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Education Diplomacy: A Comparative Analysis of China's and Japan's Educational Soft Power

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Chapter 1 Introduction

1.1 Background

Power has been a term often used but little understood and difficult to define or quantify (Nye, 2004: 1; Baldwin, 2002). Joseph Nye (2004: 1) states that "power is like the weather. Everyone depends on it and talks about it, but few understand it" and "power is also like love, easier to experience than to define or measure, but no less real for that.". People usually approach power through a perspective of the traditional hard power which is often identified with military and economic dimensions of power. The concept of soft power has been introduced by Joseph Nye in 1990 in which he extensively discusses the power of the U.S. and points out that its power does not only limit to economy and military dimensions. The third dimension of U.S. power is soft power. According to Nye (2004), soft power of a nation depends how attractive its culture, political ideals, and policies are in the eyes of others.

While soft power has been extensively studied in political science, the educational soft power aspect has been "relatively under-explored in the literature on soft power in international relations" (Rothman, n.d., 6). According to Wojciuk et al (2015: 1-3), education "has not been adequately covered in existing IR literature" and that "in our assessment the educational dimension of this notion is one of the least developed, both in the literature and in existing indexes of soft power". Furthermore, education has been a core strategy for many nation's foreign policy to win friends and influence enemies. Altbach and McGill (2008: 37) states that that "higher education has always served as an international force, influencing intellectual and scientific development and spreading ideas worldwide". Therefore, the objective of this thesis is to contribute to the existing studies on educational soft power. The thesis will explore and analyze the role of education in building a country's soft power with a focus on China and Japan. The reason that China and Japan have been chosen for this study is multifold. First of all, Japan can be a model of soft power in Asia due to its successful soft power strategies which allow it to occupy the sixth place in the 2017 Soft Power

30 index. Japan has moved up by two ranks since 2015 in which it occupied the eighth place in the index. Nye (2004: 85) further states that "Japan has more potential soft power resources than any other Asian country". On the other hand, China has made significant progress within the last decade in its effort to promote soft power, occupying 25th place in the same index, moving up the rank by five places in 2015 in which it occupied 30th place. Therefore, China and Japan are performing relatively well in soft power acquisition in comparison to some Asian countries such as South Korea and Singapore. In 2017, South Korean and Singapore occupy 20th and 21st places respectively which is one rank down from 2016 for both countries. Furthermore, despite the fact that South Korea and Singapore are ranked higher than China in term of soft power, both countries has made little progress in the past five years (Soft Power 30, 2017). Secondly, both China and Japan have greatly invested in the internationalization of higher educations in order to compete for global influence. Both countries have become more attractive as destinations for international students from all over the world due to many reasons including "scholarships, job opportunities in the region, cultural and geographical advantages, and governments investing in higher education" (Gomes, 2016). Gomes (2016) further states that China aims to grow the number of international students by 500,000 and Japan by 300,000 by the 2020. Furthermore, the education ranking of the 2017 Soft Power Index reveals that China and Japan rank the highest among its peers in Asia. As of 2017, Japan and China occupy 14th and 20th places respectively. Singapore is another one among the three Asian nations that make it to the top 30 in the education category of soft power, ranking 23rd, which is behind China. In order to better understand how the education is being taken consideration in the index, education is defined as "the level of human capital in a country, contribution to scholarship, and attractiveness to international students" (Soft Power 30, 2017). Furthermore, UNESCO Institute for Statistics (2014) demonstrates that China and Japan are the biggest hosts of international students among all Asian countries. China and Japan have been ranked 7th and 9th respectively in the top 20 countries for international students ranking. Japan hosted 150617 international students while China hosted 88979 international students, making them the two Asian countries that attract the most overseas students to their higher institutions. Other East Asian countries that are included in the list include Malaysia (12th), South Korea (13th), and Singapore (18th) (UNESCO Institute for Statistics, 2014). Hence, China and Japan are leading the competition in East Asia in quest of global influence by strengthening its soft power using education as a tool to pursue its foreign policy goal. Rothman (n.d., 6) also states that "China and

Japan use their educational institutions in different ways to further the national goals through educational soft power influences". Against this background, this thesis aims to identify differences and similarities between China's and Japan's educational soft power.

1.2 Research Question

As Japan and China have been successful in establishing influence in the region, both countries employ foreign policies that aim at harnessing soft power. Moreover, existing academic discourses on China and Japan soft power mainly concentrate on cultural and economic factors of soft power. Against this background, this research aims to uncover different approaches Japan and China take in order to utilize education as a tool to achieve soft power gains by making a comparison between Japan's and China's educational soft power in order to obtain a more in-depth understanding of education as another dimension of soft power resources. Hence, the main research question is:

> *What are the similarities and differences in China's and Japan's approaches to using education to build soft power?*

By answering this question, this research will bring forth approaches and policies that contribute to educational soft power, and could work to contribute to the existing research on the role of education in building soft power especially in East Asia in hopes to foster more discussion about ways other East Asian nations could obtain soft power through education. The results of the study – whether or not China's and Japan's approach to soft power diplomacy efforts through education have proved to be effective – can be used to identify the country's capabilities regarding its strength in policymaking and political public relations, and can also determine current perceptions of the country among the international public.

1.3 State of the Art

1.3.1 Literature on Conceptualization of Soft Power

Soft power is a concept originated from Joseph Nye in 1990. Nye (2004: 111) states that the definition of soft power include "the ability to get what you want through attraction rather than coercion or payments". Nye's framework of soft power identifies a country's sources of

attractiveness through culture, political values, and foreign policies which are exercised through the mechanism of attraction. However, some critiques feel that Nye's conception of soft power is "ambiguous" (Lock, 2008). Lee (2016) builds on the work of Nye by exploring the concept of attraction and the conceptualization of a nation's attractiveness. The conceptualization framework of a nation's attractiveness is divided into three dimensions: economic, social and environmental attractiveness. Nevertheless, the literature review has confirmed that economic capability is often regarded as hard power. Therefore, in order to avoid ambiguity, Lee's framework may not be the most suitable for the analysis of educational soft power.

On the contrary, Lee (2009) finds Nye's concept of soft power to be "hegemonic" because it mainly applies to a hegemon like the U.S. which needs to enhance its attractiveness in order to maintain its unipolarity while minimizing its expenditure of hard resources. Lee counter-proposes a different way to conceptualize soft power by distinguishing between hard and soft resources while neglecting the concept of attraction as a goal. Lee's theoretical framework explains how soft resource is being converted into soft power in three steps: "(1) application of soft resources; (2) cognitive processes of the recipients; (3) soft power production". The applied soft resources must create two scenarios: "(1) new way of thinking or (2) attractiveness or fear in the minds of the recipients in the short-term" (Lee, 2009: 8). Finally, Lee's "resource-based soft power theory" is supplementary to the conceptualization model of educational soft power developed by Wojciuk et al. involving values, resources, and policy tools.

Although soft power is popular among academics and has been extensively explored, its conceptualization is far from sufficient (Blanchard and Lu, 2012: 570; Lee, 2009). While there is a lot of literature to be found on soft power, it is often "under-theorised and often used intuitively" (Wojcuik et al., 2015: 3). Many critiques have pointed out that Nye's concept of soft power has been rather vague and that he did not develop theoretical frameworks or operationalization to support it (Mattern, 2005). Furthermore, there is little literature on its operationalization which draw debates and questions among academics (Wojciuk et Al., 2015: 3 and Bislev, 2017).

In order to tackle the ambiguity, some academics have developed the theoretical framework building on the work of Nye. Mcclory (2010) builds on Nye's soft power framework by identifying new dimensions of soft power including culture, education, and business. Trunkos (2013) proposes

a more subjective conceptualization of soft power by assessing soft power capability resources rather than outcome. For example, international patents and level of corruption would be considered results while foreign investments, language, foreign aids would be resources.

Lee (2009: 2) also criticizes that Nye's concept of soft power is vague and suggests a new definition of soft power. In contrast to Nye's work which focuses on separating coercive power from co-optive power, Lee's definition has derived from "making a distinction between hard resources and soft resources". Lee argues that soft power can be both coercive and co-optive just like hard power. Furthermore, soft resources alone do not guarantee the creation of soft power as it partially depends on the intellectual capacity of that country. Hence, the possession of soft resources alone does not translate into the possession of soft power. Soft resources are basically "symbolic resources to exert influence upon others" such as ideas, images, theories, education, discourses, culture, and traditions (2009: 3). On the other hands, hard resources which are often associated with military or economic aspects are not considered the sources of soft power. Soft resources lead to soft power only if it has been diverted into influence or "used and manipulated to move others in specific directions" (Lee, 2009: 7). In a nutshell, the criteria that Lee uses to identify the types of power is the resources used to achieve such power. For example, when soft resources such as culture and traditions are utilized in order to exert influence on other countries, the results shall be soft power and when hard resources such as military are employed instead, the results will be hard power (Lee, 2009:6-7).

Roselle, Miskimmon, O' Loughlin (2014: 74) states that strategic narratives are vital to soft power because certain actors, events, and explanations are more appealing than others while soft power resources such as culture, values, or policies can be mobilized to fit a preexisting or developing personal narratives. Hence, strategic narratives take control of the formation, projection, diffusion, and reception of such ideas and tailor it to the preferences of the international audience. Roselle et al (2014) suggest looking the following components of the narratives in order to better understand how they are related to international relations: "character or actors; setting, environment, space; conflict or action; and resolution or suggested resolution".

Vuving (2009) states that there are three different "power currencies" that evaluate the operationalization of soft power including "brilliance, beauty, and benignity". Brilliance refers to "high performance" and achievements. A nation that possesses excellence in practices, policies, institutions, values or may be perceived as a model by another nation who looks up to it favorably. In this case, a nation's brilliance leads to its soft power gains because it causes admiration which will potentially translate into imitation (Vuving, 2009: 8-10). Beauty refers to "shared ideals, values or visions" which evokes a sense of common identity and community. When a country is perceived to be is perceived to bese of common identity and community. uses admiration whic", it will gain "credibility, legitimacy, and moral authority" which will help that country generate soft power due to the production of inspiration (Vuving, 2009: 9-11). Benignity refers to the sense of altruism and selflessness through acts of kindness. Benignity leads to soft power because it generates gratitude and sympathy and demonstrates peaceful intentions and cooperation (Vuving, 2009: 8-9).

1.3.2 Literature on Education and Soft Power

According to Nye (2004), international education is considered to be a soft power resource under the culture category. Against this background, Laifer and Kitchen (2017) concludes that educational institutions serve as "vehicles to showcase cultural forms."

Wojciuk et al (2015) proposes that education dimension of soft power plays a crucial role in soft power politics despite the fact that it has not received as much attention from academics. Wojciuk et al (2015: 3, 17) argues that because soft power is closely associated with attraction, the source of attraction is based on "what is important and valuable for the people in a given moment: what they find necessary for their well-being" such as modernization, equality, and good life. Hence, the source of soft power is arbitrary and "intersubjectively constructed" (Lukes, 2007: 87-88; Wojciuk et al, 2015: 3). This means that what is deemed attractive for some might not be attractive for others such as political and religious values. Hence, education is considered a universally attractive value that is appreciated regardless of country and culture (Wojciuk et. Al, 2015: 3). Finally, shared value plays an important role in building soft power (Nye, 2004: 11). Nye (2004)

further states that universal value is a source of soft power as "soft power is rested on some shared value".

Nye (2004: 109) states that building relationship through education is another crucial component of building soft power. In regards to the role of education in soft power building, Nye (2004: 17) points out that higher education has become increasingly more important, especially in the information age and that higher education institutions "develop soft power of their own that may reinforce or be at odds with official foreign policy goals". He further implies that academic exchanges "help create an attractive image of a country and can improve its prospects for obtaining its desired outcome" (2004: 110). Finally, in order to conceptualize the educational aspect of soft power, Wojciuk et Al (2015: 17) suggests to consider values, resources, and foreign policy tools – all of which revolve around the idea of a good life and an orientation forwards the future.

Rothman (n.d.) finds that education is a crucial element of a country's soft power stating that "education is an important though perhaps under explored avenue for softer power influences" and "education as a tool for implementing soft power internationally is relatively under-explored in the literature on soft power in international relations, though there are some efforts discussing education within the Asian context." Rothman (n.d.) states that nations engage in "cultural sharing, language exchanges, symbolic movements and protests, and internationalization of education" in order to increase its soft power. Furthermore, he suggests that there are two ways education is being used as a tool to gain soft power: internationalization of domestic educational institutions to attract foreign students such as Japan's Top Global University Project and exporting educational opportunities abroad such as the Japan Foundation and China's Confucius Institutes. Finally, Rothman states that education is an attractive resource and in order to translate such resource into soft power, the most effective transferal is through language education.

Furthermore, Paradise (2012) also views that education facilitates development of a nation's soft power. As educational soft power falls under the umbrella of diplomacy, Hong (2014: 156) states that educational diplomacy can be defined as "the practice of utilizing education as a means to facilitate the achievement of the foreign policy goals of reshaping perception and cultivating goodwill, thus improving international relations". In order to utilize education for soft power gains,

Hong states that educational exchanges are an effective strategy in building positive experiences and impression of a host country, finding that more than 50 percent of students from EU nations and China return to their countries with positive image of their host countries after the end of their exchange program.

Altbach and Peterson (2008: 37) also focuses on the role that higher education plays in internalization by discussing how America's education has helped it to progress "in the hierarchy of nations". The authors argue that the more a nation's higher education system is perceived to be attractive by international audience, the more soft power it possesses (Altbach and Peterson, 2008: 51). America's higher institutions have attracted international students from all reach of the world and the network of international students serve as a basis for American public diplomacy which could be achieved due to the renowned excellence and quality of its educational systems worldwide. Mashiko and Miki (2008) states America uses the Fulbright Scholarship Program to attract elites and future leaders to its higher institutions. Through academic exchanges, America is able to spread its values and establish mutual understandings with the potential leaders of other countries.

Trilokekar (2009: 134-135) states that Canada also adopted a similar approach as the US using education to harness soft power through programs such as "Canadian studies abroad, the Government of Canada (GOC) awards programs, academic exchanges, and the Canadian Studies Program Abroad (CSPA)". The government also invested in the marketing of Canadian higher education to attract more international students. The reasons why many countries are competing for more international students is also due to the fact that the number of international students can also represent a source of soft power (Nye, 2004; Atkinson, 2010). Furthermore, Atkinson (2010: 1) states that US-hosted educational exchange programs is a strategy for the U.S. "to effectively engage its ideational adversaries". Hence, the more volume of international students, the more opportunities for the states to project its values and idea.

Atkinson (2010: 19) finds that educational exchange is conducive to soft power gains as her study has demonstrated the following: "US-hosted educational exchange programs do play an important role in supporting the development of liberal values and practices in authoritarian states"S Further,

education will serve as an effective conveyer of values under three conditions: "(i) the depth and extent of social interactions that occur while abroad, (ii) the sharing of a sense of community or common identity between participants and their hosts, and (iii) the attainment of a politically influential position by the exchange participant after returning home (Atkinson, 2010: 2). The extent of interactions international students has with the locals tend to correlate with the positive attitude of the students towards the host country. Atkinson finds that a well-structured exchange programs that encourage international students to interact with American people, students are more likely to have positive attitude towards America in general. Furthermore, a common identity and a sense of community are "re a sense of communitforce" that influences the attitudes and perceptions of the participants. Lastly, education can be translated into effects only if the participants go back to their home countries. The positions they have in the society and politics are also important. Therefore, a structured exchange program tailored at promoting exchanges and interactions between foreign military officers and local counterparts is definitely more effective than "more effective thacivilian exchanges" due to the shared common identity, obligation to return home, and their positions in the political systems (Atkinson, 2010: 5-7).

Lo (2011) assesses the characteristics of the global hegemonies in higher education and concludes that university ranking plays an important role in making an education system attractive. She further recommends that the indicators behind university ranking need to extend beyond educational excellence to include values such diversity and equality as these are increasingly appreciated common values.

Skorton (2011) states that they are three approaches for public diplomacy through higher education. Firstly, in order to make higher education more accessible to overseas students, local students should be encouraged to study abroad as well. The second approach the establishment of universities in a host country. The last approach is the establishment of faculty-to-faculty linkages with other countries around a common interest or problem.

Although Nye (2004: 110) states that exchanges will help increase goodwill and attractiveness of a nation, some academics express some doubts that it will not always be the case and varies depending on different factors. Machiko and Miki (2008: 76) argues that it is not always the case

and that exchange opportunities do not necessarily "guarantee better understanding and cordial relationships among exchange participants" but could also potentially lead to conflicts. Therefore, it is important for universities, which play extremely crucial role in soft power building, to be more strategic and considerate in helping people to develop positive experiences. Universities with deliver quality program and activities that are conducive to diversity are perceived to be attractive.

Furthermore, Bislev (2017: 89) states that there is a strong connection between internationalization of higher education and soft power in the sense that international academic exchange contributes positively to intercultural understanding. However, whether or not the the students will like its host country enough to actively support its policies still needs to be closely determined (Bislev, 2017: 85). Roselle, Miskimmon, and O'Loughlin (2014) also states that it is not difficult to uncover changes in attitude but it is extremely difficult to determine whether changes in attitudes result in changes in behaviors as well. In order to determine the correlation between education and soft power, Bislev (2017: 84) suggests exploring the three following areas: "the pre-trip decision-making process based on existing imaginaries of the chosen host country; the actual study abroad period, with a special focus on the interaction between host country and international students; and finally the long-term effects of the period abroad in terms of changes in values and worldview."

Rothman (n.d.) states China and Japan are examples of how Asian nations use higher education institutions as a tool to fulfill the goal of harnessing soft power and that the two countries employ different approaches to educational soft power. According to Altbach and Peterson (46), Japan hosts the most international students in Asia while boasting the strongest academic system in the region. It utilizes higher education institution as a source of soft power by offering scholarships to international students, especially ones from Asian economic partners. China also aims to establish a world-class system of higher education to attract both Chinese and international students and it has witnessed a drastic surge of international students by 11 percent in 2004 due to governmental services provided to the students as well as its increasingly positive reputation.

1.3.3 Literature on Japan's Soft Power

According to Naoyuki (2008: 226), one of the main "implementing arms" of Japanese public diplomacy is the Japan Foundation, which shares a few similarities with China's Confucius

Institutes. Following the soft power policy set by the Ministry of Foreign Affairs (MOFA), the Japan Foundation places an emphasis on "cultural and art exchanges, Japanese-language programs, and Japan studies and intellectual exchanges" (Naoyuki, 2008: 226). Furthermore, Japan also focuses on bringing in international students to Japan through student exchanges, scholarships, and vocational training such as the JET program.

McConnell (2008) states that JET program is to promote internationalization by inviting international college graduates to teach English to Japanese students. Nye (2004) views the JET program as a significant part of Japan's educational soft power. Tsutomu (2008) also states that to foster and maintain soft power, Japanese-language education abroad should be consistently supported and promoted by both public and private stakeholders.

Green (2016: 89) states that Japan has focused on the internationalization of their education through initiatives such as the Top Global University project that aims to globalize Japanese universities and help them raise in global rankings. The internationalization of higher education as a foreign policy instrument helps Japan gain soft power because Japanese universities will be more attractive if they are perceived to be more international and more prestigious. Hence, more international students will be coming to Japan and enjoy their experiences so they can bring back positive attitude towards Japan back to their home country. Two other important initiatives aiming at harnessing soft power include the Japan Exchange and Teaching （JET） Program and the Cool Japan campaign. Lastly, Green suggests that one of the indicators of internationalization is the global university ranking.

According to Akiyoshi (2008: 56) education has been an aspect incorporated in Japan's strategy to building soft power in the following: "a look at education development in Japan readily reveals that education itself has functioned as a device to transform military and economic power into soft power over relatively recent decades". However, he claims that Japan's educational soft power has been losing its strength and attractiveness. In order to increase the attractiveness of Japanese educational soft power, Akiyoshi (2008: 72) states that academic profiles and "capacities to foster the development of citizens with characteristics and a culture that can be admired by the global community". In other words, culture and people play an important part in making a nation

attractive. Furthermore, universal values such as support for democracy, human rights, and individual opportunities and quality of life are also perceived to attractive by the majority (Nye 2004: 34; Bislev: 89).

As for the case of Japan, Machiko and Miki (86) states that the high education institutions play a potentially important role in building and sustaining soft power but the goal is still "largely unfulfilled" which is why Japan needs to make its higher education more attractive by offering "learning opportunities that meet current and future global needs". This statement is complementary to soft power educational model developed by Wojciuk et al. which states that education is attractive if it centers around the orientation towards the future.

1.3.4 Literature on China's Soft Power

Scholars in many fields have extensively discussed China's rising economic and political power, diplomatic presence and soft power (Edney, 2014: 1). As for Chinese academics, the concept of Nye's soft power started to gain more of their attention in the late 1990 (Petersen, 2013: 47). Nye (2005) states that the rise of China's economic and military power attracts significantly more international attention than its soft power aspect. After the end of the Cold War, China itself also acknowledged that its public diplomacy strategies were not effective enough in engaging the global audience and still has much to improve in term of its soft power (Mingjiang, 2008). According to Hsiao and Yang (2009), China's concept of soft power is unique and comprehensive while going beyond the Western definition of soft power and Nye's definition. Edney (2014: 108) describes China's unique concept of soft power extends beyond the realm of foreign policy to include domestic agenda such as as enhancing "domestic social and political cohesion". Yu Keping, one of President Hu Jintao's advisors explains that the incremental elements of soft power lie in the following factors: "education, psychological and physical condition of the people, technological advancement, superiority of national culture, human resources and strategy, social cohesion and unity, and the sustainability of socio-economic development" (as cited in Petersen, 2013: 50).

In term of China's approach to educational soft power, Ren (2012) states other than the internationalization of education, China also employs another method to build its educational soft

power and that is by exporting its language and cultural education abroad through the establishment of Confucius Institutes in the higher educational institutions globally. Other than exporting its educational systems, China also tries to reach the foreign audience through its students abroad, Bislev (82) explores China's strategy of "people-to-people ambassadors" in which it views Chinese students overseas as a "public diplomacy tool" and "soft power resources". According to Yang (2015), China's technical aid in the fields medical, agricultural and engineering, has played a vital role for enhancing positive a positive image and building soft power in Africa.

Finally, Zhao (2011) states that China has used government scholarships to appeal to international students from other countries in order to generate soft power, especially in the case of African. Since the 2006 China-Africa Summit, African students who receive Chinese government scholarships have more than doubled.

Chapter 2 Characteristics of Japanese and Chinese Soft Power

2.1 Characteristics of Japanese Soft Power

Nye (2004) states that Japan's soft power potential is the highest among all nations. After the end of WWII in 1945, Japan has undergone drastic transformation shifting its focus on military capabilities to economic and technological developments making it a model of a nation that successfully harnesses influence without involving military means (Gribvoka, 2018). Japan experienced devastating consequences and setbacks after the end of the war which led the government to focus on the national restoration and economic development as well as minimize its involvement in international politics. Furthermore, contribution to Japan's economic recovery was supported by the Supreme Commander of the Allied Powers (SCAPS) which oversaw Japan between 1945 and 1942. In the initial stage of Japan's economic recovery, SCAPS has made changes to the governance, law and regulations, as well as economic and industrial infrastructures which contributed to the foundation of Japanese economic development after the war (Inkster, 2001: 13). In 1950s, Japan made drastic progress in economic, social, and technological aspects, transforming itself from a devastated nation to an economic power while adopting export-oriented industrialization policy (Zang and Baimbridge, 2012). In 1960s and 1970s, Japan became reknown for it being a successful model of capitalism (Inkster, 2001: 1). Japan's post-war economic recovery has served as an economic development model for newly industrialized countries (NICs) and newly industrialized economies (NIEs) such as South Korea, Taiwan, Hong Kong and Singapore, all of which have been able to achieve robust industrialization (Vogel, 1979).

