree. In order to comply with the law many of them pursue Master degree in academic institutions, which do not have the capacity to teach vocational curriculum. If the trend continues, many polytechnics will lose their vocational education capacity and become general academic education. Realizing this risk, the government is currently developing a system of recognition of prior learning under the Indonesian Qualification Framework for higher education. In this system the conversion of industrial experiences (equivalent) into academic achievement will be made possible.

5 Challenges of massification

Higher education in Indonesia does not have a long history, since the first education beyond high school was only offered in the late 19th century. Until 1960s higher education was practically only for the elite, whereby student-staff ratio of around 5 is not uncommon, and students learn “at the feet of the master”. At the time of independence in 1945 only around 200 students were active, although more than 1000 were registered. The explosion of enrolment began when the Law on University allows private providers to operate, until it reaches the current level of enrolment.

Some see the massification of higher education as a liberation, whereby access is open to a much wider population, regardless of their gender, race, religion, and social background. But some also see it as a threat to academic values and norms, decreasing quality of education, as well as the increasing trend of commercialism and capitalism. The following sections discuss the challenges of massification.

5.1 Participation rate

The higher education GER has been constantly increasing from 18.26% in 2005 to 24.67% in 2010, and 27.10% in 2011⁸, as presented in table 5. However, the GER is only considered moderate compared to neighboring Asean countries such Malaysia (40.2% in 2009) or Thailand (47.7% in 2011) [UNESCAP, 2012]. The change in demographic structure, with decreasing population in the 19-23 years brackets, has also positively affected the GER. The increase of the GER is mainly contributed by the private sector, since the enrolment in the public sector is more or less stagnant since 2010. As GER has significantly increased, the government begins to shift its priority to quality and equity, rather than a simple quantitative achievement.

| | 2005 | 2010 | 2011 |
|--------------------------|------------|------------|------------|
| Public institutions | 805,479 | 1,030,403 | 1,063,274 |
| Private institutions | 2,243,760 | 2,886,641 | 2,928,890 |
| Islamic institutions | 508,545 | 645,099 | 620,938 |
| Open University | 262,081 | 571,336 | 666,763 |
| Service institutions | 48,493 | 92,971 | 101,351 |
| TOTAL students | 3,868,358 | 5,226,450 | 5,381,216 |
| Population 19 -23 of age | 21,190,000 | 21,184,000 | 19,858,146 |
| Gross Enrolment Rate | 18.26% | 24.67% | 27.10% |

⁸ Interim report shows that GER has reached 29.87% in 2013 [MoEC 2014]

 (%)

Table-5: Student enrolment [DGHE 2012]

Distance Learning is an attractive alternative to significantly increase the enrolment, but has not been fully capitalized so far. The only institution that has implemented it in large scale is the Open University, which enrolls 11.58% of the total national student enrolment in 2012. Although initially designed for coping with the challenge of accommodating high school leavers who cannot be absorbed by the traditional institutions, most of its 650,000 currently registered students (2012) are school teachers (in-service training). In its form the Open University cannot be considered as an alternative for fresh high school leavers, and its operation rely mostly on traditional mode of printed modules. Recently DGHE has endorsed the elite institutions to actively promote and offer the provision of distance learning through mixed mode delivery.

5.2 Equity

The increased participation of young generation in schooling demonstrates the successful government campaign, supported by significant budget increase. However the benefit does not reach equally across the population⁹. In primary education the enrolment rate is more less uniform across social economic quintiles, due to free basic education policy. The gap of enrolment between quintiles becomes more and more obvious in higher levels of education, as children reach “employable” age. Students come from the lowest two economic quintiles have to find works to support their families. The gap between population in lowest quintile and highest quintile is 20% in junior secondary, 53% in senior secondary, and 62% in higher education, as illustrated in Figure-2 [Moeliodihardjo, 2013].

Due to the alarming trend of disparity in access to higher education, the government has introduced several programs. The first program is a full scholarship program called *Bidik Misi*, launched in 2010. It targeted poor students with a good academic record in their final year of high school and covers eight semesters for a bachelor degree or six semesters for a 3-year Diploma program. It started with a modest 19,669 scholarships in 2010, and has expanded to cover 144,799 students (cohort, accumulated) in 2013, costing more than Rp 1.5 trillion. After being adjusted in 2013, the scholarship now provides Rp 3.6 million for tuition per student-semester and Rp 2.4 million for living allowance per student-semester.

