Edited by: Budi Setiawan, Budi Mulyana and Edza Aria Wikurendra

ECONOMIC AND BUSINESS TRAJECTORY

Indonesia, Asia and Europe

DOSZ
Association of Hungarian PhD and DLA Candidates

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PREFACE

The monograph "Economic and Business Trajectory: Indonesia, Asia, and Europe" is published with all the limitations, both from the author's limited knowledge, limited time available, and limited application in the field. However, the existing limitations do not prevent us from moving forward, writing, and continuing to study so that all the materials are collected and compiled. We also do our best so that its content is sufficiently appropriate to become a monograph entity.

We thank the Indonesian Student Association in Hungary (PPI Hongaria) for encouraging us to pursue this project and providing us with their very substantial support, guidance, and encouragement. We are grateful to the Association of Hungarian PhD and DLA Candidates (DOSZ) for their support which was the starting point for this monograph.

In addition, we thank publisher for proofreading the manuscript. Our sincere wish is that this volume will provide researchers, professionals, academics, and students, with some of the necessary background knowledge of economic and business trajectories. We hope that this monograph will be of benefit to anyone who pays attention to the problem of economics, as well as a business trajectory in general. Hopefully, this small work will bring benefits to the wider community.

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Fintech for Improved Financial Inclusion in Indonesia and Hungary

Budi Setiawan and Robert J. Nathan

Introduction

The world is at a crossroads in search of trade-offs between the role of technology and human involvement in economic activities. When looking at the history of industry 1.0 at the end of the 18th century, the physical involvement of labor in business operations was dominant. One hundred years later, companies began to compete to create products on a massive scale. Mass production was triggered by the discovery of electrical energy, and it was a sign for the beginning of industry 2.0. Subsequently, in the 1960s, many companies began to combine electrical energy and the internet in business activities. As a result, companies could carry out economic activities through computers and automation and reduce labor capital in production. At this time, the world entered the era of industrial 3.0 (Oxford Analytica, 2016).

Today, smart connectivity technologies such as cloud computing, big data, and network machines have shaped what we know as digitalization. Economic activities are digitally connected to create products more efficiently. The connection of various technologies to create more efficient products is a sign of a new era, industry 4.0. Hardt (2020) explained that the efficiency in industry 4.0 is the speed and affordable cost of utilizing the technology. Hardt posits that the internet has been found around since 1969, however the high cost of access has made the internet unfamiliar to the general public, so technology utility has not been optimal.

Technological developments invigorate innovation in various economic activities, including digitalization of the financial industry. The role of technology in the financial sector will provide added value to society and the economy in cost efficiency, speed, transparency, access, and security (IMF, 2019). Besides, the technology-based financial sector (financial technology), better known as fintech, can also increase financial inclusion (IMF, 2020). At the household level, Agarwal and Chua (2020) stated that fintech has a positive correlation to consumption and borrowing. Financial inclusion occurs when individuals and businesses have access to essential and economical financial services, including transactions, payments, savings, credit, and insurance offered responsibly and sustainably.

Thus, how do technological advances in industry 4.0 uplift financial inclusion and improve people's welfare through sustainable economic growth? The PwC Indonesia (2019) explained that providing financial access for the public is a determining factor in creating a multiplier effect for mobility and economic growth. On the other hand, people's ability to access the financial industry is still relatively low. Kunt et al. (2017) stated that 1.7 billion adults are excluded from the financial system around the world. This figure is better than in 2014, 2 billion adults. More than 50% of the unbanked population comes from the Asian region, particularly South, East, and Pacific Asia. Meanwhile, according to Google-Temasek-Bain & Company (2019), the adult unbanked population in Indonesia was around 92 million in 2019.

Furthermore, low levels of financial literacy and inclusion positively correlate with access to financial institutions. Lusardi (2019) argued that financial literacy should be recognized as a fundamental right and a prerequisite for all members of society, not only owned by high-income people. Klapper et al. (2013) stated that people with a higher level of financial knowledge experienced a lower negative impact during the 2009 global financial crisis, having an important role in managing personal finance when facing the Covid-19 pandemic (Anand et al. 2020). Financial literacy is also an important skill that has a significant impact on individuals, families, and the economy (Oseifuah et al. 2018), and according to recent study Low et al. (2021), financial literacy in developing countries is still low.

Research conducted by Klapper et al. (2015) outlined that Indonesians' financial literacy is at the middle level with a score of 32, much lower than Hungary with a score of 54. Financial literacy includes several basic aspects, such as numeracy, inflation, compound interest, and risk diversification. The low level of financial knowledge limits individuals to make good financial decisions so that the probability of mitigating risks is not optimal (Abreu and Mendes, 2010). Also, financial illiteracy creates further drawbacks for economically vulnerable groups of people (Stolper and Walter, 2017).

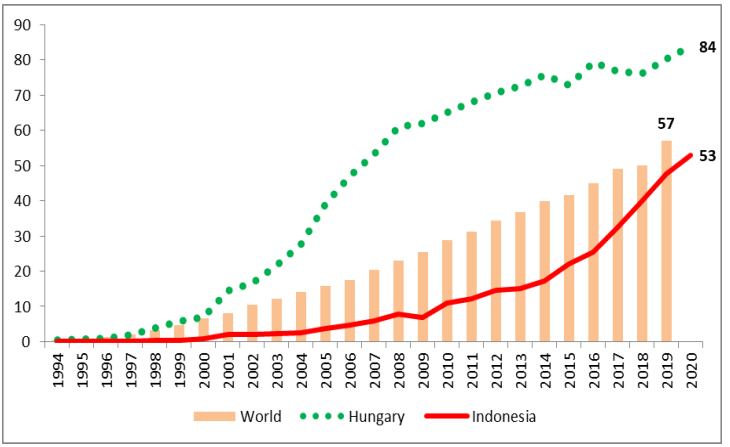
On the other hand, even though Hungary has a high financial literacy level, participation in the financial sector needs to be accelerated. For instance, stock market participation is relatively low. World Bank data describes that the ratio of the market capitalization of listed domestic companies compared to Hungary's Gross Domestic Product (GDP) is only 18% in 2020. This number is much lower than Indonesia at 47% in the same year. In fact, community involvement in the domestic capital market provides various benefits. For individuals, capital markets provide a more efficient allocation of capital and risk diversification. Alternative sources of funding, mitigate the principal-agent problem and reduce asymmetry information for companies (Adjasi and Biekpe, 2006), and promote economic growth in Mauritius (Nowbutsing and Odit, 2009), three African economies (Aregbeshola, 2016), CESEE countries (Bongini et al. 2017), Bangladesh (Qamruzzaman and Wei, 2018), BRICS members (Khatun and Bist, 2019), and China (Vo et al, 2020).

The Role of Technology in Providing Financial Access for the Society

Indonesia and Hungary have strong capital in the technology sector. For example, smartphone users and internet connections have increased dramatically in both countries. Smartphone users in Indonesia reached 183 million in 2020, or around 67% of the total population. This figure has grown more than tripled compared to 2015 (55 million users). In Hungary, smartphone users reached 6.9 million in 2020 (71%), which is predicted to grow to 7.5 million in 2025 (Statista, 2020). Emeana et al. (2020) described that mobile phone has potential to revolutionize agriculture by facilitating financial service to farmers

in Africa, and widespread acceptance of mobile payment in Poland (Cabanillas et al. 2020).

Furthermore, internet infrastructure establishment and broadband penetration to rural areas will encourage financial service companies to build technology-based service innovations, such as mobile banking and internet banking. According to Payne et al. (2018), optimizing mobile and internet banking would enable customers to conduct financial and non-financial transactions electronically without interacting directly with bank employees. This activity will accelerate banking services at a lower cost so that consumers and banks receive mutual benefits. Financial services optimization positively impacts reducing poverty in Egypt (Kheir, 2018), rural China (Wang and He, 2020) and significantly reduces poverty and income inequality in 116 developing countries (Omar and Inaba, 2020).



Source: Own elaboration based on World Bank data

Figure 1. Individual Using Internet (% of Population) in the World, Indonesia, and Hungary from 1994 to 2020

The internet users' growth in Indonesia and Hungary is experiencing a positive trend. 84% of Hungary's population has been exposed to the internet. Internet users in Hungary have grown by an average of 3% over the past ten years. In general, the internet penetration rate in Hungary is approximately twice the world internet

penetration rate. In contrast, even though internet users in Indonesia have experienced 589% growth for ten years (2009-2019). The total internet penetration rate in Indonesia is still much lower.

The high number of smartphone users and the affordable cost of internet access have an impact on society and other aspects of life, including innovation (Sarwar and Soomro, 2013). For example, several companies engaged in the financial industry have tried to make products based on financial technology, including Indonesia and Hungary. In Indonesia, the existence of fintech began to develop after Bank Indonesia issued a regulation in 2016 on digital financial services. Since then, the fintech sector has continued to grow until today. The distribution of fintech funds in Indonesia reached US$ 6.4 billion as of February 2020 or grew 37 times compared to December 2017 of US $ 173 million. Furthermore, one of the largest unicorn companies, which also has a fintech service, raised US$3 billion in 2020 from Google, Tencent, Facebook, and PayPal (KPMG, 2020). Switzerland Global Enterprise (2020) reported that one of the reasons for developing the financial industry in Indonesia is by optimizing the growth of the e-commerce sector, which is predicted to reach US$ 50 billion by 2024, and changes in the lifestyle of technology-dependent individuals.

In Hungary, digital financial services have started to develop, although they still have much room for improvement. Digitization of the banking sector, for instance, should provide easy access to the public for saving and borrowing money through digital platforms. According to Deloitte (2018), digitalization in the Hungarian banking sector is relatively low compared to Polish, Spanish, and Czech. The indicator to measure the digital maturity of banking includes the availability of banking services in digital form, user experience with the digital interface, and consistency between consumer expectations and technological developments.

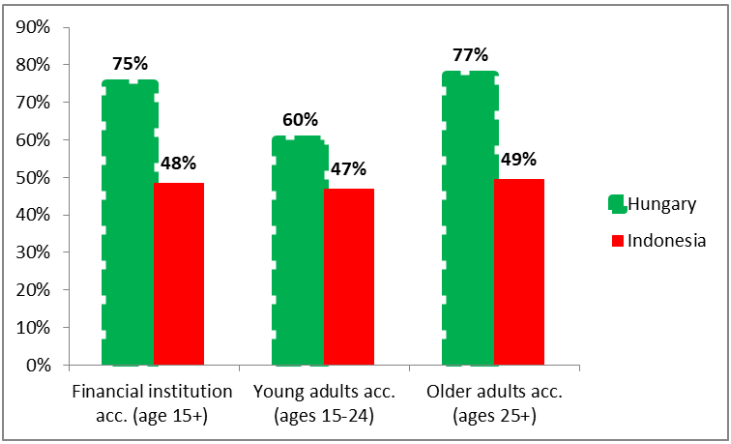
Stock market participation in Hungary is relatively low. World Bank data shows that the percentage of domestic companies' market capitalization to GDP is 18% in 2020. Indonesia, as a comparison, is already at the level of 47% in the same year. The fact that the Hungarian still rely on cash payments is one of the barriers in the development of

fintech (Varga, 2017). Belhazy et al. (2018) assessed payment behavior and cash usage over 1,000 company leaders in Hungary's micro, small, and medium-sized companies (MSME). The result outlined that the payment method that is often used by MSME is credit transfer. However, cash usage is still high, especially for transaction values below HUF 500,000. The use of cash will continue to decrease when the cost of electronic payments and other banking services is more affordable, flexible, and can meet MSME needs.

Furthermore, Vegso et al. (2018) surveyed 1.500 people to explore consumer's payment behavior in Hungary. They depicted that the Hungarian people, especially the youngest and the eldest, prefer cash to electronic payment because they are economically inactive and have low education and income level. On the other hand, Kunt et al. (2017) stated that shifting payment from cash to cashless society provides more transparent and efficient payment from a business to individual, and from individual to government or business. Furthermore, cashless payment has a significant effect on economic growth in the long run (Tee and Ong, 2016).

Industry 4.0 for Outreaching the Unbanked Population through Fintech in Indonesia

World Bank data explains that around 1.7 billion adults do not have access to regulated financial services, and 50% come from the Asian region. In Indonesia, adults who do not have access to financial services are relatively high, known as the unbanked population. Board of Governors of the Federal Reserve System (2019) defines unbanked as individuals or businesses that do not have access to checking, saving, or money market accounts. People from the lower-income segment are often unbanked. Meanwhile, for small and informal businesses, lack of financial literacy is the main factor causing exclusion from financial institutions (Beck, 2020). The public's inclusion of access to financial institutions in Hungary is more than half of the population, while in a country with middle income like Indonesia, it is less than 50%.



Source: Own elaboration based on World Bank data

Figure 2.
Access to Financial Institution in Indonesia and Hungary in 2017

As the country with the largest economy in Southeast Asia, with GDP US$1.11 trillion, Indonesia still faces challenges related to public access to financial institutions. World Bank describes that less than half of Indonesia's population has access to financial institutions, much lower than Hungary's population (75%). In detail, less than 50 percent of Indonesia's young adults and older adults have access to financial institutions, namely 47% and 49%, respectively. The number is about 10% lower than the population level of young adults and older adults who have financial access in Hungary. According to Deloitte (2015), nearly 60% of Indonesia's entire bankable populations do not yet have a bank account (unbanked). Nonetheless, on a microeconomic perspective, access to finance plays an essential role in improving a household's income and poverty reduction (Linh et al. 2019).

Research has empirically linked financial technology with financial inclusion (Bansal, 2014; Ozili, 2018). They can solve some of the barriers that conventional financial services have, such as reducing costs when making deliveries, especially in poor rural areas and migrants; information asymmetry between consumers and service providers, resulting in a lack of information when conducting a risk feasibility study; insufficiency of the role of technology in supporting

data verification to meet creditworthiness; and the lack of financial service products for the lower-income segment.

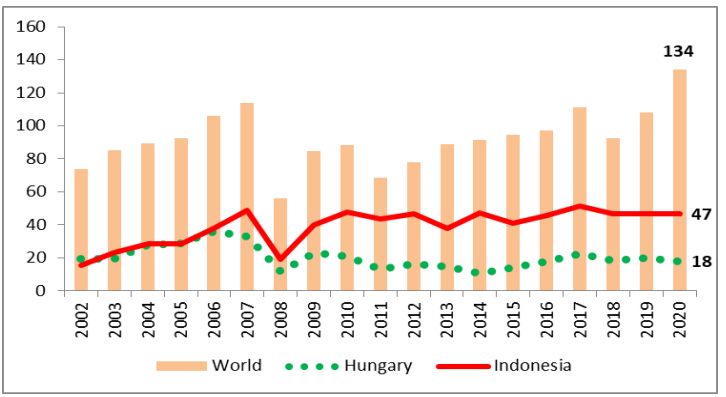
Specifically, through peer to peer lending (P2P) financing, financial technology can provide individuals access to financial facilities. MSME can obtain access to capital through crowdfunding services. Digital financial services platforms can also be a place for marketing and supply chain for MSME. Furthermore, Agustia and Anridho (2020) explained that the implementation of technology in the financial industry is projected to be able to encourage financial inclusion at low cost and low risk, especially for the unbanked population in Indonesia, increase financial inclusion in rural India (Bansal, 2014), and emerging and advanced economies (Ozili, 2018).

The presence of fintech in the financial industry creates two perspectives for the banking industry. Banks see fintech as a partner when two parties can provide mutual benefits. In this case, fintech encourages banks to reach a broader range of consumers at low costs, while fintech has partnered with banks regarding adaptation to financial regulations (Viuker, 2017). For instance, Indonesia's fintech sector helps banks create new financial players that are quickly connecting with more and more unbanked people and customers who do not have bank accounts (OJK, 2020). In contrast, banks consider fintech a competitor because fintech can optimize technology to provide financial services to consumers. This phenomenon will potentially reduce about a third of the banking sector's income in the future (Drummer et al. 2016). Recent study indicates that fintech could be a game changer in bringing financial inclusion for consumers, including Indonesia (Setiawan et al., 2021; Nathan et al., 2022).

Industry 4.0 for Increasing Stock Market Participation in Hungary

In Hungary, more than 75% of the population have access to financial institutions. Furthermore, there are more than 80% of smartphone users and internet users in Hungary. However, public participation to utilize financial services still needs to be improved. On the one hand, stock market participation is still very low. On the other hand, financial inclusion, in macro level, is determined by such as

market capitalization of the stock market (Kunt et al. 2017). World Bank data shows that the percentage of domestic companies' market capitalization to GDP is only 20% in 2019. This number was far below the world of 92% in 2018, and Indonesia at the level of 47% in 2019. Optimization of the financial sector has an important role because policies only focusing on expanding access to basic finance are unlikely to significantly improve people's welfare (Dupas et al. 2018). New empirical evidence stated that the openness in financial service, such as insurance, bond and stock market, has positive and significant impact on economic growth (Khatun and Bist, 2019; Sengupta, 2019).



Source: Own elaboration based on World Bank data

Figure 3. Market Capitalization of Listed Domestic Companies (% of GDP) in the World, Indonesia and Hungary from 2002 to 2020

Based on World Bank data for 2002 - 2020, it depicted that the percentage of listed domestic companies' market capitalization to the GDP of Hungary and Indonesia experienced a positive trend from 2002 to 2007. However, the number decreased drastically when the global financial crisis occurred in 2008/09. The percentage of market capitalization in Indonesia was 56% during the crisis, compared to Hungary at the level of 12%. After the global financial crisis, the percentage of domestic company market capitalization to GDP of Indonesia continued to increase, except for Hungary, which slumped to 18% in 2020. The number was more than twice as low as Indonesia at 47% in the same year.

The low percentage of domestic companies' capitalization to GDP is an indication that domestic companies' participation in optimizing capital sources from the financial market is still relatively small. On the other hand, the source of funding from the capital market (such as issuing stock) is considered relatively inexpensive, and it protects companies from interest rate shocks (Singh and Weisse, 1998). Besides, Bats and Houben (2017) explained that market-based financing has a lower systemic risk than bank-based financing and encourages companies to innovate at a higher level (Wies and Moorman, 2015) and attract foreign direct investment (Carp, 2012).

Domestic companies' participation in optimizing funding from the capital market needs to be boosted because it can escalate investor participation in the capital market industry (El-Wassal, 2013). The amount of domestic capital market capitalization on GDP in Hungary is only 18% in 2020, and this figure was less than half of the European Union at 53% in 2018. On the other hand, although Hungary's economic growth is quite significant in the last decade (2010-2019), the company's listings on the capital market are still lagging behind Western European counterparts. One of the challenges is that large-scale market transactions rarely occur on the Budapest Stock Exchange (BSE), making it less attractive to global investors (Andreko and Hegedus, 2020).

Therefore, the government's policy in motivating public awareness to participate in the capital market plays an essential role. In the early stages, the government can provide incentives by educating the community. The cost of socialization will eventually decrease when investor participation increases (Guiso and Jeppelli, 2005). For instance, the vice president of Indonesia launched the national campaign "Let's Invest in Stocks / Yuk Nabung Saham" on 12 November 2015. The program is a campaign that encourages people to invest in the capital market. Since it was launched in 2015, the number of public participation in the Indonesian capital market industry has increased from 12.88% to 16.29% in 2019.

Hungary already has one of the important aspects to increase stock market participation, namely higher income per capita than

Indonesia. On the other hand, two demarcations are needed between the government and corporation to support the financial sector. The government, for instance, established good governance and the regulatory environment, and the company focuses on the availability of financial information and provides the investor with affordable cost to utilize financial services (Karlan et al. 2014; Allen et al. 2016). The depth of public financial inclusion will increase economic growth and decrease income inequality (Beck et al. 2007; Kunt and Levine, 2009; EOCD, 2020).

Indonesia and Hungary have just celebrated 65 years of bilateral cooperation in November 2020. The two countries agreed to improve relations in the technology sector by conducting a two-day HunIndoTech 2.0 Business Forum on 17-18 November 2020. Technology experts and prominent fintech companies from Hungary and Indonesia shared their thoughts on digital solutions, covering infrastructure development, cyber security, and fintech.

In conclusion, Government-to-Government (G2G) cooperation would further strengthen the financial sector of both countries, where Indonesia could further boost its internet penetration and financial literacy rate, while Hungary could further cooperate to increase its stock market participation. This would be further accelerated by the rise of fintech in both countries, which creates financial inclusion to more people in both countries.

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Waste Management with Circular Economy Approach in Indonesia

Edza Aria Wikurendra

Introduction

The rise of development in big cities, including Indonesia, can spur economic growth. As a result, these cities will become magnets for residents to come looking for work and a place to live often referred to as urbanization. Urbanization and waste management problems are two essential aspects closely related to sustainable development goals. Urbanization involves various multidimensional factors, including demographic, social, economic, and geographical areas. The phenomenon is characterized by population concentration in urban areas, followed by the modernization of other aspects of life due to urbanization (Ye & Wu, 2014). Generally, urbanization occurs more intensively in developing countries, one of which is Indonesia (Wilonoyudho et al., 2017). Indonesia continued to experience an increase in the proportion of the urban population from 30.9% in 1990 to 43.1% in 2005 and increased sharply to 53.12% in 2015 (Central Bureau of Statistics, 2020c). (United Nations Habitat, 2016) states that in Indonesia, 65% of urban population growth is due to migration and reclassification, while around 35% is due to the natural growth of the urban population.

This excessive urbanization has caused various problems in Indonesia. Not only causing trouble in the destination city but also causing trouble in the abandoned village. One of the problems due to urbanization is the significant increase in urban solid waste in Indonesia (Wibisono et al., 2020). In addition, the increase in people's purchasing power for various types of basic materials and

technological products also contributes significantly to the quantity and quality of the waste produced (França et al., 2020). Solid waste has shown a positive correlation with urbanization on a global scale (Bai et al., 2017). The solid waste generated globally in 1997 was about 0.49 billion tonnes with an estimated annual growth rate of 3.2-4.5% in developed countries and 2-3% in developing countries (Karak et al., 2012). Research conducted in the developing city of Limpopo Province, South Africa, shows that the waste in this city is increasing by 30% every year (Ogola et al., 2011). Waste management in Beijing, China, shows that economic development and population growth have increased waste generation from 2.96 million tons in 2000 to 6.20 million tons in 2007, fluctuating to 6.35 million tons in 2010 (Wang & Wang, 2012). Issues related to waste use are becoming increasingly crucial as urbanization increases.