Japan has become a pacifist nation due to its past experiences and the new constitution which prohibits Japan from being involved in militarization (Pyle, 2008: 1). Hence, Japan no longer possesses a military and does not engage in militaristic activities other than the Japan Self Defense Forces (JSDF) which was established in 1954. The possession of nuclear weapons, however, is not explicitly prohibited in the constitution but Japan has declared that it will not acquire nuclear arms due to its experience of being the only nation to have been attacked by nuclear weapons

(Dolan and Worden, 1992). As military capabilities translate into hard power, the lack of military means that Japan's hard power has been minimized. Nevertheless, without hard power, Japan invests immense efforts in acquiring soft power. According to Koga (2017), Japan is contributing to peace by expanding its work in peacebuilding, the range of strategies and activities that create sustainable peace without necessarily using military force. Cooper (2004) further states that Japan possesses various types of soft power including urban development, industrialization, business management, or popular culture which is hugely popular among teenagers all over the world. Gribvoka (2018) also states that Japan's attractiveness derives from factors such as economic success, urban development, high quality of education, futuristic technologies, mysterious culture, all of which contribute to Japan's attractive reputation as "a smart and advanced country". Japan's soft power has been growing constantly due to various resources it possesses such as media, pop culture, cartoons, anime, fashion, lifestyle, food, music, game industry, official development assistance (ODA). Although such soft resources do not guarantee soft power gains, it helps Japan establish itself as "a norm setter" in the region (Soderberg, 2011: 37).

One of the most important players in Japan's soft power diplomacy is the Japan Foundation, established in 1972. The Japan Foundation is an extra-departmental organization of the Ministry of Foreign Affairs (MOFA) which focuses primarily on promoting Japan's culture and language and improving the international image of Japan through exchanges of people, their ideas and information (Iwabuchi, 2015: 420; Vyas: 2008). The Japan Foundation initially promoted traditional art and high culture such as Noh theater, Ikebana (flower arrangement), ukiyo-e (woodblock prints) and tea ceremony. However, such forms of art were able to reach to limited audience which is why the Foundation now also focuses on popular culture such as anime and manga in order to appeal to a wider range of audience (Lam, 2007: 356). According to Vyas (2008), the Japan foundation has become a "credible cultural relations organization with broad political support and in close cooperation with MOFA". Other than the Tokyo headquarter, the Japan Foundation has 24 offices in 23 countries and work closely with embassies and consulates, language institutions, and cultural exchange organizations (Japan Foundation, 2018). The objectives of the Foundation are "deepening mutual understanding between the people of Japan and other countries/regions, our various activities and information services create opportunities of people-to-people interactions" through developing programs in the following fields: art and

cultural exchange; Japanese language education overseas, and Japanese studies and intellectual exchange (Japan Foundation, 2018). The Japan Foundation also promotes and provides Japanese language education. According to Romanova (2013), the study of Japanese language is deeply associated with soft power gains. The study of Japanese language is common in East Asia. In 2006, 30.6 percent of South Korean and 23 percent of Chinese were studying Japanese (Romanova, 2013).

In 1987, the Japan Exchange and Teaching Programme (JET) was launched as a language education and exchange program with the purpose of "increasing mututal understanding between the people of Japan and the people of other nations" by recruiting university graduates from English-speaking nations to come and teach English in Japan with the aim of promoting "internationalization in Japan's local communities by helping to improve foreign language education and developing international exchange at the community level" (JET, 2017). Furthermore, the JET program boasts significant growth of the program from 848 participants in 1987 to 5,163 participants in 2017 and a total number of almost 60,000 participants who have taken part since the launch of the program up until today (JET, 2017). The program has been successful at drawing young people to Japan and the majority return to their home country and act as "unofficial goodwill ambassadors for Japan". According to Johnston and Nakamura (2010), the JET program is an effective foreign policy tool and a good investment in following: "for a relatively small investment in the part of taxpayers, the JET program has created huge returns, welcoming generations of non-Japanese who have, and will, go on to promote better relations between Japan and their own country and expose Japanese to the outside world in unprecedented way." The JET program is a powerful tool in obtaining soft power in the sense that the it promotes nostalgia and a sense of attachment among the participants who return to their countries, many of whom define Japan as their "second home" and Japan then becomes a part of their identity (Hughson, 2017: 213). The experiences and memories are "conducive to the dispersion of an image of Japan abroad" and the participants become "carriers of knowledge of its society and culture". All of this contributes to the image of Japan and makes it more appealing to the general public (Hughson, 2017: 214).

While traditional culture, language education, intellectual and people-to-people exchange have been the focuses of Japan's soft power diplomacy, the use of media culture also has played a very

significant role (Iwabuchi, 2015: 420). In 1980s, Japanese media culture as a part of culture diplomacy started to gain momentum. Japanese TV programs, popular music, animation, comic books and pop idols were gaining popularity in East and Southeast Asia especially among young people. Media culture plays an important role in delivering ideas and values which enhances Japan's reputation (Iwabuchi, 2015: 420-421). Japanese media culture has maintained its popularity until today among many generations because its cultural products "have the best of both worlds: distinctively Japanese in style and yet have universal appeal among the young." (Lam, 2007: 350). Furthermore, the creativity of Japanese artists is the catalyst for huge success with Hello Kitty, Pokemon, Doraemon and etc. Japan's success in marketing its media cultural products, projecting itself as 'cool' and building an increasingly powerful global commercial force has strengthened its cultural presence. With Japan possessing an immense amount of potential soft power from its cultural assets and being a cultural superpower, Mcgray (2002) comes up with the concept of Gross National Cool (GNC) which is "a measure for Japan's new source for worldwide influence" (Green: 2016: 96). GNC implies how successful Japanese media culture is selling today that even if its industrial economy loses its influence, its cultural assets would prevail due to its unprecedented influence all over the world (Allison).

The Japanese government has recognized the popularity of Japanese media culture and seized the opportunity to bandwagon on the promotion of such products in order to harness soft power (Lam, 2007: 351). As a result, Japan has mastered "the art of transmitting certain kinds of mass culture" which has been a strategy adopted by the U.S. in building its soft power through popular culture (Mcgray, 2009). In 2006, MOFA declared that it would use 'pop-culture diplomacy' to promote and enhance understanding of Japan through pop-culture which is additional to traditional culture and art under the 'Cool Japan' policy discourse (Iwabuchi, 2015: 420-421). The Cool Japan campaign was initially allocated $371 million which was later increased to $1 billion in 2015 (Green, 2016: 97). According to Diplomatic Bluebook, the policy is explained as: "Japanese culture is currently attracting attention around the world as 'Cool Japan'. In order to increase interest in Japan and further heighten the image of Japan, Ministry of Foreign Affairs (MOFA) is working with the private sector through overseas diplomatic establishments and the Japan Foundation to promote cultural exchanges while taking into consideration the characteristics of each foreign country" (MOFA, 2006: 208). According to Iwabuchi (2015: 423), a variety of

committees responsible for promoting Japanese media culture have been established including the Head Office for Intellectual Property Strategy (2002), the Committee for Tourism Nation (2003), the Committee for Info-communication Software (2003), the Research Committee for Content Business (2005), the J-Brand Initiative (2003), and the Council for the Promotion of International Exchange (2006). The 'Cool Japan' policy for national branding and soft power gains has been implemented by various governmental bodies and ministries. In 2010, the Ministry of Economy, Trade and Industry (METI) established the Cool Japan promotion office. In 2013, 'the Council for the Promotion of Cool Japan' was established by the Cabinet Secretariat with an allocation of 50 billion yen for infrastructure to promote Japan overseas. The 'Cool Japan Fund' was also established in 2013 to "capitalize on Japanese coolness to maximize its economic effect" (Kimura, 2018). While METI has a leading role in the Cool Japan policy implementation, MOFA has also been active with policy using it as a strategy for public diplomacy. Pop-culture diplomacy has been adopted for "nation branding through the dissemination of Japanese media culture" (Iwaguchi 423). One of the examples is the Japanese government efforts in promoting manga and anime worldwide establishing initiatives such as the International Manga Award, Anime Ambassador program, and the annual World Cosplay Summit. The aim is to reach out to a wide range of audience inside and outside Japan as well as to introduce Japan and its culture to foreigners as friendly, creative, fun and likeable (Kanji, 2016). In 2015, Kentaro Snoura, the Parliamentary Vice-Minister for Foreign Affairs states that "Of all the attractive things that Japan has, manga and other forms of pop culture have powerful appeal worldwide…[this] is an important asset that provides robust support for Japanese diplomacy" (as cited in Kanji, 2016). It can be summarized that METI role in the Cool Japan policy is more economy driven while MOFA prioritizes the development of "Japan's cultural standing" in the world. The common goal that both METI and MOFA share is their aspiration to improve Japan's brand image (Iwabuchi, 2015: 424). In 2014, Japan House (JH) has been established under MOFA as a strategic communications initiative for soft power with a budget of $35 million. Japan House has offices in London, Los Angeles, and Sao Paulo. Its role is rather similar to the Japan Foundation aiming to promote diverse aspects of Japanese culture and lifestyles (Stanislaus, 2017).

Japan's approach to soft power has become more proactive since Prime Minister Shinzo Abe returned to office in 2012. Since 2015, MOFA receives $500 million increase for public diplomacy.

In 2013, Japan won the bid to host the 2020 Olympics. The 2020 Olympics will be an unprecedented opportunity for Japan to shape its cultural and national identity, as well as demonstrate its assets and win the heart and mind of the world (the Soft Power 30, 2017). On top of the Cool Japan policy, Japan is trying to transition from 'Cool Japan' to a nation that providing solutions to global problems (Cool Japan Strategy, 2015 as cited in Guahardo, 2016) The Intermediary Plan was developed in 2014 with the goals of "developing human resources or a competent workforce that has global perspectives, revitalizing communities through cultural assets, and promoting international cultural exchange". Japan's new focus is more people-based and demonstrates its commitment to the inclusive development of human resources which support women and foreigners in the workforce. This will provide Japan with more soft power if its gender equality gap will be taken care of. In order to be more engaged in human resource development, the Ministry of Education, Culture, Sports, Science and Technology (MEXT) has invested efforts in English-language teaching, encouraging Japanese students to study abroad, and bringing in foreign students (Guahardo, 2016).

The Japanese government has been focusing on internationalization of its higher education system as an instrument of foreign policy to increase its influence and appeal globally as university system has an influence over a nation's profile and reputation (Green, 2016: 89). In 2014, the Japanese government launched the Top Global University project which rewards subsidies to 37 Japanese public and private universities in order to promote internationalization efforts and raise global rankings. For the Top Global University (TGU) Project, the government allocates a total budget of 7.7 billion yen for ten consecutive years starting from 2015 (Green 2016, 92). The TGU project plays the role of a soft power resource supporting selected Japanese universities to expand international networks and provide scholarship which are conducive to Japan's soft power gains.
In the attempts to attract international students to universities in Japan, the Japanese government has chosen a proactive approach in encouraging academic exchanges by coordinating with related stakeholders and higher education institutions and by granting scholarship to international students. One of the most well-known Japanese government scholarship is the Monbukagakusho Scholarship (文部科学省奨学金 - Monbukagakushō Shōgakukin) by MEXT. The Japanese government scholarships have been granted to 9,166 international students in 2017 (JICA, 2017). Other granters of scholarships include Japan Foundation, Japan External Trade Organization

(JETRO), Japan International Cooperation Agency and higher education institutions. One of the many purposes of the scholarships is to engage international students with the Japanese education system and way of life in order for them to have a first-hand exposure of Japan and develop a better understanding of Japanese culture. MOFA confirms that scholarships and grants play a vital role in promoting culture after WWII. According to statistics from the Japan Student Services Organization (JASSO) since the launch of TGU Project in 2015, there was 208,379 international students in Japan. In 2017, Japan welcomed a total of 267,042 international students which is a 11.6% increase from 2016 (239,287) and a 22% increase from 2015 (208,379) (JASSO, 2017).

Another student exchange project that has been established by MOFA in 1974 and is still running up until today is the Ship for Southeast Asian and Japanese Youth Program (SSEAYP). The purpose of the SSEAYP Program is to promote international exchange between youths of Japan and ten Southeast Asian countries in order to enhance mutual understanding and cultural exchange as states in the following: "the aims of this Program are to promote friendship and mutual understanding among the youths of Japan and the ten Southeast Asian countries, to broaden their perspective of the world, and furthermore, to strengthen their spirit of international cooperation, and practical skills for international collaboration" (Cabinet Office, 2015).

In recent years, the Japanese government has taken a more proactive approach in cultural diplomacy and do not only support the continuation of existing exchange programs but also continues to initiate new exchange programs and projects. One of the new projects include the Japan-East Asian Network of Exchange for Students and Youths (JENESYS) which has been initiated under the current Prime Minister, Shinzo Abe, at the East Asian Summit (EAS) in 2007 in Philippines. Abe announced to invest $315 million dollars to support the youth exchange program which invites youths from EAS countries to Japan (JICE, 2014). The purpose of JENESYS is to promote better understanding of Japan among international youths through a variety of activities in Japan focusing on politics, policy, economy, society and culture. Some of the activities include visits to important places and organizations in Japan, activities with Japanese youths, homestays, and fieldtrips to historical places (JICE, 2014).

Moreover, the Japanese government has been actively pushing for Japan studies at oversea universities in order to grow its soft power. The aim is to counter the growing influence of China and South Korea and to correct the narratives of its wartime past. In 2015, the Massachusetts Institute of Technology (MIT) received $5 million from MOFA to fund its Japan studies. The Abe administration feels that Japanese history is not "properly understood" in the U.S and that research on Japan should be supported. However, there was a report from an official from the Finance Ministry claiming that the Japanese diplomats take part in influencing the selection procedure of scholar on for Japan studies programs that Japan provides funding for in order to ensure that they are "appropriate" (Umekawa, 2015).

Japan's pacifist position in the international area also helps boosting its reputation, making it more favorable by other nations (Gribvoka, 2018). The role of Japan Self-Defense Forces (JSDF) in humanitarian and peacekeeping operations also contributes to its soft power (Deb, 2017). Although the JSDF is closely associated with hard power and the draw a connection between the JSDF and soft power seems rather odds, Nye (2011: 21) states that resources associated with hard power such as the military can also produce soft power depending on how it is used (Heng, 2017: 178). Despite the fact that Japan can no longer participate in wars or other military activities, Japan can participate in the United Nations missions and rescue missions under strict conditions. With the goal of "proactive contribution to peace", Japan has taken part in peacekeeping operations in Cambodia, Timor-Leste and South Sudan (Deb, 2017). Japan also participates in Humanitarian Assistance and Disaster Relief (HADR) operations in disaster-prone countries such as the typhoon Haiyan in the Philippines. Japan can operate in such missions under assistance mode which contributes to the positive reputation of Japan as "an active responsible power". Furthermore, its participation in such missions allows Japan to legitimize its military forces (Heng, 2017: 178). Moreover, JSDF is engaged in capacity-building and training with other nations, which also help Japan strengthen its global image and generate soft power (Heng, 2017: 179). Despite its inability "to apply military power in any international negotiation", Japan does not use its economic might to threaten other nations as demonstrated by the fact that Japan rarely uses economic sanctions in its foreign policy which places large emphasis on cooperation with other nations which allows Japan to harness more soft power as cooperation is one of the fundaments of soft power (Vyas, 2011: 59).

Japanese non-profit organizations (NGOs) also play a role as "agents of soft power". According to Vyas (2011:152), NGOs serve as agents of soft power by "enabling the free and transparent transmission of ideas and information between countries". For example, the Japan-China Friendship Association (JCFA) was set up to link Japanese and Chinese citizens and engage them in environmental projects, educational programs and other cultural exchanges. JCFA also promotes youth educational exchanges and longer term study. The Japanese NGOs that operate in China transmit Japanese cultural values and ideas to people in China through cooperative activities in a non-coercive manner. Hence, Japanese NGOs serve to enhance Japan's soft power by creating links and transfer information (Vyas, 2011: 153).

Another important aspect of Japan's soft power is Official Development Assistant (ODA). Due to the lack of capability to deploy its military to engage in fighting, ODA is considered as "one of the few tools Japan can use to smooth relations with other countries" (Soderberg: 2011, 39). The origins of Japan's foreign aid program took shape when it donated US$50,000 to the Colombo Plan in 1953. In 1960s, Japan's foreign aid was mainly for Asia with an emphasis on commercial agenda and by 1990s Japan became the world's largest ODA donor, contributing to a large number of infrastructures such as roads, railways, harbors, airport, and power plants in East and Southeast Asia and introducing its own development models that still set standards for many of its former recipients. Other than infrastructures, Japan's ODA is allocated on commercial programs fostering trade and investments, agriculture programs, institution building, environmental issues, peace-building, peace preservation, education and health programs (Soderberg: 2011: 51). According to the annual report of JICA (2017), in 2016, Japan allocated US$7,016.09 million to bilateral ODA and US 3,315.33 million to multilateral organizations. The total ODA contributions is US$ 10,331.42 million which is a 12.7% increase from 2015, enabling Japan to occupy the fourth rank among the member countries of the Development Assistance Committee (DAC) of the Organization for Economic Co-operation and Development (OECD)

One of the characteristics of Japanese ODA is that it focuses on building economic linkage and places high priority on the concept of "self-help". According to Richard Grant (1988), development approach based on self-help has always been one of the most prevalent components

in Japan's aid planning and implementation. The focus on self-help has derived the Meiji period and has been further amplified by Japan's own experience of post-war economic development based on the principle of self-help and little on foreign aid. Hence, the self-help and self-reliance development approach is clearly reflected in Japan's policies on foreign aids which usually aim at infrastructure, human resource development, technical assistance and intellectual support for policy formulation and institution building. Although Japan's ODA does not translate directly into soft power but it has contributed to economic prosperity and social stability in East Asia which bring benefits to Japan including soft power (Ohno, 2002: 4). Soderberg (2011: 52) conducts a comparative analysis on how aid programs of three Asian nations that were recipients of Japanese ODA and are now giving aids to other nations and finds that the characteristics of aid programs of all three nations bare resemblance to the Japanese model. Hence, Soderberg (2011) concludes that ODA policy is not only the main source of Japanese soft power that makes it attractive but is also influential in the way that its practices and values are reflected in other nations' economic development models.

One of the development model that Japan has successfully exported to other nations is the One Village One Product. The OVOP Movement is to encourage villages to specialize in one product from their locally available resources and that one product has high quality and is unique in the world (Haraguchi, 2008). Movement was officially launched in the prefectural level and later in other rural Japanese areas and finally on the global scale. The most notable significance of OVOP is the continuity and the expansion of the movement. Starting from the village level, OVOP has not only expanded domestically across the nation but also across the globe as it has been widely praised and adopted in Asia, Africa, and South America as an economic development model. Moreover, the Japanese Government has been using an OVOP approach as a foreign aid strategy, expanding its role as a policy system that has been introduced to developing countries to promote a sustainable approach to development and regional vitalization (Murayama and Son, 2012). The OVOP policy, once implemented at a local government level, has expanded at a global level, demonstrating how Japan's experience in rural development and regional revitalization is reflected in its ODA policies.

The soft power approaches discussed in this section have demonstrated that Japanese diplomacy has undergone a transition to be more proactive since 1990s (Stanislaus, 2017). The Japanese government has not only taken a proactive role in starting initiatives to cultivate soft power but also allocates and manages budgets, implements the projects, and cooperates with other related stakeholders. In the past, the Japanese government also placed a strong emphasis on soft power but its role was not as clear in how it implemented such policy. Furthermore, although there have always been initiatives for soft power diplomacy the purpose of such initiatives has gradually changed from promoting Japanese culture and international exchanges in order to enhance its image globally to placing heavy emphasis on promoting a good understanding of Japanese culture in order to obtain more influence and secure soft power gains. Japan also places more focus on cultural diplomacy in order to maintain and improve its soft power (Taksinapinun, 2008). Against the background of Nye's soft power theory, promoting Japanese culture and values to other countries will increase Japan's attractiveness in the eyes of the audience and this has become the core of Japanese foreign policy. One of the reasons why Japan has employed a proactive approach to soft power diplomacy is to counter the growing influence of its two East Asian neighbors with China being a global rising power and South Korea successfully gaining influence in cultural power due to K-Pop. Hence, Japan has to adapt to the changing political landscape in the region by pursuing proactive policies to secure influence and maximize soft power (Heng, 2017). Due to the fact that one of the most important aspects of Japan's soft power is its cultural assets, public diplomacy focuses on exporting Japanese culture and cultural products to the world (Duong, 2013: 26). While much has been written about the cultural aspect of Japanese soft power, the academic discourse on the educational aspect of its soft power has not been adequately discussed (Wojciuk et al, 2015; Rothman, n.d.; Amirbek, 2014). Therefore, a study on the educational aspect soft power will provide a better understanding of Japanese soft power overall.

2.2 Characteristics of Chinese Soft Power

Although the term soft power was coined by Joseph Nye in 1990, China has been utilizing public diplomacy to fulfill its national agenda for a very long time. For example, in 1930, the Communist Party utilized media as a propaganda tool to engage with the world audience by inviting Edgar Snow, an American journalist to report on the Party's activities and in 1949, it initiated ping-pong diplomacy in order to engage in diplomatic relations with the US (d' Hooghe, 2005). Upon the

death of Mao Zedong's in 1976, China quickly adopted an official doctrine of international peace and significantly increased its diplomatic activities along with overall interactions with other international institutions. After the Tiananmen incident in 1989, China was under international pressure and suffering from poor reputation which led China to shift its focus to building good relations with the international community. In combination with the national strategy to expand its influence internationally against the backdrop of globalization, China invested significant efforts in enhancing its presence and participation in the international community, especially in cultural and social contexts (Edney, 2014: 1). The strategies that China has adopted in order to increase its soft power include the followings: (1) foreign aids and investments that are more flexible than others in terms and conditions related to human rights, environment, and good governance, which make it more appealing to developing countries; (2) humanitarian and peace-building activities such as China's participations in UN peacekeeping missions as well as deployments of medical professionals to developing countries; (3) language and culture exchange programs with the Confucius Institute being the core of the policy; (4) official visits of government officials and international meetings which aim at increasing positive interaction with other nations; (5) bilateral cooperation in which China seeks to increase its presence and contribution by initiating new bilateral cooperation frameworks such as Shanghai Cooperation Organization (SCO) or China-Africa Cooperation Forum (CACF) (Bamrungsuk, 2014). The tools of Chinese public diplomacy in order to gain soft power include domestic media and propaganda, foreign press, internet, academic discourses, participation in global events such as hosting APEC meetings in 2001 and Olympics in 2008, foreign aid, education exchanges and overseas Chinese communities (d'Hooghe, 2005).

In order to attract international audience, China crafted strategic initiatives to mobilize its soft power resources such "smile diplomacy", "public diplomacy", and "good neighbor diplomacy" (Hsiao and Yang, 2009). In the 1990s, China focused on building relations with ASEAN states through the following strategies: "first, establish firm political and fiscal connections with Southeast Asian governments through assistance aid; second, explore a comprehensive cooperative framework through FTA-plus development plans; third, enhance cultural attractiveness and promote pro-China understanding among ASEAN states by means of quasi-governmental projects; and fourth, less often noted, expand the influence of the private sector and

its relations with Chinese overseas and local business networks in Southeast Asia" (Hsiao and Yang, 2009). Kurlantzick (2006) states that China has built strong rapport with ASEAN countries by signing the ASEAN's Treaty of Amity and Cooperation as well as the Code of Conduct in the South China Sea disputes. Furthermore, it also focuses on strengthening relations with ASEAN countries that do not have close ties with the US such as Burma and Cambodia in attempt to destabilize the influence of the US, Japan and Taiwan in Southeast Asia. Sheng Ding (2008) states that China positions itself as cooperative and willing to solve issues through peaceful means by being an active participants of ASEAN Regional Forum (ARF) and ASEAN+3, as well as being the host for the Six-Party Talks aimed at ending North Korea's nuclear program. Another major Chinese initiative is the "One Belt, One Road" project in which China attempts to recreate the old Silk Road that connects Southeast Asian, Central Asia and East Africa to Europe by developing road and rail infrastructure, energy projects, and other infrastructure. According to China, the aim of the initiative is the integration of people from different societies to create mutual trust, respect and understanding. This strategy will allow Chinese influence to expand in the region as well as create a positive reputation of China as a connector. Furthermore, the initiative will improve international recognition and significance of China as an international player (Sterling, 2018).