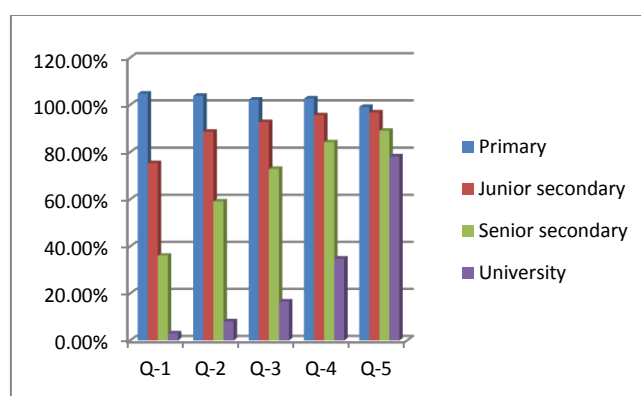


Figure-2: Participation rate by economic background, based on Susenas data [BPS 2011]

The second program is introducing a new type of vocational training institution called “*Akademi Komunitas*”, a resemblance of community college. This institution provides 1-2 year vocational program beyond high school. In order to reach out those who do not have access to higher education, these new institutions will be established mostly at the district level. The effectiveness of this program needs sometime to be evaluated, since it has just been initiated in 2012.

⁹ The gender disparity has practically been completely eradicated in higher education, when the number of female students for the first time surpassed their male counterpart in 2008.

5.3 The role of private sector

The private sector plays a central role in providing more access to higher education, contributing two third of student enrolment. The critical problem facing private institutions is the proliferation of institutions, resulted in small institutions with small number of students. Due to over dependence on student tuition, private institutions with small enrolment tend not to survive.

Only a handful of private institutions are considered as healthy, viable, and capable in providing quality education. These institutions are even in better quality compared to many public universities. They are definitely better managed, provide better services to their students, and have more concerns over the employability of their graduates. Successful institutions are mostly supported by strong financial backers, allowing them to survive during the difficult initial development stage. But more central for its survival is the existence of professional managers, strong leadership, and visionary founders.

It is still difficult for private institutions to focus more on research as long as its funding structure is dependent on student tuition. Only 2 to 3 private institutions are currently active in research. The government has attempted several times to encourage smaller institutions to merge or amalgamate, with limited or no success. Private institutions are established by private foundation, and many of these foundations have a lot of differences between them, e.g. ideology and specific interests, that are difficult to reconcile. Moreover many of these foundations have their own strong backers in the Parliament.

5.4 Mission differentiation

As the number of institutions has exploded to more than 3,500, the higher education system becomes highly differentiated. But it appears that most institutions do not adequately focus their activities according to their specific mission/purpose and location. The elite universities, which are heavily invested with modern laboratory equipment and facilities and the best academics, also conduct low-level almost trivial activities that do not fit with their purpose, e.g. running short-term non-degree training courses or Diploma programs. As time and resources are limited, it is difficult for these universities to internationally excell when a significant time and resources should be allocated to carry out trivial activities. On the other hand, many regional universities, instead of focusing on the fields of study relevant to the region, aspire to cover broad academic disciplines similar to the top national universities, without sufficient resources to do so.

It is important that once the mission is chosen, an institution needs to be consistent in implementing it. Excellence in the chosen mission is particularly important for Indonesia at this point of time as it is embarking on the transition to an efficiency driven economy. The successful transformation of the economy requires tremendous input and contribution from higher education, without which it will fail to move up the ladder.

5.5 University management

When Indonesia proclaimed its independence almost 70 years ago, a university was managed mostly by peers, whereby almost all decisions were taken by committees. Student enrolment was relatively small (less than 2000), whilst the number of active students was even smaller. Nowadays such management style is not feasible anymore to be implemented. Universities have become a large enterprise with large student enrolment; offering dozens of wide range of different programs, from philosophy to molecular biology to nuclear physics; possessing hundreds of thousand square meters of land; and operating with annual budget of more than Rp 1 trillion.

In dealing with large classes, the mode and technic in delivering the materials need to be appropriately adjusted, and teachers have to learn how to deal with such large classes. As enrolment grows, teachers cannot provide sufficient attention to the needs of each individual student. Information which previously was controlled by teachers, currently is widely available through the internet. The role of teachers has been shifted toward more facilitating, and students have to learn to study by themselves.

Since most of the support comes from public (students and the government), such enterprise needs to be professionally managed. A university must comply with a certain set of accountability and transparency standards. Nevertheless university management is unique, as it cannot implement corporate management techniques as such. It has to provide sufficient autonomy to keep innovation and creativity to flourish, whilst at the same time adhere the norms in accountability and transparency. In order to find the most appropriate management style for a university, in some cases, is quite a challenge.