Urbanization and Waste Generation in Indonesia

As in most developing countries in Asia, urbanization in Indonesia is triggered by economic development, especially in the industrial and service sectors, which tend to be located in big cities. This development is due to the availability of utilities such as water, electricity, ports and airports, and places of concentration of skilled labour and markets. Urbanization and economic development in most Indonesia are driven by domestic and foreign investment in large urban areas. In 1950, only Jakarta City had over one million people. Thirty years later, in 1980, there were three new cities, with over one million population being Surabaya, Bandung, and Medan.

Furthermore, in 1990, Semarang, Palembang, and Makassar had over one million people. And in 2010, the number of cities with a population of more than one million people became eleven with the addition of Bekasi, Tangerang, Depok, and South Tangerang cities. The latter cities are cities that have developed due to the mega-urbanization process of Jakarta, forming the megacities of Jabodetabek (Jakarta, Bogor, Depok, Tangerang, and Bekasi), where Jakarta's urban activities have overflowed to its periphery. Urban physical development extends beyond the city and urban boundaries, spreading along the main roads and spreading randomly in all directions (Rustiadi et al., 2021). The

trend of urbanization is predicted to continue to increase from year to year (Table 1). Furthermore, urbanization is also integral to the three pillars of sustainable development: economic development, social development, and environmental protection (Mensah, 2019).

Table 1. Urbanization Trends Projection in Indonesia

Year	Population in Million			% of the total population		% increase in Urban Population
	Total	Urban	Rural	Urban	Rural	
2010	238,5	118,7	119,8	49,8	50,2	-
2015	255,4	136,1	119,3	53,3	46,7	3,5
2020	271	153,6	117,4	56,7	43,3	3,4
2025	284	170,4	113,6	60	40	3,3
2030	296,4	187,9	108,5	63,4	36,6	3,4
2035	305,6	203,5	102,1	66,6	33,4	3,3

Source: (Central Bureau of Statistics, 2020d)

The rapid population growth in urban areas has increased the amount of waste generation. From studies and evaluations that have been carried out in cities in Indonesia, it can be identified the main problems in the management of municipal solid waste, including (Damanhuri et al., 2014):

a. Urban population growth provides a logical consequence of the increasing complexity of the solid waste problem.
b. Increasing population density demands better methods/ patterns of waste management.
c. The heterogeneity of the socio-cultural level of the urban population adds to the complexity of the problem.
d. The situation of funds and the relatively low priority of handling from local governments is a common problem on a national scale.
e. Shifting food handling techniques, such as non-biodegradable packaging such as plastic.
f. Limited appropriate human resources are available to deal with the waste problem.

g. Prolonged moving waste equipment design development
h. Community participation which in general is still not well-directed and well-organized.
i. The concept of waste management is sometimes not suitable to be applied, and the possibility of modification of the idea is not open in the field.

Waste generation in Indonesia continues to increase from year to year in line with population growth and urbanization. In metro cities and big cities, waste generation is estimated to reach >500 tons/ day on average. In contrast, in medium cities with a population of <500 people/ ha, the middle waste generation is 100-300 tons/ day (Central Bureau of Statistics, 2020a). Improvements do not match this increasing waste generation in waste management infrastructure and efforts to reduce waste at the source (application of the 3R concept: reduce, reuse, recycle). The quality of service is still limited (regarding costs, human resources, facilities, infrastructure, and community participation). From an institutional perspective, the roles of operators and regulators are unclear. Landfill as a place for final processing waste often gets public protest and rejection. As a result, there is a decrease in environmental quality, especially in urban areas.

The volume of waste increases from year to year due to population growth, technological improvement, and socio-economic activities of the community, as illustrated in table 2 regarding the projected increase in waste based on population (Abdel-Shafy & Mansour, 2018). The same opinion was expressed by (Liu et al., 2019); the growth of the volume of waste is closely related to the rapid increase in population from rural areas to urban areas. In addition, landfill is still the primary choice in waste management in Indonesia. Most waste is directly transported and disposed of to landfills without pre-treatment; only about 10% of the waste is used (Ministry of Environment and Forestry, 2018).

Until now, the paradigm of waste management used is collect-transport and throw away. In contrast, the main mainstay of a city in solving waste problems is landfilling. The government tends to pay less serious attention to landfills, so there are cases of landfill failure.

The government seems to think that its landfills can solve all waste problems without paying proportional attention to these facilities; landfills can be a time bomb for the government. Landfill operations in Indonesia are mostly still in an open dumping system. Clause 44 of Law Number 18 of 2008 concerning Waste Management mandates that no later than 2013, every regional/ city government will have a representative landfill that meets technical and environmental principles (sanitary landfill).

Table 2.
Projected Increase in Waste Volume Based on Total Population

Year	Projected Total Population in Million	Waste generation projection (liter/day)	Waste generation projection (m^3/day)	Waste generation projection (m^3/year)
2010	238,5	150.255.000	150.255	54.832.125
2015	255,4	160.902.000	160.902	58.729.230
2020	271	170.730.000	170.730	62.316.450
2025	284	178.920.000	178.920	65.305.800
2030	296,4	186.732.000	186.732	68.157.180
2035	305,6	192.528.000	192.528	70.272.720

Source: (Central Bureau of Statistics, 2020b)

In the early 1990s, the Indonesian Ministry of Public Works introduced the transition method using a controlled landfill system, especially for small and medium-sized cities, by delaying the closing time to 5 to 7 days. However, most waste managers in districts/ cities still consider this method expensive. A landfill that has been designed and prepared as a sanitary landfill will quickly turn into open dumping if the landfill manager does not consistently apply the applicable regulations. In addition, another challenge faced in developing a solid waste management system in Indonesia is the low level of access to dependable waste services. There is still a gap in waste services between the SDGs targets in 2015, 70%, with the existing achievement of 56.2%. According to data (Ministry of Health of the Republic of Indonesia, 2018a), access to solid waste services in Indonesia at the

national level reaches 86.73% (this value includes total waste management: fulfilling and not fulfilling). Table 3 shows the achievement of access to waste management in Indonesia, consisting of rural, urban, and national accomplishments.

Table 3. Achievements of Access to Waste Handling in Indonesia

Access to Waste Handling Achievements	2010	2013	2018
Rural	73,70 %	72,60 %	82,00 %
Urban	87,40 %	87,00 %	91,43 %
National	80,50 %	79,80 %	86,73 %

Source: (Ministry of Health of the Republic of Indonesia, 2018b)

In addition to the low coverage of waste services in several cities, the Government of Indonesia is also still facing challenges, including the lack of facilities and infrastructure, the absence of a management agency that handles explicitly waste, the lack of budget allocations provided by the local government as a result of this sector not being become a priority in regional development, the behaviour of people who have not implemented clean and hygienic living behaviour, and weak law enforcement. Law Number 18 of 2008 concerning Waste Management mandates reducing and handling waste. It was reinforced by the Regulation of the Minister of Public Works Number 3 of 2013 concerning the Implementation of Facilities and Infrastructure for Handling Household Waste and Types of Household Waste which mandates sorting and storage from the source of the waste.

Based on the Medium-Term National Development Plan (RPJMN) 2015-2019, the Government of Indonesia has set a universal access target in the sanitation sector, namely increasing population access to proper sanitation (domestic wastewater, garbage, and environmental drainage) to 100% at the level of basic needs. In solid waste, the targets are reducing and utilizing waste by 20-35%, transportation and final processing of waste by 65-80%. In achieving the target of universal access, appropriate policies and strategies are needed by involving the active role of the community and development partners, including the private sector and donors from

abroad, to obtain alternative sources of another financing, in addition to those available from the Revenue Expenditure State Budget (APBN) funds.

Future Strategies to Address The Waste Problem In Indonesia

Waste management in industrialized countries is often defined as control over the generation of waste, starting from the storage, collection, transfer, transportation, processing, and final disposal of waste, with the best principles for health, economy, engineering, conservation, aesthetics, environment, and also to the attitude of society (Ferronato & Torretta, 2019). The success of management does not only depend on technical aspects but also includes non-technical aspects, such as how to regulate the system so that it can function, how the institution or organization should manage it, how to finance the system, and last but not least how to involve the waste-producing community in handling the waste. To run a waste management system must involve various disciplines, such as urban planning, geography, economics, public health, sociology, demography, communication, conservation, and materials science (Hannon, 2020). Before Law Number 18 of 2008 was issued, urban waste management (issued by the Ministry of Public Works) in Indonesia positioned that urban waste management consisted of 5 subsystem components (figure 1). The 5 subsystem components include the operating technical aspect, financing, legal and regulatory, community participation, and institutional (Abdul & Syafrudin, 2018). However, if you pay attention, this concept applies to solving the waste problem and to other sectors generally related to community services. Therefore, the five components are more accurately described as essential aspects that affect solid waste management.

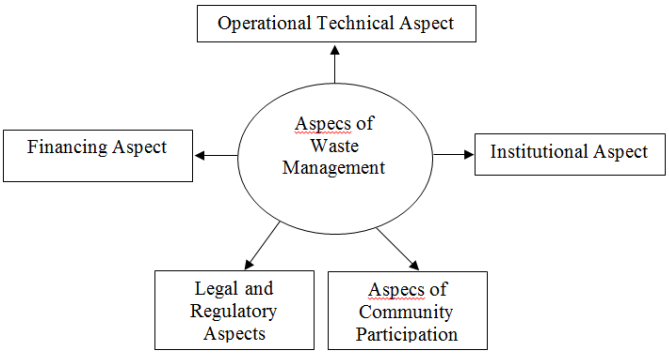

Figure 1. Aspects of urban waste management

Increased production has created a problem that requires landfills. The material flow in society is schematically depicted in Figure 2. Waste is generated at the stage of extracting raw materials and during the production process. Waste is generated at the stage of extracting raw materials and during the production process. The most effective way to reduce the waste problem is to reduce the amount and toxicity of the waste generated. But with the increasing desire for a better standard of living, humans are becoming more and more consuming and generating more waste. Consequently, the community must look for effective waste management methods and ways to reduce the amount of waste that needs to be disposed of in landfills. Following Law no. 18 of 2008, waste management aims to improve public health and environmental quality and make waste a resource.

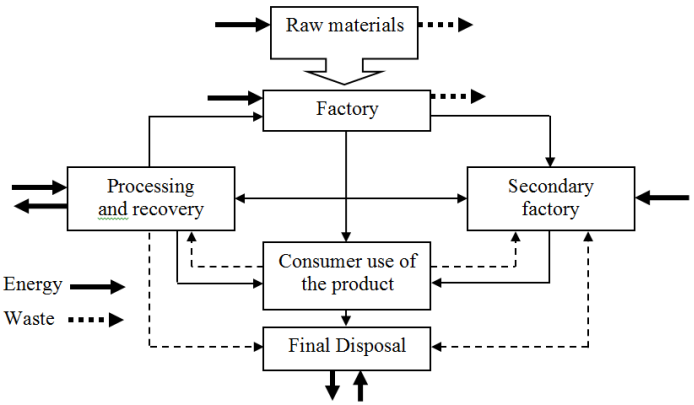

Figure 2. The flow of materials and waste in industrial society

The increase in waste resulted in increasingly complex problems for managing waste. Solid waste management is complex because it includes many technologies and disciplines. Includes technology associated with control over the generation, storage, collection, transfer and transportation, processing, and disposal of waste, which is acceptable and by the principles of public health, economics, engineering, aesthetics, and other environmental considerations, including responsiveness to the general public (Thyberg & Tonjes, 2015).

According to (Yukalang et al., 2017), waste management will fail when too much waste is in the wrong place, not close enough to where to sell waste, or not recycled enough. The solution lies in redesigning products, packaging, and processes suitable for input into the value chain. Initiatives and tools can also support successful sustainable waste management strategies. One example of a developing waste management strategy is the circular economy approach (Viva et al., 2020). The circular economy aims to generate economic growth by maintaining the value of products, materials, and resources in the economy for as long as possible, thereby minimizing the social and environmental damage caused by the old linear economic approach (Velenturf & Purnell, 2021). Not just better waste management with more recycling, a circular economy encompasses a broad range of interventions across all sectors of the economy (Kirchherr et al., 2017). Circular economy activities are focused on the 5Rs: Reduce, Reuse, Recycle, Refurbish, and Renew (Table 4).

Table 4. A Circular Approach Consisting of 5R

Reduce	● Eliminating waste in production and supply chains (such as 3D printing) ● Virtualization of products and services (such as e-books) ● Reducing energy use (such as improving energy efficiency) ● Redesign the product to use fewer inputs (such as the use of solid steel in construction)

Reuse	● Sharing existing assets (such as houses, cars, and other equipment) ● Use of second-hand goods ● Improve asset use by offering products as services
Recycle	● Reusing existing materials ● Anaerobic digestion and biochemical extraction for organic waste
Refurbish	● Remanufacture products or components ● Longer life cycle with product maintenance
Renew	● Prioritizing renewable energy and materials (such as replacing plastic packaging with paper-based ones)

Source: (Ellen MacArthur Foundation, 2012)

Five Priority Sectors Offer Great Potential For A Circular Economy Approach In Indonesia

Applying a circular economy in Indonesia has potential in five sectors: food and beverage, textiles, construction, wholesale and retail trade (focusing on plastic packaging), and electrical and electronic equipment (Kementerian PPN et al., 2021a). These sectors play an essential role in the Indonesian economy. Based on data published by the (Central Bureau of Statistics, 2020d), these five sectors contributed more than 30 per cent of Indonesia's GDP. They employed more than 43 million people, or a third of Indonesia's workforce in 2019 (Table 5).

These five sectors generated a significant amount of waste in 2019. Food wastage and waste, excluding food waste during production, amounts to nearly 57.4 million tonnes. Waste volume is expected to increase to 82 per cent by 2030 in several sectors (Figure 3) (Kementerian PPN et al., 2021b). The increase in a waste generation comes from physical waste, such as food scraps or textile waste, and structural destruction, such as empty office space or inefficient energy use. Two key factors are likely to drive the growth of waste generation in the next decade. First, by 2030 there will be an additional 90 million Indonesians who will join the class of consumptive society, which will drive demand for basic consumer needs (e.g., packaged food) and discretionary consumer products (e.g., electronics and clothing)

(Oberman et al., 2012). Second, by 2019 and 2030, more than 35 million people will live in urban areas (Wang et al., 2019). According to government estimates, by 2045, around 67 per cent of Indonesia's population will live in urban areas (Minister of National Development Planning, 2021). Urbanization drives demand for consumer products and the construction of houses and other public infrastructure, which generates waste in the process.

Table 5. The five focused sectors contribute ~33% of GDP and employ over 43 million people

Sectors	GDP in 2019 (Indonesian trillion)	Percentage of total (%)	Workforce in 2019 (Million)	Percentage of total (%)
Food and Drink	1014	9,3 %	13,1	10,1 %
Textile	146	1,3 %	1,2	0,9 %
Construction	1108	10,1 %	7,6	5,9 %
Wholesale and retail	1168	10,7 %	19,8	15,3 %
Electrical and electronic equipment	204	1,9 %	1,6	1,3 %
Total	3640	33,2 %	43,3	33,5 %

Source: (Central Bureau of Statistics, 2020d)

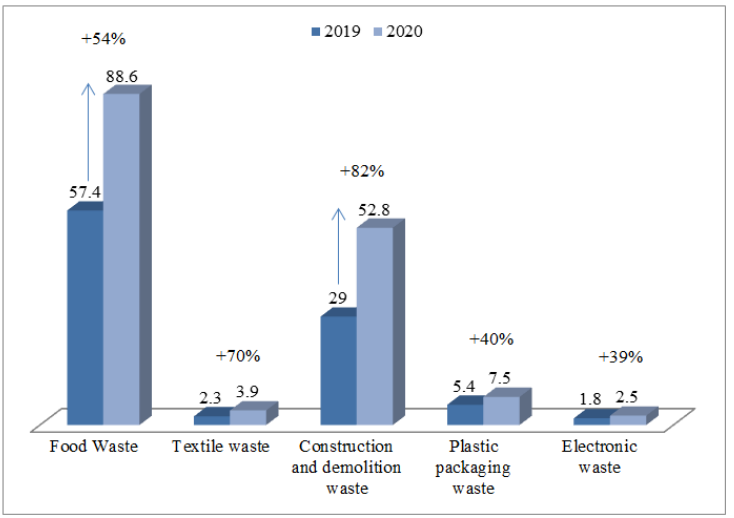

Figure 3. A predicted increase in waste generated by five key sectors

A Waste Track In Five Sectors Is An Opportunity For A Circular Economy

Based on the potential and opportunities of 5R circularity in each sector, prioritization can be done in each sector (see Table 6). These opportunities are identified based on available evidence that they can make the most impact in the sector and then revised in consultation with stakeholders. For example, for the food and beverage sector, "Reduce" and "Recycle" have the most significant opportunity. As a result, four opportunities are prioritized, namely as follows: (1) reducing food wastage after harvest; (2) reducing wastage and waste in the food supply chain; (3) reducing food waste generated by consumers; and (4) reducing food waste and waste in the production process. Impact of each prioritized opportunity, an estimate of the current adoption rate in Indonesia is used. For example, the recycling rate of e-waste in Indonesia is estimated at 5 per cent (Mairizal et al., 2021).

Estimates of the potential for each circular economy opportunity are made based on national and international references that can be applied to Indonesia in 2030. Indonesia can increase its e-waste recycling rate and match India's e-waste recycling rate of 21 per cent by

2030 (Sari et al., 2021). Case studies elsewhere are also used to understand this potential further. Pilot projects in Benin, Cape Verde, India, and Rwanda have documented a reduction in food wastage of more than 50 per cent during field trials with various storage techniques and low-cost handling practices (Kitinoja & AlHassan, 2012). Thus, it can be assumed that if Indonesia invests in improving infrastructure and food handling (e.g., temperature control during storage), it can reduce postharvest food wastage by as much as 50 per cent by 2030.

Table 6. Potential and opportunities for 5R circularity in every sector

5R	Food and Drink	Textile	Construction	Wholesale and retail trade	Electrical and electronic equipment
REDUCE	Reduce food wastage at the postharvest stage	Reduction of waste at the production stage	Reduce waste with existing processes	Reduce the use of plastic packaging	Virtualization and dematerialization of physical goods
	Reducing food wastage in the food supply chain		Reduce waste with new processes		
	Reduce consumer food waste		Optimization of building use		
REUSE		Product reuse	Reusing materials	Reusing plastic packaging	Product reuse
RECYCLE	Process materials from food waste during the processing stage	Recycle materials	Recycle materials	Redesigning plastic packaging so that it can be recycled	Recycle materials
				Increase the recycling rate of plastic packaging	
REFURBISH					Increase product life and reduce product obsolescence
					Product repair
RENEW		Using materials that are more environmentally friendly	Using materials that are more environmentally friendly	Using materials that are more environmentally friendly	
			Design and build buildings that are more resource-efficient		

Source: (Kementerian PPN et al., 2021b)

	High potential
	Medium potential
	Low potential

A successful transition to implementing a circular economy can help Indonesia reduce waste production at the source and increase recycling rates. A circular economy can also reduce waste by up to 50 per cent by 2030 (compared to a "business as usual" scenario). Depending on each sector type, recycling rates can also increase by 4-17 per cent compared to the business as usual scenario. The analysis shows that the circular economy can contribute significantly to government efforts to reduce waste in five sectors (Figure 4) (Kementerian PPN et al., 2021b).

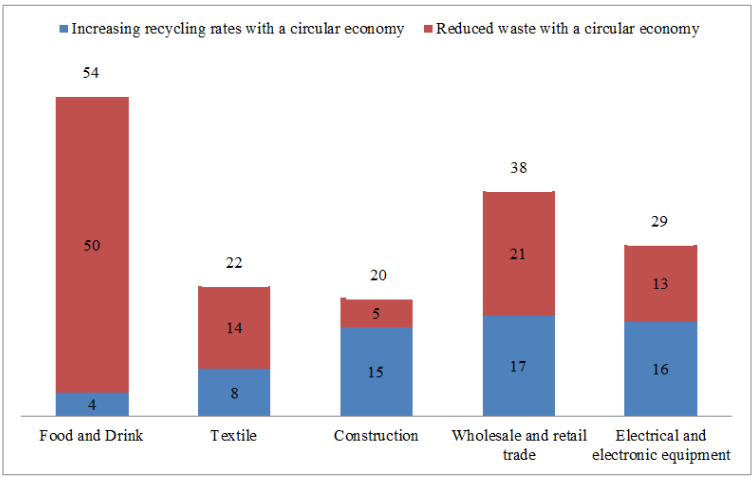

Figure 4. Prediction of the circular economy's contribution to waste reduction in Indonesia

1. Indonesia can reduce food waste and waste by 50 per cent and recycle as much as 4 per cent of its remaining food waste and waste compared to the business as usual scenario.
2. Indonesia can reduce textile waste by 14 per cent and recycle 8 per cent of the remaining textile waste.
3. Indonesia can reduce construction and demolition waste by 5 per cent and recycle the remaining 15 per cent of construction and demolition waste.
4. Indonesia can reduce plastic packaging waste by 21 per cent and recycle 17 per cent of the remaining plastic packaging waste.
5. Indonesia can reduce e-waste by 13 per cent and recycle 16 per cent of the remaining e-waste.