Furthermore, China's "peaceful rise", an attempt has been executed through its participation and contribution to regional international organizations such as the World Trade Organization and the United Nations peacekeeping operations which has allowed China to minimize fears and deter other nations from trying to balance its power. China's economic growth and growing market after the Mao's era has made it especially attractive to developing countries, especially when it has been giving out foreign aid to parts of Asia, Africa and Latin America (Nye, 2005). Although the Chinese government does not provide official number on its development spending, a report published by AidData shows that China has spent $354.3 billion between 2000 to 2014 on 4,300 projects in 140 countries rivalling the US which spent $395 billion during the same time period. The report discloses that Angola, Pakistan and Russia have received the most development spending from China. However, only 22% of the spending has been allocated to ODA which includes funding for humanitarian programs, food aid, access to medicines, agriculture support, and discounted loans to government and businesses. The major recipients of Chinese ODA are

African countries such as Cote d'Ivoire, Ethiopia and Cameroon – all of which are economically significant to china due to its mineral resources (Murphy, 2017).

China has been placing an importance on development agenda in Africa and pursuing agreements on energy and commodities. In order to appeal to Africa, China has employed various strategies such as investing in infrastructure, agriculture and energy forgiving over $1 billion debt from African countries. In countries that China invests in its energy such as Sudan, Angola and Equatorial Guinea, China has built physical infrastructures such as roads, bridges and hospitals. In term of human resource development, China also provides scholarships to students from Africa to study or participate in trainings in its universities and military institutes (Pan, 2006). As China promised scholarships and political support for African education development at Forum on China-Africa Cooperation in 2000, the number of African students in China has rose from 2000 in 2003 to 50,000 in 2015, surpassing UK and US as a destination for African students (Breeze, 2017). Moreover, China also puts effort in providing humanitarian assistance in Africa by deploying a large number of medical professionals to work across various countries. Chinese practices in Africa has helped it gain a relatively more favorable position in the continent, especially due to the fact that its foreign aid and development assistance do not usually come at the cost of political conditions like those from the West or Japan (Pan, 2006).

As for Latin America, China seized the opportunities to engage with many countries that were undergoing political transitions such as Ecuador and Venezuela in which left-wing politicians were transitioning into power by introducing economic development prospects that represent alternatives to Western ideologies in the form of Beijing Consensus. Despite the fact that the concept of Beijing Consensus has gained more spotlight internally, it faces many obstacles and doubts whether it can actually serve as "a model" to other countries. Edney (2014: 117) explains the challenges in the following: "the idea of China acting as a model – either political or economic – for other countries remains somewhat problematic given the lack of a clear and consistent ideological basis for many of the Party-state's policies, the ongoing process of significant reform that is still subject to constant assessment and adjustment, and the past efforts expended by the Part-state to counter foreign ideas by emphasizes the uniqueness of the Chinese experience." Furthermore, although China has gained popularity among many developing countries, its soft

power in the west is far from competitive, especially in comparison to its competitor such as the US, China still has a long way to go in term of expanding soft power (Nye, 2005). Nye (2005) explains the weaknesses that undermine China's soft power in the following: "China does not have cultural industries like Hollywood, and its universities are far from the equal of America's. It lacks the many non-governmental organizations that generate much of America's soft power. Politically, China suffers from corruption, inequality, and a lack of democracy, human rights and the rule of law… the continuing belligerence of its hard power stance toward Taiwan…efforts to persuade the Europeans to relax an embargo on the sale of arms imposed in the aftermath of the 1989 Tiananmen Square massacre". Nevertheless, although China's soft power may not be comparable to that of the US, China cannot be overlooked as its soft power in the making carries much potential to expand (Nye, 2005).

According to Nye (2005), China possesses an attractive traditional culture while its popular culture has already started to gain much momentum. China prioritizes culture as a tool to build soft power which is an area under the responsibility of the propaganda authorities. Furthermore, China views culture, soft power and national cohesion as interconnected and inseparable which is different from Nye whose focus on soft power is on the international level and does not consider the possibility that a state's soft power can have influence over its own domestic politics (Edney, 2014: 108). In a nutshell, the Party-state believes that enhancing its soft power has much to do with cultural policies at the domestic level (Edney, 2014: 109). As this paper focuses on its foreign policies in order to understand how China engages with other countries in order to gain soft power, the domestic dimension of soft power policy towards its own citizens will not be further discussed as it is a stand-alone on its own.

The most prominent soft power strategy that China utilizes is the expansion of Confucius Institute, especially in the higher education context (Metzgar, 2015: 2). The Confucius Institute (Hanban) is a non-profit public educational organization founded in 2004 under the Ministry of Education of the People's Republic of China. The aim of the organization is to "promote Chinese language and culture in foreign countries" (Confucius Institute Headquarters, 2014). It also manages the administration of Chinese language proficiency test (HSK), training of Chinese language teachers, and scholarship and sponsorship schemes for traveling to China (Metzgar, 2015: 2). Unlike similar

institutions such as Alliance Francaise, the British Council, Spain's Instituto Cervantes or Germany's Goethe Institute, Confucius Institute in all locations are not free-standing operations in the sense that they are affiliated universities in the host countries. The establishment of the Institute in host universities is described in the following: "Agreements can differ, but Hanban normally funds the establishment of the center, provides teachers and material from China, and pays to sustain it. The local facility usually provides the infrastructure and management and administrative staff" (Torres, 2017). For example, it is reported that China provided $3.6 million upfront to Stanford University in the US. Since its establishment in 2004, the Confucius Institute has expanded significantly with more than 1,500 centers in 140 countries globally. It is estimated that the budget from the government for each center is up to $200,000 annually. The practice allows the Institute to easily penetrate the market and expand drastically in number. Other differences would be the size and the model for expansion as the Confucius institutes itself provide Chinese language and cultural lessons to more than 1.5 million students which is on a much larger scale than Alliance Francaise (500,000) or British Council (370,000) (Torres, 2017). Furthermore, Chinese language courses offered at the Confucius Institutes can take for university credits for some universities which makes the practice translating into outsourcing Chinese language education to the Chinese government. Hence, students are exposed to direct propaganda from China which has been tailored and delivered to them in the form of language and cultural courses (Peterson, 2017). However, despite its rapid growth, the Confucius Institute faces many challenges especially with top tier education institution in Japan and the West as it is often perceived as "a Trojan horse" and "a vehicle for Chinese propaganda" because it is widely reported that the Institute controls over what the teachers from China say to its students, provide inaccurate facts to students, and put pressure on the host universities' faculty members to "censor themselves". As a result to China's restriction on academic autonomy, University of Chicago, Pennsylvania State University in the US, Canada's McMaster University, Sweden's Stockholm University, and France's Lyon University among many, have closed down their Confucius Institutes (Peterson, 2017). Finally, despite China's rapid expansion of the Confucius Institute, Zhe (2010) states that China has not made a full use of its culture as culture has two dimensions: traditional and popular. The Confucius Institute only focuses on promoting traditional Chinese culture which might not be as appealing to the younger generations. China is lacking behind its neighbors in term of distinct popular cultures such as Japan's manga and anime and South Korea's K-pop. Zhe further explains

that manga is a vehicle delivering contents that help foreigners understand Japanese culture better which then leads to overall curiosity about the Japan and consequently more people from the new generations want to learn Japanese language and culture. In term of popular culture, China is trying invest in Hollywood through partnerships with film studios and cinema chains such as Sony Pictures. Hollywood producers themselves are also more interested in paining China in a positive light in their works in order to tap into the Chinese audience. However, Chinese films still have not been successful in reaching the global market and its appeal to the audience is still questionable. Other than the film industry, China promotes key figures such as actor Jackie Chan and professional basketball player Yao Ming. Pandas also have become one of China's cultural product in which it utilizes "panda diplomacy" and "panda loan" to foster amicable relations with other nations. Despite China's billions of dollars investment in soft power, a concrete result is yet to be seen.

While the Confucius Institution is a soft power strategy that is executed abroad in different countries, another strategy to make use of education exchange is a domestic one. China tries to internationalize its educational systems and make its higher education institutions more appealing to international students. One of the prominent examples is the Schwarzman and Yenching programs. The Schwarzman educational program provides scholarships to bring Americans and other international students to China for graduate study at Tsinghua University which is one of the most prestigious universities in China. Similarly, Yenching Academy also offers scholarships to attract international students to the prestigious Peking University. The two programs were established and promoted at around the same time which reflects on China's increasing efforts in utilizing education to promote its soft power. The major difference with the Confucius Institution is that the China is expanding its soft power efforts in "locales under direct Chinese government influence: state-controlled educational institution" (Metzgar, 2015: 7-8). It is undeniable that the common aim of the two program is to familiarize future elites from foreign countries with China and its perspectives, culture, values, and language, as well as to provide them with knowledge and better understanding of China's culture, society, history, and politics. Since 1990s, China has witnessed 300% growth in number of international students in China. Despite the constant growth in number, the majority of international students in China are not degree students are only there to study Chinese language. Therefore, China pushes forward these two programs in order to recruit

outstanding students who will be potential leaders once they return to their home country in order to make sure the expansion of Chinese influence through its alumni. In order to attract such students, China does not only support with scholarships but also invites high-profile academics to serve in advisory roles such as Condoleeza Rice, Henry Kissinger, Tony Blaire and Colin Powell. While the long term result of the two programs are yet to be seen, the promotion efforts reflect on China's proactive quest for soft power (Metzgar, 2015: 12).

Chapter 3 Theoretical Approach

3.1 The Model of Educational Soft Power

With the purpose of answering the research questions, the theoretical considerations on the topic of educational soft power will be explored and identified in order to be able to operationalize the concept of educational soft power. Then, a theoretical framework for this research will be defined which will provide a basis for the empirical analysis. As education has been used as a diplomatic tool to improve soft power of a nation, the author has reviewed frameworks related soft power and education in order to assess similarities and differences of Japan's and China's educational soft power.

As discussed in the previous section on the state of arts on soft power, the author draws on the work of Wojciuk et al. (2015) to identify the differences and similarities in characteristics of how Japan and China utilizes education to wield its soft power. Wojciuk et al.'s emphasis on the ideal of a good life and an orientation towards the future as the attraction of education is useful in this analysis as it tackles an increasingly popular concept such as quality of life, social progress, development, and happiness – all of which provides a contrast to common conceptualizations of soft power that usually focus on cultural and economic factors. Moreover, Wojciuk et al.'s attention to values, policy tools, and resources is of value for understanding educational soft power of China and Japan. Finally, Wojciuk et al.'s conceptualization of educational soft power is generative for identifying the differences and similarities in how Japan and China mobilizes education for soft power gains.

In order to perform a comparative analysis of educational soft power of Japan and China, the model of educational soft power developed by Wojciuk et al. (2015) will be used as the basis to understand the nature of how each country attempts to generate soft power through the internationalization of education. The model of educational soft power provides the conceptualization of the concept through three dimensions including: values, resources, and policy tools. Wojciuk et al. (2015) has attempted to conceptualize educational soft power in international relations and has created the model of educational soft power which is divided into three

mechanisms: values, resources, and policy tools. Furthermore, the core of soft power is attraction and what makes education attractive is "centered around the idea of a good life and an orientation towards the future" (Wojciuk et al, 2015: 17). Hence, mechanisms associated with the idea of a good life and a promising future can be indicators of educational soft power. The theoretical framework developed by Lee (2009) as previously discussed is complementary to Wojciuk et al.'s model in which it highlights the importance of resources in soft power. Against this background, the three mechanisms of educational soft power will be introduced and will later be used to compose a coherent analytical framework.

3.1.1 Value

The value mechanism plays an important role in building soft power because values can be attractive for foreign audiences and an effective carrier of value is education (Wojciuk et al, 2015: 17). Hence, education is an effective tool in spreading certain values that are deemed attractive to foreign audience and as the audience associates such values with a nation through education, they view that nation with favorable opinions. This can be confirmed by Steter et al (2010: 193) who conclude that norms and values are spread through a nation's education system through education exchanges and students themselves who bring the values back to their home country and carry the values as they progress socially and professionally. Moreover, upon successful completion of higher education, foreign students will eventually return home with familiarity of customs, language, culture, and science of the host country as well as personal relations and social networks – all of which can be transferred to their professional and social circle (Nye, 2004: 12; Amirbek and Ydyrys, 2014: 515). In other words, once the students return home, many of them occupy leading or influential positions in the organizations in which they also act as "Trojan-horse" transmitting socio-political values (Tremblay, 2010: 117). Moreover, Wojciuk et al (2015: 17) further identify some of the attractive values stating that "the most important and resonating ones were modernization, equality, good life and competitiveness". Therefore, the author of this thesis adopts the aforementioned values proposed by Wojciuk et al. as ones of the attractive values that gain favorable opinions among the international audience and are therefore the criteria for values.

3.1.1.1 Modernization

Among its many existing definition, modernization is defined as "a linear path towards a developed industrial society" and it is an indicator for "a change in the value system" (SOAS, n.d.).

In attempt to operationalize the concept modernization, Lipset's Thesis provides a theoretical fundament by establishing the theoretical link between the level of development to democracy as the following: "the more well-to-do a nation, the greater the chances that it will sustain democracy" (Lipset, 1959: 75). McCulloch (2014) suggests the Democracy Index established by Economist Intelligence Unit (EIU) provides a measurement for democracy as it focuses on five following variables: "the nature of electoral processes (e.g. free elections), functioning of government (e.g. checks and balances on government authority), political participation (e.g. voter turnout), democratic political culture (e.g. popular support for democracy) and civil liberties (e.g. a free press, independent judiciary) in a country". Coppedge et al (2011: 249) suggests that the Political Rights and Civil Liberty by Freedom House are comprehensive at measuring democracy. In further attempts to operationalize modernization, Stockemer and Sundstrom (2014) states that modernization is "a multifaceted concept" which cannot be measured by a single indicator but should be approached by analyzing four indicators including the regional per Capita GDP, the percentage of citizens employed in agriculture, industry and the service sector, women's participation in the labor force, and population density. The regional per capita GDP reflects the development and with higher development, there would be a higher demand for women in workforces, especially in "positions of power" such as political representation (Burns et al., 2001 as cited in Stockmer and Sundstrom, 2014). Secondly, the shift of citizens employed in agriculture, industry to the service sector provide an overview of the employment trend which reflect opportunities which may be attractive to international students. Population density can reflect a country's modernization because people who live in urban tend to have more access to multicultural environment, foreign influence, and modern values and lifestyles (Stockmer and Sundstrom, 2014). Lastly, Stockmer and Sundstrom (2014) states that women's labor force participation is the last indicator as high rate of women's workforce participation is "one of the most visible aspects of the modernization process".

3.1.1.2 Equality

The concept of equality that is covered in this paper will focus on the gender dimension due to the fact that gender equality does contribute to the influence attractiveness of a country. In order to better understand how social equality relates to soft power, Anguelov (2015) explains that educational opportunities for women is a powerful soft power tool. Furthermore, Cameron (2018) also emphasizes the role of gender equality in soft power politics stating the following: "there is a clear connection between women's inclusion and increasing prosperity and stability, and it seems that equality may also enhance nations' soft power." She further explains that many countries that promote women's rights and gender equality have earned improved reputation such as Canada and Nordic countries, which are "punching above their weight in indices of soft power" (Cameron, 2018). According to Soft Power 30 and a survey from British Council of youth perceptions in the G20, Canada ranks highly for its attractiveness which is partially due to the fact that Prime Minister Justin Trudeau has been actively campaigning for women empowerment and feminism, as well as appoint "a fully gender balanced cabinet", all of which is Trudeau's strategy to gain popularity and soft power (Cameron, 2018; Soft Power 30, 2018). Cameron suggests to look at Global Gender Gap Report which is developed by World Economic Forum as well as gender representation in ministerial position for indicators of gender equality. In order to narrow down the indicators of gender equality, it is important to consider how each indicator is relevant to a country's attractiveness in the eyes of international audience, especially international students. Therefore, gender equality indicators that represent an orientation towards a good life or a bright future such as ones related to employment opportunities for international students will be extracted for this papers. The UN Human Development Data between 1990-2015 suggest indicators such as female share of paid employment in non-agriculture, labor force participation rate for male and female, unemployment rate female to male ratio as well as indices such as Gender Development Index (GDI) and Gender Inequality Index (GII). Furthermore, gender quality extends beyond women rights as Fujita and Griffin (2017) states that promoting lesbian, gay, bisexual, transgender, and queer (LGBTQ) equality is also conducive to build brand loyalty and gain soft power and suggests Corporate Equality Index as one of the indicators of LGBTQ equality stating that it is "the gold standard for business leaders in the U.S. and increasingly with their colleagues around the world".

Hence, the indicator for equality will include female share of paid employment in non-agriculture, labor force participation rate for male and female, unemployment rate female to male ratio, gender representation in ministerial position, Global Gender Gap Report Gender Development Index (GDI), Gender Inequality Index (GII), and Corporate Equality Index.

3.1.1.3 Quality of Life

Quality of life is defined as "notion of human welfare (well-being) measured by social indicators rather than by "quantitative" measures of income and production" (UN, 2016). Traditionally quality of life is often measured by material consumption as Friedman (2011) states that "mainstream poverty analysis takes consumption as the operational measure of the "welfare space" and stipulates a consumption threshold below which an individual or household is deemed poor". Hence, the operationalization of quality of life in this papers will focus on both quantitative and social measures. The report *How's Life? Measuring Well-Being* (2011: 19) by OECD proposes the dimensions of quality of life as follows: "health status, work and life balance, education and skills, civic engagement and governance, social connection, environment quality, personal security, and subjective well-being". In order to operationalize quality of life, this papers prioritizes dimensions and indicators that are attractive to international students. Lee (2016) came up with the operationalization of a country's attractiveness utilizing indicators related to well-being such as social attractiveness, economic attractiveness, and environmental attractiveness. In order to operationalize economic attractiveness, Lee suggests variables such as market size, market growth, purchasing power, and market openness. Although GDP is used as a standard benchmark of economic development, it is also used to measure social progress as the European Union (EU) explains in the following: "although it (GDP) was not intended as an indicator of social progress, it has been considered to be closely linked to the well-being of citizens." As for social attractiveness, Lee considers variables such as human development, political stability, transparency and culture. EU (2018) also proposes health as an essential part of quality of life which can be measured using life expectancy and the number of healthy life years. Furthermore, Friedman (2011) proposes personal safety as another indicator of quality of life. Lastly, natural and living environment has effects on the quality of life and economic prosperity of societies (EU, 2018). In order to operationalize of environmental attractiveness, Lee proposes variables such as greenhouse gas, air pollutants, and clean energy.

3.1.1.4 Competitiveness

The term, competitiveness, is rather broad and is not specific enough to narrow down its definition. Furthermore, Wojcuik et al (2015) does not provide any further clarification which makes it ambiguous to pin point the dimension of value that competitiveness belongs to as literature regarding value on competitiveness is limited. Therefore, this papers will narrow the scope down to the dimension of competitiveness that makes a nation more attractive. Porter (1990) argues that a nation's competitiveness does not originally come from its natural resources, labor pool or financial resources as classical economics suggest but rather from its capacity to innovate and upgrade the aforementioned resources. Atkinson (2013) defines a nation's competitiveness as "the ability of a region to export more in value added terms than it imports when including for "terms of trade" to reflect all government "discounts" and import barriers". The two explanations of competitiveness share one common denominator and that is to innovate and to create value from existing resources. Although innovation is not synonymous to value adding but it is closely related as Carlson and Wilmot (2006: 4) states that "…innovation is the process that turns an idea into value for the customer and results in sustainable profit for the enterprise" while Kumar (2013: 1) states that innovation is "…a viable offering that is new to a specific context and time, creating user and provider value". Hence, this papers will focus on innovation as a variable of competitiveness that makes a nation more attractive. Anguelov (2017) explains how innovation is relevant to soft power in his article *How the new digital world is changing how we conceive of soft power* in which he states that the traditional definition of soft power is now being challenged by "the technological innovation of new media and new means of communications" and is drifting away from diplomacy to "the disaggregated, individually-led, and relatively uncontrolled digital sphere of clickbait and smart devices". Moreover, Anguelov (2017) concludes that technological innovation is the major change in soft power definition. Lasserre (2018: 169) states that technological innovation is one of the measures for a country's attractiveness. Therefore, technological innovation plays a role in attracting international students but to which extent is still unclear. In order to operationalize technological innovation, the indicators for innovation are divided into two categories: indicators based on innovation input and indicators based on innovation output. Indicators based on innovation input is mainly related to R&D as follows: "R&D budget, existence of formalized R&D in the company, participation in R&D projects with

other organization, acceptance on publicly-funded innovation support programs, and educational background of staff" (Flor and Oltra, 2004: 324-5). However, the indicators present in this dimension overlap with the next section on Educational Resources and therefore, will be covered in Educational Resources instead. Furthermore, indicators based on innovation output will be covered. In fact, indicators based on innovation output are considered stronger indicators than ones based on input as explained by Flor and Oltra (2004: 324) in the following: "we might consider indicators based on innovation results to be stronger than those based on input, as they fulfill the basic requirement for innovation in that a technological innovation actually occurs." Finally, the indicators based on innovation output are categorized into two dimensions: patent and innovation. Indicators for the patent dimension include number of patents, number of innovations based on patents, and number of patent citations. Indicators for the innovation dimension include number of innovations, innovations in technical and specialized journals (LBIOs) and new products as a percentage of total sales deriving from innovative products (Flor and Oltra, 2004: 324-9).

3.1.1.5 Summary

The summary of operationalization of the "Value" dimension of educational soft power is demonstrated in table 1.

Table 1 Summary of the Operationalization of the Value Dimension

Value		
Criteria	**Variables**	**Operationalization**
Modernization	Socio-Economic Structure	the regional per Capita GDP, the percentage of citizens employed in agriculture, industry, and the service sector, women's participation in the labor force, and population density (number of people per square kilometer)
	Democracy	EIU Democracy Index, Freedom in the World,
Equality	Gender Equality	female share of paid employment in non-agriculture, labor force participation rate for male and female, unemployment rate female to male ratio, gender representation in ministerial position, Global Gender Gap Report Gender Development Index (GDI), Gender Inequality Index (GII), and Corporate Equality Index
Quality of Life (Good life)	Economic Attractiveness	GDP, market size, market growth, purchasing power, and market openness

	Environmental Attractiveness	Co2 emission, air pollutant (particle emission), clean energy (renewables generation)
	Social Attractiveness	Human development index (HDI), Political Stability Index, Corruption perception index, sporting success (International Olympic Committee), life expectancy and the number of healthy life years, crime rates, homicide
Competitiveness	Patent	number of patents, number of innovations based on patents, and number of patent citations
	Innovation	number of innovations, innovations in technical and specialized journals (LBIOs) and new products as a percentage of total sales deriving from innovative products

3.1.2 Educational Resource

The resource mechanism centers around the fact that a nation's soft power is generated by the resources it possesses such as quality of a nation's education system (Wojciuk et al, 2015: 17). Cowan and Arsenault (cited in Amirbek and Ydyrys, 2014: 515) state that the capability to provide educational opportunities to foreign students is "the most important instruments of soft power of the state". Many governments are aware of the fact that attractive education system is conducive to soft power generation which sheds light on the recent trends in the internationalization of higher education as studies have demonstrated that "building soft power is a key strategic function in the development of education hubs around the Asia Pacific region" (Sheng-kai, 2015: 2). Nevertheless, a nation's attempts to develop education hubs alone do not necessarily lead to educational soft power because it requires a well-established education system that fulfills the international standards of academic institutions to succeed. Furthermore, Cowan and Arsenault (cited in Amirbek and Ydyrys, 2014: 515) indicates that only education systems that is "integrated into the international educational and scientific space, can become one of the major competitive advantages of the modern state in the "global competitions for minds" and attract the most talented foreign students." For example, the U.S. has long acknowledged the importance of education as a soft power instrument and succeeded in establishing high quality educational system rapport with foreign students, making it one of the most attractive destinations for talents from all over the world. As a result, the U.S. education system allows it to successfully implement its geopolitical strategy and foreign policy. Furthermore, high-quality human capital, local and global human network, and high valued intellectual capacity are soft power resources that have long-term socio-

political and cultural impacts (Cheng, Cheung & Yeun 2011: 481-482 as cited in Sheng-kai, 2015-2).