5.6 Internationalization

In the last decades the world become smaller as goods, services, people, and information move more freely across continents and countries. In 2015 the Asean Economic Community will be formally implemented, allowing free movement of goods, services, and people across its member countries. In this context the higher education sector will be affected at least in two fronts. The first is as the service providers, whereby a degree granted by one university should be recognized regionally and students will be allowed to transfer its credits across institutions within the region. The second is as the producer of skilled work force, who will be allowed to seek employment within the region.

Both implications require a strong national qualification framework, and a regional mutual recognition arrangement. The Indonesian national qualification framework has been in its process of development for sometime. In order for member countries to harmonize their national qualification framework, the establishment of the Asean Qualification Reference Framework (AQRF) is currently in the development process and expected to be formally enacted in the next Asean summit.

As foreign students could potentially generate significant additional revenue for universities, many universities have established international office. This office provides a variety of support to international students and teachers, such as visa arrangement and finding accommodation. It also conducts promotional activities and proactively provides information about program offerings, available facilities, as well as pleasant environment for teaching and learning activities.

6 Concluding remarks

Higher education in Indonesia has experienced a quite significant growth and development in the last decade. Significant increase in government funding has pushed the GER (gross enrolment rate) to almost 30%. Nevertheless the rapid growth requires aspects that need to be properly addressed, as illustrated in the following sections.

6.1 Institutional reform

Inadequate institutional support is the primary cause of many the problems elaborated in previous chapters. As Indonesia is currently in a transition phase into a new government under the newly president elect, now is the most appropriate time for carrying out institutional reform. The reform should include improvement of the institutional framework, internal management, and governance, providing more autonomy and decentralizing authority to the institutions. At the same time transparency and accountability should be strengthened by improving institutional quality assurance, and involving external stakeholders in the process.

6.2 Institutional focus

Higher education has to cope with enormous challenges in the future, from the pressure to increase enrolment, more fierce competition from overseas providers due to economic integration, increasing demand from employers for more relevant graduates, to increasing demand for quality and relevant research. With limited resources, universities have to carefully select their institutional focus according to its mission, geographical location, and available resources. For example, the elite institutions could acquire international reputation when they are consistent with its chosen focus of conducting excellent research activities. The polytechnics will excel when they are consistent with its focus of providing excellent vocational education. The teaching universities could only excel when they are

consistent in providing high quality teaching. The government could provide incentives and disincentives for such policy to be effective.

6.3 National commitment

The need for a national commitment and concerted effort to foster university – industry partnership in conducting research activities is profound. Indonesia will not be able to upgrade itself into industrialized country without an active participation of university research. The parliament and the government should be hand in hand in increasing budget allocation for research, and at the same time developing more innovative scheme for fund channeling. The government could provide competitive research grants for any good initiatives.

References

- [Battelle 2012] R&D Magazine, December 2012. *Global research funding forecast*.
- [BAN-PT, 2013] Badan Akreditasi Nasional Perguruan Tinggi, unpublished materials from BAN-PT dated 1 December 2013.
- [BPS 2013] *Berita Resmi Statistik*. No 78/11/Th XVI, 6 November 2013.
- [DGHE 2013] Unpublished materials.
- [Estermann and Nokkala, 2009] Estermann, T. and Nokkala, T.; *University autonomy in Europe I, exploratory study*, The European University Association (EUA)
- [GII 2012] Global Innovation Index 2012
- [MoEC 2014] *Arahan Menteri Pendidikan dan Kebudayaan - Rembuk Nasional Pendidikan dan Kebudayaan*
- [Moeliodihardjo 2013] Moeliodihardjo, B.Y.; *Access and equity in higher education*, the World Bank
- [Moeliodihardjo, et.al 2013] Moeliodihardjo, B.Y., Soemardi, B.W., Brodjonegoro, S.S., Hatakenaka, S; *Developing strategies for university, industry, and government partnership*, ACDP
- [THES, 2009] Times Higher Education Supplement, *World Ranking Universities 2009*, <http://www.timeshighereducation.co.uk/world-university-rankings/2009-1010/world-ranking>

[QS 2012] *QS World University Rankings 2012/2013*, <http://www.topuniversities.com/university-rank>

[UNESCAP 2012] United Nations Economic and Social Commission for Asia and the Pacific, 2012. *Statistical yearbook for Asia and the Pacific*, <http://www.unescap.org/stat/data/syb2012/country-profiles/index.asp>

[WEF 2012] World Economic Forum, *Global competitiveness report 2012–2013*.