Potential Significant Economic Impacts From The Implementation Of A Circular Economy

Generating less and recycling more waste can significantly impact the Indonesian economy (Figure 5). Based on two methodologies (model based on the IO table and the Incremental Input-Output Ratio), the transition to a circular economy could increase Indonesia's gross domestic product (GDP) by IDR 593 – 638 trillion (equivalent to USD 42 – 45 billion) in 2030 (equal to 2.3 to 2.5 per cent of projected GDP in 2030) (Central Bureau of Statistics, 2020d). Economic value can be more significant than the "business as usual" scenario in which Indonesia does not actively implement a circular economy. There are two essential aspects of the analysis:

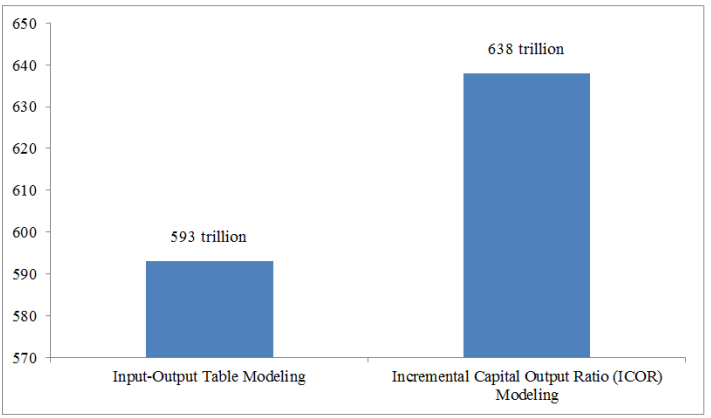

Figure 5.
The impact of the circular economy on Indonesia's GDP in 2030

1. Based on the latest government estimates, Indonesia's GDP will decrease by 1.6 and 2.2 per cent in 2020 (Muhyiddin & Nugroho, 2021). The International Monetary Fund (IMF) projects Indonesia's GDP to grow as high as 6.1 per cent in 2021 (International Monetary Fund, 2020). However, the relationship between GDP growth and waste volume in the five priority sectors cannot be directly assessed, and COVID-19 may have a more significant impact on waste and circular opportunities (which is difficult to quantify) than the current linear economy. For example, a decline in household income could decrease the demand for electronic goods, further reducing e-

waste. There is an increase in the percentage of formal workers working from home, and digitalization can potentially increase the volume of electronic waste (Dutta et al., 2021). Other results are also uncertain whether reducing the volume of e-waste caused by a decrease in income can outweigh the increase in the volume of e-waste caused by digitalization. It is essential to update this analysis once the impact of COVID-19 on the Indonesian economy and the volume of waste is known. It aims to determine the potential of the circular economy after COVID-19.

2. Broad economic benefits are derived from adopting circular economic opportunities in the five sectors. These economic benefits are derived from reducing waste in critical sectors, where savings can be utilized in other sectors (health, education, recreational services, etc.). It is important to note that although the economy will benefit significantly from adopting a circular economy, it does not mean that the economic output of these five sectors will be higher. Understanding the exact financial impact in each sector is not easy because it depends on how businesses and consumers take advantage of the savings resulting from the adoption of a circular economy. For example, if consumers reduce their food waste (which causes their food spending to also decrease due to the food savings they make) and decide to use the excess spending money to buy food of higher quality and price, then the impact on the food sector and drink to be positive. However, if the savings are used in other sectors, the effect on the food sector can be damaging. Adopting business efficiency opportunities linked to a circular economy can generate significant returns to GDP and employment growth in the industry. However, if the adoption of a circular economy causes a decrease in consumer demand, this will drive economic growth to slow down compared to business-as-usual conditions. The results of this study need to be studied further, especially the impact in the broader economy, especially on spending caused by savings from the circular economy. However, these findings reinforce the importance of understanding the existence of winners and losers in the transition process to a circular economy. Businesses and policymakers must prepare themselves to ensure that the transition

that is carried out prioritizes the principles of justice and does not harm several things in the Indonesian economy and society.

Indonesia's micro, small and medium enterprises (MSMEs) can also play an essential role in supporting the economic transition. In 2018, there were 64 million MSMEs in Indonesia employing around 61 million people (equivalent to almost 90 per cent of the total workforce) (Handayani et al., 2020). MSMEs also contributed to nearly 60 per cent of Indonesia's GDP in 2017 (Tambunan, 2019). A circular economy can reduce MSME production costs with greater production efficiencies and waste reduction and result in new business models, such as a focus on recycling and recovery, which can provide significant opportunities for MSMEs (Plant Chicago, 2020). In addition, MSMEs can play a better role than large companies in adopting a circular economy. MSMEs are also better positioned to adopt a circular business model that requires a decentralized production system, such as a business model that focuses on reusing, recycling, and repurposing resources locally. MSMEs have great opportunities to be close to ending consumers than large companies (Bark et al., 2017). However, most MSME companies are still micro or small in Indonesia. According to the Central Bureau of Statistics, micro and small enterprises contributed 98 per cent of all MSMEs in 2016 (Central Bureau of Statistics, 2020d). Small and medium enterprises have limited knowledge regarding adopting a circular economy, so the government will need a policy concept that is adaptive to business variations in MSMEs. To support micro and small enterprises, the government could also consider these enterprises as part of supply chain partnerships that have proven effective in Europe.

A Circular Economy Can Reduce Carbon Emissions And Clean Water Use Significantly

There is great potential for reducing carbon dioxide emissions, other greenhouse gases (CO_2e), and consumption of clean water, which can help Indonesia achieve its low-carbon and sustainable development targets. For example, based on a document submitted by the Government of Indonesia to the United Nations Framework Convention on Climate Change (UNFCCC), Indonesia is committed to

reducing CO_2e emissions by 29 per cent from the "business as usual" scenario with its resources up to 41 per cent with international assistance by 2030 (Ministry of Environment and Forestry Directorate General of Climate Change, 2021). Based on this analysis, a circular economy can help Indonesia achieve around 15 per cent of its lowest target to reduce CO_2e emissions and approximately 11 per cent of its highest target of reducing CO_2e emissions by 2030 relative to a "business as usual" scenario.

The reduction in CO_2e emissions is driven by several factors, including lower waste generation, alternative feedstocks that are more energy-efficient, and increased resource lifetime. Emissions released during various products related to the five focus sectors (e.g., food, textiles, plastics) are expected to account for the emissions that could be avoided if Indonesia adopted circular opportunities. Apart from preventing carbon emissions, a circular economy can also offer several other environmental benefits. For example, increasing the reuse of textile products can reduce the production of textile materials and reduce the negative impact of wastewater pollution from textile factories. Increased recycling of food waste through composting can help avoid land degradation and reduce the need to clear new land in pursuit of fertile agricultural land elsewhere (Ayilara et al., 2020).

A Circular Economy Can Create 4.4 Million Green Jobs Cumulatively And Significant Savings On Household Expenditure

Opportunities in a circular economy across five sectors could generate 4.4 million net jobs between 2021 and 2030 in Indonesia. The additional jobs generated from the circular economy could contribute to Indonesia's target of generating three million jobs annually, as stated in Law no. 11 of 2020 concerning Job Creation (Omnibus Law) (Kementerian PPN et al., 2021b).

It is important to note that there will be winners and losers in this job transition. For example, some jobs upstream (such as mining or manufacturing) are likely lost. However, new jobs were created in the downstream sector (e.g., in other manufacturing or service sectors). The direct impact on employment in the five sectors could vary from -

14 to 2.5 million jobs under different scenarios. Policies support job transition by retraining sector-shifting workers to create new jobs. This required policy response will be reviewed in detail in the action plan preparation. Despite its direct impact on employment, a circular economy that limits carbon emissions and reduces environmental pollution is an investment in human capital, health, and productivity. Pollution and Health Metrics report by the Global Alliance on Health and Pollution revealed 232,974 pollution-related deaths in Indonesia (Global Alliance on Health and Pollution, 2019). By reducing the demand for raw materials directly from nature, a circular economy can reduce deaths related to this pollution.

In addition, the circular economy can also contribute to reducing gender disparities in Indonesia. According to the Organization for Economic Co-operation and Development (OECD), the poor labour conditions faced by the female workforce and situations that force them to be exposed to more hazardous products and chemicals are examples of why women are disadvantaged in a linear economy (OECD, 2020). Even plastic pollution has a disproportionate impact on women. Women are more likely to be exposed to the adverse effects of plastic pollution than men, such as direct exposure to emissions from incineration or waste disposal because they are more likely to be responsible for household tasks that expose them to waste pollution. Furthermore, women workers in the informal sector of waste treatment often face health and safety risks and violence and discrimination in the workplace (WIEGO, 2018).

The circular economy can also create significant economic opportunities for Indonesian women. According to the International Labor Organization (ILO), the emergence of "green jobs" can offer opportunities for women's empowerment (International Labour Organization, 2015). Particularly relevant for the textile sector in Indonesia, where women account for 58 per cent of employment (Horne & Andrade, 2017). Underscores the importance of a circular economy to create benefits for gender equality in Indonesia and the need for a women-centred, proactive approach to policy development.

Based on this analysis, 75 per cent of the total net employment created by the circular economy in Indonesia in 2030 can empower

women. Potential for job transfer from sectors that are generally male-dominated (e.g., construction, where women only occupy two per cent of total employment) to jobs that will be created in sectors that women dominate typically (e.g., education, human resources, health and social work, which allows households to have a more significant allocation of storage that can be reinvested).

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Opportunities and Challenges of Biomass for Renewable Energy in Indonesia and Hungary

Budi Mulyana

Introduction

Green energy has got attention at the Conference of Parties (COP) 26, 2021, in Glasgow, United Kingdom. The parties have committed to achieving energy transition from coal-fired power generation in 2030 to support climate targets and Paris Agreement (UN Climate Change Conference UK 2021, 2021). Indonesia, as the commitment to reach net-zero by 2060, will consider accelerating the coal phase-out into 2040 (UN Climate Change Conference UK 2021, 2021). Furthermore, The President Republic of Indonesia, Joko Widodo, stated the commitment of Indonesia to renewable energy at the COP 26 in Glasgow as follow:

"In the energy sector, we are also moving forward. With the development of the electric car ecosystem, the construction of the largest solar power plant in Southeast Asia, the use of new and renewable energy including bio-fuel, as well as the development of clean energy-based industries, including the construction of the world's largest green industrial area in North Kalimantan." (Biro Pers Media dan Informasi Sekretariat Presiden, 2021b).

Nowadays, more than 50% of power energy in Indonesia is based on coal-fired power plants. Based on the annual report of National Electricity Enterprise (PLN) 2020, the total electricity production from coal-fired power plants was 113.335 MW (63.8%) from PLN's total production of electricity 177.692 MW (PT Perusahaan Listrik Negara,

2021). Furthermore, it was equal to coal consumption of 65.98 million tons of coal fuel expenses Rp. 46.16 trillion (PT Perusahaan Listrik Negara, 2021).

Coal is one of the promising natural resources and contributes to Indonesia's economy. Coal reserves in Indonesia reach 38.84 billion tons or equivalent for reserves for 65 years assuming no new reserves are found and coal consumption per year is 600 million tons (Kementerian Energi dan Sumberdaya Mineral Republik Indonesia, 2021a). Coal production in Indonesia in 2018 was around 557 million tons/year of which 357 million tons were exported to China and India while 115 million tons were used for power generation and other industries. Then in 2021 it is targeted that coal production can reach 625 million tons (Kementerian Energi dan Sumberdaya Mineral Republik Indonesia, 2021a; Secretariat General National Energy Council Republic of Indonesia, 2019). The price of coal-based on the reference price from the Ministry of Energy and Mineral Resources in 2021 is 75.84 USD/ton in January 2021 and 161.63 USD/ton in October 2021 (Kementerian Energi dan Sumberdaya Mineral Republik Indonesia, 2021b).

The Government of Indonesia realizes that coal burning has contributed to greenhouse gases emission. The Government of Indonesia issued President Decree on the National Energy Plan which regulated the use of energy mixed from new and renewable energy at least 23% by 2025 and 31% by 2050 (Presiden Republik Indonesia, 2017). The low utilization of biomass as a substitute for coal for electricity generation is caused by the high production costs of new and renewable energy-based plants and the lack of low-interest funding h (Secretariat General National Energy Council Republic of Indonesia, 2019). With the target of reducing greenhouse emissions, the switching capacity of coal-fired power generators (PLTU) to biomass-fired power generators (PLTbm) in 2025 will reach 25% (Secretariat General National Energy Council Republic of Indonesia, 2019).

In Hungary, the coal-fired power plant will be phased out by 2025. Originally, at the United Nations Climate Summit in New York in 2019, the President of Hungary, Janos Ader, stated that Hungary planned to exit coal by 2030 (Simon, 2021) and boost the solar energy

capacity (Hungary today, 2019). Reducing the use of fossil fuels, the government of Hungary has planned the use of renewable energy sources for heating/cooling, implementing Green District Heating Programme, and reducing the energy consumption in public institutions, industry, and transport (Ministry of Innovation and Technology of Hungary, 2018). Either Indonesia or Hungary, has committed to reducing the CO_2 emission by maximizing the utilization of new and renewable energy.

Supporting the new and renewable energy policies, although solar, water flows, and wind energy are most used on energy generating plants, biomass also is one of the considering solutions for renewable energy in Indonesia and Hungary. Biomass in Hungary is not only important for renewable energy but also for rural and agricultural development (Vagvolgyi, 2013). The utilization of renewable energy in Hungary almost is 90% of total primary energy consumption (Deák & Ferencz, 2017). Unfortunately, besides the opportunities for the development of renewable energy from biomass, there are some challenges to applying biomass energy in Indonesia and Hungary.

I. Opportunity of biomass for renewable energy

a. Commitment Government of Indonesia and Hungary to develop renewable energy

The government of Indonesia and Hungary has been committing to use new and renewable energy by substituting fossil energy to decrease the emission of greenhouse gasses (GHG). By 2025, the utilization of new and renewable energy at least 23% and 31% by 2050 (Presiden Republik Indonesia, 2017). While, in Hungary the reducing of GHG emission by at least 40% by 2030 over the year 1990 (Ministry of Innovation and Technology of Hungary, 2018).

Ministry of Environment and Forestry (MoEF), Ministry of Agriculture (MoA), Ministry of State-owned Enterprises (MoSE), and Ministry of Energy and Mineral Resources (MoEMR) the Republic of Indonesia have been taking strategic plan by issuing some regulations to support the renewable energy in Indonesia. MoEF and MoA have

been issuing a regulation to ensure the supply of biomass for energy. For instance, the Ministry of Environment and Forestry issued Ministry regulation number P.62/MENLHK/SETJEN/KUM.1/10/2019 on forest plantation which regulated plantation for energy purposes (Menteri Lingkungan Hidup dan Kehutanan, 2019). Ministry of Environment and Forestry encourages the utilization of biomass for energy purposes not only from forestry residues but also the development of bioenergy plantations. Meanwhile, the Ministry of Agriculture supports on the utilization of biomass from agroindustry residues for energy.

Supporting green energy policy, three state-owned enterprises (national electricity enterprise/PLN), plantation (national agriculture enterprise/ PTPN), and forestry (national forestry enterprise /Perum Perhutani) signed Head of Agreements (HoA) which PTPN and Perum Perhutani will supply biomass for co-firing in the power plants (PLN) (Kontan.co.id, 2021). National Forestry Enterprise (Perum Perhutani) has committed to planting 120,000 ha of biomass plantation for the next 5 years to fulfill the global market demand for bioenergy (Perum Perhutani, 2020).

In Hungary, the government of Hungary has authorized the Ministry of Innovation and Technology (MIT) to draw up the appropriate policy programmes, determine the future of the energy sector, determine national objectives on energy efficiency and renewable energy (Ministry of Innovation and Technology of Hungary, 2018). Furthermore, on reducing GHG emissions from electricity generating plants, the government of Hungary will stop the utilization of coal and focus on two sources of energy, namely nuclear and renewable energy (Ministry of Innovation and Technology of Hungary, 2018).

In general, most of the supply of biomass for bioenergy comes from the agricultural sector. Sources of biomass are bioenergy plantation and residues (Table 1). For instance, Perum Perhutani has been developing *Gliricidia sepium* for bioenergy plantation in Semarang (Mulyana et al, 2020a, 2020b). Whereas, the oil palm industry also has integrated the biomass power plant to supply the electricity for its industry (Febijanto, 2011; Harris & Mahmudsyah, 2013; Nuryadi et al., 2019).

Table 1. Potential biomass sources for energy from agricultural sector in Indonesia

Biomass sources	References
Gliricidia sepium	Maulana et al., (2021); Mulyana et al. (2020a, 2020b)
Calliandra sp	(Maulana et al., 2021)
Forest residues	Gustavsson et al. (2015)
Empty fruit bunch	Febijanto (2011); Harris & Mahmudsyah (2013); Nuryadi et al. (2019)
Agroindustry residues	Febijanto (2007); Wulandari et al. (2019)
Bamboo	Sharma et al. (2018)
Forestry industry residues	Febijanto, (2007); PT Korintiga Hutani (n.d.)

Biomass for energy in Hungary can be collected from agro residues, agriculture plants, and wood biomass (Table 2). Biomass residues potential in Hungary is more than 330 PJ (Szalay et al., 2020). Furthermore, Szalay et al., (2020) described the sources of biomass residues in Hungary as follows; grape pruning (1.5 t/ha), orchard residues (2.5 t/ha), and dried biomass of woody energy plantations (10 t/ha).

Table 2. Percentage biomass sources for energy in Hungary

Biomass sources	Percentage (%)
Forestry biomass	26.6
Perennial energy grass	24.0
Cereals	19.5
Energy plantation	16.5
Manure, biogass substrate	8.5
Non-food oil crops	5.2

Source: Hajdu (2012) in Deák & Ferencz, (2017)

b. Development of bioenergy plantation and utilization of biomass from industrial residues.

The issue of green energy by utilizing new and renewable energy has been getting more attention around the world. One of the promising renewable energy is bioenergy. Bioenergy sources are biomass, biofuel, and biogas which are utilized from plants. The main sources of biomass for energy come from agricultural sectors (table 1).

Indonesia is a located in tropical zone that can produce bioenergy from agricultural sectors. In general, the purpose of utilization of bioenergy in Indonesia is for co-firing the combustion process in coal-fired generator plants and industries. Bioenergy power plants in Indonesia has distributed in all main islands. Most bioenergy power plants are located in Sumatera and Java Islands.

The consumer of biomass not only biomass-fired power plants but also the coal-fired power plant and industries for its co-firing. The coal-fired power plants in Indonesia and industries are distributed on all-island, mainly in Java Island. Meanwhile, Java Island is the most populated island in Indonesia and the land use for the development of bioenergy plantations is also limited. Furthermore, the development of bioenergy plantations is distributed in Sumatera and Kalimantan Island.

The source of biomass energy in Sumatera and Kalimantan Island can be found from bioenergy plantation and/or oil palm industries' residue such as oil palm shells. In Java Island, the National Forestry Enterprise (Perum Perhutani) developed *Gliricidia sepium* plantation for bioenergy purposes. The plantation was established in 2013 and could be harvested at an optimal age of 2 years (Mulyana et al., 2020). The potential revenues from wood biomass were Rp. 60 million/year and it will increase to Rp. 180 million on wood pellet form (Kontan.co.id, 2019).

The other potential land for bioenergy supply can be developed on the degraded or critical land. For instance, *Calliandra sp.* can be planted in the marginal land, post-mining, and watershed to produce forage and wood biomass for energy (Daru & Mayulu, 2020). Utilization of critical area in East Nusa Tenggara with woody biomass

plantation can be applied in the private forest or state forest with community forest scheme (Narendra et al., 2019). Rehabilitation of degraded land with bioenergy plantations provides the opportunity to secure renewable energy sources (Artati et al., 2019).

Biomass sources for energy in Hungary come from crops land (i.e. corn, sunflower, rapeseed, wheat, and barley), orchards, and forest plantation for energy purposes (poplar, willow, and black locust). Poplar plantation is suitable to be cultivated in Hungary and has the highest ratio (65%) compared to other energy plantations (Vagvolgyi, 2013).

II. Challenges on biomass for energy

a. Equilibrium of supply and demand of biomass for energy

The demand for biomass for energy in Indonesia is increasing. In 2021. The demand for biomass for co-firing in 52 coal-fired power plants is 5 million tons/year (Kontan.co.id, 2021). Based on Energy plan of Indonesia, utilization of biomass as renewable energy is 23% by 2025 and 31% by 2050 (Presiden Republik Indonesia, 2017). The main producer of biomass comes from agricultural sectors and the consumer of biomass are power plants and industries (Figure 1).

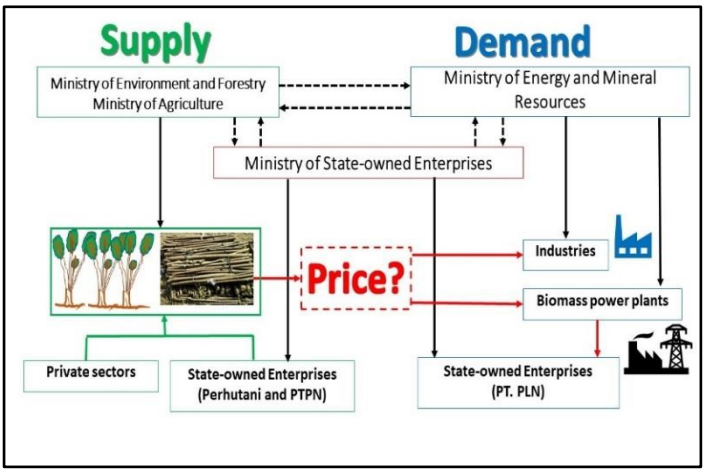

Figure 1. supply and demand of biomass for energy in Indonesia

The price is the main problem between producers and consumers of biomass for energy. The cost of electricity supplies from the biomass-fired power plant is higher than the cost of electricity supplies from the coal-fired power plant. It was one of the factors that caused the low utilization of biomass for renewable energy sources (Secretariat General National Energy Council Republic of Indonesia, 2019). The Indonesian Forest Entrepreneurs Association (APHI) proposes a feedstock price for woodchips of R. 666,000 – Rp. 995,000 per tonne (Asosiasi Pengusaha Hutan Indonesia, 2020).

A similar case also has occurred in an energy plantation in Hungary. For instance, black locust (*Robinia pseudosacacia*) plantation in Hungary was a high cost for harvesting, and sales price was low (Deák & Ferencz, 2017). Furthermore, Deák & Ferencz (2017) have explained that the harvesting cost in black locust plantation (rotation was 1-3 years) was 120-140,000 HUF (Hungarian Forint) while the wood chips' yields were 13-16 tons/ha. The revenue did not cover the cost of harvesting, storage, supplies, loading, and transportation (Deák & Ferencz, 2017). Hence, incentives from the government are important to attract the owner to develop energy plantations.

The other issue on biomass for energy is the price of biomass in other countries is higher than Indonesia's price. For instance, the price of palm shells on the world market reaches US$ 90-100/ton free on board, while PLN calculates the biomass price for co-firing at US$ 65/ton (katadata.co.id, 2021). It will attract the biomass producer to sell the biomass to the international market rather than supply it to the domestic market.

