Revisiting the Focus of Indonesian Higher Education: A Proposition toward Arts and Design as Promoted College Majors

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Abstract—Education has been an important service industry for many countries due to its economic contributions and roles in developing human capital. Deriving from preceding assertion, nations across the world have spent significant amount of their financial resources in the sector. Unfortunately, research in education have been deemed to be lacking which may result in ill-advised decisions made by governments including when determining which field of higher education to focus. This study answers such uncertainty by compiling and presenting data from various resources to support the proposition that arts and design should be the focal point to assist creative industry which is the emerging and promising powerhouse of Indonesian economy.

Keywords—education; service; industry; economy; arts; design

I. INTRODUCTION

Education has been regarded an important service industry for many countries due to at least two reasons. First, education has made significant contributions to their economy, whose output can be measured as Gross Domestic Product (GDP). In the United States, the world’s largest economy, about 10% of its GDP has been the contribution of education sector, second largest following health sector [1]. Second, education is the determinant factor for most nations in developing their human resources. Understanding the former statement, nations across the world are currently in race of investing huge financial resources in the sector although such action has been well-understood from the ancient days when Plato believed that extensive community wealth must be invested in education [2].

Table I lists ten of world’s largest economies along with their expenditures on education [3]. Based on the available data in the table, it can be inferred that the average of total government expenditure on education of some of ten world’s largest economies was 11.36% of their expenditure or 4.76% of their GDP in year 2016. It is truly a massive amount considering the size of their economies and the importance of other sectors, such as healthcare and infrastructure. In an effort to be on par, the Government of Indonesia has amended the Founding Constitution (i.e. Undang-Undang Dasar 1945) which stipulates that at least 20% of government’s budget should be allocated to the education sector from year 2009 onwards [4]. Indonesian government’s expenditure on education in year 2016 was actually 3.6% of GDP or 20.5% of total government expenditure [3]. Such data show that Indonesian government has strived hard to fulfil the mandate.

<table>
<thead>
<tr>
<th>World’s Rank</th>
<th>Economy</th>
<th>GDP in 2016 (US$ million)</th>
<th>Government Expenditure on Education in 2016 (% of GDP)</th>
<th>% of total Govt. Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>US</td>
<td>18.6</td>
<td>5.4</td>
<td>14.5</td>
</tr>
<tr>
<td>2</td>
<td>China</td>
<td>11.2</td>
<td>n/a*</td>
<td>n/a*</td>
</tr>
<tr>
<td>3</td>
<td>Japan</td>
<td>4.9</td>
<td>3.6</td>
<td>9.3</td>
</tr>
<tr>
<td>4</td>
<td>Germany</td>
<td>3.5</td>
<td>5.0</td>
<td>11.1</td>
</tr>
<tr>
<td>5</td>
<td>UK</td>
<td>2.6</td>
<td>5.7</td>
<td>13.9</td>
</tr>
<tr>
<td>6</td>
<td>France</td>
<td>2.5</td>
<td>n/a*</td>
<td>n/a*</td>
</tr>
<tr>
<td>7</td>
<td>India</td>
<td>2.3</td>
<td>n/a*</td>
<td>n/a*</td>
</tr>
<tr>
<td>8</td>
<td>Italy</td>
<td>1.9</td>
<td>4.1</td>
<td>8.0</td>
</tr>
<tr>
<td>9</td>
<td>Brazil</td>
<td>1.8</td>
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<td>n/a*</td>
</tr>
<tr>
<td>10</td>
<td>Canada</td>
<td>1.5</td>
<td>n/a*</td>
<td>n/a*</td>
</tr>
</tbody>
</table>

* data not available

Any investments would require comprehensive analysis [5]. Unfortunately, despite such important positions as described earlier, research in education have been minimal globally when compared to other service industries such as retail, financial and transportation [1]. Such situation is not encouraging since governments may have spent too much financial resources into ill-advised decisions in the sector. One of such decisions is which field of higher education the Indonesian government should be focusing on.

II. CREATIVE INDUSTRY IN INDONESIA

During the celebration of National Awakening Day (i.e. Hari Kebangkitan Nasional) in year 2011, the Master Plan for Acceleration and Expansion of Economic Development of Indonesia (i.e. Masterplan Percepatan dan Perluasan Pembangunan Ekonomi Indonesia or MP3EI) was enacted through Presidential Decree No. 32 of year 2011. It was intended to be a strategic direction for the next 15 years (from year 2011 to 2025) complementing the formerly legislated National Long-Term Development Plan which runs from year 2005 to 2025 (i.e. Rencana Pembangunan Jangka Panjang Nasional or RPJPN) in year 2007. Such master plan shows the determination of Indonesian government to raise per capita income of more than four times, from US$ 3500 to 15000 and to sustain a growth rate in GDP of 8-9% per year through the following four key elements: (1) infrastructure; (2) human capital; (3) agriculture, fisheries and forestry; and (4) creative industry.
on average [6]. Further, it was mentioned that the master plan received some enhancements in year 2015 with some shifts in development sector priorities.