By reviewing soft power measurement reports, the author is able to extract soft power indicators that are related to education. The Soft Power in Asia report states that human capital can be measured by looking at the country's level of education and country's quality of university. The New Persuaders report states that the education aspect of soft power can be measured looking at quality of universities and number of foreign students. The Elcano Global Presence Index (2018) suggests scientific research (number of articles published in the areas of arts and humanities, social sciences, and sciences) and educational outreach (total number of foreign students present in the country) as indicators for educational soft power. The Soft Power 30 Index (2017) states that the ability to attract foreign students is a powerful tool for a soft power which can be measured by quality of university, number of international students in the country, and academic output at higher institution. Diaz (2014) discovers that the level of investment in Research and Development (R&D) affects the international attractiveness of the country's higher education systems. OECD suggests cost such as tuition fee and cost of living plays a role in the attractiveness of the education system, especially among international students from developing countries which is reflected in the deterioration of the US market share due to its comparatively high tuition fees for international students. From here, we are able to extract three criteria of educational resources: quality of education, human capital, and R&D. The next part of this section will further elaborate and build on each criteria and its variables as well as clarify its operationalization.

3.1.2.1 Quality of Education

While many definitions for quality of education have been reviewed, the one defined by the Flemish Association for Development Cooperation and Technical Assistance (VVOB) is in line with the model of educational soft power developed by Wojcuik et al. VVOB (n.d.) defines quality education as follows: "Quality education provides all learners with capacities they require to become economically productive, develop sustainable livelihoods, contribute to peaceful and democratic societies and enhance individual wellbeing." This definition focuses on how education fits into the dimension of an orientation towards the good life and well-being as emphasized by Wojcuik et a. It is obvious that the quality of education is what makes a country more attractive to

international students. She and Wotherspoon (2013) makes a connection between quality of education and how it enables a country to attract international students by using the example of the US explaining the following: "the US has traditionally been the most attractive destination for international students, especially for those at advanced research levels, due to its academic prestige and extraordinary education and research resources". In order to operationalize quality of education, Wojcuik et al (2015: 14) states that university ranking is the one of the important measurements. Biever and Martens (2011) suggests that the Program for International Student Assessment (PISA) developed by OECD is an effective measurement of education quality and "an indicator of the performance and social integration ability of education systems" (Zahner et al, 2002 as cited in Bieber and Martens, 2011: 1). PISA tests on scientific, reading, and mathematical literacy, and problem solving abilities (Bieber and Martens, 2011: 1). English as a language of instruction is also important to the attractiveness of the university as English is widely perceived to be a mean of communication that will open doors to international employment opportunities (UNESCO, 2012: 43). Good quality education also attracts a lot of international students, therefore, the number of international student should also be taken into consideration (the Soft Power 30, 2017; the Elcano Global Presence Index, 2018). UNESCO (2012: 42) suggests that academic output in leading international journals are vital to the ranking of the universities. It can be operationalized by number of articles published in the areas of arts and humanities, social sciences, and sciences.

3.1.2.2 Human Capital

The second criteria for educational resources is human capital. One of the most powerful attractions of a country can be found in its work force and further explains that human capital makes a country attractive to FDI which then drives an active labor market (Kapstein, 2001: 9; Dorozynska, 2014). As a result, an active labor market would mean that there are more employment opportunities which makes the market more attractive to international students.

The concept of human capital has dated back to 18th century when Adam Smith explains that economic activity was driven by "the acquired and useful abilities of all the inhabitants or members of the society (Smith as cited in OECD, 2006: 28). However, it wasn't until 1960s that the idea of human capital became systematically developed (OECD, 2006: 28). Schultz (1961) once states

that “economists have long known that people are an important part of the wealth of nations”. Oxford English Dictionary defines human capital “the skills the labor force possesses and is regarded as a resource or asset.” OECD (2006: 29) defines human capital as “the knowledge, skills, competencies and attributes embodied in individuals that facilitate the creation of personal, social and economic well-being”. As both definitions focus on the possession of knowledge and skills, the operationalization of human capital will explore variables related to knowledge and skills. The operationalization of human capital can be divided into two main categories: country’s level of education and financial resources (UNESCO, 2018).

In order to operationalize country’s level of education, UNESCO Institute for Statistics (2018) suggests indicators related to education performance of the population such as literacy rate, enrolment by level of education, gross enrolment ratio and graduation ration. As for the operationalization of financial resources, UNESCO suggests public expenditure on education and its related activities. Furthermore, World Economic Forum also has designed a comprehensive ranking of nations’ human capital known as Human Capital Index. This index will also provide an overview of how each nation’s human capital is assessed. The Human Capital Index also suggests key indicators such as total population, working age population, tertiary-education population, aged dependency ratio, child dependency ration, media age of population, GDP per capita, labor force participation rate, employment-to-population ratio, and unemployment rate.

3.1.2.3 Research and Development (R&D)

The last criteria for educational resource is R&D. While there is no single concrete definition for R&D, Forbes and Wield (2004: 267) defines R&D as “e concrete definition for Rindigenization, learning from other firms, improving existing products, the core business of the firm, research aimed at producing new knowledge, or coordinating global knowledge systemsvin OECD (2015) places an emphasis on development of knowledge and defines R&D as the following: “R&D comprise creative and systematic work undertaken in order to increase the stock of knowledge—including knowledge of humankind, culture and society—and to devise new applications of available knowledge.” R&D is deeply intertwined with other educational resources variables as investment in R&D contributes to the quality of education and improves human capital, increasing

overall development and wealth of a nation (Cosmen, 2013). Furthermore, R&D also contributes to university rankings and serves as an important indicator on higher education institutions' (HEI) ability to attract quality students and researchers from both at home and abroad, as well as helps secure external funding (Wendt et al, 2015: 13). Hence, R&D contributes to the reputation of higher education institutions and makes an education system of a nation more attractive to international students. The operationalization of R&D can be divided into two variables: R&D expenditure and human resources in R&D (the Elcano Global Presence Index, 2018; Diaz, 2014). R&D expenditure can be measured using indicators such as GDP per capita, R&D expenditure, R&D expenditure as a % of GDP, public expenditure on education, and gross domestic expenditure on R&D (GERD). Moreover, human resources in R&D can be measured using total R&D personnel, researchers in R&D, technicians and equivalent staffs in R&D, and share of researchers in business sector (UNESCO, 2018).

3.1.2.4 Summary

The summary of operationalization of the "Educational Resource" dimension of educational soft power is demonstrated in table 2.

Table 2 Summary of the Operationalization of the Educational Resources Dimension

Educational Resources		
Criteria	**Variables**	**Indicators**
Quality of Education	Quality of university	QS World University Rankings (QS); Times Higher Educational World Ranking (THE); Program for International Student Assessment (PISA); Academic Ranking of World Universities (ARWU); language of instruction; number of foreign students
	Academic output at higher institutions	number of articles published in the areas of arts and humanities, social sciences, and sciences
Human Capital	Level of education	Enrolment by level of education; percentage of adults enrolled in formal education by level of education; gross enrolment ratio by level of education; completion and graduation ratio; population by completed level of education; literacy rate, Human development index (HDI), Human Capital index, total population, working age population, tertiary-education population, aged dependency ratio, child dependency ration, media age of population, GDP per

		capita, labor force participation rate, employment-to-population ratio, and unemployment rate
	Financial resources	Government expenditure on education; government expenditure per student; initial funding of education by source; expenditure by nature in public institutions
R&D	R&D Expenditure	GDP per capita; R&D expenditure; R&D expenditure as a % of GDP; public expenditure on education; gross domestic expenditure on R&D (GERD)
	Human Resources in R&D	Total R&D personnel; researchers in R&D (in headcounts); researchers in R&D (in headcounts) per 1 million population; technicians and equivalent staffs in R&D; share of researchers in business sector

3.1.3 Policy Tools

The policy tool mechanism of educational soft power takes into consideration the fact that education has become one of the most effective soft power policy tools (Nye, 2004: 14). Wojciuk et al (2015: 17) refers to this mechanism as "when a country uses education as a tool for achieving certain policy goals". Effective domestic development policies that rely on knowledge, education, or foreign development aid are examples of how education is used as a policy tool (Wojciuk et al, 2015: 17). Moreover, Sheng-kai (2015: 2) states that more and more higher education institutions have been used as tools to implement the state's policies and questions the appropriateness of the growing trend. However, by using education as a policy tool to achieve soft power, the source of soft power in this case originates from the chosen policy and not from education itself. In mobilizing education as a policy tool, the outcome of such policy often comes in the form of development aid. The operationalization of this dimension has to focus on domestic development policies related to education and official development assistance (ODA) in education (Wojciuk et al, 2015: 13).

3.1.3.1 Domestic Development Policies

As for domestic development policies, one of the trend that governments adopt in regards to education is internationalization of higher education. Internationalization of higher education is defined as the " Internationalization at the national, sector, and institutional levels is defined as the process of integrating an international, intercultural, or global dimension into the purpose,

functions or delivery of postsecondary education" (Knight, 2015). Internationalization of higher education is considered "the top stage of international relation among universities" as it does not only contribute to knowledge translation and acquisition but also commercial gains. However, once the governments take the matter in their own hands to integrate internationalization of higher education as a national policy, the objective is slightly different. At the national level, internationalization is a foreign policy instrument that serves to build national prestige and contribute to nation branding due to "the desire to be recognized as a nation with world class universities". The aim of internationalization is to promote higher education institutions in order to attract more international students. Hence, the more attractive a nation is perceived by international audience, especially students, the more soft power it is able to obtain (Deodato, n.d.; Bislev, 2017). In order to operationalize internationalization of higher education, indicators such as immigration policies, working opportunities after graduation in host country, affordability of tuition fee, cost of living, availability scholarships and loans, and ratio foreign student to domestic student population (Kolster, 2014).

3.1.3.2 Official Development Assistance (ODA)

According to OECD Development Assistance Committee (DAC), official development assistance (ODA) is defined as the following: fgovernment aid that promotes and specifically targets the economic development and welfare of developing countries. The DAC adopted ODA as the ttractive a nation is er, once the governm it remains the main source of financing for development aid."oMoreover, the OECD (2018) further clarifies the definition of ODA as "those flows to countries and territories on the DAC List of ODA Recipients and to multilateral institutions which are: i. provided by official agencies, including state and local governments, or by their executive agencies; and ii. each transaction of which: a) is administered with the promotion of the economic development and welfare of developing countries as its main objective; and b) is concessional in character and conveys a grant element of at least 25 per cent (calculated at a rate of discount of 10 per cent)." ODA has been utilized as a foreign policy tool for DAC countries as Apocada (2017) states that "the majority of countries around the world are engaged in the foreign aid process, as donors, recipients, or, oftentimes, both. States use foreign aid as a means of pursuing foreign policy objectives." According to the Ministry of Foreign Affairs (MOFA) of Japan, Japan considers ODA

as its most important foreign policy instrument to promote peace and increase its international contribution. However, what is not mentioned is that it is a policy instrument that helps Japan secures soft power which compensates for its lack of hard power which is due to its limited military capacity. While aid donors claim that the main objective is to "increase human welfare, the primary reason is to pursue foreign policy goals" which can be anything from securing commercial and economic gains, maintaining sphere of influence to improving reputation and increasing prestige (Apocada, 2017).

While the allocation of ODA by sectors varies depending on the donor countries, education sector is considered as one of the important elements of ODA which contributes to international development making it one of the eight Millennium Development Goals and one of the 17 Sustainable Development Goals (Tarnoff, 2016: 1-2). The U.S. Agency for International Development (USAID) (1980) places an emphasis on education programs as they are vital elements to its ODA allocation stating the following: "education is a vital element in the successful socio-economic development of a country. Ignorance and illiteracy hinder developing-country economic development and block the poor from participating in and benefiting from economic development." According to Wojciuk et al (2015: 13) foreign aid allocated to the educational sector usually comes in the form of educational infrastructure development and provision of scholarship, exchange and training programs. By providing scholarship and establishing educational exchange initiatives, a country will be able to tap into the international talent pool, attract international students, as well as enhance its own reputation and overall soft power. On the other hands, provision of educational infrastructure development such as construction of school, libraries, and museums will contribute to positive recognitions and reputation for the donor. The operationalization of ODA will explore variables of educational infrastructure development and scholarship and training programs. The variables of scholarship and training programs are number of scholarship recipients, number of scholarship recipients completing course and returning to home country, number of scholarships and disaggregated by level of award (UNESCO, 2016). JICA suggests indicators such as number of training participants. As for educational infrastructure development, indicators such as number of primary and secondary schools built.

3.1.3.3 Summary

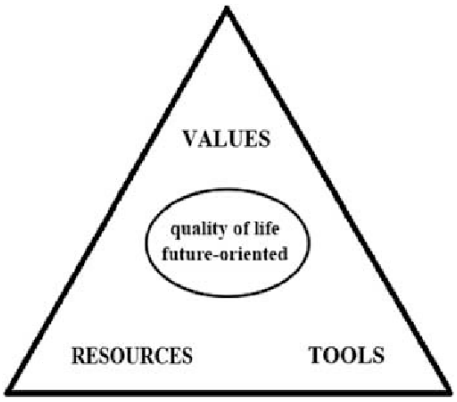
The summary of operationalization of the "Policy Tools" dimension of educational soft power is demonstrated in table 2.

Table 3 Summary of the Operationalization of the Policy Tool Dimension

Policy Tools		
Criteria	**Variables**	**Indicators**
Domestic Development Policies		immigration policies, working opportunities after graduation in host country, affordability of tuition fee, cost of living, availability scholarships and loans, and ratio foreign student to domestic student population
Foreign Development Aid	Infrastructure Development	number of primary and secondary schools built
	Scholarship and Training Programs	number of scholarship recipients, number of scholarship recipients completing course and returning to home country, number of scholarships and disaggregated by level of award

3.2 Summary of Analytical Framework

Figure 1 Educational Soft Power Model



Source: Wojciuk et al. (2015)

Table 4 Analytical Framework for Assessing Educational Soft Power of Japan and China

Dimension	Criteria	Variables	Operationalization
Values	Modernization	Socio-Economic Structure	the regional per Capita GDP, the percentage of citizens employed in agriculture, industry, and the service sector, women's participation in the labor force, and population density (number of people per square kilometer)
		Democracy	EIU Democracy Index, Freedom in the World,
	Equality	Gender Equality	female share of paid employment in non-agriculture, labor force participation rate for male and female, unemployment rate female to male ratio, gender representation in ministerial position, Global Gender Gap Report Gender Development Index (GDI), Gender Inequality Index (GII), and Corporate Equality Index
	Quality of Life (Good life)	Economic Attractiveness	GDP, market size, market growth, purchasing power, and market openness
		Environmental Attractiveness	Co2 emission, air pollutant (particle emission), clean energy (renewables generation)
		Social Attractiveness	Human development index (HDI), Political Stability Index, Corruption perception index, sporting success (International Olympic Committee), life expectancy and the number of healthy life years, crime rates, homicide
	Competitiveness	Patent	number of patents, number of innovations based on patents, and number of patent citations
		Innovation	number of innovations, innovations in technical and specialized journals (LBIOs) and new products as a percentage of total sales deriving from innovative products
Resources	Quality of Education	Quality of university	QS World University Rankings (QS); Times Higher Educational World Ranking (THE); Program for International Student Assessment (PISA); Academic Ranking of World Universities (ARWU); language of instruction; number of foreign students
		Academic output at higher institutions	number of articles published in the areas of arts and humanities, social sciences, and sciences
	Human Capital	Level of education	Enrolment by level of education; percentage of adults enrolled in formal education by level of education; gross enrolment ratio by level of education; completion and graduation ratio; population by

			completed level of education; literacy rate, Human development index (HDI), Human Capital index, total population, working age population, tertiary-education population, aged dependency ratio, child dependency ration, media age of population, GDP per capita, labor force participation rate, employment-to-population ratio, and unemployment rate
		Financial resources	Government expenditure on education; government expenditure per student; initial funding of education by source; expenditure by nature in public institutions
	R&D	R&D Expenditure	GDP per capita; R&D expenditure; R&D expenditure as a % of GDP; public expenditure on education; gross domestic expenditure on R&D (GERD)
		Human Resources in R&D	Total R&D personnel; researchers in R&D (in headcounts); researchers in R&D (in headcounts) per 1 million population; technicians and equivalent staffs in R&D; share of researchers in business sector
Policy Tools	Domestic Development Policies		immigration policies, working opportunities after graduation in host country, affordability of tuition fee, cost of living, availability scholarships and loans, and ratio foreign student to domestic student population
	Foreign Development Aid	Educational Infrastructure Development	number of primary and secondary schools built
		Scholarship and Training Programs	number of scholarship recipients, number of scholarship recipients completing course and returning to home country, number of scholarships and disaggregated by level of award

3.3 Methodological Approach

In this paper is based on the Model of Educational Soft Power developed by Wojciuk, Michalek and Stormowska (2015). The Model aims to conceptualize and operationalize the concept of educational soft power. By using the Model of Educational Soft Power as the basis, the Analytical Framework for Assessing Educational Soft Power has been developed. The Framework is divided into three dimensions that are the fundaments of educational soft power. The value dimension will focus on values that are attractive to foreign audiences such as modernisation, equality, good life, and competitiveness. The resource dimension addresses the resources a country possesses that contribute to the generation of soft power such as quality of education. The policy tool dimension covers how a country uses education to fulfil their policy goals such as foreign aids. Empirical indicators have been compiled with a focus on a time span between 2000-2018.

Chapter 4 Empirical Analysis

4.1 Value

The value dimension of educational soft power contains four criteria that are associated with the ideal of good life and a forward direction towards the future including: (1) modernization, (2) equality, (3) quality of life, and (4) competitiveness. The criteria will be analyzed for China and Japan in the following sections.

4.1.1 Modernization

In order to assess the level of modernization of China and Japan, this paper will focus on two variables that reflect a country's modernization which include socio-economic structure of the nation and its democracy.

4.1.1.1 China

With a population of 1.4 billion, China is a country with the most population in the world. China is the world's second largest economy and is one of the most important and influential player in the global economy. The GDP of China was at at 12238 billion US dollars in 2017 representing almost 20 percent of the world economy (World Bank, 2018). The rapid economic growth has gain momentum after the market reforms in 1978 in which China transitioned from a centrally-planned to a market-based economy. Its GDP grew at nearly 10 per cent a year but has gradually slowed down from 2012 (World Bank, 2018). In the second quarter of 2018, China's GDP growth has reached 6.7%, an impressive rate despite the fact that it is the lowest since 2016 (Moss, 2018). The regional GDP per Capita has been published by the Chinese government in 2017. Although it should be noted that the data should be viewed with caution as the GDP statistics of some provinces and units such as Inner Mongolia and Tianjin seem to be somewhat inflated, the breakdown of GDP statistics does provide a general overview of the economy of each province which can provide a rough comparison (Babones, 2018). According to the National Bureau of Statistics of China (NBS), The provinces or units with the highest GDP per capita in 2017 include Beijing ($20356), Shanghai ($19671), Tianjin ($18807), Jiangsu ($16965) and Zhejiang ($14630) while

the ones with the lowest GDP per capita include Gansu ($ 4647), Yunnan ($ 5474), Guizhou ($6017), Tibet ($6255), and Shanxi ($6424). Although Shanxi Province is one of the two provinces which has a reported GDP growth rate of more than 12 percent, it is still among the poorest in China. There are eleven with growth rate above 10 percent including Guangdong, China's largest province. It must be note that most of China's richest provinces are located along the eastern coast. The statistics demonstrates that the huge economic gap between the rich coastal provinces and the rest of the country is rather prominent – GDP of Gansu, China's poorest province, is less than one-fifth that of Beijing (Babones, 2018). It is evident that China is facing serious regional economic disparities in which the government under President Xi Jingping has been trying to find a solution for such as by creating connectivity between regions through investments on physical infrastructure. The well-known One Belt One Road initiative is one of the examples among many (Babones, 2018). President Xi's goal for the country is "common prosperity" in which "no region or ethnic group can be left behind" (the Economist, 2016). However, the goal is impossible to achieve anytime soon as Chinese economy has also gradually slowed down. The large regional income gaps in China reflect that the level of modernization is only clustering around China's eastern coastal provinces such as Beijing, Jiangsu and Shanghai. The gap in modernization between rich coastal provinces and the rest of the country, particularly the north and the west, is exacerbated by the fact that poorer provinces cannot modernize due to its lack of skills, education, resources, reliable legal institutions, and clustering of similar businesses which allows knowledge and idea exchanges between people (the Economist, 2016).

The employment of citizens employed in agriculture, industry, and service sector reflect the level modernization. China's employment in agriculture is 18 percent of its total employment which is a significant drop from 1991 in which more than half of the country was employed in the agricultural sector. While employment in industry contributes to 27 percent of the nation's total employment. As for employment in the services, China has seen a gradual increase in the trend with 56 percent of its population being in the services sector in contrast to 17 percent in 1991 (World Bank, 2018). Hence, it can be concluded that today Chinese people are employed in services sector and significantly less in agricultural sector which shows a trend towards modernization as people are less involved in agriculture. Data also shows that population is significantly denser in coastal cities with Shanghai (22 millions), Beijing (12 millions), and Tianjin

(11 million) being the most populous while the poverty stricken areas in the west and the north are the least populated (World Population Review, 2018). This also demonstrates that people in the poverty-stricken rural area do not desire to work in agriculture sector but migrate to to wealthy eastern coastal provinces for better job opportunities, taking on jobs in the services industry. However, data from World Bank shows that China's labor force participation among female population ages 15-64 has dropped from 73 percent in 1990 to 61 percent in 2017 (World Bank, 2018). Female labor force participation is one of an indicators of a modernized society as participation in labor force contributes to the economy, economic growth, and improvement in living standards (Shambauhg, Nunn, and Portman, 2017) .

Democracy is another important variable for modernization. Democracy can be measured using the Economist Intelligence Unit's Democracy Index (EIU Democracy Index) and Freedom in the World Index. According to 2017 EIU Democracy Index, China is one of the poorest performing countries in term of democracy and has been ranked 139th place falling far behind Iraq (112nd), Myanmar (120th), Ethiopia (129th), Zimbabwe (136th), and Belarus (138th). With Asia's average ranking being 79.4, China is also one of the poorest performers in the region especially due to its harsh penalties on online reporting, strict censorship on criticism of the regime and the Communist Party of China (CCP) leadership, and imposing pressure on foreign news agencies and journalists and critics, President Xi's consolidation of power, lack of electoral process and pluralism, low political participation and civil liberties (EIU Democracy Index, 2017). Additionally, Freedom House's Freedom in the World 2018 report classifies China as "not free" giving it an aggregate score of 14 out of 100 with 100 being the most free due to crack down of civil society and human rights movements, heavy surveillance, repressive regime, and internet censorship. It can be concluded that China is one of world's least free countries and the least free among the world's major economies. Hence, it is also one of the least democratic countries in the region and in the world.