On the other hand, the paradigm of bioenergy plantation in Indonesia is relatively new. Most forest plantation purposes are commercial timber products and timber production for the pulp and paper industry. Pirard et al., (2016) reported that the challenges on biomass for energy supply were a). the bioenergy plantation should maintain a sustainable and continuous feedstock supply, b). the investor has faced difficulties accessing funding for power plants and bioenergy plantations. Furthermore, understanding the biomass productivity is important to assess the production cost (Jiang et al., 2017).

b. Cooperation option between producer and consumer of biomass for energy

Cooperation between producers and consumers of biomass for bioenergy is important to ensure the renewable energy policy in Indonesia. The potential producer of biomass in Indonesia comes from agricultural sector such as bioenergy plantation, agroindustry residue, and forestry industry residues. The potential consumer of biomass are biomass-fired power plants, co-firing in coal-fired power plants, and industries.

i. Business to business

In Indonesia, the national electricity enterprise (PLN) buys biomass from the community or industry in the form of sawdust, rice husks, palm shells, and biomass from waste processing for co-firing at PLTU (Kementerian Energi dan Sumberdaya Mineral Republik Indonesia, 2021c). In addition, PLN also cooperates with PT. Rezeki Perkasa Sejahtera Lestari in the first biomass power plant in Indonesia (Liputan6, 2018). A similar case also found in Hungary. The power plant companies can make a contract with farmers to secure the supply of wood for energy (Szalay et al., 2019).

ii. Integration

PT. Korintiga Hutani in Kalimantan has developed power plants that used residues from forestry operations (Pirard et al., 2016). PT Korintiga built the biomass power plant in 2012 and operated it in 2013 (Agroindonesia, 2020). PT Korintiga Hutani has used by-products of wood processes (woodchip, sawn timber, etc) to generate biomass power plants that produce 7.34 MW (PT Korintiga Hutani, n.d.). Furthermore, PT Korintiga Hutani sells the exceed electricity power to Indonesia Electricity Enterprise (PLN) and the PLN distributed it to the 20,000 households.

National plantation enterprise III (PTPN III) has utilized the waste of palm oil or sugarcane industries as the feedstock of biomass power plants (Rakyat Merdeka, 2021). PTPN III has been using electricity for their industries from the biomass power plants.

The President Republic of Indonesia also has mentioned integrating renewable power plants with the green industrial park. Furthermore, The President Republic of Indonesia took an example in the green industrial park in North Kalimantan which the energy supply comes from the Kahayan river hydropower power plant. Government, power plants, and green industries will take some benefit from green energy (Biro Pers Media dan Informasi Sekretariat Presiden, 2021a).

In Hungary, the integration among Power Plants and private/public forestry sectors also has been applied. Integration 27 members (public and private forestry sectors) to supply wood-based energy fuel to Tatabanya Power Plant (Czupy et al., 2018). The integration between supplier and consumer of wood-based energy fuel is important for national energy security and minimizing the fossil fuel-energy dependency.

iii. Subsidies

Based on President decree number 22/2017 on the national plan of energy, the Government of Indonesia will take some actions to encourage the development of new and renewable energy, such as; a). energy subsidies; b). feed-in tariff from new and renewable power plants which the electricity production cost is higher than electricity prices. The other incentive is the certification for industries that used renewable energy. For instance, a renewable energy certificate is a certificate that proved electrical energy from renewable energy sources (PT Perusahaan Listrik Negara, 2021).

Most European countries, including Hungary, have provided incentives for those who have developed bioenergy producing facilities (Deák & Ferencz, 2017). Government incentives are important as an economical instrument to support the owner of the energy plantation to cover the cost of harvesting and logistics processes. For instance, the government of Hungary provide non-refundable financial to support development of bioenergy plantation from the planting until the first of harvest (Szalay et al., 2019).

c. Technology improvement on biomass-fired combustion system

Ash volatile compounds from wood biomass have made a technical problem on the boiler in power plants. Wood contains different fractions that caused different thermal behavior (Prins et al., 2006), low energy density, and high moisture (Prins et al., 2006b). Furthermore, Prins et al., (2006b) explained that deciduous wood produces more volatiles and thermal processing of wood in the temperature 225-300^{o}C (torrefaction) can solve these problems.

Torrefied wood is applicable for the gasification or combustion process. Torrefied wood moisture content was 1-3%, while the wood feedstock moisture content was ranging 10-50% (Tumuluru et al., 2011). Furthermore, Tumuluru et al., (2011) explained the advantages of low moisture contents on torrefied wood as follow

- Low moisture contents of wood biomass was good for conversion process
- Low moisture contents will reduce the cost of transportation from the supplier to consumer
- Low moisture contents will prevent the wood from decomposition.

Combustion of biomass also produces ash. Ash-forming elements in a long period will be a serious problem in biomass processing (Vassilev et al., 2017). Ash and volatile compounds have formed a thick layer of slag on the biomass-fired boiler (Yanqing, Niu et al., 2010). The ash also can be caused the corrosive and fouling on the boiler system (Magdziarz et al., 2016).

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Hungary and Indonesian Tourism Business: Finding the Balance in Between

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Tourism has become a business that encourages countries to gain significant benefits for their economies. Before the pandemic, Travel & Tourism was one of the world's major sectors in 2019, accounting for 10.4% of global GDP (USD 9.2 trillion), 10.6% of all jobs (334 million), and 1 in every 4 new jobs created globally (WTTC, 2021). Despite the fact that the number of visitors and transaction values declined dramatically in 2020, there are signs of recovery, which provides the tourism and travel industry reason to be optimistic.

Tourism enterprises in different nations have different tactics and practices on a micro level. However, their ultimate goal is the same, namely, to produce long-term profitability and business, especially in such a volatile environment as now. Entrepreneurial improvisation, environmental instability, and anxiety of scenario changes all have good and important correlations.

Globally, the environment is rapidly changing, and businesses must be prepared with knowledge and plans to deal with these unforeseen developments (Shabbir et al., 2021). Their challenges also include future pandemics and unanticipated health issues, but also business model shifts that were unthinkable five or ten years ago. Food and beverage, entertainment and tourism, and agriculture are the industries most concerned about a drop in consumer confidence at the moment (Ahmed & Nair, 2020).

Understanding the behavior of tourism industry in various countries as a source of knowledge would be able to assist in gaining a

better understanding and insight for future business development. We also perform a comparative study to examine very different facets of business people's behavior in numerous countries in order to arrive at a formula that is close to equilibrium.

Comparative analysis enhances the understanding, awareness, develop of universally applicable theory (generalization), prevents from over-generalizing based on their own or naïve universalism (relativization), and comparison provides access to a wide range of alternative options and problem solutions (Esser & Vliegenthart, 2017). Because tourists are increasingly inclined to travel across countries, the quest for a balanced formula for tourism business conduct is critical. The effects of variances in the character of tourists from various nations will be accommodated by business models that are broad and acceptable to tourists, ensuring that they are satisfied or at the very least not dissatisfied while visiting a place in another country.

Comparative studies for such global business interests would be better if taking examples of cases in countries with significant differences in characteristics such as location, culture, economic level, and language. Comparisons can be made on a variety of levels, including regional, national, and international ones, all depending on a specific subject or area of interest. This facilitates in the establishment of links between two or more phenomena as well as the giving of sound justifications (Adiyia & Ashton, 2017). Countries in Europe within Asia will certainly be able to provide an overview of the significant difference. Hungary, which is a member of the European Union and Indonesia as an Asia's developing country, can be utilized to illustrate the various contrasts between tourism business units.

Hungary Tourism

Hungary is divided into seven regions, each with its own set of tourism attractions or sites that have the potential to draw more or higher-quality type of visitors. According to the data, there are currently numerous sorts of dominant tourism activities. This is influenced by the perceptions and promotions of numerous parties with a direct interest in Hungary's tourism industry. Budapest, the country's capital, is linked with Hungarian tourism. Budapest was

visited by over 70% of the more than 31 million tourists who arrived in 2020 (Remenyik et al., 2021).

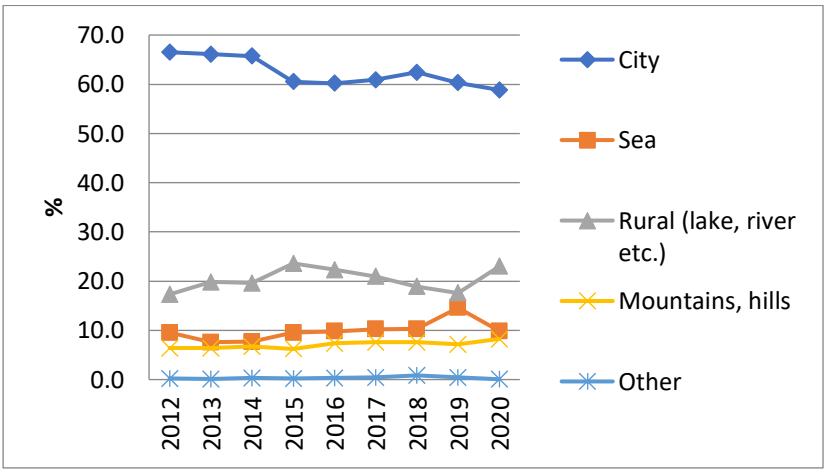
Budapest, behind Barcelona, Amsterdam, Venice, and Milan, is Europe's fifth most overcrowded tourist destination (Lock, 2021). In the long run, making Budapest the fifth most populous city in Europe in terms of over tourism is harmful and counterproductive to commercial interests and the environment. The city's greatest concentration of Airbnb housing and frequent protests from local residents about night-noise, overcrowding, litter, price increases, and street crime have arisen from the city's growing tourist numbers, particularly in the so-called "party district" of Budapest (Smith et al., 2019).

It takes a comprehensive strategy and understanding of tourism concept in the long term to make Hungary more than just Budapest in tourism terms. Demand should be diversified and must be spread over the city and be restructured in a regional Metropol framework to cater for tourists with greater buying power (Remenyik et al., 2021).

Hungary's central location on the European continent provides it a competitive advantage worth exploring further. Local transportation systems are well-connected and in good working order in almost every region. Those are essential for the movement of tourists who visiting the country. Furthermore, another benefit is the clear schedule of the ticket system, which may be acquired in a variety of ways: tickets are available both in person and online. Not every developed European country can integrate public transportation ticket sales. There are even transportation tickets that must be purchased offline at kiosks in other European nations, where identifying the location of the kiosk still involves some effort. This means that if Hungary’s tourism information is more widespread, travelers will have easier access to the destinations being promoted.

There are several types of tourist attractions that are quite popular in Hungary. Festival tourism is one of the activities that is quite attractive and becomes a routine agenda held in Hungary. Thus, it can be further developed as a great potential opportunity. Festival tourism is an event, whose aim is to provide joint entertaining or leisure-time experience fundamentally influenced by the traditions of festival visits formed in the last 1.5–2 decades (Nagy & Nagy, 2013).

Spa and wellness Tourism is also a major draw for visitors. Country thanks to the advantageous physical geographical characteristics and to its positive impacts on seasonality (Csapó & Marton, 2017). According to Hungary's statistics data, the main tourist attractions are divided into five categories: city, sea (artificial sea/ Balaton Lake), rural (lake, river, etc.), mountains & hill, and other. See the detail in Figure 1 below.



Source: (Hungarian, n.d.)

Figure 1. Distribution of visitor's location

Thus far, the city area, in this case Budapest, the Capitol, has been the most popular tourist attraction in Hungary. Budapest and Central Danube, the Lake Balaton, and Western Transdanubia are Hungary's most popular tourist regions, attracting millions of travelers each year. They visit numerous thermal spas, wine regions, and enjoy the national cuisine (Medve, 2021). Historical destinations such as castles, ancient buildings, and museums are also other tourist attractions destinations.

In Cooper's 4A dimensions of tourism components (Cooper et al., 2008): attractions (or tourism resources), access, amenities, and ancillary services, there isn't much of a distinction between urban and rural locations in this country. In Hungary, transportation networks and telecommunications networks with dependable internet are typical features.

A solid financial transaction system is pushed by a powerful internet network. As a result, practically all merchants in Hungary accept cashless payments. Prices for goods and services relevant to visitor demands are also quite consistent among cities. Various restaurants and cafés offer a variety of appetizing foods and beverages at reasonable costs. The thing that poses a significant challenge is English language abilities, which are tough to come by when there are foreign visitors. So that the occurrence of more optimum transactions or information contributes to tourism activities is being reduced.

The imbalanced distribution of visitors in Hungary, with only three main regions, is also a missed opportunity for the country. Visitors to Budapest must be spread in space and time, and the interest of domestic tourists in the city could be aroused through marketing activities (Remenyik et al., 2021). In reality, tourism is an almost limitless activity when it comes to presenting themes or stories that may be produced in a variety of other sectors (Kartika & Riana, 2020). For example, we can use the story of how the ancient community in Europe preserved the colors of their traditional clothes with ancient herbs (Ilieș et al., 2021). So, its all about themes and storytelling. Other regions that are not traditionally tourism-based have not prioritized the development of new tourism sites and encourage its activities. This potential may arise as a result of the small number of workers and the low unemployment rate (around 4.35 percent) (O'Neill, 2022).

For foreign tourists visiting Hungary, especially the Free Individual Traveler/FIT, reliable information in international languages, particularly English, is a big issue. FITs that rely on information from search engines like Google will have a hard time finding more specific information on areas outside of Budapest that have the potential to become new tourist destinations. Using Google Translate to translate Hungarian may not always yield the best results because it frequently gives a meaning that differs from the true meaning. This insufficient information does not help the tourist industry's marketing process.

Hungary's historical past, which has seen them often face war circumstances, has caused them to become more rigorous in upholding their cultural norms or to be apathetic about other cultures (Kovács,

2016; Várdy, 1983). It manifests itself as a lack of interest in changing items that are relevant to market interests, in this case the tourism market. Despite the fact that their geographic location and tourism potential are extremely attractive to potential markets from a variety of countries. However, currently in several other regions that are already starting to get busy with tourists, we can find a more tourist-friendly standard of service with good English. Thanks to the Hungarian younger generation and university students who work in various cafes and restaurants.

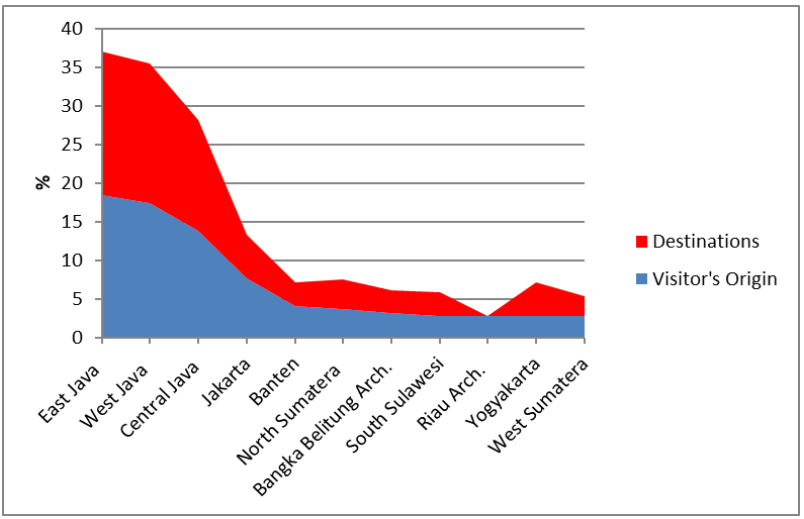
Indonesia Tourism

After CPO/Crude Palm Oil and coal, tourism is expected to become one of Indonesia's "core economies" and the third-largest contributor to foreign exchange. The tourism industry's future potential is thought to be enormous (Bank Indonesia, 2018). In order to achieve its goal of 20 million foreign tourists, Indonesia must rely on and focus on the domestic market, as the expected rise of international tourists still influenced by the pandemic. Thus, necessitates a strong domestic economic movement through domestic visitor trips is prominent.

Tourism is expected to contribute 5.5 percent of Indonesia's GDP between 2020 and 2024, according to the Indonesian National Medium-Term Development Plan (RPJMN). According to the most recent data in 2019, before the Covid epidemic, Indonesia received 16.1 million international tourist visits and 282.9 million domestic travels (BPS-Statistics Indonesia, 2020b, 2020a). Tourism is thought to boost other business sectors, absorb a large number of workers, and swiftly bring in foreign cash (Yakup, 2019).

Tourism appears to be a trend that continues to be a lifestyle, owing to the surge in tourism and travel activities fueled by the widespread use of social media. Even now, in Indonesia, there is a joke that says traveling helps people cope with their sadness. Indeed, tourism has never been as an interesting topic in Indonesia as it is now. As a result, practically all stakeholders in Indonesia are encouraged to make tourism one of the primary drivers of their product sales strategies.

However, with Indonesia's very diverse conditions, both regions, facilities, culture, and community backgrounds, it is not easy for Indonesia to present a product related to tourism comprehensively. Moreover, apart from the island of Bali, other regions in Indonesia traditionally do not live from tourism (Priatmoko et al., 2021). As a result, Indonesia's minimal service requirements and attitudes toward tourists varies. Domestic tourist travel has fortunately become a prominent activity in Indonesia, as indicated in Figure 2 below, and it is spread across many locations. However, there is still a big disparity between the number of tourism locations and the number of tourists. It can be indicated by the number of tourist destinations has not been able enough to contribute the wealth to large of people. It can be seen by the gap between the visitor place of origin who can meet their tertiary demands which is traveling.



Source: (Priatmoko et al., 2021)

Figure 2. Location vs Domestic visitor's origin

Another barrier to tourism development in Indonesia is accessibility. The needs and ease of access for tourists are significant among Cooper's 4A. Even if a destination's attractions are fantastic or distinctive, tourists will be put off if getting there is difficult and expensive. However, the construction of numerous new toll roads has

helped to mitigate this problem. Toll roads in Indonesia currently cover 2,386 kilometers, and by 2024, the total length of toll roads in Indonesia is expected to reach 5,103 kilometers (Julian, 2021).

In spite to the relatively unequal access to transportation, mass transportation modes, particularly in suburban and rural areas, are still limited. Using the services of a private transportation company or hiring a car or motorcycle to travel around Indonesia is a viable option. The amount of ride-hailing service providers is something that can be seen to be beneficial. In Indonesia, the application of Information and Communications Technology (ICT) in transportation is flourishing, so it's definitely helping to make up for the lack of mass transit options. On-demand ride services could complement or compete with existing means of transportation, particularly in locations where public transportation is scarce (Etminani-Ghasrodashti & Hamidi, 2019).

Telecommunications networks and the internet are also barriers to data communication reliability. According to Speedtest.net, Indonesia is ranked 103 for mobile broadband and 115 for fixed broadband (Speedtest, 2021). This makes it more difficult to convert numerous transactions that should be done cashless rather than cash. Because of Indonesia's unreliable internet network, different applications supporting tourism services such as online booking or lodging will be difficult to adopt in rural and suburban locations.

Another issue that travelers will experience is the pricing disparity between tourist and non-tourist areas for goods and services. Tourists, for example, will pay a higher price for food. This is still a mindset among tourism destination entrepreneurs who believe that tourists have contributed more money in order to pay for high fees when they travel. This considerable pricing gap might backfire for tourism destination entrepreneurs by lowering consumer trust in purchasing products. The next effect is that the transaction volume decreases, the turnover of goods slows, and increasing the risk of goods degrading in quality as they are kept in the store for too long.

The Balance

There are numerous things that can be resumed on tourism business activities in Hungary and Indonesia based on the conditions in these two countries. Table 1 below lists some of the important points that can be utilized as highlights.

Hungary and Indonesia can increase their tourism industries at a more optimal level for their economic growth without becoming overly reliant. Manufacture, agriculture, mining, or plantations have all been important sources of wealth for these countries. Making tourism one of the most serious supplementary income sources will boost earnings without lowering current earnings. Petrodollar-producing countries in the Middle East, such as Saudi Arabia, Qatar, and the United Arab Emirates, follow this approach. Aside from that, they already have an original source of income and are expanding another, notably tourism.

As shown in Table 1 above, there are at least a few intermediate solutions that can be used as a starting point for creating the tourism business. Table 2 shows the approach in detail.

Table 1. Hungary-Indonesia Pros & Cons

	Hungary Tourism	**Indonesia Tourism**
Pros	reliable comfort public transportation	tourism importance understanding
	fast and broaden internet coverage	diverse and fast diverse tourism destinations
	diverse potential tourism destinations	affordable vehicles rental price
	non-significant price disparity	an extremely unique characteristics diverse choice of goods and services
	standardized destination facilities	English understanding among millennial
	easy cashless payment	tons of online information
Cons	English language barrier	wide price disparity

	lack of bilingual online information	unreliable public transportation access
	lack of additional attraction	cultural barrier understanding
	lack of specific products in various regions	cash bases transaction
	scarcity of non-European market-oriented products	slow internet

Source: authors, 2022

Table 2. Intermediate Approach

Proposed Strategies
Transportation accessibility and availability are critical
fast and reliable internet as a prominent trigger for business transaction
develop new destinations using its unique characteristics
understanding pricing as a part of customer trust
determine the minimum standard of basic services
multi language friendly online contents information
bi-lingual information display in business premises
providing clearly of Do's and Dont's
understanding market target & segmentation need

Source: author's analysis, 2022

Table 2 shows some fundamental information that can be utilized as a starting point for thinking on tactical and practical approaches. Comparing tourism industry phenomena in several countries, such as Hungary and Indonesia, truly provide a more enlightened broaden viewpoint.

What Then?

The vast economic value opportunity in the tourism sector should be leveraged by the government as a reference point. The tourism sector's widespread impact on economic equality for citizens and businesspeople has made the government aware of the importance of playing a strategic role. It is impossible to allow the private sector to take just partial actions since, in addition to being ineffective, it will send a weak message about a country's tourism image.

From the proposed strategies offered above, stakeholders can focus more on designing tourism development programs in their region. Of course, a detailed plan is still needed to design applicable programs. However, by knowing what is actually a concern for the development of the tourism business, the strategic direction is easier to determine. It is important to define a common paradigm in any strategy whose major objectives are national and international scale.