In the current MP3EI master plan, manufacturing next to agriculture, shipbuilding, textiles, food and beverages, steel, mining, transportation, services and information technology sectors, has been the focus of the Indonesian economy [6]. Such sector is also used to be the backbone of many nations’ economy in the past, but it now starts declining in various parts of the world including Indonesia. Asian Development Bank (ADB) reported that Indonesia’s manufacturing sector, which consists of oil & gas and non-oil & gas industries, experienced stagnancy since year 2000 until the following five years [7]. The sector finally showed some growth over last decade with relatively small percentage of only 1.2%. In addition, ADB mentioned that the sector’s contribution to the GDP growth was minimal and it remains contributing to the trade deficit.

Contrary to the fact that manufacturing sector is declining, in the early 2000s, two research indicated that creative industry could become the future of many economies. Creative industries can be defined as a range of economic activities which are concerned with the generation or exploitation of knowledge and information [8]. Further, they may also be referred to as the cultural industries especially in Europe or creative economy [8]. The two research posit that economic growth will be powered by innovative activities [9] and creative industry will be the “only weapon” to overcome economic depression [10].

The British Government has identified that creative industry could be the “powerhouse” for Indonesia in the 21st century [11]. The Memorandum of Understanding (MoU) between the UK’s Department for Culture, Media and Sports and the Indonesia Ministry of Tourism and Creative Economy was signed in 2012 by means of fundamental works done since year 2000s or long before the MoU was actually signed. Such MoU promotes the development of creative industry by strengthening the exchange of information and best practices between the two countries. During the first decade of the 21st century, Indonesia could see that creative industry has consistently and meaningfully contributed to its GDP as appeared in Figure 1.

As a result, creative industry contributed 7.74% on the average to the Indonesia’s GDP and it was at the 6th position among ten GDP contributors as shown in Figure 2. Being an emerging industry at that time, such achievement was truly remarkable.

Next to British Government, various reliable sources also confirm the notion that creative industry could become the future of Indonesia’s economy. Global Business Guide cited data from BEKRAF which indicate “a bright future” of Indonesia’s creative sector [13]. Indonesia’s Creative Economy Agency or BEKRAF was established through Presidential Decree No. 6 of year 2015 as a new non-ministerial institution responsible for the development of creative economy in Indonesia. It oversees and assists the president in formulating, defining, coordinating and synchronising policies in the creative economy. When BEKRAF’s data were then combined with statistical data from Ministry of Industry as in Table II and Figure 3, the struggle of manufacturing and the promising potential of creative industry can be clearly confirmed.

<table>
<thead>
<tr>
<th>Year</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>7.02</td>
<td>7.05</td>
<td>7.10</td>
<td>7.34</td>
<td>7.44</td>
</tr>
<tr>
<td>US$ billion</td>
<td>64.4</td>
<td>64.3</td>
<td>63.2</td>
<td>63.2</td>
<td>69.4</td>
</tr>
</tbody>
</table>

TABLE II. VALUE ADDED CONTRIBUTION ON INDONESIA’S GDP

![Fig. 1. Creative Industry’s GDP Contribution (Year 2002 – 2010)](image1)

![Fig. 2. Average GDP Contribution (Year 2002 – 2010).](image2)

![Fig. 3. Comparison of GDP Contributions between Manufacturing and Creative Industry Sectors.](image3)
In year 2016, the contribution of creative industry to Indonesia’s GDP was US$ 69.4 billion, which accounted for 7.44% of Indonesia’s GDP. In addition, there had been a strong growth of US$ 5 billion from year 2015’s figure. However, in terms of contribution to the country’s GDP, Indonesia’s achievement in that year was still below the US (11.12%) and South Korea (8.67%) though it was above Russia (6.05%), Singapore (5.7%), Philippines (4.92%) and Canada (4.5%).

Next to fairly decent contribution to Indonesia’s GDP, in the past 15 years, creative industry has been able to employ significant number of workforce in Indonesia as presented in Figure 4. In year 2017, creative industry was able to provide employment to 16.4 million people or slightly more than 12% from the overall workforce.

![Fig. 4. Creative Industry’s Employed Workforce (Year 2002 – 2015)](image)

In terms of growth, manufacturing sector has been struggling by being consistently below national GDP growth. In contrast, creative industry has experienced relatively strong growth. The situation is shown in Figure 5. The growth figure of creative industry in year 2014 was not included since the chart will become anomaly. In that year, food and beverages (culinary) was added as a new subsector thus the growth figure cannot be directly compared with the previous year of 2013.