4.1.1.2 Japan

Japan has a population of 127 million, ranking 7th among Asian countries with the most population. With a GDP of $4.9 billion in 2017, Japan is the world's third largest economy after the US and China respectively with its GDP representing 7.86 percent of the world economy and is also

another important player in the global economy (World Bank, 2018). The end of the Second World War marks the rise of Japanese economy from post-war ruins to "the Japanese economic miracle". The Japanese post-war economic development focused on transforming an industrial society to a technologically advanced one with qualities such as "sophisticated bureaucracy, skilled workers, and cultural values for modern education" (Zhang, 1998). Today, Japan is among of the most modernized nations in the world (Speiser and Bertrand, 2015). Between 1945-1956, Japan's GDP growth was an average annual rate of 7.1 percent (Okazaki, 2018). Today the Japanese economy has slowed down significantly. However, in the second quarter of 2018, Japan's GDP growth has reached 2.5%, marking the economic expansion for seven consecutive quarters which makes people much more optimistic about Japanese economy today (Takumori, 2018). The prefectural GDP per Capita has been published by Statistics Japan in 2017. In regards to prefectural GDP per Capita, Tokyo ranks first ($61839) followed by Aichi ($38121), Shiga ($38055), Shizuoka ($37388) and Osaka ($36645). Prefectures with the lowest income per capita include Kumamoto ($27321), Chiba ($27568), Kochi ($25220), Saitama ($24953), Okinawa ($23882), and Nara ($22637). The income disparity in Japan has also been an issue with the poorest prefectural earning only one third of that of Tokyo. The issue of population decline in Japan poses another challenge for the existing income disparity as young people migrate from rural area to urban areas such as Tokyo, Osaka, and Nagoya, the population in the rural area shrink, which also means that there are less tax payers because the people who remain in the rural areas are mainly retired or elderly people who do not pay tax and need more healthcare and social services (Mayger and Dormido, 2017). Nevertheless, the income disparity issue also exists within Tokyo itself and to a worse extent. In 2016, residents of Minato ward see their income increased by 23 percent from 2012. The average taxable income of Minato ward residents is $98000, a number that is almost triple the amount that people in Koto ward makes. Hence, the income disparity coupling with aging population has led to other economic problems. With the cost of living so high and income being stagnant, it has become expensive for young people in Japan to start a family exacerbating the population decline and some young people do not pay tax because they do not earn enough (Mayger and Dormido, 2017). However, in comparison to other OECD nations, Japan's income disparity is somewhere in the middle (OECD, 2018)

The employment in agriculture, industry, and service sector also reflect the level of modernization. As of 2017, Japan's employment in agriculture is 3 percent of its total employment which is a decrease from 1991 in which 7 percent of total employment was in agricultural sector. While employment in industry contributes to 26 percent of the nation's total employment which is also a significant decrease from 35 percent in 1991. Finally, employment in services contribute to 71 percent of total employment in Japan which is a drastic increase from 59 percent 1991 (World Bank, 2018). The data shows the trend of Japanese economic development in which jobs have transitioned from agriculture and other labor-intensive jobs to industry and lastly to the services sector which is a process that reflects that workers also migrate from rural to urban areas in order to take on employment in the services sector (ILO, 2015). Hence, it can be concluded that today the majority of Japanese people are employed in services sector which translates into urban migration and modernization. As for labor force participation rate among female population between ages 15-64 shows a gradual increase from 70.1 percent in 1990 to 77.1 percent in 2017. However, it must be noted that the number of 77.1 percent does not only represent female full-time workers but also ones who work part-time. Hence, the number is slightly misleading due to the fact that many Japanese women work in part-time or non-regular jobs which the increase in female labor force participation is because more women work part-time or non-regular jobs (Shambaugh, Nunn and Portman, 2017). Although the participation in labor market is higher than in the past, many Japanese women drop out of employment for childcare or marriage, hence, worsening the current labor shortage that Japan has been experiencing as a result of aging population.

4.1.2 Equality

In order to assess the level of equality of China and Japan as a part of its educational soft power, this paper will focus on the gender dimension of equality as a variable within values that increase attractiveness of a country.

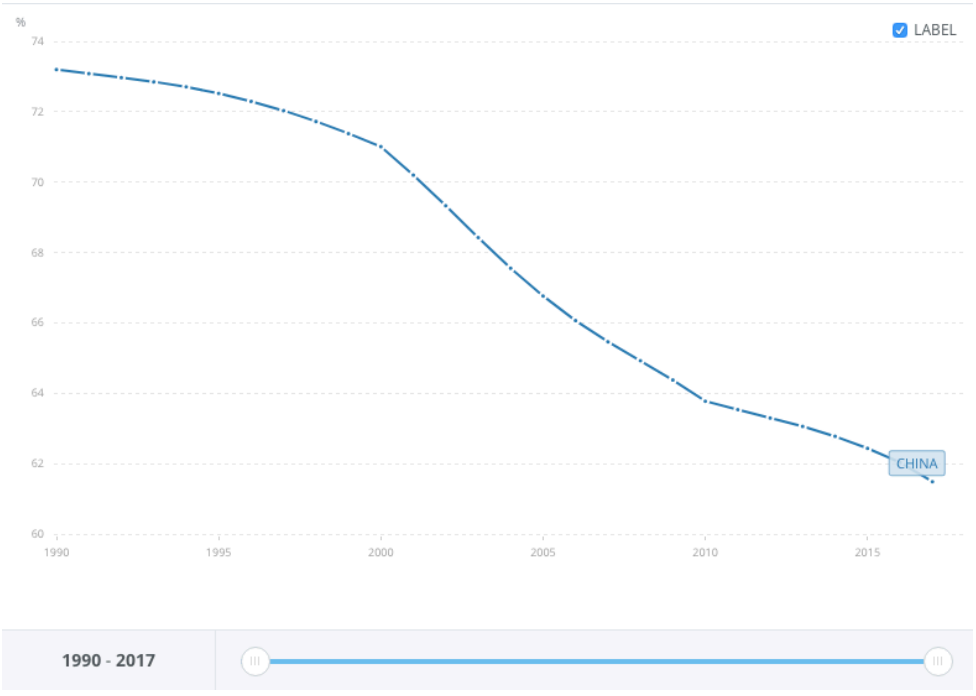
4.1.2.1 China

At a global level, China is underperforming in term of gender equality. However, if comparing with developing countries, China is doing relatively better than some of its peers. The 2017 Global Gender Gap Report of the World Economic Forum shows China ranking 100th out of 144 countries,

falling behind Azerbaijan and Cambodia. As for Gender Inequality Index, China ranks 37th out of 188 countries (UNDP, 2016). China has been slow with its progress towards gender parity but it has successful with closing gender gaps in professional and technical roles and tertiary enrolment (World Economic Forum, 2017). The overall labor force participation rate for both male and female in China has been on a gradual decline. Female labor force participation rate for China in 2017 is at 61 percent which is a drop from 73 percent in 1990 while male labor force participation rate is at 76 percent, a decrease from 85 percent in 1990. The ratio of female to male labor force participation rate is at 81 percent which has decreased from 86 percent in 1990. Due to changes in China's economic system, industrial structure, and labor market, there are more employment opportunities for women in China but also more challenges in term of gender equality in employment (Xi, 2017: 277).

Figure 2 Female labor force participation rate in China between 1990-2017

(% of female population ages 15+)



Source: World Bank (2018)

One important indicator within gender equality is share of women in wage employment in the non-agricultural sector. This indicator is important because it portrays how much access to women have to paid employment in services and industry sectors, which influences the extent for them to integrate into the economy. It also indicates the characteristic of the nation's labor market showing how open it is to women in industry and services sectors which reflects equal employment opportunities (UN, n.d.: 303). The data from the World Bank has shown that China's overall female labor force participation rate is in decline but it is still relatively high in comparison to other developing countries while the share of Chinese women in wage employment in non-agricultural sector shows an increasingly positive trend. In 2000, 52.9 percent of working women are employed in non-agricultural sector and the figure steadily increases to 76.5 percent in 2016 which is a 44.6 percent increase within the period of 16 years (World Bank, 2018). The increase in female employment in non-agricultural sectors demonstrates not only increasing equal employment opportunities for women in China but also higher tendency of integration into monetary economy, economic efficiency through flexibility of the labor market, and the Chinese economy capacity to adapt to changes that come with globalization and capitalism (UN, n.d.: 303). One of the drives behind the trend is due to the fact that Chinese women have more access to education opportunities. According to the World Bank (2018), approximately half of Chinese women are in tertiary education in contrast to less than 40 per cent of men. However, the surge in female employment in non-agricultural sectors does come with challenges as the Chinese government has started to encourage women to have two children to combat the aging population and to correct the gender imbalance that is a result of its one-child policy in which the number of single young men is on the rise and their frustration can be "a threat to the state" (Feng, 2017). The Chinese government takes a firm stance of promoting traditional gender values and denounces women who do not comply with such norms by defining them as "left-over", a term referring to "unmarried, often professionally successful women over the age of 27" while its new policy has exacerbated employment discrimination for women (Feng, 2017). Furthermore, on top of the Chinese government's aggressive push for women to resume traditional roles, women face gender inequality and discrimination from companies and organizations. Many employers in China prefer men over women due to the assumption that women will eventually have to leave their employers to take care of children and households. Some employers go so far to the extent of indicating in employment contracts that female employees must not be pregnant for the next five years. Other

than that, female employees also have difficulties in career progression and limited promotion, often finding themselves unable to progress further in career in comparison to their male counterparts (Xi, 2017: 280). The gender employment inequality and incriminatory practices in China, coupling with higher education attainment rate among female have caused the decline in overall female employment rate (Xi, 2017: 278). The unemployment rate of female is 4.2 percent of female labor force while that of male is 5 percent.

Female representation in ministerial role is another important indicator for gender equality values. According to 2017 Women in Parliaments report of Inter-Parliamentary Union (IPU), China has been ranked 70th among 193 countries for female representation in the parliament. At the Diet, the Lower House has 24.9% of female representation. However, the number for the Upper House has not been disclosed (IPU, 2018). In contrast to Hong Kong and Taiwan, China shows a lack gender representation between male and female politicians (Sun, 2017). The reasons behind the low representation are multifold. First of all, the retirement policy for public servants allow women to retire 10 years earlier than men. As a result, people in charge of recruitment feel deterred from hiring women as that means the time of their service is shorter. Secondly, the Chinese political system has a highly male-dominated culture and practices such as heavy drinking. Lastly, the anti-feminism attitude is still prevalent in China, often branding women as "emotional" and "personalized". Consequently, such obstacles have deterred women from succeeding in their career in politics (Sun, 2017).

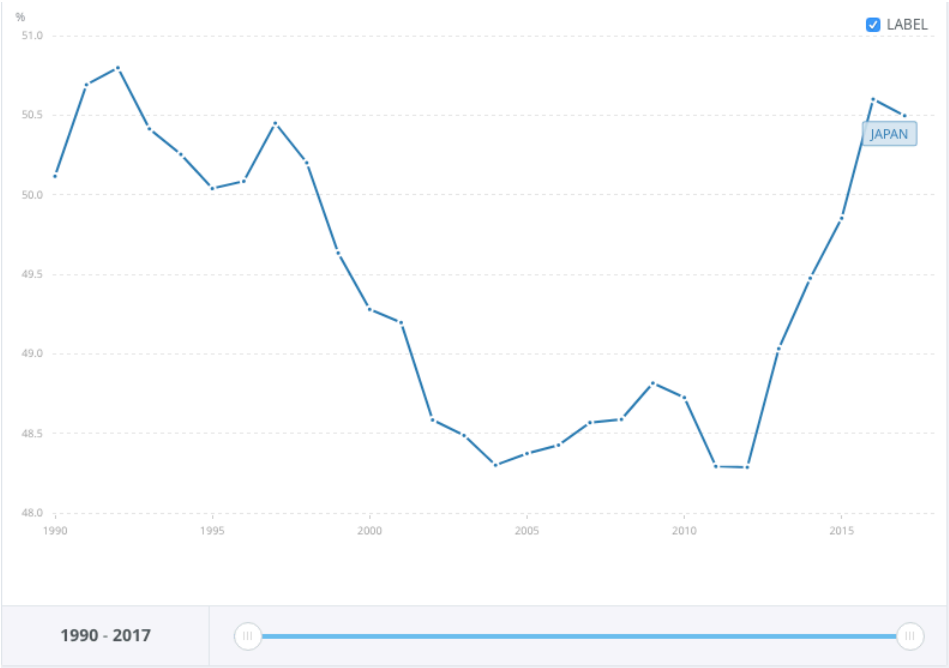
LGBT equality is also another indicator for an attractive value. The Corporate Equality Index by Human Rights Campaign is the only index for LGBT equality. However, it only covers companies and organizations in the US. How homosexuality is being perceived in China is still a grim reality with only 21 percent of Chinese thinking that homosexuality should be accepted in comparison to European average of 80 percent (Pew Research Center, 2013). Although China has decriminalized homosexuality in 1997, the LGBT community in China still struggles with employment discrimination and marriage equality, all of which are issues that the Chinese government does not seem to invest its attention to. Non-profit organizations and civil society movements in China that advocate for LGBT equality are often stigmatized, branded as "mental disorder" and banned by the society. For example, a gay LGBT activist's account was banned on Weibo, a Chinese social

media network. Many homosexual activists are also being targeted by the national police (Chen, 2018).

4.1.2.2 Japan

Gender equality in Japan is very poor in comparison to other OECD countries as it ranks 21st in Gender inequality index (UNDP, 2016). In 2017, the Global Gender Gap Report of the World Economic Forum ranks Japan at 114th after Mauritius and Guinea, which is one of the poorest performing countries in term of gender equality in East Asia just above South Korea. It must be noted that North Korea is not included in the report as there has not been sufficient data available on the country. However, Japan boasts an improvement in women's estimated earned income, as well as the country's share of female legislators, senior officials and managers, professional and technical workers. Furthermore, Japan has made significant progress narrowing the gender gap in in enrolment in tertiary education and closed the gap in gender gap in health due to its high-quality medical services (World Economic Forum, 2017). The overall labor force participation rate for both male and female in Japan has been on a gradual decline. Aging population is one of the factors behind the decline in labor force participation in Japan. According to World Bank, female labor force participation rate for Japan in 2017 is at 50 percent which is the same as 1990 although it experienced sharp decline in between due to economic recession. Japan's male labor force participation rate is at 71percent, a decrease from 77 percent in 1990. The ratio of female to male labor force participation rate is at 72 percent which has increased from 65 percent in 1990 (World Bank, 2018). Although the labor force participation of Japanese women who is 15 years and older is 50 percent but many work in jobs that do not generally improve their economic outcomes such as part-time or non-regular jobs (Shambaugh, Nunn and Portman, 2017). Therefore, part-time and non-regular jobs have contributed to the increase in labor force among Japanese women after the economic recession. Another factor that contribute to the increase in the female labor force include the support from the Japanese government in employment for women. One prominent characteristic of Japanese labor market is the M-shaped pattern of women's labor force participation which demonstrates a high participation after higher education graduation, then a decline due to marriage and childrearing years, lastly followed by a rebound to labor force participation (Shambaugh, Nunn and Portman, 2017). As for unemployment rate among female labor force is at 2.8% in 2016.

Figure 3 Female labor force participation rate in Japan between 1990-2017 (% of female population ages 15+)



Source: World Bank

As for the share of women in wage employment in the non-agricultural sector, Japan is performing well. In 2000, 94.5 percent of working women are employed in non-agricultural sector and the figure increases to 96.9 percent in 2016 which is a 2.4 percent increase within the period of 16 years. Furthermore, only 3 percent of working women are involved in the agricultural industry (UNDP, 2016). The figures demonstrate a sign of a modernized and advanced economy in which the majority of labor force migrates to industry and services sector, as well as that women have become better integrated into monetary economy. High participation of female labor force in non-agricultural economy also indicates economic efficiency. However, despite the impressive 96.9 percent figure, many women are employed in part-time or non-regular jobs which do not contribute to the economic well-being or independence of the women. Moreover, an exact number on how many Japanese women are engaged in part-time and non-regular jobs has not been reveal. Nevertheless, research demonstrates that a high number of Japanese women are engaged in "low-productivity jobs - with low status, often insecure, unsafe, and poorly paid" (UN, n.d.).

Furthermore, female representation in ministerial position is also another important indicator for gender equality. According to Women in Parliaments report of Inter-Parliamentary Union (IPU) in 2017, Japan has been ranked 158th among 193 countries for female representation in the parliament, moving up from 163rd place in 2015. Despite the minuscule improvement, Japan ranks the lowest among all major economies. There is only 10.1 percent of women occupying the Lower House seats at the Diet and 20.7 percent occupying the Upper House seats (IPU, 2018). The Abe government aims to increase the number of women in leadership roles to 30 percent by 2020 (Murakami, 2018). According to Murakami (2018), there are many obstacles for women to be leadership roles including hesitation to give up children and family, male-dominated working environment, poor work-life balance, and gender bias within the recruitment system itself.

As for LGBT equality, 54 percent of Japanese has positive attitude towards homosexually voting that the society should accept homosexuality while 36 percent completely rejects homosexuality (Pew Research Center, 2013). Despite the fact that public opinion seems relatively positive, LGBT community in Japan still face many issues from discrimination at work and at home. Same sex marriage is not permitted in Japan unless one undergoes sex change operation first (Amnesty International, n.d.). The Japanese Tourism Agency, however, aims to make Japan a LGBT-friendly destination as its goal is to welcome 20 million visitors during the Olympics in Tokyo in 2020. One of the three values promoted for Tokyo 2020 Olympic and Paralympic Games is “Accepting one another (unity in diversity)” (Ikeuchi, 2015). The efforts to promote Japan support for LGBT equality through Olympic is a smart strategy as it will help increase the appeal of Japan towards the world audience and create a positive national image.

4.1.3 Quality of Life

In order to assess the quality of life dimension of values that China and Japan possess, this section will focus on three variables including economic attractiveness, environmental attractiveness and social attractiveness.

4.1.3.1 China

China is the world's second largest economy just behind the US with GDP of $11.20 trillion. Its GDP growth has been slowing down to 6.7% in 2016. In order to see an overview of China's market size, the Market Potential Index (MPI) of Michigan State University will be used as the metric for measurement. In 2018, the index demonstrates that China is the world's most attractive market for the fifth consecutive year with a full score of 100. Within the index, China's market size and market consumption capacity have also been given a full score through assessing its electricity consumption, urban population, consumer expenditure, income share of middle-class, and household annual disposable income of middle-class. China also performs relatively well in term of market growth rate which receives a score of 68 out of 100 in which compound annual growth rate of GDP and compound annual growth rate of primary energy use were being assessed. Furthermore, China's commercial infrastructure also receives a score of 65 out of 100, a number which is achieved through assessing available airline seats, cellular mobile subscribers, households with internet access, international internet bandwidth, Logistics Performance Index (LPI), paved road density, and population per retail outlet (Michigan State University, 2018). China's economic attractiveness mainly comes from the opportunities available in its market. With its huge market size and growth, there are many opportunities for trade and investments. However, China performs very poorly in term of market intensity, market receptivity and economic freedom. The lack of economic freedom in Chinese market is due to the governmental control and inference on flow of investment capital and the financial sector (Lapickii, 2018). Furthermore, China's low market receptivity represents low market openness to foreign trade.

As for environmental attractiveness, Co2 emission, air pollutant, clean energy will be assessed. According to Zhu (2016), China is "the world's largest developing country, primary consumer, and carbon emitter". In 2017, China released 9.1 gigatons Co2 emission which is close to 1 percent

higher than its number in 2014. Taking its increasing economic growth into consideration, its increase in Co2 emission between 2014 and 2017 is not too drastic due which is due to its continued renewables deployment and faster coal-to-gas switching (International Energy Agency, 2017). Nevertheless, China is responsible for almost one quarter of the world's total CO2 emission and is the world biggest CO2 emitter due to its breakneck economic growth (Zhu, 2017; Kearns, Dormido, and McDonald, 2018). As for air pollution, China, especially cities in the northern part are known for its notorious air pollution that was extremely hazardous to health claiming at least 90,000 deaths and hundreds of thousands ill in 2013. In 2015, Berkley Earth estimated that the extreme air pollution led to 1.6 million deaths per year in China. The pollution is the worst in northern industrial provinces such as Shanxi and Hebei (Kearns, Dormido, and McDonald, 2018). Between 2012- 2013, the state of air pollution in China was often dubbed as "airpocalpyse" in which 70 percent of Chinese largest cities saw pollution levels above standard, especially the high level of PM2.5, which is particles smaller than 2.5 micrometers that can cause serious implications on heart and lungs of the inhalers (Kintish, 2017). Since then, the Chinese government has issued "draconian anti-pollution measures" known as the national action plan on air pollution which is basically a set of prohibitions. The action plan enforces the use of filters and scrubbers and minimizes the use of coal, cutting down coal consumption by up to 50 percent between 2013 and 2013. The government also aims to shut down many factories and enforce even stricter emission cuts (Zhang and Munroe, 2017). Furthermore, the government also provides subsidy to manufacturers on producing electric vehicles to replace the traditional ones that rely on fossil fuel. It is also spending on clean energy solutions such as solar panels (Kearns, Dormido, and McDonald, 2018). In December 2017, the concentration level of PM2.5 has been successfully reduced by 54 percent in Beijing and more than 30 percent across northern China where four heavily industrialized provinces are (the Economist, 2018). However, the level of pollution in China fluctuates and is not stable as it was reported in June 2018 that the northern part of China started to experience high levels of ground-level ozone, which is another air pollutant highly dangerous to lungs, respiratory tract and eyes. Furthermore, a study by Peking University reveals that while the level of PM2.5 concentrations has fell between 2013-2017, the level of daytime ozone has increased drastically, especially in hot summer months (Zhuang, 2018).

On the other hands, China finds opportunities in its struggle. The government has ambitiously aimed to seize this chance to position itself as the leader in high-tech industries for renewable energy such as electric cars and solar panels (Kearns, Dormido, and McDonald, 2018). China is currently undergoing energy transformation as it aims to invest $360 billion in renewable energy along with limiting the use of coal. Each year, China invest around $100 billion in domestic renewables, a number higher than the combined annual invest of the US and the EU. It also invests more than $32 million overseas. Furthermore, China also plans to develop an energy grid get its energy from wind turbines and solar panels from over the world. If the trend continues, China will be an important player in cutting-edge technology which will bring more economic opportunities for China (Woetzel and Kejun, 2017). Due to enormous subsidies and strict regulations, China's renewable energy capacity has been increased significantly, contributing to up to 40 percent of total energy capacity while non-fossil fuel accounts for 66 percent of China's newly installed energy capacity in 2017 (Reuters, 2018). However, China's efforts are not without obstacles. The transition from fossil fuels to renewables will be costly for China as its economy relies heavily on coal fuels, making the transition to other renewable resources very expensive (Woetzel and Kejun, 2018). Furthermore, China also lacks sufficient transmission capacity to deliver its non-fossil fuels power to customers (Reuters, 2018).