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The Importance of the Coastal Area Natural Disaster Mitigation Program in Economic Development Planning

FX Anjar Tri Laksono

Introduction

About 60% of the world's major cities are located in coastal areas (Lynett et al., 2017). These cities rely on seaports for export-import activities that contribute a significant income to the country. Coastal areas are also known as areas that are easily accessible, have great economic potential, and abundant natural resources, especially in the fisheries and marine sectors. Therefore, the major cities in the world are dominantly located by the coast. New York City, London, Hong Kong, Shanghai, Tokyo, Singapore, Jakarta, Mumbai, Dubai, Jeddah, Sydney, Melbourne, San Francisco, Los Angeles, Incheon, Amsterdam, Barcelona, Lisbon, Athens, Istanbul, Kuala Lumpur, Rome, Bangkok, Chicago, Sao Paulo, Rio de Janeiro, and Johannesburg are examples of large cities located in coastal areas. In addition to having abundant natural resources with a strategic geographical location, coastal areas have the potential for natural disasters that can disrupt the economy of the city and even the country (Raharjo & Yosi, 2017).

Natural disasters in coastal areas include earthquakes, tsunamis, floods, subsidence, and storms. Economic losses due to natural disasters in coastal areas have reached billions of US dollars in the last two decades. In the last two decades, the big natural disasters are the earthquake and tsunami in the Indian Ocean that hit Aceh, Sri Lanka, India, Maldives, Thailand, and Malaysia in 2004. As a result of this disaster, more than 200,000 people died and caused extensive

infrastructure damage, with economic losses reaching billions of US dollars (Shuto, 2019; Suppasri et al., 2018). The earthquake and tsunami that occurred in Tohoku, Japan, in 2011 resulted in a leak at the Fukushima nuclear power plant that threatened millions of Japanese people. This tragedy also caused damage to the aquatic ecosystem of the Pacific Ocean. (Macías et al., 2020; Pilarczyk et al., 2014). This disaster also resulted in the death toll of nearly 16,000 people (Strusińska-Correia, 2017). Therefore, natural disaster hazard mitigation programs in coastal areas are essential to consider in planning for economic development in coastal areas. The purpose of the discussion of this chapter is to provide appropriate strategic steps related to the implementation of natural disaster mitigation programs in coastal areas. In addition, this chapter will discuss the significance of this program in economic development planning. This discussion will be accompanied by supporting case study evidence and the author's analysis of the existing evidence to solve the problem of the threat of natural disasters to the economic development of coastal areas.

Various Natural Disasters in the Coastal Environment

Currently, disaster mitigation program planning is only applied to developing public infrastructure on a national scale, such as ports and airports. However, the same planning is not applied to the development of settlements, local scale infrastructure, and private buildings. Even planning in developing countries is only used in big cities, not small towns. People in rural areas and small cities will be more vulnerable to natural disasters. For example, in Indonesia, public infrastructure development that considers the potential for local natural disasters was only implemented after the 2004 tsunami. The implementation of this program is still minimal and has ups and downs. Shortly after the 2004 tsunami, the government began to make regulations requiring the development of cities in earthquake-and tsunami-prone areas to pay attention to the resistance of buildings to earthquake shocks. However, this program was abandoned one year after the earthquake and tsunami.

In Aceh, which was most affected by the 2004 tsunami, maintenance was never carried out on earthquake detectors. Many residential settlements have re-emerged in tsunami-prone zones. The earthquake and tsunami evacuation building was abandoned because there was no budget for the maintenance program. In other areas along the west coast of Sumatra Island, the south coast of Java and Nusa Tenggara, to the Maluku Islands, which are earthquake and tsunami-prone zones, there is no program to assess the resilience of buildings against earthquakes. Coastal communities in the area also do not care about the program. The government's neglect of disaster mitigation programs and the low level of public awareness to reduce the risk of natural disasters are serious problems that must be resolved immediately. The community, government, and private sector only consider the issue of economic gain and loss in building public infrastructure. The earthquake and tsunami in 2005 in Yogyakarta and 2006 in Pangandaran, West Java to Cilacap, Central Java, resulted in thousands of casualties and tens of thousands of damaged infrastructure (Laksono et al., 2020). The community and the government did not make improvements and took lessons from the 2004 tsunami. As a result, casualties and economic losses were still very high. In the following years, the earthquake and tsunami still had a significant impact on the economy in Indonesia because the government did not carry out massive natural disaster mitigation programs.

Developing countries in the world should be able to imitate Japan in making natural disaster mitigation programs. Japan is located in an earthquake and tsunami-prone zone like Indonesia. Every day Japanese people are used to earthquakes. The government often conducts emergency simulations in dealing with earthquakes and tsunamis. Disaster mitigation education has been included in the school curriculum. Public knowledge of the dangers of earthquake and tsunami disasters is very high so that when an earthquake and tsunami occur, casualties and economic losses can be minimized. For example, the earthquake and tsunami in Japan in 2011 caused much smaller deaths than the 2004 tsunami in the Indian Ocean. The disaster caused many other disasters, such as nuclear leaks and damage to marine

ecosystems. However, Japan was able to minimize the impact of the disaster. So far, when there was an earthquake in Japan, the death toll was only tens of people. On the other hand, when natural disasters occur in developing countries such as Turkey, Indonesia, India, the Philippines, Afghanistan, Iran, and Africa, victims can reach hundreds or even thousands of people. Economic losses can reach millions to billions of US dollars.

Natural disasters that threaten coastal areas are earthquakes and tsunamis and floods, subsidence, and storms. Floods are natural disasters that often occur in coastal areas and big cities. An example of a flood that happens almost every year and causes significant economic losses is the Jakarta flood. If there is heavy rain for a long duration, the coastal areas of northern Java such as Pekalongan, Semarang, Pemalang, Tegal, and Cirebon often experience flooding. The impact of the floods on Java Island was tremendous because it damaged the primary infrastructure for the distribution of goods and services, agricultural land, and the cessation of the production of goods and services in industrial areas. Severe floods in 2022 hit the west coast of Malaysia, which is the economic center of Malaysia. This flood disrupted the distribution of goods from the industrial center to the commercial center in Kuala Lumpur. The industrial sector in the Selangor area also experienced disruption, and many residents in Kuala Lumpur, Perak, and Selangor had to evacuate because the flood heights reached 3 to 5 m which submerged residential areas. Poor drainage, environmental damage, and high rainfall are important factors causing flooding in various locations.

In developing countries, the development of settlements and new economic centers often does not pay attention to flood prevention infrastructure. Even the high rate of urbanization has resulted in the narrowing of river channels that should be used to facilitate water flow from upstream to downstream. People who are less educated often throw garbage into waterways, resulting in silting and decreased capacity to accommodate runoff water. This problem is exacerbated by environmental damage, especially in the upstream area, which is a water absorption zone. The illegal and continuous felling of trees results in the degradation of the functions of the upstream site. Surface

water that comes from rainwater will flow quickly to the downstream area. The high flow of water that arrives in the downstream area, which is exacerbated by the damage to the drainage system, has resulted in catastrophic flooding in coastal areas. The high rainfall is also not matched by the availability of water storage infrastructure such as dams in the upstream and downstream regions. Therefore, large and small cities in developing countries must imitate flood prevention and control systems in developed countries.

In developed countries, the government controls the expansion of new business centers. Every urban settlement development must show a detailed design to prevent natural disasters like landslides, floods, or earthquakes. If the developer does not meet the requirements according to applicable regulations, the residential development project will not be approved by the government. In this case, legal firmness needs to be enforced so that no corrupt practices lead to the issuance of permits for settlement development without fulfilling requirements.

Big cities in developing countries are facing the threat of subsidence. This disaster was triggered by excessive groundwater consumption. Water is one of the components that support the soil in the crevices between rocks. If the volume of groundwater is reduced without considering the speed of recovery, there will be a decrease in the ground surface. If this happens, it will endanger the structure of the building, resulting in seawater infiltration into the land and the land surface being lower than sea level. For developing countries, this is a big problem because restoring the situation as before becomes very difficult and requires high costs and technology. These efforts will also not be able to fix the position of the ground surface as before but only prevent land subsidence from continuing. The city of Jakarta is one of the cities in the world that has this problem. The condition of the north coast of Jakarta is currently decreasing every year and is predicted to sink if no optimal efforts are made to prevent land subsidence from occurring. The solution taken by the government is to build a giant sea wall along the north coast of Jakarta. In addition, the government also makes regulations that prohibit office buildings from consuming groundwater. However, this regulation does not apply to the

household level. Even though groundwater consumption in Jakarta in 2021 is still very high, reaching 8.2 million m^3 (Nugraha et al., 2021; Sunaryo et al., 2021). The government targets that by 2030 there will be no more groundwater consumption in Jakarta. The government provides a wastewater treatment system into drinking water as a substitute for clean water for industry, office buildings, and Jakarta residents.

Countries like the Philippines, Taiwan, and the United States are very vulnerable to storm disasters. This disaster has almost the same impact as a tsunami. Storm can cause high waves of seawater. If this wave hits the coast, it will have nearly the same impact as a tsunami. Although the height of the sea waves is not as high as the tsunami, it can cause damage to infrastructure and loss of life (Gallop et al., 2020; Kongsen et al., 2021). An example of a terrible storm that has occurred in this decade is 2013 in the Philippines. Typhoon Haiyan killed thousands of people and damaged infrastructure on the Philippine coast. Economic losses due to this disaster reached millions of US dollars. Taiwan and the United States are also frequently hit by storms, as happened in 2005 in New Orleans. At that time, Hurricane Katrina damaged public infrastructure in Louisiana and destroyed thousands of homes. The death toll from this disaster nearly reached 2000 people (Xiong et al., 2018). This disaster is one of the most significant hurricane disasters to hit the United States. Taiwan, a small country in the eastern part of China and directly facing the Pacific Ocean, is also very vulnerable to natural disasters. Every year, four storm disasters damage and disrupt the community's economic activities. The handling of the impact of the storm disaster is excellent. The number of victims due to this disaster is almost non-existent. The public infrastructure in Taiwan is also ideal, so there was relatively no damage from this storm. The combination of knowledge and experience of the community and the government has proven to be effective in minimizing casualties. Every building in a hurricane-prone area always uses a strong roof and is not easily blown off by the wind. Facilities are also only allowed in the storm safe zone so that if there is an increase in sea waves, it does not cause damage to the building. Research on storm in Taiwan is carried out intensively so that the

government gets recommendations and an accurate picture of the dangers of hurricanes. Taiwan is known as a country with superior human resources in information technology and storm disaster simulation. Storm wave simulation results that have been carried out have a high level of accuracy.

Natural Disaster Mitigation in the Coastal Environment

Mitigation of natural disasters in the coastal environment needs to start with a preliminary study. In the initial research, it is necessary to study what potential disasters may occur in the area. The smaller the scale of the study, the more detailed and accurate the results will be. We need to study the history of natural disasters in the case study area. It is indispensable to find traces of relics of natural disasters in the past. Traces of natural disasters are used as data to simulate the impact of these disasters if they happen again in the future. The simulation results need to be re-validated with data and information in the field. In addition, the simulation needs to be done repeatedly so that we get results that have a high level of accuracy. The next step is to map disaster-prone zones. The mapping of disaster-prone zones must consider various aspects.

Aspects that need to be considered in mapping include elements of the impact of natural disasters, geographical location, and population density. Therefore, a combination of simulation and observation needs to be done to get an accurate map of natural disaster hazard zones. The mapping of natural disaster-prone zones consists of various stages. The first stage is preliminary mapping. In the initial mapping, the data collected includes

- the location of the coordinates,
- the morphology of the area,
- the elevation, and
- the distance from the shoreline.

In the preliminary study, we need to delineate the case study area. A survey of regional geological maps also needs to be carried out to know the local area's geological history. Every event in geological

history will leave certain traces, for example, sedimentary structures, lithological types, geological structures, and the presence of micro and macrofossils. Likewise, certain natural disaster events will leave traces on the rock layers. If we do a more detailed analysis of the geological traces, we will get information about the types of natural disasters. In addition, we can explain how big the tragedy occurred and when the natural disaster occurred.

In some cases, scientists use Carbon Dating and Pb dating to determine the time of the natural disaster occurrence (Aditama et al., 2021). When we have received information about the types of natural disasters and the time of occurrence of these events, we can predict the types of disasters that will occur in the future and when these natural disasters will occur. Especially for earthquake and tsunami natural disasters, it is necessary to collect historical data on seismicity, location and distribution of fault structures, and fault structure components. The structural elements of the fault are needed for the analysis of the fault movement mechanism. The fault structure's movement mechanism is fundamental to assessing the direction and speed of movement of the fault structure. If we already know the two critical pieces of information, we can estimate the earthquake's magnitude. If the earthquake's magnitude is more than 7 Mw, it is possible to generate a tsunami wave. The distance between the earthquake source and the case study area can help us estimate the height and propagation of tsunami waves when they reach land. The height and propagation of a tsunami wave function of its amplitude and wavelength.

Initially, tsunami waves are generated with small amplitude and large wavelengths. Then when the tsunami waves hit the coast, the amplitude gets more extensive, but the wavelength gets smaller. We can see this phenomenon when the tsunami waves first reach the shore. The height of the tsunami waves reached several meters. The propagation of tsunami waves from the coastline can reach tens of kilometers. In contrast, the height of tsunami waves can reach tens of meters. It is different from a storm that only forms waves with a height of 5 m and an inundation distance of no more than 1 km.

The frequency of tsunamis and storm waves in the field is not the same. Periods of tsunami waves usually occur in hundreds of years, while storms have a shorter period of even one year, which can occur four times as in Taiwan (Laksono et al., 2021). Although both types of natural disasters happen in a short time, tsunami waves deposit thicker sediments than storms. Tsunami waves deposit sediment from the sea and land. On the other hand, storm waves are dominated by deposition originating from the sea. Tsunami waves usually show traces of run-up and backwash. When run-up, tsunami waves transport sediments from the sea, including fragments of marine organisms such as foraminifera and molluscs. During backwashing, tsunami waves carry sediment from the land, such as tree roots, pieces of artificial objects, and fragments of terrestrial organisms.

Detailed and advanced mapping was carried out to create a map of the evacuation route for the earthquake and tsunami disaster. The making of the map must take into account the factors of population density, road capacity, availability of temporary shelters, the capacity of temporary shelters, road conditions, distance from vulnerable zones to safe points, and knowledge of residents regarding the evacuation route. In making an evacuation route map, it is better to use several simulations and then choose the one with the shortest distance from the vulnerable zone to the safe area and consider the factors of population density, road capacity, and the availability of temporary shelters. Simulation can be performed using Matlab. The simulation results are then validated through field observations and compared with previous tsunami events. Then, the simulation results are disseminated to the public. The community must be familiar with routine self-evacuation simulations to be trained. It is hoped that when an earthquake and tsunami occur in the future, the impact will not be severe. In addition, the next most important thing is to make regulations to avoid the construction of buildings in vulnerable zones. Laws should also cover the resistance of structures to earthquake shocks and the installation of evacuation routes in an earthquake and tsunami.

In dealing with subsidence disasters, the government needs to encourage people to stop consuming groundwater and provide clean

water by utilizing water recycling systems and distilling seawater into drinking water. The erection of high-rise buildings must also be regulated. The height of the building must be adjusted to the carrying capacity of the soil so that there will be no subsidence. Control over the use of groundwater and the construction of high-rise buildings must be carried out so that no more individuals violate these rules. Meanwhile, for flood management, the government needs to normalize the river and relocate residents' houses on the banks of the river. Rivers that have experienced constriction and siltation are dredged and widened so that the capacity to hold water increases again. Upstream areas must also receive attention, mainly to prevent illegal logging and destruction of water catchment areas. The government should also build dams to reduce surface water discharge from upstream to downstream areas. Communities need to receive an education so that they are willing to keep the environment clean and contribute to preventing flooding.

Each type of natural disaster has different handling. Each region also has another risk of natural disasters. Therefore, there needs to be a local study of the potential for disasters and how to handle them. After that, we can combine the results of each regional study to determine appropriate policies to reduce the impact of natural disasters, especially in coastal areas. Approaches taken based on local natural disaster studies will be more accurate when compared to studies in general and on a broad scale. The results of regional studies can also be inputted into a database and then distributed to the public through social media and the official website to access them for free and quickly. In addition, the public needs to receive education related to natural disaster mitigation through routine self-evacuation simulations.

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Economic Trajectory of CEECs and ASEAN's Relations with China

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Introduction

Perhaps when someone who concern about international economy is asked an example of well-performed economies, (s)he would put China in the first row. China as an emerging giant Asia has remarkable economic achievements. Over the last three decades, its Gross Domestic Product (GDP) annual growth rate averaged 9.5%, although in the last few years it steadily grew at 5-6%. In 2017, for example, China's GDP reached $1,2237.7 billion, representing just under 20% of the world economy (Trading Economics, 2018; World Bank, 2018). Recently the country is the second world's largest economy after the US. With its enormous population of about 1.4 billion, it is interesting that China has made substantial achievements since managing the economy for its huge population is not a plain sailing task. The world sees how China's economy in the last decades has been growing from one of the poorest countries to one of the largest economies in the world.

In terms of nominal GDP, China has been the world's second-biggest economy after the US. Nevertheless, in terms of the Purchasing Power Parity (PPP) per capita, it is the largest on the planet, estimated to be $27 trillion in 2021 (IMF, 2022). China has also grown as the world's largest manufacturing economy and the top exporter of goods. In terms of imports, China is a net importer of services products. This economic trajectory cannot be separated from its open-door policy since the late 1970s and the fact that since 2001, Beijing has held a

membership in the World Trade Organization (WTO). Both make China possible to become a global economic player.

China's immersion into the global economy has broadened by involving itself in more regimes and partnerships. Numerous international economic organizations that involve almost every leading economy across the globe are participated by China. In the Southern front of China, there is a big market namely the Association of South East Asian Nations (ASEAN). Far away in the west, in the central and eastern part of Europe, there are dozens of countries called Central and Eastern European Countries. ASEAN comprises of 10 countries[1] with population more than 600 million, while CEECs constitute a strategic spot. China has built economic cooperation with these two regions.

But why would we consider ASEAN and CEECs as two examples of China's global partnerships? It is the purpose of this study to explain both. This section of the book attempts to elaborate the cooperation between China-ASEAN and China-CEECs especially in the accounts of their origins, current developments, and some issues surrounding them. Hence, after this introduction, the second part will elaborate the Sino-ASEAN cooperation. Subsequently, China-CEECs partnership will be explained in the third part. The fourth part will give some concluding remarks.

1. **ASEAN-China Cooperation**

Founded in 1967, ASEAN is an organization made up of a group Southeast Asian countries with the primary objective of promoting stability and economic growth throughout the region. Currently, the Association is developing free trade agreements among their member states as well as with other partners beyond the region. One of them is with China.

ASEAN and China have been cooperating each other through economic partnerships. Since 2010, both parties have been under the

[1] Consist of Indonesia, Malaysia, The Philippines, Thailand, Singapore, Brunei, Vietnam, Laos, Cambodia, and Myanmar.

scheme of ASEAN-China Free Trade Area (ACFTA) aiming at boosting mutual economic benefits. In 2018, the total trade between both parties reached the highest record, accounting for US$ 587.87 billion, which indicated 14.1% growth annually. While China is the biggest trade partner for the Southeast Asian countries, ASEAN has also become the largest partner for China since 2020 (Global Times, 2021). In 2021, their trade growth was recorded to reach 85 times in the last thirty years (Xinhuanet, 2021). Additionally, since 2004 their sum investment stock has grown 22 times and hit US$ 205.71 billion in 2018 and this trend is growing up (Xinhuanet, 2019).

ASEAN itself is a huge market. There is a population of 661.5 million people across the ASEAN countries (IMF, 2021). The region is one of the largest economies in the world. With an annual average growth of 5.5%, it is projected that by 2050, ASEAN will be the 4th largest economy in the world. Its population could also mean one of the largest workforces in the world just behind India and China (US-ASEAN Business Council, 2019; Vinayak et al., 2014). While this could justify why ASEAN is a special partner for China, there are also many considerations. Let us take a look at the background and development of the Sino-ASEAN cooperation.

1.1. The Origin and Development

It was in 1991 when the Foreign Minister of China attended an opening ceremony of an ASEAN Summit. Ever since, Sino-ASEAN dialogue partnerships was established. At the same time, China had already been enjoying its rocketed economic growth, and gaining more partnerships was in line with its opening-up policy. In 1996, China-ASEAN full dialogue partnership was established. One year late, when Asian Financial Crisis hit ASEAN, China financially assisted countries in the region. This was Beijing's soft approach to gain more partnerships. Economic growth and prosperity in the region also become the vision of both sides. Therefore, in 2002, ASEAN and China committed to prepare a free trade (FTA) that would be realized in 2010. Both countries had common goals to gain economic benefits from each other as it is clearly mentioned in their framework a desire *to "minimize barriers and deepen economic linkage"* between them (ASEAN, 2002).

In 2003, they confidently managed to turn into a strategic partnership. This moment was also to complete the negotiations on the rules for the FTA. As a result, their economic cooperation started to develop with the agreed framework. Since then, economic ties – including trade and investment - between ASEAN and China have been growing rapidly. In the path of pre-ACFTA in 2009, China's funds and loans for investment and infrastructure development projects had facilitated economic improvement for ASEAN member states. This is one of China's support mechanisms to strengthen cooperation with ASEAN. It is also worth noting that since 2009, China has become ASEAN's biggest trade partner.

Table 1. Development of China ASEAN Economic Cooperation

Year	Cooperation
1991	Sino-ASEAN dialogue partnerships was established
1996	China-ASEAN full dialogue partnership
1997	China gave financial assistance for Southeast Asian countries amid the Asian financial crisis
2002	Signed a framework to establish ACFTA by 2010
2003	China and ASEAN upgraded from dialogue partnership to a strategic partnership
2010	ASEAN-China Free Trade Area (ACFTA) was in force

Source: based on many news resources

In 2010 when the implementation of ACFTA was started, China gained an economic momentum. Its GDP overtook Japan's and became the second world economic power after the US thanks to its consistent rapid economic growth. For ASEAN, this gave economic confidence in the post-2008 economic crisis. ACFTA, aimed for a liberalization platform toward prosperous and highly region (ASEAN, 2011), has made the relations between ASEAN and China more intensive.

As the follow up of the free trade, China initiated financial support to regional projects through the Asian Infrastructure Investment Bank with priority on ASEAN connectivity. This made the bilateral trade between them hit US$ 318.6 billion in 2012, and it was predicted to hit US$ 1 trillion by 2020. ACFTA has enormous growth

potential with a market consisting of nearly 2 billion inhabitants, along with GDP of US$ 3 trillion.