![Fig. 5. Comparison of Growth between Manufacturing and Creative Industry Sectors with Reference to National GDP.](image)

The previously described data of GDP contribution, employment capability and sector’s growth should have confirmed the likelihood of creative industry to be promoted as a dominant pillar of Indonesian economy in this near future.

III. CHALLENGES OF CREATIVE INDUSTRY IN INDONESIA

Until year 2014, there are 14 subsectors of Indonesia’s creative industry as depicted below. Such framework resembles the work of Howkins in 2001 [8].

![Fig. 6. Subsectors within Indonesia’s Creative Industry (until 2014).](image)

From year 2014, close to the establishment of BEKRAF in 2015, the above framework was altered. While advertising, architecture, crafts, fashion, interactive games, music, performance art, publishing & printing, television & radio remain, antiques, computer service & software and R&D were removed. The film & photography subsector was divided into film and photography. The design subsector was redefined into product design, interior design and visual communication design. Two additional subsectors are fine art and culinary. Thus, in total currently there are 16 subsectors under BEKRAF’s management.

The past five years could see that creative industry in Indonesia has grown satisfactorily above national GDP as in Figure 5. However, it was mainly due to the inclusion of culinary as a new subsector, which contribute almost half of the creative industry’s contribution to Indonesia’s GDP. Despite huge local market potential as the 4th largest country in the world as well as proven foreign markets acceptance, the overall contribution of creative industry has been very much stagnant between 6-8% in the past 10 years (from year 2005 to 2015) [12]. It is lower when compared to the time when the sector was initiated in the early 2000s.

BEKRAF recently released results of a study investigating factors which inhibit Indonesia’s creative industry to grow substantially further [12]. On the macro scale, the Indonesian government needs to establish firm rules and regulations in the fields of digital applications & games, film and music. In the film industry for example, next to weak local market and low product quality, there are problems of piracy which have not been dealt properly [12]. On the micro scale, there is a staggering fact that 71.35% of creative industry players have never done any research and development. As a result, only 62.3% among those involved in the industry could create innovations [12]. Such fact could well be attributed to the lack of education of those working in the creative industry sector.
IV. ARTS AND DESIGN HIGHER EDUCATION IN INDONESIA

Manufacturing contains heavy application of science, technology, engineering and mathematics (commonly abbreviated and known as STEM). Thus, STEM education is relevant in countries where such sector is dominant [14]. The examples of such countries are most countries in the Organisation for Economic Co-operation and Development (OECD) led by Germany, Korea and Finland. As for creative industry, the supply of its entrepreneurs, talents and employees comes from arts and design education [15]. Since creative industry has earlier been identified as the future of Indonesia, the supply sustainability of the human capital in the sector should receive pinnacle attention.

However, it can be noted that arts and design education receive little attention from Indonesian government until today. In the recent National Exams for State Universities Entrance (i.e. Seleksi Nasional Masuk Perguruan Tinggi Negeri or SNMPTN) in year 2018, among 117,025 available seats at 85 participating public higher education institutions (HEIs), only 3003 seats were devoted to arts and design study programmes. That number is clearly insignificant, which is about 2.5% in proportion. Next to the available seats, among that 85 participating HEIs, there are only seven of arts and design institutes next to technical institutes, general and Islamic HEIs as well as teachers’ colleges as depicted below. It can be observed that next to technical schools, arts and design institutes are the second smallest in number.

![Fig. 7. Different Types of Public HEIs participating in SNMPTN 2018.](image)

The arts and design institutes take the name of Indonesian Arts Institute (i.e. Institut Seni Indonesia or ISI) of X with X denotes where it locates as well as Indonesian Cultural Arts Institute (i.e. Institut Seni Budaya Indonesia or ISBI) of X with X denotes its location. These HEIs offer a wide range of programmes of both vocational and academic in nature as well as from diploma, bachelors, masters up to doctoral levels. In terms of distribution across Indonesia, there are two institutes in Sumatra island (in Aceh and Padang Panjang), three institutes in Java island (in Bandung, Surakarta, Yogyakarta), one in Bali island (in Denpasar) and one in Jayapura, Papua. Next to arts and design institutes, various teachers’ colleges provide courses in the fields. However, these courses are pedagogical in nature to prepare students for the profession of teaching instead of becoming professional artists or designers. A handful of general HEIs also provide courses in arts and design, but they are more academic than vocational in nature.

V. CONCLUSIONS AND RECOMMENDATIONS

Through economic data, creative industry has proved its potential to be a dominant sector in Indonesia. Nevertheless, such industry requires the supply of capable human resources, which can be derived from arts and design education. The current situation is not encouraging since only little attention received from Indonesian government in that field of education. Therefore, it is advisable that Indonesian government with possible partnership with private sectors establish many more arts and design HEIs next to encourage existing HEIs to open such programmes across Indonesia.

REFERENCES