In term of social attractiveness, China still faces many challenges. It ranks 90th out of 188 countries in the 2016 Human Development Index (HDI) behind Peru, Thailand, and Ecuador respectively. China is also performing very poorly in obtaining international trust in its political stability being ranked 138th out of 194 after Papua New Guinea and Swaziland (World Bank, 2016). It is also ranked 80th out in 183 countries with a score of 41 out of 100 in Corruption Perceptions Index 2017 following after Burkina Faso, Lesotho, and Tunisia. China's freedom of expression and freedom of press are not only limited but also threatened by the Chinese authorities resulting in shrinking civic space (Transparency International, 2018). In term of sporting success, China has hosted Olympics once in 2008 and will host 2022 Winter Olympics. It ranks world's number one in table tennis with total of 53 medals and in badminton with total 41 metals. It also is leading in diving, weightlifting, shooting, taekwondo and gymnastics. Today, China ranks world's 4th in summer sports with a total of 224 gold medals out of a total of 546 medals earned (Wikipedia, 2018). In term of health, China has raised its average life expectancy rate at an impressive rate

from 44 years in 1960 to 76 years in 2016. Today it ranks 37th in relative to the US 40th in world's life expectancy (World Bank, 2018). As for the healthy life years, China can expect 68.7 years of healthy life (Xinhua, 2018). Finally, as for personal safety, the data available suggests that there is an incredibly low rate of crimes committed in China despite the size, social stresses, population, rapid rural to urban migration, and large inequality gap of the country with an intentional homicide rate of only 0.70 per 100,000 people in 2014 (Miles, 2018; IndexMundi, n.d.). The official statistics demonstrate that China's homicide rate is even low than Switzerland and Japan. The statistics are claimed to be "misleading" by many news sources (the Economist, 2013). However, with such restrictions on official data, it is not possible to find a more accurate number and trend in this regards.

4.1.3.1 Japan

Japan is the world's third largest economy following after the US and China with GDP of $4.95 trillion According to the Market Potential Index (MPI) 2018, Japan has been ranked 6th among 97 countries with a score of 47 out of 100 after India, Singapore and Canada. Japan has one of the highest market consumption capacity in the world, ranking just below China (Michigan State University, 2018). Its household consumption percent of GDP is more than 58% (CIA, 2016). It also has very high economic freedom with a score of 92 out of 100 and relatively high levels of market intensity and commercial infrastructure (Michigan State University, 2018). Other than high consumption capacity and sophisticated consumer economy which make Japanese market attractive, Japanese market also stands out in term of its respects for the rule of law and strong protection for intellectual property rights (US Department of Commerce, 2018). Furthermore, Japan is known as the world's largest and most technologically advanced producers of motor vehicles, electronics, machinery, steel and nonferrous metals, ships chemicals, textiles, and processed foods (CIA, 2016). However, in contrast to its high market consumption capacity and overall market attractiveness to both domestic and foreign companies, Japan has very low market receptivity which means that it is harder for foreign products to succeed in the unique Japanese market as Ariga (1990: 91) states that Japan "is the most difficult market in the world in which to succeed" (Synodinos, 2001: 235). Another challenge that Japan itself face with the size of its market and its capacity as a consumer and a producer, Japan is a labor short market due to aging population and relatively low level of female participation in work force. With an unemployment

rate of 2.8% in 2017, this demonstrates an improved economy, shrinking work-age population, high life expectancy and falling birth rates (Nussey, 2017). With the job-to-application ratio of 1.5 jobs for every person, it is an opportunity for foreigners to fill in this gap. However, the Abe's government has approached its nation's labor shortage a bit differently by turning away from immigration with fears that "newcomers could disrupt social order" and aiming to have artificial intelligence, housewives, and retirees to fill these gaps instead (Chandran, 2018). Although the government plans to open its door to more "professional and skilled foreign workers", it maintains strict immigration policy on these professionals such as limiting their duration of stay, preventing family members from joining them in Japan, and Japanese language test requirement. Furthermore, it also has an extremely difficult refugee policy in which it accepts only 1 percent of asylum applications (Chandran, 2018). Hence, while Japan's market is attractive for foreigners who want to seek employment opportunities, there will be challenges in term of language barriers and immigration restrictions.

As for environmental attractiveness, Japan's total greenhouse gas emissions in 2016 were 1228 million tons which is a 7.2 percent decrease from 2013 and 0.5 percent decrease from 2015. Despite its progress, Japan still ranks 5th in 2016 as the world's top Co2 emitters just after China, US, India and Russia (Janssens-Maenhout et al, 2017). The CO2 emission level in Japan increased after the nuclear disaster at Fukushima in 2011 but its level has decreased to a six-year low as of 2017 (Reuters, 2017). According to the Ministry of the Environment of Japan (2018), the factors behind Japan's decrease in Co2 emissions are "the decrease in energy-related CO_2 emissions due to wider adoption of renewable energy and resumption of nuclear power plant operation, despite the increase in hydrofluorocarbon emissions from refrigerants that substitute for ozone-depleting substances." Furthermore, air pollutants in Japan especially PM2.5 are of a low level. According to Air Pollution in the World Real-time Air Quality Index (AQI) as of August 2018, Japan's air quality level "considered satisfactory and air pollution poses little or no risks". The success in controlling air pollution in Japan makes it one of the leading countries in the deployment of clean technologies and renewables. Japan's market related to global warming mitigation including renewable energy has increased to 49 trillion yen in 2015 (EU-Japan Centre, 2014). The subsidies from the Japanese government for renewable energy has also created attractive energy market and ensured future growth and development in the sector.

Finally, in term of social attractiveness, Japan has always ranked high in term of its soft power and attractiveness. According to the Soft Power 30 Index in 2018, Japan has been ranked 5th among countries with the highest soft power, especially for its culture and tradition. Japan also ranks very high in the Human Development Index (HDI) occupying the 17th place among 188 countries following Sweden, Liechtenstein and the UK. Furthermore, in 2016, it also has been ranked 24th among 194 countries in the Political Stability Index (World Bank, 2016). As for the Corruption Perceptions Index of 2017, Japan ranks 20th as the least corrupt country just after Belgium, the US and Estonia respectively (Transparency International, 2018). Other than Japan's favorable political environment, it is also going to be a host for Tokyo 2020 Olympics, which is a golden opportunity for Japan to execute strategies for soft power gains. Japan was also a host of Olympics on three occasions in the past in 1964, 1972, and 1998. Japan is also a leading sport such as Judo, wrestling, gymnastics, and swimming with total medals earned of 84, 69, 98, and 80 respectively (Japanese Olympic Committee, 2018). Japan is also performing extremely well in term of life expectancy ranking world's number one in high life expectancy with an average of 86.8 years old which reflects the quality of life and healthcare (World Health Organization, 2017). Japan is the world's leader in term of average healthy life expectancy, meaning the years people live in full health, with an average of 74.9 years. Japanese women also live longer than their male counterparts. The factors behind long life expectancy in Japan is debatable but many studies believe that it is due to genetic, social lifestyle, high living standards, and medical quality (Otake, 2017). Finally, crime rate and homicide rate are very low with a homicide rate of 0.3 per 100,000 people with senior citizens accounting for 20 percent of crimes committed. The density of police officers per population is also particularly high, especially in Tokyo. With such low crime rates and high density of police officers, police attention is directed towards petty crimes such as drug offence, robberies, and activist activities (McNeill, 2018). Hence, Japan ranks among one of the safest countries in the world to be in.

4.1.4 Competitiveness

The competitiveness value of Japan and China will be assessed through two variables: patent and innovation.

4.1.4.1 China

China's strong performance in patent citation has been improved drastically close to surpassing its neighbor, Japan. China's strong inventive activity is clustered around Shenzhen and Hong Kong – making the Shenzhen-Hong Kong the world's second largest cluster with the most patents filed (Cookson, 2017). With 41218 patents filed between 2011 and 2015, China is only second to Japan and way ahead of the San Jose-San Francisco cluster with 34324. The largest patent applicant is ZTE from Shenzhen with more than 41 percent of patents filed from the cluster being in digital communications (Cookson, 2017). Huawei Technologies CO., LTD. and State Grid Corporation of China are also ranked world's 7th and 10th top patent applicants, based on total of number of patent families. More importantly, China's universities are leaders in patent applications, based on patent families. The top five patent applicants include Zhejiang University, Tsinghua University, Harbin Institute of Technology, Southeast University, and Shanghai Jiao Tong University respectively.

In term of innovation, China has been ranked as the world's 22nd most innovative country with outstanding performance in R&D, manufacturing, hi-tech companies, and number of patents filed (Bloomberg, 2015). The 2018 Global Innovation Index also ranks China as the world's 17th place out of 124 countries. The Global Competitiveness Index 2017-2018 ranks China 27th out of 137 countries.

4.1.4.2 Japan

Japan's regarded by many as an "innovation powerhouse". Its Tokyo-Yokohama cluster has the highest patent filings in the world between 2011 and 2015, according to the World Intellectual Property Organization (Wipo) (Cookson, 2017). Osaka-Kobe-Kyoto and Nagoya are two other clusters in Japan that also made it to the world's top ten. The Tokyo cluster alone has contributed to 94,079 patent filings mainly from corporate rather than university (Cookson, 2017). The largest

contributor from Tokyo is Mitsubishi Electric. While the world's top patent applicant is Canon Inc. with the highest number of patent families of 30,476 between 2011 (Wipo, 2017). Moreover, Japanese firms such as Panasonic, Toshiba KK, Toyota Jidosha Kabushiki Kaisha, Mitsubishi Electric Corp, Seiko Epson Corp also made it to the global top ten of patent applicants. Japanese top five universities and public research organizations in term of patent applications include the National Institute of Advanced Industry and Technology, Tokyo University, Railway Technical Research Institute, Tohoku University and Kyoto University respectively (Wipo, 2017).

In term of innovation, Bloomberg ranks Japan as the world's second most innovative country just below South Korea with strong performance in R&D, manufacturing, hi-tech companies, research personnel, and number of patents (Bloomberg, 2015). The 2018 Global Innovation Index (GII) ranks Japan as the 13th place out of 124 countries. The Global Competitiveness Index 2017-2018 also places Japan as the 10th place out of 137 behind Hong Kong, Finland and Norway in terms of institutions, policies and factors that determine the level of productivity. Japan performs exceptionally well in term of patent filing.

4.2 Resource

The resource dimension of educational soft power contains three criteria that reflect the quality and competitiveness of the nation's educational system which make it appealing to international students including: (1) quality of education, (2) human capital, and (3) research and development. The criteria will be analyzed for China and Japan in the following sections.

4.2.1 Quality of Education

The quality of education of Japan and China can be assessed using two criteria including quality of university and academic output at high institutions.

4.2.1.1 China

The number of high ranking universities affect how attractive a country is being perceived especially in the realm of educational soft power. The assessment will only focus on universities

from mainland China and exclude universities from Hong Kong and Taiwan. While China is renowned for the its economic power, there is still a long way for China to go to become competitive in the world's education arena despite the fact there are several areas in education that China has made significant improvements such as productivity of its researchers (Times Higher Education, 2017). According to the 2018 QS World University Ranking (QS), three Chinese universities have been ranked in the top universities in Asia including the prestigious Tsinghua University (3rd), Peking University (9th) and Fudan University (10th). Tsinghua University also ranks 25th in the world's top universities while Peking University ranks 38th and Fudan ranks 40th. Tsinghua University performs exceptionally well in term of academic reputation, employer reputation, faculty student but it needs improvement in term of attracting international students, international faculty and citation per faculty. The 2016-2017 Times Higher Education World University Rankings (THE) shows that 7 universities from mainland China made it to the top 400, a number which is relatively low in comparison to its East Asian counterparts such as South Korea and Hong Kong. The 2015 Program for International Student Assessment (PISA) focuses on the performance of students who are about to enter the labor force with a focus on the following areas: "scientific, reading, and mathematical literacy and problem solving abilities" (Lingrad and Grek, 2007: 14 as cited in Bieber and Martens, 2011: 11). The 2015 PISA report demonstrates that China performs very well in science, reading, and mathematics. However, the problem with the 2015 PISA report is that the Chinese authority has only provided data on four big cities including Shanghai, Beijing, Jiansu and Guangdong while excluding the statistics from the rest of China. Hence, this is the explanation behind China's high score. Prior to 2015, China only provided data on Shanghai making it the sole representative of mainland China. The 2015 report explains China's exemplary performance in the following: "About 80% of students have reached basic proficiency or above (i.e., 84% for Science, 78% for Reading and 84% for Math) – meeting the OECD average for Reading and exceeding it for Mathematics and Science". While the four big Chinese cities perform very well, it is not possible to assess the overall education quality of China as a country if only data on four cities are available.

The policy of English as a medium instruction has been encouraged by the Chinese government as announced in 2001 by the Ministry of Education to attract international students and to "demonstrate the high quality of university teaching" and as a result, many top-tier Chinese

Universities have launched courses in English (Fan, 2017). In 2014, two leading Chinese universities, Tsinghua Universities (Schwarzman Scholars) and Peking Universities (Yenching Academy), have established English-language graduate programs aimed to attract future global leaders and increase its soft power gains (Metzgar, 2015). However, besides the recently launched programs at top-tier intuitions which is led by many foreign academics, the effectiveness and quality of English as a medium of instruction of universities in China in general will need more improvements in order to attract international students. Lei and Hu (2014 as cited in Fan, 2017) find that there are many challenges in regards to the implementation of English as a medium of instruction such as "courses taught by young faculty members, the use of textbooks published by Anglo-American universities, the different English proficiency levels of teachers and students and concerns about students English proficiency" and that the initiative "was not effective in improving either students' English proficiency or their English learning and use affect". Other problems may include the fact that courses are listed as English instructed but in reality students and lecturers mainly use Chinese to communicate with only learning materials such as textbooks and presentations in English (Fan, 2017: 4). There are still rooms for much improvement in term of English as a language of instruction which will help make Chinese universities more appealing to international students who aim to pursue degree programs rather than just Chinese language studies. In 2017, the Ministry of Education reveals that the number of foreign degree students studying in China have reached 241500 which makes up almost half of the total foreign students in China. With increasing scholarships provided or subsidized by the Chinese government, the number of degree foreign students in specialized fields also rise accordingly.

As for academic output at higher institutions, the World Bank reports a significant growth in China's scientific and technical journal articles from 86621 in 2003 to 426165 in 2016, making it the world's number one publisher accounting for more than 18 percent of worldwide total, followed by the US, India and Germany. The trend shows 151 percent increase in publications over the last ten years. The top fields of study by number of publications include engineering, material science, medicine, chemistry and physics and astronomy respectively (American Journal Express, 2016). The skyrocketing rise in academic publications is partially due to financial rewards or cash-per-publication that academics and scientists receive when they publish in reputable journals. The estimated data shows that a scientist can earn up to $100000 per publication in the

top Western journals. The policy was first implemented by the Department of Physics at Nanjing University in 1990 in which $25 was granted per publishing and the reward also increased. The policy has resulted in a large volume of publications as it is a great incentive for academics in China to publish, especially when the average salary of a Chinese university professor is only $8600 (MIT Technology Review). The trend in Chinese publications which is driven by financial incentive has caused doubts in the academic world in regards to its credibility and transparency of the publications.

4.2.1.2 Japan

According to QS Top Universities (2018), two Japanese universities have been ranked in Asia's top ten including the University of Tokyo (5th) and Kyoto University (7th). 14 Japanese universities also made it to the global top 400 including the University of Tokyo (23rd), Kyoto University (35th), Tokyo Institute of Technology (58th), Osaka University (67th), Tohoku University (77th), Nagoya University (111), Kyushu University (126), Hokkaido University (128), Keio University (198), Waseda University (203), University of Tsukuba (260), Hiroshima University (321), Tokyo Medical and Dental University (352) and Kobe University (352) (QS Top Universities, 2018). In comparison to other Asian countries such as China, Hong Kong, and Singapore, their leading universities are rising in the ranking partially due to high funding. Japan face many challenges to remain competitive in the higher education (Masuo, 2017). According to the 2018 Times Higher Educational World Ranking (THE), only two universities from Japan made it to the top 100 with the University of Tokyo being ranked 46th and Kyoto University being ranked 74th. The number of international students only account to 10% of total students at the University of Tokyo and 8.7 percent of the total students at Kyoto University. Moreover, the overall education quality measured by student performance in mathematics, science and reading in Japan is exceeding the OECD average. The 2015 Program for International Student Assessment (PISA) reveals that Japan outperforms other countries in science, reading and mathematics making the gap between Japan and OECD counterparts approximately one and a half years in science and mathematics and half a year in reading. The data further shows that approximately 90 percent of students have a basic level of proficiency or above in mathematics, reading and science. 20 percent of Japanese students have high mathematics proficiency while 10 percent have high reading proficiency. Furthermore, boys also outperform girls in science, with a gap of approximately half a year of schooling (World

Bank, 2015). According to Japan Student Services Organization (JASSO), there are currently more than 850 degree courses offered in English. Engineering degree courses alone account for 287 courses. With so many degrees in which English is the mode of instruction, Japan can tap into a larger pool of international students and academics. JASSO states that there were 267,042 international students in 2017 which is an 11.6 percent increase from 2016. However, 78,658 are more non-degree students who mainly come to Japan for language studies. The majority of the students come from Asian countries such as China, Vietnam, Nepal, South Korea and Taiwan (JASSO, 2018). In the past, the number of international students dropped drastically during the 2011 Great East Japan Earthquake and the Fukushima nuclear disaster but since 2013, the number started to soar again (Nippon, 2018).

As for the academic output at higher institutions in Japan, the World Bank states that in 2016, Japan published a total of 96536 scientific and technical journal articles which is the highest number in the past decade but a small decrease from its 97235 in 2003. Japan is ranked 6th in the world the scientific and technical publications after India, Germany, and United Kingdom. In comparison to other countries in the top ten ranking, Japan shows a rapid decrease in its publication while other countries are showing more productive trends over the period between 2003 and 2016 (World Bank, 2018). While the world output increased by 56 percent, Japan's output only increased by 9 percent which is relatively low in comparison to its counterparts. The reason is partially due to the budget cut from the Japanese government which has shift its priority from more basic science to innovation and how to encourage cooperation between private sectors and high education institutions in order to achieve innovation. Hence, universities and research institutes see a cut in their financial budget. Universities see their budget declining by 1% every year while research institutions such as RIKEN, Japan's premier scientific research institution, see their budget decreasing by 20 percent over the past decade (Nature, 2017). According to American Journal Expert, (2016), the top five areas of publications are in Science including medicine (30,313), biochemistry, genetics, and molecular biology (16,293), physics and astronomy (15,030), engineering (12,451), chemistry (12,203). Furthermore, Japan is the world's second largest publisher for engineering publications. Moreover, Japan's multidisciplinary papers have grown 4 times significantly since 2006 while publications in nursing and humanities also increased drastically. The higher institutions with the most publications include University of Tokyo, Kyoto

University, Osaka University, Tohoku University, and Kyushu University. University of Tokyo and Kyoto University, the two universities that made it to Asia's top ten best universities, contribute to 6669 and 5689 publications respectively (American Journal Experts, 2016).

4.2.2 Human Capital

Human capital of Japan and China can be assessed using two criteria: level of education and financial resources.

4.2.2.1 China

China's the world's most populous country with a total population of more than 1.4 billion and the world's second largest economy with a GDP growth rate of average 7-8 percent a year. China's GDP per capita is $14,401 (World Economic Forum, 2018). China also has the world's largest education system with almost 260 million students and more than 15 million teachers in about 514000 schools in 2014 (National Bureau of Statistics of China, 2014 as cited in OECD, 2016). Education in China is mainly run by the state but is becoming increasing decentralized in response to globalization and efforts to internationalize its system. While compulsory education in China is 9 years, the Chinese government has invested significant efforts to encourage students to further participate in senior secondary education and tertiary education. Tertiary education has expanded significantly between 2000-2010 due to the efforts of the government in which gross enrolment ratio of tertiary education increased from 21 percent in 2006 to 39 percent in 2014 and various institutions, programs, international mobility, and cooperation were established and actively promoted, resulting in diversity of tertiary educational system (OECD, 2016). In 2015, enrolment in primary education for both sexes was 95 million while enrolment in secondary education was 86 million and enrolment in tertiary education was 44 million. This has resulted in improving literacy rate which is 96.4 percent in 2015. While the male literacy rate is 98.2 percent and female literacy rate is 94.5 percent narrowing the gender gap to 3.7 percent in 2014 from 19 percent in 1990 (UNESCO, 2015). The literacy rate of the age group 25-54 also outperforms many Asian countries and is ranked world's 19th in regards to literacy and numeracy. Nevertheless, despite the outstanding education outcomes, Japan still faces challenges in term of English literacy in which adults who are highly-education display poor communication skills in English (McCurry, 2013)

However, due to the aging population challenge that Japan has been facing, its working-age population, aged between 16-59, continuously shrinks for six consecutive years to 902 million, which is 64.9 percent of the country's total population (World Economic Forum, 2016). Between 2012 and 2017, China's working age population has shrunk by 25 million people (Chi, 2017). Consequently, China's labor force participation rate also continues to shrinks in relation to the decline in working-age population. Today, China's age dependency ratio is 15 percent of working-age population which has increased by two folds from 1960 (World Bank, 2018). The labor force participation has fallen from 77 percent in 2010 to 72.5 percent in 2015 and to 70.7 percent in 2017 (World Economic Forum, 2018). Although China's labor force participation rate is still relatively high by global standards with an unemployment rate of only 3.1 percent, the decline causes labor shortage in some sectors which slows economic growth, increases wages, and decreases productivity gains, causing China to struggle to maintain its manufacturing competitiveness (Bloomberg, 2017). The decline in labor force participation is not only due to the aging population as it is also a trend prevalent among young adults aged between 16 and 22 in which its participation rates decreases by 35 percent. The cause is partially due labor market mobility in which causes people to be in transition and also due to more young adults participating in higher education, resulting in them entering the job market late, however, with more qualification and education (Wang as cited in Bloomberg, 2017). According to the World Economic Forum's Human Capital Index, China has been ranked 34th out of 130 countries, receiving 67.72 out of 100 points. In Asia, it ranks fifth in the top ten Asian countries of the Human Capital Index. China ranks high in term of deployment sub-index with 74 points and is competitive in the capacity index and also the knowhow sub-indexes. Moreover, China's overall performance is above global average in all assessment sub-indexes including capacity, deployment, development, and knowhow. It out performs all BRICS nations except for the Russian Federation, mainly due to rapid increase in educational attainment of China's young adults, which will be beneficial to its future labor force (World Economic Forum, 2018).

As for financial resources allocated to education, China spends approximately 4 percent of its GDP or $590 billion on education in 2016 which is a 7.75 percent increase from 2015. Between 2011 to

2016, China has been spending an average of more than 4 percent of its GDP on education in comparison to the world's average of 7 percent and the average of 9 percent for developed countries (Li, 2017). The source of education funding is mainly from the Chinese government while enterprises, private organizations and individuals also contribute to some of the funding. The "4 percent" has always been a goal the Chinese government has been trying to achieve within the past two decades and it faced many challenges along the way making it unable to achieve the figure and only succeeded to maintain the steady 4 percent in 2011 and onwards (the National People's Congress of the People's Republic of China, 2012). China has also invested efforts in ensuring the expansion of compulsory education in rural areas in order to make education more accessible. In 2005, the Chinese government issued the Notice of the State council on Deepening the Reform of Funds for Rural Compulsory Education, basically a law that consolidated a new financial system for compulsory education in rural areas in which local and central governments both have to share the expense. As a result, in 2010, the Government's budgetary appropriation has contributed 97 percent of the total educational investment in compulsory education in rural area (OECD, 2016).