So why could this cooperation be maintained? Why would China go to ASEAN for its economic trajectory? China's motivation to establish cooperation with ASEAN is mainly to diversify its economic channels (Wang, 2013). It was in 1989 when a tragic moment called the Tiananmen Square Incident led the West to give economic sanction to China. The sanction had made China difficult in exporting its products that were usually sent to the developed countries. Chinese leaders then realized than they had been too reliance to its western counterparts. They need to diversify their trade relations, along with investment, with other partners.

The Southeast Asia, at the moment, was seen to be a prospective region. Its population constituted a potential market and labor forces. In the early 1990s, the miracle of the Asian economy echoed giving economic confidence. Although the 1997 financial crisis unexpectedly struck the region, China's market was among the safe ones. China remained confident toward the prospect so that the country assisted the ASEAN for the post-crisis recovery. China's incentive was to broaden its economic ties, and to minimize dependency factors in the trade and investment.

Its geographical and social proximity also paves the way for China's rationality in having close relations with ASEAN. Moreover, Southeast Asian countries are home to approximately 73% Chinese diaspora. This socio-cultural proximity could be another favorable reason for China to engage ASEAN in its economic developments (Guotu & Wangbo, 2010).

China considers ASEAN as its strategic counterpart. In particular to the economy, trade cooperation between the two sides has grown steadily. As global economic growth slowed and trade protectionism gained a line in 2018, ASEAN-China's annual growth rate increased by 14.1% as the trade volume reached a high record of US$ 587.8 billion. In the second quarter of 2019, ASEAN became China's second-largest trading partner for the first time overtaking the US. Meanwhile, people-to-people contacts are also growing significantly. ASEAN has

been a considerable destination for China, given the fact that Chinese tourists contribute to the ASEAN's most substantial tourism resources (Xilian, 2019).

In the other hand, ASEAN's motivations to cooperate with China are obviously for its economic developments. Considering China's status as the second world's largest economic power, coping with China means doing business with a big market and capital resources. ACFTA, in particular, has become an economic regime for bilateral ties. It facilitates the countries in conducting trade and investment to achieve their economic spur.

The bilateral trade relations between China and ASEAN are reciprocal. China is no longer a competitor in export as it was. Instead, it is an important consumer market for ASEAN products. In term of investment, ASEAN is not only the fourth biggest destination for China's outward investment but also the third-largest source of its FDI inflow. By 2020, this two-way investment was predicted to reach US$ 150 billion (ASEAN, 2018). In 2013 when China introduced the Belt and Road Initiative (BRI), ASEAN countries openly became participants in this initiative. The BRI provides an excellent opportunity to increase regional trade and physical connectivity in the region. China, in this regard, has committed to investing enormous funds in building many large-scale infrastructure and transportation projects to improve connectivity.

In early 2020, a new corona virus called COVID-19 originated in China has killed millions of the world's populations and destroyed the global economy. Both China and Southeast Asian countries were the main regions affected by the COVID-19 pandemic. Trade and investment between China and ASEAN in the early stages of the outbreak showed a downward trend, and logistics had been hampered. This had led to a decline in foreign trade for China (China's Ministry of Commerce, 2020). At the same time, ASEAN countries stepped up quarantine measures and temporarily closed border trading ports to block the spread of the virus from China. In the first two months of 2020, the total bilateral trade volume between China and ASEAN was 594.113 billion Yuan, down 3.6% YoY (General Administration of Customs of PRC, 2020).

However, with the pandemic easing gradually, there are signs of recovery in trade and investment. Departing from the pandemic, China and ASEAN countries have gradually strengthened their mutual trust in their joint efforts to fight the COVID-19 pandemic. They cooperate in handling the pandemic. This mutual concern certainly makes the development of the China-ASEAN relations more conducive (Peng, 2021).

As of June 2021, China-ASEAN trade reached US$410.75 billion. This figure represents a 38.2% YoY increase and accounts for 14.7% of China's total foreign trade. China's exports to ASEAN reached US$225.83 billion, an increase of 38.3%, while imports from ASEAN reached US$184.92 billion, an increase of 38.1%. In the first half of 2021, the accumulated mutual investment between China and ASEAN exceeded US$310 billion. Investment cooperation between the two sides is growing rapidly in sectors of infrastructure, manufacturing, high technology, agriculture, green economy, and the digital economy (China MFA, 2021).

The economic development between China and ASEAN is going bigger. Currently, both parties are involved in the Regional Comprehensive Economic Partnership (RCEP). RCEP is a framework for free trade among Asia Pacific countries consisting of China, ASEAN member states, Australia, New Zealand, Japan, and South Korea. Started to be in force in the beginning of 2022, RCEP covers 30% of world population and 30% of world GDP (Asean.org, 2021).

1.2. Issues

The relations between China and ASEAN cannot be separated from various issues and challenges. The most common and lingering issue is a dispute in the South China Sea (SCS). Some ASEAN states have territorial problem with China in the SCS as the Spratly and Paracel Islands in the Sea have been claimed to sovereignty by China since 1950s. This assertion technically only involves four ASEAN member states namely Malaysia, Vietnam, the Philippines, and Brunei Darussalam. Yet, it turns into military stand-off in the Sea and security distrust in the claims. China is accused to divide the Association by

giving more economic aids and project with ASEAN non-claimants to buy their supports in issues related to SCS.

China's assertiveness in the SCS also leads to anti-China sentiment in Vietnam and the Philippines. Especially when some military stand-off occurs in the Sea, the mass in the respective country would do demonstration urging their government to strive against Beijing. For example, the 2014 anti-China protest in Vietnam had spread nation-widely a condemnation against China for conducting an oilrig in the disputed water. As a result, several factories belonging to Chinese companies were vandalized and destroyed, and 21 people were killed (The Guardian, 2014).

In the meantime, ASEAN has bad historical track regarding to Communism in the region. The creation of ASEAN itself was to contain the spread of the ideology in the Southeast Asia in the Cold War era. Hence, China's presence was not welcomed in the region and until present day, the sentiment of the communism associated with China still occurs among the citizen, particularly in Indonesia.

Among other issues are related to Uyghur human rights in China, anti-China sentiment regarding the corona virus, and incoming Chinese workers to the region limiting job opportunity for the locals. Those aforementioned issues have become complemented the Sino-ASEAN relations. Both parties need to handle their relations carefully to secure their positive trajectory.

2. **China-CEEC**

Far from China, and from the Southeast Asia, in the eastern part of Europe, there are more than ten countries namely Central and Eastern European Countries (CEECs). Some of the CEECs are member states of European Union (EU). But apart from EU, CEECs make bilateral trade with China that has increased from US$1.57 billion in 1995 to US$74.38 billion in 2015. While the relations between China and CEECs are not new, they have turned into more institutionalized in the

framework of 16+1[2] established in 2012. Ever since, the framework leads to annual summits for involved countries as a multilateral cooperation to strengthen their economic development.

What is the origin of creation of the framework and what are the motivations? And how has the cooperation been going? This part will explain the background and development of the 16+1 and some issues surrounding it.

2.1. The Origin and Development

CEE region itself is geographically parts of European continent, and as mentioned, most of the countries in the region are parts of the EU. Since the 1990s, CEECs economy had been reliance to the EU market. Practically, the EU had (and still have) been CEECs' main trading partner. The same way also applies to the investment.

Nevertheless, the 2008 global economic crisis affected the Europe heavily. The crisis has disrupted the trade flow and investment among countries in the region. The shock of demand in the EU made CEECs aware that their dependence on the European market and capital was a vulnerability and, therefore, they should seek diversification of trading and investment partners. China, in the meantime, was not much affected by the crisis. Its huge economy was relatively stable. CEECs saw the giant Asia as a prospectus alternative partner for their economic performance. It should be noted that China and each of CEECs countries had already had economic relations. Hence, they sook for building closer relations with China for greater opportunity.

At the same time, China experienced production overcapacity and had low-cost capital (McNally, 2013). Economically, China saw the CEE region with good human development index and cheaper labour market than the western Europe. Therefore, it was logic to approach CEECs for deeper economic relations.

[2] 16+1 initially referred to 16 countries of CEE namely Albania, Bosnia & Herzegovina, Bulgaria, Croatia, the Czech Republic, Hungary, Estonia, Lithuania, Latvia, Macedonia, Poland, Montenegro, Romania, Slovakia, Serbia, and Slovenia plus China. It became 17+1 when Greece joined in 2019 but turned back to 16+1 again when Lithuania left in 2021. In this section, 16+1 and 17+1 will be used interchangeably to refer the same cooperation between China and CEECs, not to confuse.

It was the Hungarian government that facilitated the first meeting between China and CEECs in 2011 in Budapest. Afterwards, the next meeting held in Warsaw in 2012 was a moment when CEECs and Chinese leaders met their common goals. Hence, the 16+1 framework (16 countries of CEE plus China) was then established and commenced in that year. Become.

The 16+1 cooperation is an intergovernmental mechanism that aims to reduce the communication barriers between China and CEECs. This is a forum where the 16 CEECs have an opportunity to meet with top Chinese state officials on a regular basis. Along with summit, there were a number of low-level meetings. They include several sectoral coordination mechanisms across the CEE and local cooperation between CEECs and important cities in China. The purpose of the cooperation is to promote trade and investment and economic growth between both sides.

Over the next five years, the frequency of multi-level and multi-sectoral meetings and consultations has increased. After its commencement in 2012, the subsequent annual meetings continued in Bucharest (2013), Belgrade (2014), Suzhou (2015), Riga (2016), Budapest (2017), and Sofia (2018). In 2019's meeting held in Dubrovnik, Greece joined the initiative and thus the framework was officially changed to 17+1 Cooperation.

Results of the annual meeting at the head of state level consist of policy recommendations that should be implemented. Among the most highlighted ones is issues associated with international trade. The 17+1 demonstrated that foreign trade is one of the most important areas that the parties want to improve.

Since the establishment of 16+1, CEEC's total exports to China increased from 8.9 billion US dollars in 2012 to 12.3 billion US dollars in 2019. This reflects a compound annual growth rate of 4.7%. Meanwhile, CEEC imports from China rose from US$55.2 billion in 2012 to US$89.2 billion in 2019, indicating a compound annual growth rate of 7.1% (Stanojevic et al., 2021).

The framework is also in line with China's BRI in the region. With the introduction of BRI, 16+1 has become a medium to promote

BRI's agenda to increase cooperation in infrastructure, transportation, and logistics, to further support trade and investment. For example regarding the infrastructure projects, China invests the Budapest-Belgrade rail line, as well as the China-Europe land-sea express line, although the projects are still ongoing (Brînză, 2020).

The cooperation between China and CEECs continues to be closely intertwined. According to China's customs statistics, the total value of bilateral trade between the two sides in the first three quarters of 2021 has reached $98.8 billion, up 27.2 percent YoY. China's exports to CEECs totalled more than $70 billion, up 25.3%, while imports from CEECs totalled $25 billion, up 32.5%. Despite the small size of the economies of CEECs, the growth of economic and trade cooperation between China and CEECs is higher than between China and the EU. In the first three quarters of 2021, trade growth between China and the EU rose only 22.7% YoY (China-CEEC.org, 2021).

2.2. Some Issues

Through the 16+1, the cooperation between China and CEECs is expected to be more convenient in the ways of connectivity, cooperation, trade, and cultural exchange. Nevertheless, as international trade is the main attention in the 16+1, there have been many critics regarding to the cooperation. For example, it is indicated that the gap between the expectation from the framework and the results that have so far been realized is rather disappointing when it comes to the 16 participating countries. Since the establishment of the 16+1, CEECs have faced trade deficit with China (Vangeli, 2017).

The answer to why CEECs face a gradual trade deficit against China might because of many factors. First, it is because China faced an economic slow-down leading the giant Asia to do more export their goods to the world including CEECs. Second, China’s market is not quite open for foreign companies. The critic believes that the unfairness gives limited space for the CEECs’ firms to invest in China. Third, many investment projects in CEECs are mostly done by Chinese contractors and workers without involving the local labours. In sum, those aspects make the cooperation beneficial for China and

disadvantageous for CEECs (Pepermans, 2018). Another critic calls this a threat discourse on China's presence in the region. That the economic gap could be related to the inability of CEECs countries to cope with China's strategy (Pavlićević, 2018).

Another issue concerns with the ambition of the framework creation. CEE economic size is not as big as Southeast Asian as what is discussed earlier. Together, the 17 countries in the region contributes 2.2% share of world GDP (CMS, 2020). If we see from Chinese perspective, the region is economically not in the top priority of China. The establishment of the cooperation is motivated instead by political will of the CEE leaders rather than purely economic interest (Matura, 2019). Furthermore, there are many criticize that the 16+1 is a Chinese political strategy to spread its influence in the region against the EU and divide the region (Garlick, 2019). Some also assert that the ones benefit more from the framework among CEECs are the V4 countries, namely Hungary, Poland, Czech Republic, and Slovakia. Those are the top leading members that initially proposed the idea of the cooperation with China.

When the Covid-19 outbreak was declared as a global pandemic in early 2020, the 17+1 Summit was postponed. It was finally hosted via a videoconference a year later in February 2021. Due to the pandemic, their economic relations were interrupted. Attention to the health cooperation become one of the main agenda. At the beginning of the pandemic that devastated China, CEECs showed their solidarity. Subsequently when the rest of the world get their turn for pandemic, China's presence in CEE was apparent. Hence, the pandemic has become a test for the performance of 17+1 in health-related cooperation. It also does not give any indication that the V4 countries – as believably the main player in the CEE – become the main benefiters in the time of pandemic (Furst, 2021).

There are other issues in the development of China-CEECs relations. Among others include the ongoing railway projects that are not finished yet as expected, anti-Chinese sentiment regarding human rights, and critics to 5G technology related to information security. A recent moment of Lithuania's withdrawal from the 17+1 in 2021 was also grabbed concerns. The government in Vilnius states that they did

not get any significant benefit from the framework. Also, the country maintains closer bilateral relations with Taiwan, leading to a political dispute with Beijing. Those represent how dynamic the Sino-CEECs relations are.

3. **Concluding Remarks**

Telling the story of Sino-ASEAN and Sino-CEECs relations does not really mean to compare both ties in a very equal way. Neither it gives a comparison in the sense of academic or methodologic way. Southeast Asian economy is way bigger than CEE, indeed. Each has their own trajectory with their respective challenges. China and ASEAN might have better economic milestone by creating a free trade. Meanwhile, China and CEECs have just at the stage of creating formal framework for prospective cooperation. Hence, the purpose of this section is mainly to identify some patterns of the relations and some challenges shadowing them. In academia, it helps to define further research agenda.

We already learn that each economic path would be accompanied by political issues. The study of International Political Economy would find its locus in this sense. For example, research on Sino-ASEAN relations should pay attention between economy and political issue equally. Likewise, further research could rise a question about *quo vadis* Sino-CEECs relations.

Nevertheless, the discussion in this section has shown that ASEAN and CEE have become parts of China global strides. It also indicates the importance of regimes or cooperation frameworks for international business and investment. With the rising China and the socio-economic prospect in the partner countries, the world would see their future direction.

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The Importance of Performance Measurement in Higher Education Institutions

Herlina Rahmawati Dewi

Introduction

Higher education institutions (HEIs) face significant pressure to reform as a result of the possible mismatch between expanding forms of global competition among HEIs and conventional conceptions of higher education (Evison et al., 2021). The importance of enhanced performance strategy in higher education illustrates the necessity for institutions of higher learning to reform their administrative governance in order to sustain a competitive edge on a global scale (Sukboonyasatit et al., 2011). Thus, the governments of most countries have begun to implement New Public Management (NPM) (Lapsley, 2009) specifically the use of performance measurement systems that assist higher education institutions in finding potential strategies and developing academic performance objectives in order to accomplish the institution's overarching objective (Jalaliyoon & Taherdoost, 2012).

As a general principle, the performance measurement system assesses the outcomes of higher education institutions in terms of teaching, research, and community service in order to improve academic performance, allowing HEIs to engage in additional chances for national and international collaboration. For many years, researchers have been investigating the topic of performance measurement in HEI environments, both at the organizational and/or individual levels. However, as compared to the corporate sector, the number of studies analyzing performance measurement systems in HEIs is extremely restricted and still not definitive. One reason is that performance measurement systems at HEIs could not be used all the

time. An integration investigation is recommended to get a better idea of how performance assessment systems work and how these effects show up (Franco-Santos et al., 2012).

In the beginning, the research was primarily concerned with specifying the factors of performance (Kumar, 2005; Markom et al., 2012; H. Q. Tran & Pham, 2019). Following that, research was conducted to determine whether parameters (Balabonienė & Večerskienė, 2014; Sukboonyasatit et al., 2011) and methods(Higgins, 1989; Länsiluoto et al., 2013; Modell, 2003) could be used to develop a performance measurement system in a HEIs as a government institution. The investigations then construct and analyze the contextual factors that affect the relationship between the performance assessment system and its impacts (Dobija et al., 2019; Franco-Santos et al., 2012; Hussein et al., 2016; Pilonato & Monfardini, 2020; Vakkuri & Meklin, 2003). There are, however, only a few studies that look at the impact of performance measurement system implementation from the point of view of an expert (Kallio & Kallio, 2014).

The purpose of this chapter is to discuss the importance of performance measurement systems in HEIs under the NPM philosophy. This chapter will also discuss performance measurement concepts such as composite indexes and balanced scorecards that can be used in the HEIs. The last part of this chapter will describe performance measurement in Indonesian HEIs and why it is still an important issue for the government to pay attention to in order to enhance the effectiveness of HEIs both at the organizational and individual levels.

New Public Management and Corporatization in Higher Education Institutions

This chapter will address the concepts and effects of NPM, particularly the implementation of a performance measurement system that results in corporatization in higher education institutions. The NPM philosophy is to measure the performance of the public sector by using management practices and performance criteria in the private sector (Cullen et al., 2003; Lapsley, 2009). Governments in

various countries implement NPM, intending to transform the performance of the public sector so that it can achieve organizational goals. However, the effectiveness and efficiency of NPM in several studies has drawn various criticisms because it is definite and has an unstable nature (Kallio & Kallio, 2014; Parker, 2011). HEIs are public sectors that are also the target of implementing the NPM by the government in several countries by carrying out HEI management reforms, one of which is through the application of performance measurement both at the institutional and individual levels (Kallio et al., 2016; Kallio & Kallio, 2014).

Parker (2011) explains that the political and economic agenda are critical environmental factors that encourage the government to implement NPM and private sector philosophy on HEIs. State universities were forced to reconstruct to reduce dependence on government budgets through such things as financing, subsidies, and grants, forcing universities to derive revenue from the market. So, like in private universities, currently, public universities are forced to have a commercial strategy to earn income and, at the same time, maintain the expectations of stakeholders. So it is not surprising that one of the university's performance measurement indicators is the number of grants received for research, teaching, and community services. In addition, as a challenge to education, which must be a "global product," also makes universities worldwide seek international accreditation. International accreditation could be proof of the university's good performance and could also be a commercial strategy that can attract students and other stakeholders.

However, the implementation of performance measurement is sometimes only ceremonially and symbolically intended to gain legitimacy from stakeholders (Dobija et al., 2019). Implementation of performance measurement with quantitative performance targets impacts HEIs as organizations and academic professionals as the central intellectual capital (Dobija et al., 2019; Kallio et al., 2016). This performance measurement matrix is predicted to affect academic professionals by causing them to lose their unique roles as educators and research scholars. This effect is because they perceive teaching, research, and community service activities as merely implementing the

university's performance targets passed down to the faculty and passed down as their targets. So, they feel that they have lost academic independence and feel only like administrators and implementers of organizational activities to achieve targets. Moreover, research shows that academic professionals have a lot of work to do, which makes them stressed and less motivated (Kallio et al., 2016).

Based on this explanation, the implementation of NPM, primarily through implementing performance measurement in HEIs aimed at increasing organizational efficiency, effectiveness, and accountability, also shows an unexpected impact. Thus, questions arise: how vital is performance measurement, and what kind of performance measurement can support the successful implementation of new public management in universities? So that the performance measurement system, which is crucial for NPM, will benefit every party.

The Importance of Performance Measurement in Higher Education Institutions

Performance measurement is crucial because it has an impact on individual behavior, such as work motivation and organizational ability; this is an example of strategic alignment, which will eventually affect performance, whether for individuals, teams, or the organization as a whole (Franco-Santos et al., 2012). Likewise, in HEIs, performance measurement is an essential part of the organization that comes from the need to observe actions and operations to achieve goals both at the organizational and individual levels (Jalaliyoon & Taherdoost, 2012). Also, the results of performance measurement are essential for improving performance and accountability to stakeholders (Asif & Searcy, 2014).

Using the theoretical lenses of institutional theory, Grossi et al. (2019) shows that higher education institutions and academic professionals are affected by external pressures such as state laws and governmental control (state pressure), academic community expectations of professional standards and collegiality (academic pressures), and the requirement to conform with international

standards and market forces (market pressures). So, higher education institutions, as unique organizations, must pay attention not only to exogenous factors but also endogenous factors related to the different responses of organizations and individual actors (such as university managers and professional academics) in implementing performance measurement (Dobija et al., 2019).

One of the critical endogenous factors that will affect the successful implementation of performance measurement in HEIs at the individual level is organizational learning. According to Kumar (2005), while organizational learning is crucial for improvements in financial and knowledge efficiency, teams and individual learning are essential but insufficient components of institutional improvement. Furthermore, Ali's (2012) investigation shows that learning organization activities are minimal in HEIs. Nevertheless, their role is significant in increasing teaching and research performance satisfaction.

As in the private sector, another significant factor in the success of performance measurement implementation in HEIs is financial incentives. For example, the results of Kim & Bak's (2020) investigation show that when the university boosted financial incentives for scholarly achievement, academic researchers who viewed the incentives positively produced more papers in journals with a higher impact factor. By contrast, the increase in incentives had no significant effect on the amount and quality of research performed by researchers who saw such incentives as controlling. This research is based on crowding theories of motivation, which propose that the effect of performance-based financial rewards on performance may be contingent upon how an individual views the rewards. However, Guarini et al. (2020) warns about the unintended effects of the performance measurement system on academic behavior. Thus, administrators should discuss with employees how incentives can make them feel good and supportive to enhance their capabilities by utilizing the performance measurement system.

Another critical aspect of measuring higher education performance from a financial perspective is the need for HEIs to obtain public funding. To ensure accountability and to assure the value for

money of state spending, governments across the globe have strengthened methods for measuring the performance of HEIs (Kallio et al., 2016). Therefore, HEIs that get financial resources from the public must be accountable for their performance not to lose financial support (Asif & Searcy, 2014; Cullen et al., 2003). This public fund makes it more and more important for HEIs to have a way to measure their performance.

Performance Measurement System in Higher Education Institutions

The performance measurement system in HEIs is complex, judgmental, specific and requires the participation of key stakeholders. Consequently, it is not easy for HEIs to develop and build performance measures that satisfy all stakeholders. There have been a lot of studies done on performance indicators. In this section, this paper will discuss the results of those studies and some ideas for performance measurement that can be used by higher education institutions when they are developing a performance measurement system that fits their needs.

Performance indicators are the most critical elements in the performance measurement system to be implemented effectively and efficiently by HEIs. With the right performance indicators, HEIs have a basis for improving internal performance and communicating with all stakeholders (Asif & Searcy, 2014). Additionally, the government and donors are increasingly tying financing to performance indicators for HEIs. As a result, HEIs must constantly enhance their performance to maintain long-term support. Performance indicators provide targets and guidance so that HEIs can constantly improve performance with their limited resources. HEIs can use performance indicators to track and compare important processes like research, teaching, and financial performance so that they can continue to survive in a competitive world. However, developing and selecting performance indicators is not an easy task for HEIs because they must pay attention to the needs of all stakeholders (Länsiluoto et al., 2013).

In addition, Pilonato & Monfardini (2020) emphasizes the importance of paying attention to the level of control in developing performance indicators. Because of the responsibility of each individual in

the organizational structure, it is imperative in the process of effective management control. Furthermore, the main challenge in choosing performance indicators, apart from being acceptable to stakeholders and paying attention to the level of control in the organization, must also be related to quality. Thus, the performance indicator's objective should be to promote internal quality improvement and to serve as a standard for performance. Additionally, performance metrics should be specified subjectively and quantitatively and conveyed to all stakeholders (Al-Turki & Duffuaa, 2003).

On the other hand, Tambi et al. (2008) shows that performance indicators also have several weaknesses. For example, it is difficult for performance indicators to relate the output to the input used. In addition, it is often used as an indirect measurement of the target and the ambiguity of meaning in its use. So this must always be a concern and a consideration in the performance measurement system at HEIs. Therefore, HEIs must pay attention to developing, updating, and validating indicators for measuring higher education performance (Abubakar et al., 2018). Several studies have been conducted to develop and test several approaches to measuring performance in the private sector to be implemented in HEIs, for example, the composite index (Asif & Searcy, 2014; Gnaldi & Ranalli, 2016) and the balanced scorecard (Cullen et al., 2003; Hladchenko, 2015).

The Composite Index

Performance evaluation must be based on a well-defined hierarchical structure that connects the aims and objectives of each division of the business (Al-Turki & Duffuaa, 2003). A composite index was constructed using the analytic hierarchy process, which allows for the connection of the goals and objectives of all university entities (Asif & Searcy, 2014). A composite index enables the performance of a HEI's various roles to be quantified. It converts data to a composite value that can be used to assess internal performance, performance over time, or performance against other HEIs. The necessity for a composite index is justified by the difficulty of judgment when several indicators are available. Thus, while HEIs are awarded based on a composite index, priority should be given to the source and form of certain uncertainties,

as slight adjustment could significantly influence the quantity of financial assistance provided for every entity (Gnaldi & Ranalli, 2016).

Apart from its utility as a reasonably straightforward communication tool for delivering aggregate performance information, the composite index's value and benefits are still debated. Additionally, their appropriateness as a standard for HEIs is questioned by methodological concerns and the multifaceted structure of HEIs (Gnaldi & Ranalli, 2016). Additionally, if the composite index contains an excessive number of variables, HEIs may have difficulty selecting the most pertinent ones for their circumstances. Thus, additional research is required to evaluate the effectiveness of these approaches in a variety of different situations.

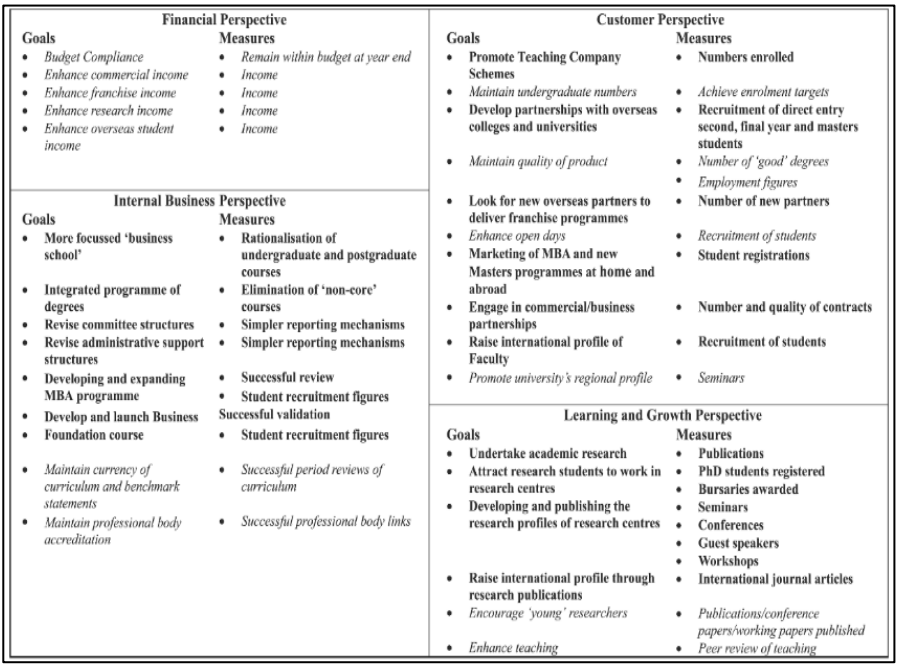
The Balanced Scorecard

The balanced scorecard is a methodology for transforming an organization's vision and strategy into objectives, metrics, and targets in four distinct areas: financial, customer satisfaction, internal business process, and innovation and learning (Kaplan & Norton, 2005). HEIs might employ a balanced scorecard as a strategic management system that integrates the HEI's plan into a complete set of performance metrics that serve as the foundation for a strategic measurement and management system (Hladchenko, 2015). Additionally, Cullen et al. (2003) believe that while using such performance measurement models, it is critical to recognize that key performance indicators on their own might be dysfunctional unless they are embedded in the culture of a strategy-focused organization. And balanced scorecard may assist the HEIs in resolving this issue.

When considering the numerous stakeholders in HEIs, the necessity to balance all areas of performance is critical (Cullen et al., 2003). For example, research performance expectations may create difficulties in meeting certain of the personnel requirements involved with professional certification. Economic constraints may conflict with the requirement to control academic-student ratios in order to create a happy and supportive learning environment. Table 1 shows the example of balanced scorecard indicators.

Table 1. Balanced scorecard from published information

Financial Perspective	**Customer Perspective**
● Library and computer spending ● Faculty spending	● Entry standard ● Graduate destination ● First and upper seconds
Internal Business Perspective	**Innovation and Learning perspectives**
● Teaching assessment ● Self-student ratio ● Completion ratio	● Research assessment



Financial Perspective

Goals	Measures
• *Budget Compliance*	• *Remain within budget at year end*
• *Enhance commercial income*	• *Income*
• *Enhance franchise income*	• *Income*
• *Enhance research income*	• *Income*
• *Enhance overseas student income*	• *Income*

Internal Business Perspective

Goals	Measures
• More focussed 'business school'	• Rationalisation of undergraduate and postgraduate courses
• Integrated programme of degrees	• Elimination of 'non-core' courses
• Revise committee structures	• Simpler reporting mechanisms
• Revise administrative support structures	• Simpler reporting mechanisms
• Developing and expanding MBA programme	• Successful review • Student recruitment figures
• Develop and launch Business	Successful validation
• Foundation course	• Student recruitment figures
• *Maintain currency of curriculum and benchmark statements*	• *Successful period reviews of curriculum*
• *Maintain professional body accreditation*	• *Successful professional body links*

Customer Perspective

Goals	Measures
• Promote Teaching Company Schemes	• Numbers enrolled
• *Maintain undergraduate numbers*	• *Achieve enrolment targets*
• Develop partnerships with overseas colleges and universities	• Recruitment of direct entry second, final year and masters students
• *Maintain quality of product*	• *Number of 'good' degrees* • *Employment figures*
• Look for new overseas partners to deliver franchise programmes	• Number of new partners
• *Enhance open days*	• *Recruitment of students*
• Marketing of MBA and new Masters programmes at home and abroad	• Student registrations
• Engage in commercial/business partnerships	• Number and quality of contracts
• Raise international profile of Faculty	• Recruitment of students
• *Promote university's regional profile*	• *Seminars*

Learning and Growth Perspective

Goals	Measures
• Undertake academic research	• Publications
• Attract research students to work in research centres	• PhD students registered • Bursaries awarded
• Developing and publishing the research profiles of research centres	• Seminars • Conferences • Guest speakers • Workshops
• Raise international profile through research publications	• International journal articles
• *Encourage 'young' researchers*	• *Publications/conference papers/working papers published*
• *Enhance teaching*	• *Peer review of teaching*

Source: (Cullen et al., 2003)

The Need of Comprehensive Performance Measurement System in Indonesian Higher Education Institutions

The government of the Republic of Indonesia is continually imposing new regulation on higher education institutions, which have a significant impact on academic lives. The Minister of Education and Culture Regulation No. 3 of 2020, Section Six on Academic Standards,

establishes minimal standards for academics' qualifications and skills to deliver education services. These higher education reforms are meant to improve academic performance and, as a result, HEIs performance. There are two notable variations between this regulation's new performance measurement and previous regulations. This new performance assessment governs the particular responsibilities of academics at each functional level (assistant professor, associate professor, and professor) who must submit publications per three years. In addition, this new law gives HEIs the power to give rewards, whereas previous rules left the administration of sanctions and rewards in question. In terms of sanctions, the HEIs should follow official guidelines. However, whether regulatory measures alone are adequate to improve academic achievement remains to be investigated. Table 2 shows the demographics of HEIs and academics in Indonesia.

Studies in Indonesia show that HEIs administration and academics are unable to embrace and adapt to the new performance measurement system (Al Idrus et al., 2018; Rusdiana & Nasihudin, 2019; Sianipar, 2020). The HEIs' lack of preparedness as a controller for employing the system is expected to be related to the incentive system as a formal control instrument. Based on Table 2, Indonesia has 583 private universities, accounting for 87.41 percent of the total number of institutions. This situation is more problematic for academics at private universities in Indonesia since the performance evaluation system is regulated by the state, while incentive programs are regulated by each university, whose laws are managed by the organization's founder.

Table 2. Indonesian Demography of Higher Education Institutions and Academic

Type of HE Institutions	Higher Education (HE) Institutions				Academic			
	2020			2019	2020			2019
	National	Private HE	%	Private HE	National	Private HE	%	Private HE
Total	**4,593**	**3,044**	**66.27**	**3,129**	**312,890**	**181,804**	**58.46**	**182,901**
University	667	583	87.41	552	186,982	105,890	59.04	110,395
Institute	271	120	44.28	102	26,771	8,432	34.18	9,150
School of Higher Learning	2,465	1361	55.21	1,424	63,668	49,078	72.22	45,982
Academy	830	772	93.01	851	12,081	12,211	90.01	10,874
Community College	38	32	84.21	30	208	83	57.69	120
Polytechnic	322	176	54.66	170	23,180	6,110	27.52	6,380

Source: PDDikti, Ministry of Education and Culture, Republic of Indonesia

Private university academics made up 110.395, or 59.04 percent, of all university academics for the year 2020. According to the demographic data of academics at private universities (Table 3), academics' performance still needs to be improved. Based on this table, the number of private universities and academics increased between 2019 and 2020, however this was not followed by an increase in the quality of academics. According to the ratio of academic educational levels and functional positions in 2019 and 2020, approximately 80 percent of academics at private

universities hold a master's degree. Moreover, only less than 25 percent academics have attained the associate professor functional level, and even fewer have attained professor positions (less than 1 percent).

Table 3. The Number of Indonesian Academics Based on Educational Level and Functional Title at Private University

Number of Full Time Academic Based on Educational Level at Private University				
Personnel Status and Highest Certificate	**2019**		**2020**	
	Number	**%**	**Number**	**%**
Total	**150,428**	**100.00**	**153,201***	**100.00**
Diploma	922	0.61	778	0.51
Bachelor	10,290	6.84	8,467	5.53
Master	122,994	81.76	126,177	82.36
PhD	14,283	9.49	15,912	10.39
Profession	672	0.45	530	0.35
Specialist	1,267	0.84	1,337	0.87
Number of Full Time Academics Based On Functional Title at Private University				
Functional Title	**2019**		**2020**	
	Number	**%**	**Number**	**%**
Total	**181,804**	**100.00**	**182,901**	**100.00**
Non Functional	89,350	49.15	82,920	45.34
Expert Assistant/ Assistant Professor	51,110	28.11	54,699	29.91
Lector/Associate Professor	31,026	17.07	34,991	19.13
Head Lector/Associate Professor	9,043	4.97	8,905	4.87%
Professor	1,275	0.70	1,386	0.76

* In 2020, the number of lecturers (M/F) of Private Higher Education = 182.901; the number of missing values of highest certificate = 29.700

Source: PDDikti, Ministry of Education and Culture, Republic of Indonesia

Conclusion

HEIs is a place to create and grow knowledge that is critical to the long-term sustainability of human life. As a result, the most important component in HEIs is the quality of academic human resources. Until date, academic performance has been used to evaluate teaching, research, and community service. Working in HEIs is difficult, as seen by how academics "battle" to work in ways that are compatible with their professional orientations. They must continuously "stretch" in order to meet additional governmental and economic expectations, all while operating in a global higher education market system (Dunning, 2019).

It is obvious that academics in developing nations are under increasing pressure to improve their competitiveness (Evison et al., 2021). Lately, the government has designated academics at HEIs in developing nations as a target for NPM through the deployment of performance measurement system (Abubakar et al., 2018; Y. T. Tran & Nguyen, 2020). This paper suggests more research in performance measurement system both for individual and organization contexts within higher education institutions. In addition, giving more setting on different countries and HEIs to this research area will contribute to the development of theories from a variety of academic and cultural perspectives.

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Analysis of Hydrogen Economy Potential between European Countries and Indonesia

Miratul Alifah

Population and energy consumption

The population problem is more than just a numerical problem. The quantity of energy consumed is currently the most pressing issue with population expansion. It becomes more difficult to remove them. Nearby forests are dwindling, Darmstadter (2004) states, the coal miners must dig deeper, and oil must be extracted in increasingly difficult terrain. In 2050, energy consumption is predicted to quadruple from 2000 levels.

If the availability of natural resources is not conserved, they will be depleted as the world's population grows. Khan, Hou, and Lee (2020) said by the use of fossil fuels, environmental quality has declined. So far, transportation is the source of the most CO_2 emissions. Power officials, such as those in the United States, adopt policies that limit the usage of natural resources and promote clean energy lifestyles in order to secure future energy and improve the environment. Climate change is due to CO_2 pollution and population growth, all of which are pressing concerns on the earth.

Renewable energy is generating energy from natural processes that are continuously replenished. This energy is not exhausted and is constantly renewed. Offshore solar and wind power generation systems are expected to develop rapidly, according to the International Energy Agency (IEA). Cost savings, rapid technical breakthroughs, and joint government policy efforts all contributed to the rise. Due to unaffordable costs, the number of solar photovoltaic users will not

increase significantly. The quantity of solar, wind, and water energies are seasonal in every country. Due to the difficulty of supplying renewable energy people have sought out other options, such as hydrogen. Because hydrogen can be obtained in any weather condition. The explanation why hydrogen has become a good pick is that hydrogen energy is considered as one of the most potential alternatives, clean, and eco-friendly energy systems with near-zero emissions. The comparative energy values of various fuels are shown in Table 1. Brandon and Kurban (2017) show that hydrogen has nearly three times the chemical energy of fossil fuels like gasoline, kerosene, and diesel oil. Moreover, hydrogen produces electricity during fuel cell operations once that has been provided from any energy source, leaving only water vapor as exhaust gas, with no other greenhouse gas emissions or particulate gases.

Table 1. Chemical energy values of various fuels (Dong et al, 2018)

Fuel	Phase	Molecular Weight	Kj/mol	Mj/kg	Mj/m^3	Btu/lb	Btu/ft^3
Hydrogen	Gas	2.016	285.84	141.79	12.75	60,986	324
Methane	Gas	16.043	890.31	55.50	39.72	23,870	1,009
Ethane	Gas	30.069	1,559.58	51.88	69.59	22,313	1,768
Propane	Gas	44.096	2,220.05	50.33	99.05	21,654	2,516
Butane	Gas	58.122	2,878.52	49.85	128.43	21,301	3,263
Ethanol	Liquid	46.069	1,3705.01	29.85	-	12,837	-
Gasoline	Liquid	110	5,013.47	45.58	-	19,603	-
Kerosene	Liquid	178	8,084.99	45.42	-	19,536	-
Diesel Oil	Liquid	225	10,124.99	45.00	-	19,355	-
Coal	Solid	-	-	25.58	-	11,002	-
Wood (dry)	Solid	-	-	21.14	-	9,093	-
Peat (dry)	Solid	-	-	22.09	-	9,500	-

In the other hand, unlike other tools, the use of hydrogen as a renewable energy has not resulted in the development of a significant number of applications. This is based on the fact that the advancement of hydrogen utilization technologies faces a number of challenges, including how to store, refill, and apply hydrogen on a large scale, which is challenging.

Sustainable, clean, reliable, cost-effective supply and secure renewable energy would be in high demand in the future. Hydrogen has been proposed as the ideal energy system's source. A plentiful supply of hydrogen and environmentally friendly hydrogen emissions are essential for the transition to a hydrogen economy.

Solar and wind power, according to projections, will continue to dominate the use of renewable energy in 2050. as shown in Figure 1. However, in 2050, hydrogen is expected to account for just 3% of all fuel usage across all sectors. As a result, Jain (2009) mentioned that the advancement of hydrogen technology has plenty to offer. One of the most recent breakthroughs in the last few decades has been the numerous advances in hydrogen storage. These inventions have been encapsulated in the idea of a hydrogen economy.

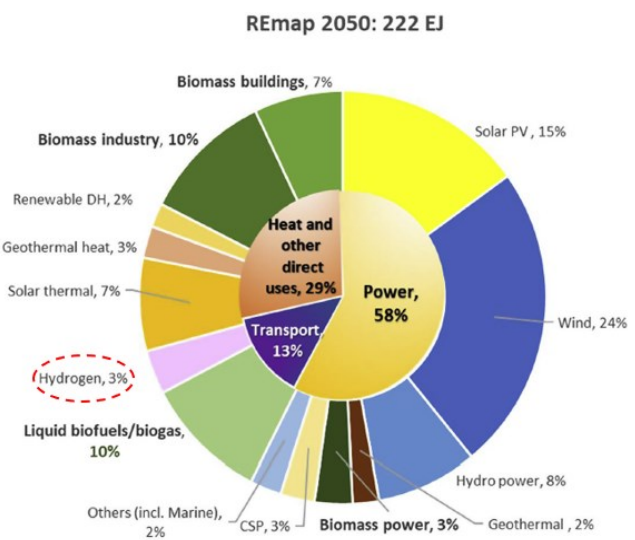

Figure 1. Breakdown of renewables use in total final energy consumption terms, REmap 2050 [8]

Hydrogen Economy

With the variety of other energy sources that are constantly being produced, hydrogen remains a promising source of energy. A proper definition is needed to improve this. The hydrogen economy is a term used to describe this form of drafting. However, the realization of a possible hydrogen economy presents a trifecta of challenges to the scientific community Figure 2. (Gielen et al, 2019) said how to increase hydrogen production is one of the primary concerns in the hydrogen economy. To generate hydrogen, the strategic approach necessitates a variety of feedstocks. There are three main processes involved in hydrogen production.

a. Thermochemically: natural gas, ethanol, and biomass;

b. Electrolytically;

c. Photolithically;

d. By Steam Methane Reforming (SMR) [9]

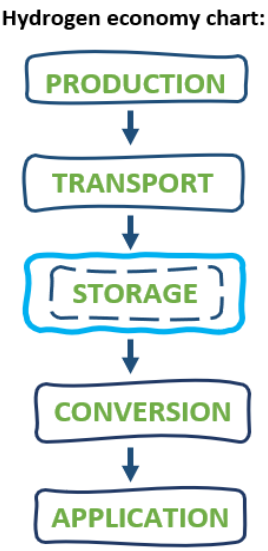

Figure 2. Scheme of Hydrogen Economy (Alifah, 2022)

A network of pipelines connects or transports hydrogen production and storage to end-users, forming the hydrogen infrastructure. Hydrogen pipelines must be kept to a minimum because hydrogen will

corrode steel. Low-pressure hydrogen can be delivered using polyethylene tubing. There are three kinds of conversion hydrogen:

a. Power-to-gas (P2G): Electrolysis is a method of producing hydrogen that uses electricity. This hydrogen is then either added into the gas distribution grid (mixed with natural gas or used alone) or transformed to synthetic CH_4 in a subsequent methanation stage.
b. Power-to-power (P2P): Electrolysis is a method of producing hydrogen that uses electricity. This hydrogen is then stored in a pressurized tank or a deep cavity (for small-scale applications).
c. Gas-to-gas (G2G): Steam methane reforming (SMR) is a well-known process for extracting hydrogen from natural gas, accounting for approximately 95% of all hydrogen produced globally.

The application of hydrogen renewable energy is modes of transportation, such as car and rail. The hydrogen storage capacity would need to be increased not only depending on the operational specifications. Indeed, (Hua et al, 2014) if hydrogen is to be contained in a liquid form on the train, various types of high-pressure gaseous buffer tanks will be needed to convert the liquid to steam, as the fuel cell will need gas. Current configurations for diesel or electric trains do not provide enough space, so a variety of hydrogen storage solutions for different train applications must be constructed. Onboard hydrogen storage solutions that are tailored to particular use cases and designed around vehicle constraints will be needed Figure 3. Industrial vehicles (forklifts, for example), passenger cars, and trains fuelled by hydrogen fuel cells are finding new markets. In order, to help these vehicles, indoor and outdoor hydrogen fuelling stations are being installed.