4.2.2.2 Japan

Japan has a total population of 128 million and GDP per capita (PPP) of $38,240 (World Economic Forum, 2018). Japan is among the global top PISA performers excelling in mathematics, science and reading. The compulsory education is 9 years from 6 to 15 years old. The Japanese education system is controlled by central and local authorities under the Ministry of Education, Culture, Sports, and Science and Technology (MEXT) while most schooling decisions in lower secondary education are under the responsibilities of regional and local governments and schools. Japan also has a highly competitive education system. Japanese education institutions have the highest level of autonomy among OECD countries when it comes curriculum and assessment policies while the qualifications of teachers and instructors are tightly regulated (OECD, 2015). With the education system highly competitive, Japan has one of the world's highest adult literacy rate of 99 percent and has completely closed gender gap in literacy rate since 1995. Today, both female and male literacy rates are stable at 99 percent (UNESCO, 2018). Japanese women also rank the highest in the world in both literacy and numeracy proficiency. In 2015, enrolment in primary education for both sexes was 6.7 million, in secondary education was 7 million and in tertiary education for both

sexes are 3.9 million (UNESCO, 2018). Japan ranks the world's number one in secondary education attainment rate from age 25 to age 65 and above with strong literacy and numeracy skills. It also ranks the world's number 1 in term of tertiary education attainment rate in the 25-54 age group. Moreover, literacy among the age group 15-24 is even higher and has been ranked the world's top in term of literacy and numeracy skills (World Economic Forum, 2018). While Japan's education outcomes are very high and outperform the international standard, Japan faces challenges in decreasing working-age population and "the transition from school to work in a context of globalization". The aging population issue is reflected through the trend in aged dependency ratio which rose from 9 percent of working-age population in 1960 to 45 percent in 2017. While child dependency ratio dropped from 47 percent in 1960 to only 21 percent in 2017. With the challenge of population decline, Japan's working age population is only around 77 million which is almost half of the country. Unemployment rate is 3.1 percent which is much below the global and OECD average while youth not in employment, education or training rate (NEET) is 3.6 percent. Labor force participation rate is 60 percent. However, there is a pool of labor force relatively untapped which is the Japanese women who rank the world's highest in both literacy and numeracy proficiency but only 73 percent are employed –many in part-time or non-regular jobs (World Economic Forum, 2018; OECD, 2015). Overall, Japan ranks very high in term of human capital, occupying 17th place out of 130 countries with a score of 72.05 points out of 100 in the Human Capital Index. Moreover, Japan's ranks second only to Singapore among East Asia's top 10 (World Economic Forum, 2018). Japan performs well in all sub indexes, ranking 9th in the capacity sub-index, 19th in the knowhow sub-index, and 23rd in the development sub-index. It also performs well in the deployment sub-index. As a result, Japan has the highest score as a country that has boosted its past educational success across generation and hence, has achieved the 9th largest capacity in education after Latvia, Slovenia and Finland.

In term of financial resources for education, OECD (2015) reports that Japan's investment in educational institutions (public and private) is 5 percent of Japan's GDP which is below OECD average (5.3 percent) with a higher share of private funding than the OECD average. While Japan's public expenditure on educational institutions is 3.5 percent of its GDP in comparison to the OECD average of 4.7 percent and is also lower than other East Asian countries such as South Korea, Vietnam, Malaysia and Thailand (UNESCO Institute for Statistics, 2018). Furthermore, Japan's

share of public investment on educational institutions is 70.1 percent which is also lower than the OECD average of 83.5 percent. The governmental expenditure on education is 9.24 percent of its total government expenditure in all sector, which shows a decreasing trend. The initial government funding per student also decreases from $10899 in 2011 to $9683 in 2014 (UNESCO Institute for Statistics, 2018). Moreover, the Japanese government's main responsibility is to provide funding to national higher education institutions but it also provides subsidies to private education institutions including universities. Private and public universities offer loans, reduction of tuition fees to students from low-income families and also international students, through subsidies provided from the Japanese government (OECD, 2015). As there are more students attending higher education in Japan, there is an increasing demand for scholarship loans for domestic students which will be essential to help students' families alleviate the burden of paying for admission fee, tuition, accommodation, food and transportation (Sawa, 2014).

4.2.3 Research and Development (R&D)

Level of R&D in Japan and China can be assessed using two variables: R&D expenditure and human resources in R&D.

4.2.3.1 China

China's input on R&D is the second highest in the world in 2017 after the US (Luo, 2018). With a GDP of $11.2 trillion in 2016, China spends 2.11 percent of its GDP on R&D, which is approximately $279 billion. The increase is drastic in comparison to its gross domestic spending on R&D in 1996 which is only 0.56 of its GDP, which is a change made possible by the China's rapid economic expansion (World Bank, 2018). The year-on-year increase is estimated to be about 14 percent (Reuters, 2018). China's growth in R&D investment has already exceeded that of the US and the EU (Veugelers, 2017). China's sources of R&D financing are categorized into two parts – 74.7% or $282 billion from business and 21.3 percent from the government. In 1994, businesses only contributed to 32.4 percent of China's R&D spending and has surged due to the growth of new businesses and enterprises, demonstrated by the number of domestic Chinese companies listed on stock exchanged has tripled between 2000 to 2016 (3000) (China Power Team, 2018). The two biggest spenders on R&D in 2016 is Alibaba and ZTE Corp. Huawei is another

big spender on R&D contributing approximately $11 billion to R&D, which is higher than Apple and Johnson & Johnson. Between 1991 and 2015, higher education institutions also form a small portion of China's R&D, which is approximately 9.4 percent of R&D usage. The small figure is due to "the country's restrictions on intellectual freedom, coupled with a focus on the graduate employment over scientific output, have impeded innovation within China's universities" (China Power Team, 2018). The lack of well-established ties between universities and businesses also affects knowledge transfer. Furthermore, China's R&D priorities focus around experimental development or development research, investing more than 80 percent of its R&D resources, rather than applied research (10.8 percent) and basic research (5 percent) which are important to "the development of new scientific ideas and cutting-edge technologies" (China Power Team, 2018).

In attempts to become an innovation hub and "a big technological innovation power by 2050", the Chinese government has been trying to shift itself away from the low-end heavy industries to a more sustainable alternative in order to encourage its economic growth and rise up in the global value chain. In order to achieve the goal, China also has established many new high-tech industrial parks and incubators as infrastructure to support its R&D and innovations such as artificial intelligence, robotics, big data, nuclear and renewable energy, and electric vehicles (Reuter, 2017). Moreover, the government has also tried to elevate the financial burden on R&D for Chinese firms by pouring in $347 billion into R&D in 2015 and has also provided significant tax breaks to Chinese firms in order to incentivize their investment in R&D. Domestic restriction, however, limits the foreign investment in R&D, which only contributes to approximately 0.74 percent. However, the figure does not represent R&D facilities in China which belongs to multinational corporations such as Apple (China Power Team, 2018). Furthermore, China also has the world's largest number of R&D personnel. China's total R&D personnel has increased from 2.9 million in 2011 to 3.9 million in 2016. Furthermore, 26.5 percent of its total R&D personnel in 2016 are female 2016, which is a slight increase from 25.3 percent in 2011, a positive trend demonstrating that more women are employed in science and technology. The total number of researcher in R&D is 1177 in 2015, in which the number has increased by two-fold since 1996 (443). Additionally, the number of researchers in R&D per 1 million population has jumped from 2108 in 2011 to 2763.1.

4.2.3.2 Japan

As of 2016, Japan is the world's third biggest spender in R&D. With a GDP of $ 5 trillion in 2016, Japan spent 3.15 percent of its GDP on R&D, which is an increase from 2.69 percent in 1996 (World Bank, 2018). Japan is also the biggest spender among G7 nations. Japan's total R&D personnel has slightly increased from 86, 9825 in 2011 to 87,2349 in 2016 in which female makes up of 21 percent of the total R&D personnel. The number of researcher in R&D is a total of 5328 in 2016 in which male researchers make up of 85 percent and female researchers make up the remaining 15 percent. Japan has made some progress in improving female employment in R&D as the number of female has improved from14 percent in 2011. In 2016, the number of researcher in R&D per 1 million population is 6819 in 2016 while technician and equivalent staffs in R&D is 83551 (World Bank, 2018).

Investing in R&D has been one of the drives behind Japan's past economic success and also one of the reasons why Japan has become a global leader in technology and innovation. Due to the fact that Japan has been losing its competitiveness to the US, China and South Korean recently, the government has been investing efforts in strengthening R&D capabilities. In 2013, the government set a target to spend 4 percent of GDP for total R&D investment for public and private sectors combined. Japan is focus on R&D and innovations in "energy, environment, robotics, artificial intelligence, the internet of things and cyber physical systems" (Nicca Chemical Co., 2016).
Since 2012, the R&D spending at Japanese corporations is also rising faster than ever in order to maintain competitiveness in the fast-changing global market. Today, the private sector contributes to over 70 percent of the total R&D investment. Approximately, 40 percent of major Japanese corporations have increased their R&D spending significantly. The spending among the corporations is $107 billion in 2017, which is a 5.7 percent increase from the 2016. Some of the top spenders include Honda Motor, Suzuki Motor, Mazda Motor, Toyota Motor, Denso, Mitsubishi Electric, Sumitomo Chemical, Mitsubishi Chemical Holdings (Nikkei Asian Review, 2017). Furthermore, in order to improve the economy and encourage new innovations, the government aims to a ban, allowing state-backed research institutions in invest in startups (Nikkei Asian Review, 2017). Japan has also been trying to attract multinational corporations to establish R&D facilities in Japan by providing "income tax breaks, reduction of patent fees and shortened investment procedures" (Nicca Chemical Co., 2016). The attempt has been successful due to "its

reputation as an international hub for R&D and heavy investment in this area". Some examples of corporations that have established its R&D research center include Apple, Johnson & Johnson, and 3M Healthcare (Nicca Chemical Co., 2016).

4.3 Policy Tools

The policy tool dimension of educational soft power contains two criteria that reflect educational and employment opportunities for international students which leads a direction towards a better life and future including: (1) domestic development policies and (2) foreign development aid. The criteria will be analyzed for China and Japan in the following sections.

4.3.1 Domestic Development Policies

4.3.1.1 China

In the past, China was restrictive, prohibiting international students in China from working during their time studying in China and a work visa after graduation was only possible with "at least two years of post-study work experience overseas". Hence, after graduation it was almost impossible for new graduates from Chinese universities to remain in China, let alone obtain a working visa. However, the policy has changed over the year as China has been trying to push for internationalization of its education system in order to position itself as an attractive international education hub by introducing various changes which helps China to be more appealing to international students such as allowing work visa for "talented individuals" to stay and work in China after graduation (Australian Government Department of Education and Training, 2016). In January 2017, the Ministry of Human Resources and Social Security, Ministry of Education and the Ministry of Foreign Affairs together announced a new rule which outlines employment visa eligibility requirements for those who want to work in China, welcoming mainly those "with a postgraduate degree or higher from Chinese or "well-known" foreign universities" to find employment within a year of graduation (Xinhua, 2017). According the Chinadily (2017), some of the requirements are as followed: "a qualified student must be at least 18 years old, healthy, possess a clean criminal record, and have grades averaging above 80 percent, or a B+/B under the letter-grade system" and "the jobs these students take must match the individual's academic

specialties". Moreover, international students in Chinese universities who meet the requirement will be able to obtain work permits and employment licenses. However, international students from foreign universities will only be able to obtain work permits and can receive employment license after landing in China. The policy has been well-received by international students in China as Chinese job market is attractive to job-seekers due to the wealth of opportunities, competitive salaries and relatively low costs of living. In the past, the opportunities for foreigners to be employed in China were limited to few roles such as language teachers, multinational executives, and foreign mission staffers. Today, there are increasingly more options for foreign students whether it is within multinational companies or China's growing tech-startups (Chinadaily, 2017). In order to increase economic modernization, China has also been granting permanent residency or "green card program" since 2004, mainly to foreign investors and celebrities. The year on year increase in number of people who have been granted the green cards is 163 percent (Ives, 2017).

According to the Ministry of Education of China (2018), there are 489200 international students in 2017, in which half is consisted of degree students. Furthermore, 75800 are graduate and doctoral students. The number of international degree students in China has increased by 15 percent over the year. The students represent 204 countries and territories, studying in 935 Chinese higher education, attracting mainly students from South Korea, Thailand, Pakistan, the US and India, respectively. There are many reasons that have helped China to attract more international students. First of all, the Chinese government has allocated funding to provide scholarships to international students so that they can pursue their professional studies and higher educations in their fields of specialty in China. The number of foreign students who received Chinese government scholarships in 2017 was 58600 from 180 countries, which is 12 percent of the total number of international students in China (Ministry of Education, 2018). The number do not include scholarships from private institutions or foundations such as corporations, universities or global university programs such as Yenching Academy and Schwarzman Scholars. The other reason behind the increasing foreign students is due to the increasing degree programs conducted in English. In 2017, there are more than 616 Master's programs in China that are using English as a mean of instruction which makes China a more attractive destination for education because foreigners now have higher chances to enter Chinese job market (Shinibekova, 2017).

Tuition fees in Chinese public universities are relatively affordable in comparison to UK or some Asian countries. For example, fees for an English-taught degree costs between $2200 to $4500 per year. However, degrees in medicine, engineering, and business can be significantly more expensive ranging from $24000 to $50000 per year, which is on par with the US and the UK which is the reason why the majority of students in science and engineering receive some forms of funding such as scholarship. The average tuition fees for Chinese top universities are the following: $17000 per year for Peking University, $7500 per year for Tsinghua University, and $8000 to $11000 for Fudan University. While the most affordable tuitions fee can be found at Samara National Research Universities ($1800 per year), Nanjing University of Technology ($4000 per year), Beijing Jiaotong University (average $5000 per year) and University of Science & Technology of China (average $4350 per year). The average living cost in China varies from city to city. The average living cost for Beijing, China's the most expensive city, is between $1000 to $1200 per month while the cost for Shanghai, the second most expensive city, is between $850 to $1200 per month. However, other major cities in China are considered to be much more affordable such as Tianjin, Jiangsu or Sichuan (Vioreanu, 2018).

The challenge that comes with China's internationalization efforts is the quality of students it brings, which can potentially affect the quality and attractiveness of Chinese education system in a long run. The Ministry of Education itself has addressed this challenge. Due to the efforts to internationalize, many Chinese higher education institutions focus on increasing the quantity of international students without paying much attention to their credentials by lowering barriers to admittance (Bao, 2017). Hence, despite increasing number of international students, China still has many areas that need to be improved in order for it to be a global leader in education.

4.3.1.2 Japan

Due to the decline in population, Japan is left without many choices but to start opening up to immigration, a decision Japan has always been reluctant in implementing. Being one of the world's most rapidly aging societies, a share of working-age population is on decline causing labor shortages which leaves Japan with no choices but to quietly and un-publicly open up to foreign work force to meet the rising demand in the job market. While the Japanese government publicly announced that the in order to solve the issues of labor shortage, it encourages elderly and women to integrate into the labor force while leaving out its new immigration policy which

has led to a 40 percent rise in foreign work force since 2013. Immigration to Japan has always been strict and exclusionary. The path to naturalization is extremely difficult and restrictive. Citizenship are denied to even though the children are born and grow up in Japan. Children can only obtain citizenship if their parents' nationality is Japanese. Most long-term foreign residents in Japan hold permanent resident visas as the statistics show that the ratio of naturalization to permanent resident visa per year is approximately 1000 to 30000. During the Lehman Shock in 2008 and the Fukushima nuclear disaster in 2011, the number of foreign residents have dropped but has now recovered again. Immigration has remained very unpopular in Japan, therefore, the government turns towards increasing recruitment incrementally under existing immigration policy without potentially causing a public referendum (Green, 2017).

In 2016, the figure on foreign workers in Japan has reached 1 million. Among foreign workers, 210,000 are students. In other words, 1 in every 5 foreign workers is student, many of whom are enrolled in Japanese language school. While the Japanese government promotes the intake of international students as a strategy to increase cultural exchange, another reason which is not mentioned to the Japanese public is that these international students will help fill the gap in the Japanese labor market, especially menial works in convenience stores, restaurants and other services (Okunuki, 2017). Furthermore, Japan initiated the "technical intern trainee" in 1990, a back door to bring in low-skilled foreign laborers to work in rural machinery, construction and farming sectors with a low wage for a maximum of five years. The condition has been described as "oppressive". In 2016, technical trainees make up 9 percent (212510 trainees) of foreign residents in Japan (Green, 2017). In order to further alleviate labor shortage, the government acknowledged that it needs to increase foreign labor force by a large scale, thus in June 2018, the Japanese government announced its new policy to create a five-year visa for non-professional foreign laborers, aiming to receive 500,000 low-skilled laborers by 2025 mainly in order to counter labor shortage and prepare for the 2020 Olympics in Tokyo. In order to obtain this new visa, the applicants have to pass certain skill and language proficiency tests. As immigration is still "a taboo" in Japan for fear that it will disrupt social balance and homogeneity, the government promises that the new visa policy does not equal to immigration (Green, 2017).

As for employment opportunities for international students in Japan, there are now more opportunities in Japanese and multinational companies than ever due to aging population. The

Government has announced Japan Revitalization Strategy 2016 in order to increase the employment rate of the employment rate of international students in Japan to 50 percent and retain "excellent" foreign students. The government has also simplified the process to change student visas to post-study work visas as well as job hunting visas which are granted to international students for six months to find jobs in Japan after their graduation from college or universities. 80 percent of international employees in Japan is graduates of four-year undergraduate degree programs who are mainly from Asian neighbor countries such as China, South Korea and Vietnam. Waseda University, a well-known private university with the most international students in Japan, states that in 2015, 36 percent of 960 foreign students found jobs in Japan, which is a rise from 93 in 2009. While 36 percent does not sound like a large number, it has to be noted that not all foreign students seek employments in Japan as many would like to return to their home countries or go to different countries. Another obstacle that international students face in looking for jobs in Japan is the unrealistic expectation of Japanese employers who expect international students to have fluency in Japanese on par with native speakers. This has caused Japan to fail to retain talents as some prefer to go to other countries which are more accommodating in term of language proficiency. Furthermore, it is often that jobs are limited to IT sectors, interpretation, and some other sectors in order to protect local employment. Another challenge faced by international students is that even though they are employed by Japanese companies, their career progression and promotion are not on par with their Japanese counterparts, which can be perceived as discriminatory. Hence, the international employees often end up leaving Japan or hop to a new firm after a few years of employment, making retention rate low (Kakuchi, 2017).

On the other hands, Japan has always welcomed foreign high-skilled professionals and the visa policy for them are rather relaxed. High-skilled workers can renew their visas and even obtain the permanent resident visa to remain in Japan permanently (Masumoto, 2018). The Japanese government has been accommodating and eager to recruit high-skilled professions due to the fact that "they have the highest level of approval from the Japanese public" (Masumoto, 2018). In 2012, Japan launched a Highly Skilled Foreign Professional (HSFP) visa in order to attract scientists, researchers, engineers, and businessmen with perks and benefits that are exclusive to this group of visa holders. As of 2015, there are 2642 HSFP visa issued. HSFP visa holders can apply for permanent residency within five years. While other foreigners can apply for permanent residency after remaining in Japan for a minimum of ten years, spouses of Japanese nationals are

eligible in less time. Japan has been highly selective of refugees as it only granted refugee status to 27 out of 7500 applications in 2015. Although, Japan compensates its low refugee acceptance by providing high levels of foreign and humanitarian aid, Japan's reputation and credibility may be undermined in the global area, which will affect its soft power in the long run (Green, 2017).

In term of tuition fees and scholarships, Japan can be attractive to international students, in comparison to the US and the UK. Tuition free at Japanese public university are relatively low. The average for national and public universities is $10000 per year while the average for private universities range from $12000 to $20000 per year (Japan Study Support, 2016). The living expenses also vary across nation with an average of $1200 nationwide. Tokyo has the highest cost of living with an estimated living expense $1450 per month. The cheapest cost of living can be found in Shikoku region with an average of $940 per month (Japan Study Support, 2016). Nevertheless, there are many public and private scholarships available in Japan. One of the most prestigious scholarship is the MEXT or Monbukagakusho scholarships offered by the Ministry of Education, Culture, Sports, Science and Technology. From its launch in 1954 until 2015, there have been 102,000 students from 160 countries around the world who have studied in Japan with this scholarship. In 2015 alone, there were 9,223 foreign students who received the MEXT scholarship (Embassy of Japan in the United States of America, n.d.).

4.3.2 Foreign Development Aid

Foreign development aid of Japan and China can be assessed using two variables: educational infrastructure and development scholarship and training programs.

4.3.2.1 China

China has transitioned itself from an aid recipient to a growing donor, quickly catching up with the US. The details and the data on Chinese foreign aids are not disclosed to the public as China see it as a "state secret" (Chandran, 2017). However, AidData (as cited in Lo, 2018), has been trying to reveal its secret demonstrating that between 2000 and 2014, China has spent an estimate of over $354.4 billion in aid to 140 countries. Many of its top recipients are members of the Belt and Road Initiative such as Cuba ($6.7 billion), Cote d'Ivore ($4.0 billion), Ethiopia ($3.7 billion),

and Zimbabwe ($3.6 billion) (Chandran, 2017). Many critiques of Chinese aids claim that the nature of Chinese aid is commercial rather than humanitarian. According to UNESCO (2015), China's education aid focuses on the following areas: "higher education—primarily scholarships and university partnerships; vocational training, including teacher training; Chinese- language instruction in developing countries through institutional support and volunteer teachers; school construction and educational materials; and collaboration with multilateral organizations on education and training." While the three main areas include university scholarships, vocational training programs and Chinese-language instruction in developing countries. China has been trying hard to distinguish itself apart from other aid donors by self-identifying and actively promoting itself as "a developing country" and "a partner" who prioritizes equality and mutual benefit and South-South cooperation over traditional donor models. China's strategy to appeal to other developing countries is by building solidarity and promoting the us-against-them mentality – with them being the West. Allison (2013) from the Guardian describes the way China positions itself apart from other donors in the following: "This is a refrain I hear again and again from Chinese academics and government officials: China and African countries are in the third world together, they are all countries discriminated against by the west; they are brothers or partners or whatever other word describes a friendly, mutually beneficial partnership between two regions of equal stature and development."

Furthermore, China's approaches to educational aid are to link education and culture, as well as to promote the China's developmental experience as the learning model for its aid recipients (Reilly, 2015: 5). The first mode of education aid is technical and vocational education and training (TVET). Between 1981 and 2009, China has conducted more than 4000 training sessions for more than 120,000 participants in 20 fields. The second mode of education aid is university scholarships and partnerships which are mainly under the responsibility of Chinese Scholarship Council (CSC). All CSC scholarships include tuition fees, living expenses, and healthcare covering PhD, Masters, Undergraduate, and Non-degree studies. An estimate of 197,926 CSC scholarships has been granted between 2003-2013, mainly to students from developing countries (Reilly, 2015: 14). Moreover, China has been shifting its focus to attracting African students since the Forum on China-Africa Cooperation in 2000. The number of African students in China has risen by 26-fold from 2000 in 2003 to 50,000 in 2015. China also promised to provide 30000 scholarships to

African students by 2018 in order to attract the new generation of African scholars and elites, mainly from East Africa. Due to the restrictive immigration policy, the likelihood of international who will be bringing education and skills home after graduation is higher than many countries such as the US, the UK, and France (Breeze and Moore, 2017). The third mode of education is volunteer programs and language which is mainly represented by the Confucius Institute as discussed earlier.

As for China's contribution to educational infrastructural development, China has built elementary schools, technical training centers and university facilities mainly in Africa and Asia under the supervision of International Economic Cooperation Bureau (IECB) which receives funding from China's foreign aid budget. China has built hundreds of elementary and universities. China reported that it has built 200 elementary schools between 2007 and 2015. While some of the universities China has built include the following "the Ethio-China Polytechnic College (Ethiopia) (estimated cost: $15 million), the Fendell Campus of the University of Liberia (estimated cost: $21.8 million), the Science and Technology University of Malawi (supported by an $80 million loan), and a training center within Zimbabwe's Gwebi Agricultural College" (Xinhua 2012a; King 2010b as cited in Reilly, 2015).

4.3.2.2 Japan

After the end of the Second World War, Japan has transitioned itself from being an aid recipient to one of the world's largest donor countries. In 2017, Japan is the world's fourth largest donor and Asia's largest donor, contributing approximately $11.9 billion. The figure represents 0.23% of Japan's gross national income (GNI) which puts it in the 20th place among 29 DAC countries (Donortracker, 2018; JICA, 2017). Japan's aim is "to contribute to the peace and development of the international community, and thereby to help ensure Japan's own security and prosperity" while its main priorities include supporting sustainable development through self-help efforts of developing countries, contributing to human security through poverty reduction, addressing global issues and ensuring global peace and security (Global Partnership for Education, 2017). In 2017, its new vision is "leading the world with trust" in which Japan aims to lead developing countries as an "equal partner" and build trust and share its own development experience with recipient countries (JICA, 2017). In term of education aid, Japan places an emphasis on human resources

development and education as the "cornerstone of nation-building efforts of developing countries" based on Japanese experience. Japan's education aid is under the responsibility of the Overseas Economic Cooperation Council, Ministry of Finance, Ministry of Foreign Affairs, and Ministry of Economy, Trade and Industry while Japan International Cooperation Agency (JICA) and Japan Bank for International Cooperation (JBIC) implement the programs. In 2016, Japan has donated more than $202.28 million to support education alone which is the highest since 2010. (OECD, 2018). In 2015, the top recipient countries for aid to basic education include Mongolia, Ethiopia, Burkina Faso, and Nepal (World Bank, 2018). JICA focuses on three subsectors of education including basic education, higher education, and technical and vocational education and training (TVET) which are the core of human development. In 2016, Japan has contributed $1.9 billion to technical cooperation. Between 1994 and 2015, JICA has trained 930,000 people from 60 countries in mathematics and science. Japan also has a scholarship dedicated to attracting African students under the ABE Initiatives in which there were 821 student participants between 2014 and 2016 (JICA, 2017). One of the government scholarships awarded to international students among many is the MEXT or Monbukagakusho scholarships from the Ministry of Education, Culture, Sports, Science and Technology. From the scholarship establishment in 1954 until 2015, there have been 102,000 students from 160 countries around the world who have studied in Japan with this scholarship. In 2015, there were 9,223 foreign students who received the MEXT scholarship (Embassy of Japan in the United States of America, n.d.). There are also many other government scholarships while other sources of scholarships come from Japanese universities, private sector, and NGOs. In term of educational infrastructure development, official figures on the number of primary and secondary schools built are not disclosed but it is estimated that Japan has built more than 1000 schools in Africa alone by 2015 (JICA, 2017).

Chapter 5 Conclusion

The analysis presented in Chapter 4 of this paper aims to demonstrate characteristics of China and Japan's educational soft power. Hence, the guiding research question has been what the differences and similarities between China and Japan's educational soft power are. While China and Japan are two of the world's largest economies with cultural and soft power assets, both invest significant efforts in expanding their soft power beyond the economic and cultural realms through the education sector. Hence, education has been utilized as a tool to boost China and Japan's attractiveness, which then contributes to their soft power. By analyzing the three mechanisms of educational soft power including values, resources, and policy goals, it can be concluded that the similarity between China and Japan is that they both proactively pursue the internationalization of higher education as the main strategy to appeal to foreign students and obtain soft power. Nevertheless, there are also various differences in all dimensions, which influence and reflect each country's level of attractiveness.

5.1 Values

The value dimension represents how China and Japan utilize education as a carrier of genuine values in order to gain favorable opinions and positive impressions from the international community, especially the new generations of existing and potential elites. The value dimension has been assessed through analyzing four criteria: modernization, equality, quality of life, and competitiveness. All criteria reflect the ideal of good life and contribute to a forward direction towards the future, which are attractive to young adults and international students. In term of modernization, the similarity between China and Japan is the pace of economic development and the scale of its economy both countries have experienced. Furthermore, Japan is an aging society which has been experiencing population decline and rapid migration from rural to urban areas. Similarly, China has entered an aging society which will pose many potential issues in the future. However, the stark difference is that Japan has been fully modernized and completely transformed from an industrial society to a technologically advanced one with highly-skilled workforce and value for modern education while China is still in the progress. China, on the other hands, has made progress in improving its socio-economic structure through the rapid expansion of economic

growth and job market in services sector which have enabled a quick transition from an agricultural society to an industrial one and a relatively slower transition from an industrial society to the service industry. However, the economic expansion has drastically exacerbated inequality between the rich and the poor, as well as widened the gap between the wealthy eastern coastal provinces of China such as Beijing and Shanghai and the poor provinces in the north and the west. The large regional income gap in China reflect that the level of modernization clusters around China's eastern coastal provinces, which makes it difficult for poor provinces to modernize due to the lack of skills, education, and resources. On the contrary, income disparity still exists in Japan but the at a significantly lower level when compared to China. Furthermore, while Japan enjoys sophisticated bureaucracy and solid democracy, China is one the the world's poorest performers in term of democracy due to the repressive regime and draconian restrictions on media, academic discourse, freedom of political expression and civil liberties. In term of gender equality, both China and Japan have closed gender gap between men and women in education attainment. However, both countries perform poorly gender gap in professional employment due to traditional values on gender roles. Labor force participation among female population is another indicator of a modernized society. Japan's female labor force participation has increased in recent years, the trend represents a large share of part-time and non-regular jobs which are not conducive to improving the living standards and to be integrated into the monetary economy. Furthermore, many Japanese women later quit their full-time jobs for childcare or marriage. Many Japanese women drop out of employment for childcare or marriage, hence, worsening the current labor shortage that Japan has been experiencing as a result of aging population. Moreover, women in China and Japan still face discrimination in term of employment opportunities, especially in the non-agricultural sectors, as well as lower career progression and limited promotion in comparison to men. Female representation in ministerial roles is also small in China and Japan. LGBT equality is very low and even denounced in China while it is relatively more tolerated in Japan. However, both countries have much to improve in term of gender equality.

In term of quality of life, Japan has enjoyed a high quality of living. China and Japan boasts largest market size and economic opportunities which translate into high economic attractiveness. However, China's market has low receptivity and economic freedom due to tight governmental control. Japan stands out in term of rule of law and protection for intellectual property rights,

sophisticated consumer economy and high consumption capacity. Japan is similar to China in term of low market receptivity. As for environmental attractiveness, while both China and Japan are major Co2 emitters in the world, Japan outperforms China in every aspect due to its advanced technology in clean and renewable energy and low level of air pollution which poses little or no risk to health. As for social attractiveness, Japan is highly regarded globally in term of human development, political stability, low corruption, life expectancy, and safety – all of which makes it a highly attractive country for international students. On the other hands, China still struggles to obtain international trust due to low political stability, high corruption, repressive regime and limited freedom of expression. In term of personal safety, it is also suspected by many that the official statistics on China's homicide rate, which is lower than Japan and Switzerland, is rather misleading (the Economist, 2013). Hence, it has not been taking into consideration in this paper due to lack of available data. In term of competitiveness, Japan has long been one of the global powerhouses in innovation with outstanding institutions, policies, productivity, R&D, manufacturing, hi-tech companies, research personnel and number of patents, making it the world's second most innovative country. Today, China, especially the Shenzhen and Hong Kong cluster, has been able to quickly catch up with Japan in R&D, manufacturing, hi-tech companies and startups, and number of patents filed.

5.2 Resource

The resource dimension represents education as a soft power resource that China and Japan possess. The resource dimension has been assessed through analyzing three criteria: quality of education, human capital and R&D. All criteria directly influence a country's educational reputation and affect the level of attractiveness its education system is perceived by international students. As education is considered a universal value for achieving a better life and a growth towards the future, a country that possesses a competitive education system as a soft resource, will also be able to obtain more educational soft power. Quality of education available in a country can be partially represented through university ranking. Both China and Japan have a fair share of high ranking universities. Three Chinese universities made it to the top ten universities in Asia including Tsinghua University, Peking University, and Fudan University while Japan has University of Tokyo and Kyoto University. Furthermore, overall education quality can also be measured by

students' performances in science, reading and mathematics tested by PISA. Japan has outperformed the global and OECD average while data on China is incomplete as it only reveals PISA result of major cities such as Beijing and Shanghai, which do not accurately represent the whole country. Hence, the PISA result on China cannot be assessed. Other than high academic performance, Japan has focused on the internationalization of education, resulting a large variety of more than 850 degree programs conducted in English which make universities in Japan more accessible and appealing to international students. In contrast, China has only recently started to internationalize and therefore, there are much less options for degree programs in English although the number of English-taught degree programs and scholarships available has been steadily increasing including the Yenching Academy program at Peking University and the Schwarzman Scholars program at Tsinghua University. China will need to offer more options in English-taught degree programs in order to remain competitive. In term of academic productivity, China and Japan are ones of the world's biggest publishers of scientific and technical journal articles. While China is the world's number one publisher, the high volume of Chinese publications is partially driven by financial incentives as China grants financial rewards or cash-per-publication for academics and scientists when they publish in reputable journals. This may undermine the credibility and transparency of China's academic output in the eyes of the international community. In term of human capital, China and Japan both rank highly and share similarities in high literacy rate, relatively low female labor force participation, declining workforce due to aging population. However, Japan has large education capacity as it has boosted its past educational success across generations. Finally, as for financial resources for education, both China and Japanese governments are the main sources of funding for public and private higher education institutions which are then granted to international students in the forms of loan, reduction of tuition fees and scholarships. However, Japan's scholarship schemes such as the MEXT scholarship have been well-established and receive much recognitions from international students which allow it to tap into the world's talent pool due to the high volume of application and competition. As for R&D, China and Japan are both world's biggest spenders in R&D in order to maintain its competitiveness in the global market. Furthermore, the majority of R&D personnel in both countries are male.

5.3 Policy Tools

The policy tool dimension represents education as a tool employed by China and Japan to pursue and achieve foreign policy goals. This dimension has been assessed through two criteria: domestic development policies and foreign development aid. In term of domestic development policies, China and Japan share similarities in regards to immigration policy which are conservative. While China and Japan have welcomed foreign highly-skilled professionals with open arms, both have maintained relatively restrictive immigration policies which makes it difficult for international students to remain in the country and find a job after graduation. However, with Japan being an aged society and China following Japan's footsteps, the reality is grim and both countries are left with not many options but to encourage more women to join the workforce and relax immigration policies in order to attract international labor force. Due to the declining demographic, Japan is in serious need of both highly-skilled and low skilled workers, which presents many employment opportunities to international students and foreigners in general. Nevertheless, the requirement of Japanese language proficiency is a factor that limits Japan from tapping into a wider talent pool and makes Japan less attractive as a destination for work. Furthermore, the availability of a vast variety of scholarships and affordable tuition fees also make China and Japan attractive destinations.

The analysis of China and Japan demonstrate that a nation's soft power can be obtained and enhanced from excellence in the educational sector. China and Japan both actively pursue education as a deliberate instrument to gain international recognitions and build soft power in international relations. The strategy to utilize education for soft power gains is mainly through internationalization which comes in various forms such as development aid, scholarships, and employment opportunities. The internationalization of education is important because it increases the attractiveness of a nation and the mobility of students are soft power resources.

5.4 Summary of the Analysis

Table 5 Summary of the Analysis for Assessing Educational Soft Power of Japan and China

Dimension	Criteria	Variables	Operationalization	Findings
Values	Modernization	Socio-Economic Structure	the regional per Capita GDP, the percentage of citizens employed in agriculture, industry, and the service sector, women's participation in the labor force, and population density (number of people per square kilometer)	Japan has been fully modernized and completely transformed from an industrial society to a technologically advanced one with highly-skilled workforce and value for modern education while China is still in the progress as modernization clusters around China's eastern coastal provinces, which makes it difficult for poor provinces to modernize due to the lack of skills, education, and resources. The similarity between China and Japan is the pace of economic development and the scale of its economy both countries had experienced. Furthermore, both Japan and China are aging societies which have been experiencing population decline and rapid migration from rural to urban areas which has posed as a challenge it their socio-economic structures.
		Democracy	EIU Democracy Index, Freedom in the World,	Japan enjoys sophisticated bureaucracy and solid democracy while China is one the the world's poorest performers in term of democracy due to the repressive regime and draconian restrictions on media, academic discourse, freedom of political expression and civil liberties.
	Equality	Gender Equality	female share of paid employment in non-agriculture, labor force participation rate	China and Japan have much to improve in term of gender equality. Japan's female labor force participation has

			for male and female, unemployment rate female to male ratio, gender representation in ministerial position, Global Gender Gap Report Gender Development Index (GDI), Gender Inequality Index (GII), and Corporate Equality Index	increased in recent years but the trend represents a large share of part-time and non-regular jobs which are not conducive to improving the living standards and to be integrated into the monetary economy. Moreover, women in China and Japan still face discrimination in term of employment opportunities, especially in the non-agricultural sectors, as well as lower career progression and limited promotion in comparison to men. Female representation in ministerial roles is also small in China and Japan. LGBT equality is low in China and Japan.
	Quality of Life (Good life)	Economic Attractiveness	GDP, market size, market growth, purchasing power, and market openness	China and Japan boasts largest market size and economic opportunities which translate into high economic attractiveness. However, China's market has low receptivity and economic freedom due to tight governmental control. Japan stands out in term of rule of law and protection for intellectual property rights, sophisticated consumer economy and high consumption capacity. Japan is similar to China in term of low market receptivity.
		Environmental Attractiveness	Co2 emission, air pollutant (particle emission), clean energy (renewables generation)	As for environmental attractiveness, while both China and Japan are major Co2 emitters in the world, Japan outperforms China in every aspect due to its advanced technology in clean and renewable energy and low level of air pollution which poses little or no risk to health. China has yet to resolve its issues with environment pollutions although they are implementing more strict measures and regulations.
		Social Attractiveness	Human development index (HDI), Political Stability Index, Corruption	Japan is highly regarded globally in term of human development, political stability, low corruption, life

			perception index, sporting success (International Olympic Committee), life expectancy and the number of healthy life years, crime rates, homicide	expectancy, low crime rates and safety – all of which makes it a highly attractive country for international students. On the other hands, China still struggles to obtain international trust due to low political stability, high corruption, repressive regime and limited freedom of expression.
	Competitiveness	Patent	number of patents, number of innovations based on patents, and number of patent citations	Japan has long been one of the global powerhouses in innovation with outstanding institutions, policies, productivity, R&D, manufacturing, hi-tech companies, research personnel and number of patents, making it the world's second most innovative country. Today, China, especially the Shenzhen and Hong Kong cluster, has been able to quickly catch up with Japan in R&D, manufacturing, hi-tech companies and startups, and number of patents filed.
		Innovation	number of innovations, innovations in technical and specialized journals (LBIOs) and new products as a percentage of total sales deriving from innovative products	
Resources	Quality of Education	Quality of university	QS World University Rankings (QS); Times Higher Educational World Ranking (THE); Program for International Student Assessment (PISA); Academic Ranking of World Universities (ARWU); language of instruction; number of foreign students	Both China and Japan have a fair share of high ranking universities. Three Chinese universities made it to the top ten universities in Asia including Tsinghua University, Peking University, and Fudan University while Japan has University of Tokyo and Kyoto University. In term of PISA, Japan has outperformed the global and OECD average while data on China cannot be assessed as it only reveals PISA result of major cities such as Beijing and Shanghai, which do not accurately represent the whole country. Other than high academic performance, Japan has focused on the internationalization of education, resulting a large variety of more than 850 degree programs conducted in English. In contrast, China has only recently started to internationalize

				and therefore, there are much less options for degree programs in English although the number of English-taught degree programs and scholarships available.
		Academic output at higher institutions	number of articles published in the areas of arts and humanities, social sciences, and sciences	China and Japan are ones of the world's biggest publishers of scientific and technical journal articles. While China is the world's number one publisher, the high volume of Chinese publications is partially driven by financial incentives as China grants financial rewards or cash-per-publication for academics and scientists when they publish in reputable journals. This may undermine the credibility and transparency of China's academic output in the eyes of the international community.
	Human Capital	Level of education	Enrolment by level of education; percentage of adults enrolled in formal education by level of education; gross enrolment ratio by level of education; completion and graduation ratio; population by completed level of education; literacy rate, Human development index (HDI), Human Capital index, total population, working age population, tertiary-education population, aged dependency ratio, child dependency ration, media age of population, GDP per capita, labor force participation rate, employment-to-population ratio, and unemployment rate	Japan ranks among the world's highest in the Human Development Index. China and Japan both rank highly and share similarities in high literacy rate, relatively low female labor force participation, declining workforce due to aging population. However, Japan has large education capacity as it has boosted its past educational success across generations.

		Financial resources	Government expenditure on education; government expenditure per student; initial funding of education by source; expenditure by nature in public institutions	Both China and Japanese governments are the main sources of funding for public and private higher education institutions which are then granted to international students in the forms of loan, reduction of tuition fees and scholarships. Japan's scholarship schemes such as the MEXT scholarship have been well-established and receive much recognitions from international students which allow it to tap into the world's talent pool due to the high volume of application and competition.
	R&D	R&D Expenditure	GDP per capita; R&D expenditure; R&D expenditure as a % of GDP; public expenditure on education; gross domestic expenditure on R&D (GERD)	China and Japan are both world's biggest spenders in R&D in order to maintain its competitiveness in the global market. Furthermore, the majority of R&D personnel in both countries are male.
		Human Resources in R&D	Total R&D personnel; researchers in R&D (in headcounts); researchers in R&D (in headcounts) per 1 million population; technicians and equivalent staffs in R&D; share of researchers in business sector	
Policy Tools	Domestic Development Policies		immigration policies, working opportunities after graduation in host country, affordability of tuition fee, cost of living, availability scholarships and loans, and ratio foreign student to domestic student population	China and Japan share similarities in regards to conservative immigration policy. While China and Japan have welcomed foreign highly-skilled professionals with open arms, both have maintained relatively restrictive immigration policies which makes it difficult for international students to remain in the country and find a job after graduation. Due to the declining demographic, Japan is in serious need of both

				highly-skilled and low skilled workers, which presents many employment opportunities to international students and foreigners in general. China and Japan share similarities in regards to immigration policy which are conservative. While China and Japan have welcomed foreign highly-skilled professionals with open arms, both have maintained relatively restrictive immigration policies which makes it difficult for international students to remain in the country and find a job after graduation. Due to the declining demographic, Japan is in serious need of both highly-skilled and low skilled workers, which presents many employment opportunities to international students and foreigners in general.
	Foreign Development Aid	Educational Infrastructure Development	number of primary and secondary schools built	According to OECD, Japan has donated more than $202.28 million to support education alone in 2016 which is the highest since 2010. In term of educational infrastructure development, official figures on the number of primary and secondary schools built are not disclosed but it is estimated that Japan has built more than 1000 schools in Africa. Furthermore, China has built hundreds elementary schools, technical training centers and university facilities mainly in Africa and Asia between 2007 and 2015.

		Scholarship and Training Programs	number of scholarship recipients, number of scholarship recipients completing course and returning to home country, number of scholarships and disaggregated by level of award	Between 1994 and 2015, JICA has trained 930,000 people from 60 countries in mathematics and science. Japan also has a scholarship dedicated to attracting African students under the ABE Initiatives in which there were 821 student participants between 2014 and 2016 (JICA, 2017). One of the government scholarships awarded to international students among many is the MEXT Scholarship. From the scholarship establishment in 1954 until 2015, there have been 102,000 students from 160 countries around the world who have studied in Japan with this scholarship. There are also many other government scholarships while other sources of scholarships come from Japanese universities, private sector, and NGOs. On the other hands, China's approaches to educational aid are to link education and culture, as well as to promote the China's developmental experience as the learning model for its aid recipients (Reilly, 2015: 5). The first mode of education aid is technical and vocational education and training (TVET). Between 1981 and 2009, China has conducted more than 4000 training sessions for more than 120,000 participants in 20 fields. The second mode of education aid is university scholarships and partnerships which are mainly under the responsibility of Chinese Scholarship Council (CSC) with an estimate of 197,926 CSC scholarships has been granted between 2003-2013, mainly to students from developing countries.

Appendix A

A.1 Abstract

The popularity of Japanese popular and traditional culture is often under the spotlight when analyzing how Japan has risen from World War II destruction to become a soft power superpower. Similarly, the China's rising soft power is also associated with its cultural assets which are promoted through the Confucius Institute all over the world. Thus, many studies of Japan's and China's soft power mainly focus on the cultural dimensions of soft power. However, the sources of China's and Japan's soft power extend beyond their cultural assets, covering a variety of dimensions – one of which is education. A high quality education is among one of the crucial factors that can increase a nation's attractiveness and contribute to its soft power gains. Against this background, this thesis aims at operationalizing the concept of educational soft power and examining the characteristics of Chinese and Japanese educational soft power. By drawing the theoretical framework from the Educational Soft Power Model developed by Wojciuk, Michalek and Stormowska (2015), the similarities and differences in characteristics of Chinese and Japanese educational soft power are assessed through three mechanisms that reflect the ideal of a good life and an orientation towards the future: values, resources, and policy tools. A diverse set of data on modernization, equality, quality of life, competitiveness, quality of education, human capital, R&D, domestic development policies and foreign development aid, is drawn from various sources to provide an in-depth insight into the educational dimension of soft power possessed by the two East Asian superpowers. Therefore, this thesis aims to contributes to a greater understanding of China and Japan's soft power in the education sector by demonstrating how both countries utilizes education to remain competitive and attractive in the global arena.

Keywords: Soft Power, Higher Education, Model of Educational Soft Power, China, Japan

A.2 Zusammenfassung

Die Popularität der zeitgenössischen und traditionellen Kultur Japans wird oft bei der Analyse hervorgehoben, wie Japan von der Zerstörung des zweiten Weltkriegs zur Supermacht der sanften Macht geworden sei. Gleichermaßen wird die ansteigende sanfte Macht Chinas ebenfalls mit seinen kulturellen Vermögen assoziiert, die überall auf der ganzen Welt durch die Konfuzius-Institute gefördert werden. Infolgedessen fokussieren viele Studien über die sanfte Macht von Japan und China hauptsächlich auf die kulturellen Dimensionen der sanften Macht.

Dennoch weiten die Quellen der sanften Macht von China und Japan über ihre kulturellen Vermögen hinaus. Sie schließt die Vielfalt der anderen Dimensionen ein, einschließlich einer der Bildung. Die hohe Qualität der Bildung ist einer der wichtigsten Faktoren, die die Anziehungskraft einer Nation erhöhen und zu den Gewinnen von der sanften Macht beitragen können. Vor diesem Hintergrund zielt diese Masterarbeit auf die Operationalisierung des Konzeptes über die sanfte Macht der Bildung und analysiert derer Charakter von China und Japan. Nach dem theoretischen Rahmen von the Educational Soft Power Model, der von Wojciuk, Michalek and Stormowska (2015) entwickelt wurde, werden die Ähnlichkeiten und die Unterschiede von den Eigenschaften der sanften Macht der Bildung Chinas und Japans durch drei Mechanismen untersucht. Sie resultieren das Ideal vom guten Leben und die Orientierung auf die Zukunft: Werte, Ressourcen und politische Instrumente. Der vielfältige Datensatz besteht aus der Modernisierung, der Gleichheit, der Lebensqualität, der Wettbewerbsfähigkeit, der Qualität der Bildung, dem Humankapital, der Forschung und der Entwicklung, der Politik über die innenpolitischen Entwicklung und der internationalen Entwicklungshilfe. Er stammt aus unterschiedlichen Quellen um einen tiefen Einblick in die sanfte Macht auf der Dimension der Bildung zu bieten, die die beiden Supermächte aus Ostasien besitzen. Aus diesem Grund hat diese Masterarbeit das Ziel, um zum besseren Verständnis über die sanfte Macht Chinas und Japans im Bildungsbereich durch die Darstellung darüber, wie die beiden Länder die Bildung benutzt um wettbewerbsfähig und interessant auf der Weltbühne zu bleiben, beizutragen.

Schlüsselwörter: Sanfte Macht, Höhere Bildung, Model of Educational Soft Power, China, Japan

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