Figure 3. Corodia Lint Train from Germany (Molitor, 2021)

Hydrogen Economy in Europe

Hydrogen is predicted to play a critical part in a future climate-neutral economy, (Dalebrook et al, 2013) said that allowing for emission-free transportation, heating, and industrial activities, as well as inter-seasonal energy storage. Clean hydrogen made from renewable energy is a zero-emission energy carrier, but it is still more expensive than hydrogen made from natural gas. According to some analyses, an EU energy system that includes a considerable amount of hydrogen and renewable gases would be more cost-effective than one that relies heavily on electrification.

The EU prioritizes research and industry innovation in hydrogen applications, which gets significant EU financing through research framework programs. The Fuel Cells and Hydrogen Joint Undertaking (FCH JU), (Mettler and Luitter, 2020) public-private cooperation financed by the European Commission, manages hydrogen initiatives. At the end of last year, Europe had 200 hydrogen stations, 100 of which were in Germany. With 34 operational hydrogen stations, France is still second in Europe, and with 38 planned hydrogen stations, it is now showing the fastest growth in Europe.

To meet the deployment targets established in this strategic roadmap by 2024 and 2030, a robust investment agenda must be developed, leveraging synergies and guaranteeing public support

coherence across EU funds and EIB finance, while avoiding excessive assistance. From now to 2030, investments in electrolysers could range between €24 and €42 billion. In addition, over the same period, €220-340 billion would be required to scale up and directly connect 80-120 GW of solar and wind energy production capacity to the electrolysers to provide the necessary electricity.

Hydrogen Economy in Indonesia

Indonesia currently lacks a long-term plan to achieve net-zero emissions by 2050. Even in 2050, (Saputra and Jati, 2021), said, it is expected that fossil energy would still account for 70% of the national energy mix. Indonesia's present energy supply plan does not include an energy transition strategy. Because energy authorities in Indonesia are still unfamiliar with this new technology, Indonesia is still a long way off. In this period of energy transformation, the Indonesian government must comprehend the significance of green hydrogen in the decarbonization process as a policymaker. Furthermore, from both a research and policy development standpoint, an integrated strategy for hydrogen development must be developed and executed. Hydrogen is projected to pervade a variety of industries throughout the world, including manufacturing, power generation, transportation, building, and exports. Hydrogen power's long-term stability makes it a feasible choice for generating electricity in remote locations.

Nevertheless, as part of its 2050 green transition strategy, Pertamina, (Indonesia's state-owned energy company) is turning to renewable energy sources like hydrogen to help the goal of building 10GW of clean energy power production capacity by 2026. Pertamina has stated that renewables including geothermal will account for 47% of Indonesian primary energy consumption in 2050 under the company's green transition scenario. Pertamina Power and New Renewable Energy (PNRE), (Nathan, 2021) stated the business's parent company, said it is considering projects such as green and blue hydrogen to meet the 2026 objective, which will require a $12 billion investment. Green hydrogen is made using renewable energy and produces no emissions, whereas blue hydrogen is made with fossil fuels and the carbon is absorbed and stored. PNRE also recently signed

an initial agreement with Japex (a Japanese upstream firm) and Lemigas (Indonesia's energy and mineral resources ministry's research center for oil and gas technology development) to conduct a joint study on the development of carbon capture, utilization, and storage methods to reduce emissions at the Sukowati and Gundih oil fields in Indonesia. The action by Pertamina indicates that Indonesia decides a great choice to participate in reducing CO_2 emissions in the world. The Indonesian scientists should have a strong volition to encourage research institutions to allocate their funds to build the hydrogen economy system in Indonesia.

The Good diplomatic between European Countries and Indonesia have to obtain positive impacts on the environment. Indonesia should not only seize this chance but also seek European Countries' assistance in developing this new energy source. Hydrogen has the potential to reduce carbon emissions depending on how it is produced, according to the International Renewable Energy Agency, which reports that 15 countries, including three in Asia, as well as the European Union, have already launched policy strategies to support the development of hydrogen energy, with more on the way.

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The Relationship Between Business and Politics: A Study of Rent-Seeking in Indonesia

Donie Kadewandana and Viktória Endrődi-Kovács

Introduction

The relationship between business and politics cannot be separated in a country because the state needs the private sector (capital) to drive the economy. However, this relationship of mutual need or dependence between the state and the owners of capital does not always have a positive impact, there is a tendency also to have a negative impact. Negative impacts occur when the relationship only benefits individuals, groups, and not for the public interest.

The relationship between business and politics produces three types of rent-seeking practices, as initiated by Ross (2001). First, rent creation, namely, companies seek profits made by the government by bribing politicians or bureaucrats. Second, rent seizing is a condition when government actors or bureaucrats try to get the right to allocate the rent generated from state institutions for the interests of individuals and groups. Third, is rent extraction, in which politicians and bureaucrats seek to profit from the company by threatening the company through regulations.

The link between business and politics is one of the causes of corruption's emergence, which explains that corruption is no longer seen as a bad behavior involving actors in government institutions, but also covers a broader space, namely between rulers and entrepreneurs in distributing state-owned resources.

As Lambsdorff (2002: 104) argues that rent-seeking behavior can be classified as an act of corruption when lobbying opportunities are not transparent to the public. This rent-seeking practice is at the root of the emergence of corruption. The pattern of relations between businessmen who seek rent and the government that makes policies, in the process, results in many agreements that are outside the formal institutional structure. Rent-seeking and corruption are two interrelated entities. It can be said that rent-seeking is a form of corruption that occurs in public institutions by involving state actors as the main players.

An action can be called the practice of rent-seeking when there is an abuse of power by political officials or bureaucrats to obtain state resources by manipulating rules and policies. In fact, it violates the rules, and the rules are made legally to facilitate the practice of rent-seeking. The character of rent-seeking is to ignore the principles of transparency and accountability so that it has an impact on the marginalization of the public interest. Public service governance becomes bad (bad governance) and has the opportunity to create corrupt practices.

In this case, the pattern of business and political relations that is rife in Indonesia and involves political actors (politicians/government), economic actors (businessmen) is allegedly an action taken to share state resources, where the practice of rent-seeking becomes things that stand out in business and political relations are carried out openly and occur in democratic regimes, which have an impact on corruption.

In the context of public services and government management, business and political relations cannot be separated (Saleh & Perdana, 2009). This relationship can result in the practice of rent-seeking (hunting for rent). Rent-seeking is the root cause of the emergence of corruption because this practice provides opportunities for policy manipulation as an implication of political agreements and lobbying outside the formal institutional structure (Hogan et al., 2011: 102-113). Not only violating the rules, but the rules were made legally to facilitate the practice of rent-seeking. The practice of rent-seeking violates the logic of good governance, where a public agency should prioritize transparency, accountability, and participation (Grafton & Williams,

2020). Based on the elaboration above, the writer is interested in analyzing the pattern of business and political relations in the case of rent-seeking in Indonesia.

Rent-Seeking: A Theoretical Overview

The study of rent-seeking was initially developed in 1967. Two important economists who wrote this thought on rent-seeking were Gurdon Tullock and Anne Kruger. However, although Anne Kruger, as an economist, was the first to use the word rent-seeking, historically, Tullock was the first to write a conceptual about the practice of rent-seeking.

The main premise of Tullock in the rent-seeking concept was based on the opinion of economists at that time who stated that the welfare cost of a tariff or commodity price and the form of a market monopoly were not important to be studied in more depth because they had no impact on economic conditions. This assumption is refuted by Tullock (1967: 224), who states that commodity prices are not only determined by welfare costs such as taxes, wages, production costs but also include social costs such as bribes and security costs.

The main premise departs from Tullock, who sees that a market monopoly can cause very high social costs to mitigate threats from any party. For example, social security costs for other entrepreneurs do not damage the market. Second, there are many strict procedures related to exports and imports, so there is the potential for other social costs such as bribes to arise to facilitate and smooth out these procedures. Third, the large number of lobbyists, such as in the United States as parties used by entrepreneurs to obtain import or export permits, also raises other social costs.

Tullock's concept of rent-seeking is not much different from the research findings of Anne Kruger (1974: 291-292) on rent-seeking in the context of import permits. The main premise in Kruger's writing is that there are government restrictions on economic activity, so import permits are valuable. Obtaining these permits is often done legally, but on the other hand, this condition creates rent-seeking in various forms such as bribery, corruption, smuggling, and black markets. This

situation illustrates that power is used to influence the market. Companies make profits in unhealthy ways, such as by bribing the authorities to obtain import monopoly rights or licenses.

The two economists outline two important arguments. First, rent-seeking tends to have a large impact on economic conditions, which is different from the premise of classical economists who stated that the practice of rent-seeking is not a negative activity but a positive activity to spur economic activity. Second, this rent-seeking practice will take many forms, such as bribery, corruption, and smuggling, if the state always imposes limits or limits on economic activity. Therefore, these social costs, in most cases, tend to be part of the investment and these social costs are included in determining a commodity price. As a simple illustration, only limited licenses for beef import are granted by the government. The limited permit has made company X bribe the permit giver to obtain the import permit. The bribes given are categorized as social costs. These social costs are part of determining the commodity price of an item in the market. In Tullock's view, this phenomenon occurs an indirect cost transfer from consumers to other communities (producers), which does not add value to an item but transfers a value to bear the burden of social costs. This social cost is indirectly charged to consumers, which should not have happened.

Although the descriptions of the two economies provide important contributions and lay the foundation stone for the concept of rent-seeking, these concepts tend to be abstract, and it is difficult to distinguish between rent-seeking and non-rent seekers. However, this distinction between rent-seekers and not is studied and described by James B Buchanan, who explains the basic difference between the behavior of rent-seekers and not.

Buchanan's (1980: 1-30) article is more detailed and clearly distinguishes between rent-seeking and profit-seeking. Rent-seeking is a practice carried out by entrepreneurs in order to obtain privileges from the state to provide certain goods and services by lobbying and bribery. This type of entrepreneur does not generate value but transfers value. Meanwhile, profit-seeking is a practice carried out by entrepreneurs by creating value. These entrepreneurs often maximize

their profits based on the opportunities available in the market structure.

However, Buchanan's description of seeing the differences between rent-seeking and profit-seeking practices focuses on one entity, namely, entrepreneurs. This distinction tends to ignore state actors or authorities in the practice of rent-seeking. Whereas Tullock and Anne Kruger's description of rent-seeking also involves other actors such as the state or government and other groups who also take part in the practice of rent-seeking, such as thugs and political elites.

As described above, there are two important approaches in the study of rent-seeking. The first approach looks at rent-seeking from a classical economic perspective. The classical economic theory approach states that rent-seeking is interpreted as neutral or does not negatively impact the economy, even providing benefits and positive impacts to spur economic activity.

Meanwhile, the concept of rent-seeking in the study of the political economy outside of the classical economic approach is considered a negative behavior because each interest group seeks to obtain considerable economic benefits with small businesses. To get this big profit, they do lobbying activities. This lobbying activity has a big impact because it results in slow decision-making, and the economy does not respond quickly and appropriately to changes and developments (Pasour, 1982: 69).

The practice of rent-seeking in contemporary political economy studies tends to separate the relationship between the state (government) or capital (entrepreneur) domains. This difference is presumably due to the different characteristics of the two entities. If these two entities are not separated, it can lead to the practice of seeking rent with various variants such as bribery and corruption.

In the view of Didik J Rachbini (2006), rent-seeking in the study of political economy is the pursuit of income by means of monopoly, licensing and the use of power capital in the business. Entrepreneurs earn profits by not fair competition in the market. Power is used to influence the market to be distorted for its interests. According to him, economic rent-seeking occurs when an entrepreneur or company takes

uncompensated benefits or values from others by manipulating the business or business environment. Manipulation in the business environment also occurs due to the struggle for monopoly over the game's rules or regulations. Therefore, business actors who lobbied to influence regulations to favor themselves at the expense of other parties are called rent-seekers. The practice of hunting for economic rents is also associated with efforts to regulate economic regulations through lobbying the government and parliament. The government sets tariffs for business groups. This practice is also part of the practice. The same applies to granting a monopoly on the import of goods, which is part of the practice of hunting for economic rent (Rachbini, 2006: 127-128).

In the political economy literature, the concept of rent-seeking is considered a negative behavior. The assumption built is that each interest group seeks to obtain the maximum economic benefit with the least amount of effort. At this point, all available resources, such as lobbying, will be used to achieve this goal. It is where the problem arises. If the outcome of this lobbying is a policy, then the impact can be huge. According to Olson, the lobbying process can have a big impact because it causes the decision-making process to run very slowly. Ultimately, the economy cannot respond quickly to changes and new technologies (Yustika, 2006: 2).

Rent-seeking as An Act of Corruption

In his writings "Corruption, Capitalism and Democracy," John Girling argues that corrupt behavior does not only involve actors in government institutions but also in a wider scope, such as the relationship between businessmen and politicians to 'share' state resources (Girling, 1997: 6).

The phrase that "politics tends to corrupt, absolute power corrupts absolutely," as put forward by Lord Acton, can be interpreted that authoritarian regimes are prone to corruption. However, this was criticized by John Girling, who believed that corruption could also occur in a democratic regime and occur in an arena where there is power in it. According to him, power can be drawn into a narrower

concept, namely the relationship between economic and political power, which is the basis of government-oriented to the capitalist system. In his view, economic power is 'dangerous' for political power (Girling, 1997: 7). When referring to the concept of democracy, which means freedom, then in business and economic relations, democracy is also implemented in the conception of lobbying and advertising. Lobbying and advertising are ways that businesses use to influence politicians' policies. In a market-oriented government system, policymakers will tend to pay attention to business interests rather than the public. It is considered a rational choice because an effective market-oriented economic system of government will strengthen the political system itself. Therefore, the lobbying and advertising space will always be open from businessmen to politicians.

It would be raise problems, especially those related to corruption. Rent-seeking behavior is distinguished from profit-seeking behavior in a sound business venture. In a healthy business, companies create value and then make mutually beneficial transactions. But in the practice of hunting for economic rents, business actors (business people) invite power or influence power to take values that are not compensated (Rachbini, 2006: 127).

Gordon Tullock divides the rent-seeking theory into two main aspects: transfer costs and competing rents. Transfer costs are costs incurred to lobby for policies issued by public officials, by hiring lawyers and by political campaigns. Meanwhile, competing rents are business parties lobbying the state for certain regulations concerning taxes, distribution, import quotas, subsidies, etc. In conditions of competing rents, the logic at play is prisoner dilemmas. The parties who ultimately lose in competing for rent will still benefit. For example, in the context of taxation, because the scope of the policy targets is wide, it is not only for certain business people (Lambsdorff, 2002: 99-100).

In his writings, Corruption and Rent-Seeking, A.K. Jain argues that rent-seeking behavior can be classified as an act of corruption when lobbying opportunities are not transparent to the public, so only certain parties can engage in competition (Lambsdorff, 2002: 104). This argument is no longer relevant for authoritarian countries that do not

consider public opinion in conducting business and political relations. According to him, rent-seeking can be called corruption when a businessman who is lobbying pays or gives money (privately) to a public official. It is different when business people incur costs to lobby, or what is known as transfer costs as described above (Lambsdorff, 2002: 106).

Rent-seeking behavior, classified as an act of corruption, can be associated with a monopoly market system. In this market system, state resources are controlled by certain parties to compete on who can manage or obtain the country's resources. Policymakers, in the concept of rent-seeking, will marginalize public ownership in allocating the country's resources. The issue of corruption in the rent-seeking framework cannot simply be understood whether the corruption violates the law or is legal/illegal because public officials create laws or regulations to legalize it.

In the view of some political economists, the widespread practice of rent-seeking in developing countries is intentionally encouraged or tolerated by the state to prevent competition through the market and carry out national economic development. As a result, there are several rents used by the bureaucracy, a group of economic actors who are supported or colluded with the state, the state on behalf of the ruling government.

Rent-seeking arises from the actions of a certain person, group or organization, especially a bureaucracy or a politician who takes the maximum material advantage from selling authority and manipulation practices to support other parties in exploiting economic resources. The practice of rent-seeking, in the end, fosters corruption, so the term shadow state appears.

The concept of a shadow state, among others, has the characteristics of a government system controlled by state officials who act based on the interests of business (private) groups or other external actors outside state institutions. These actors can be providers of goods and services to the government. There is an obligation for the government to buy from them without having to go through legal purchasing procedures, such as mechanisms for procuring goods and

services or auctions. The shadow state is driven by unwritten laws, constantly changing according to the tastes of the government and the interests of entrepreneurs. Cooperation between them will cause a monopoly in controlling the main economic resources, which will always be filled with uncertainty. Citizens who live in a shadow state are characterized by a wide gap in poverty between the poor and the rich due to the absence of strict rules to provide access to welfare for the poor. The elites systematically use their influence to influence every decision-making and budget planning.

Rent-Seeking in Bureaucratic Circles

Bureaucracy and politics are like two different sides of a coin but complement each other. Both contribute to the implementation of good governance. Like a system, each has a role, function and purpose. However, if you look at the current phenomena, bureaucracy and politics are like complicated things that can only be accessed by people who have positions and will look difficult if ordinary people access them. Based on legal principles, bureaucrats or governments are individuals. It is ironic when there is a politicization of the bureaucracy that causes the bureaucracy only to benefit a few people and is like private property.

Referring to Max Weber's opinion, bureaucracy is a form of organization whose application is related to achieving goals. This bureaucracy is intended as a system of authority rationally determined by various kinds of regulations to organize the work done by many people. The rise of various bureaucratic problems, both on a micro and macro scale, cannot be separated from the many bureaucratic officials who take refuge in the political power that led him to become a bureaucrat. Many bureaucratic problems in Indonesia are not new, but problems that have existed since the era of the "young" bureaucracy. Since then, the bureaucracy has not been separated from the shadows of politics. It is because the two are related to each other. The bureaucracy, which is the holder of a central role in matters relating to the community, is often faced with a dilemma. The bureaucracy is often used as a political tool to gain or maintain power in the government. The use of the bureaucracy as a tool of political interest by several

elements has proven successful because most of them use the imagery in the bureaucracy to gain power.

According to Andi Irawan (2008), the term rent-seeking in state institutions refers to the behavior of public officials and politicians in deciding public budget allocations (APBN-APBD), or policies aimed at the public with the motivation to gain personal and group benefits which have implications for harming the interests of the public. Public, both in the short and long term. The practice of rent-seeking in the popular Indonesian language is often termed KKN (Collusion, Corruption and Nepotism). Referring to the opinion above, an argument can be drawn that the practice of "rent and power-seeking" politicians and bureaucrats has definitely colored the process of making and implementing policies, including policies on development and public services. In gaining and maintaining power, bureaucratic elites and politicians often receive financial support from businessmen, so we often hear of collusion, corruption and nepotism in various media carried out by political elites and bureaucrats. In return, political elites and bureaucratic officials promote the interests of entrepreneurs in achieving their economic/business goals. This practice of rent-seeking shows the cooperation of the bureaucratic elite, politicians and businessmen (as a source of funds) as a clientelistic relationship that reflects the achievement of the interests of the bureaucratic elite, politicians and businessmen above the public interest.

Rent-Seeking Practices in Indonesia and its Handling

During the New Order era in Indonesia, rent-seeking was centered on the Central Government (President Suharto). After the fall of the New Order regime and decentralization, rent-seeking shifted to the regions and at the center. It is related to the transfer of some authority to the regions. Several permits, such as land licenses, mining permits and use rights over natural resources, were transferred to the regions, resulting in shifting forms of rent-seeking and corruption during the reform period. In addition, corruption actors are not only focused on one business force, as was the case during the New Order.

The transformation of the pattern of business and political relations in the form of rent-seeking from the New Order government to the Reformation Period was caused by several things, namely: First, there was a reorganization of business actors during the New Order era, where business people did not die after the monetary crisis and reform occurred in 1998, but transformed with the current political situation to maintain control of economic resources. The economic power of the New Order era, called the Oligarchy, remained after the collapse of the New Order regime. In fact, they remained the main business force in the Reformation Period. Thus, the economic power remains the same. However, they were then forced to follow a pattern that required them to operate in an arena of political tug-of-war different from the New Order regime. This situation is related to institutional change in the Reformation Period. In addition, economic power during the New Order era also controlled democratization by being involved in political parties and even becoming their leaders. They then, in addition to being a businessman and a politician. A party that requires large sums of money to win election contestations and bring businessmen to become party leaders.

Economic power also changes its patron-client locus with decentralization. This economic power shifts to decentralized patronage relations. It follows the pattern of the transfer of some central power to the regions, moreover, with the Regional Head Election, which requires a lot of money for contestation. The involvement of economic forces (business people) directly or indirectly (through deregulation) is still the most profitable because it is the strongest economic power. Therefore, when regulation (regulation) is thrown into the market, then with democratization, they have mastered the market.

Second is the absence of new capitalists (new businessmen), which is significant as a new economic power. It relates to the impact of the first factor coupled with decentralization, thus preventing a new, more productive type of capitalist from emerging. Furthermore, it will not be the main force even if it appears. With decentralization, rent-based transfers move from the central government to regional

governments. It then changes the economic structure at the regional level and changes the pattern of rent-seeking at the local level.

Third, political actors or government officials are still dominated by predatory power relations. The economic actors and political or government actors interact in the form of clientelism relations, namely the existence of business and political relations due to a weak economic base and the control of resources controlled by a handful of elites. According to Vedi R Hadiz, even though the reforms were implemented, the elements have been rearranged in a new decentralized patronage network, more fluid, and competes with one another (Hadiz, 1997: 244).

This pattern of sustainability became the legacy of the New Order and later influenced the pattern of business and political relations during the reformation period. Hadiz refers to Peter Evans that predatory power is a public official (either individual or corporatist) who controls state resources for personal and relative interests. Evans mentions the involvement of business people who have close relationships with bureaucrats and politicians, which relates to rent-seeking. According to him, rent-seeking is a form of corruption because, ultimately, high investment and many state-owned resources are not allocated for the needs of citizens but go to the state apparatus and their relatives (Hadiz, 1997: 253). The predatory power is the incumbent power in the bureaucracy, in which it fights for rent. This predatory power can last forever because they can make and issue licenses, regulate taxes, subsidies and so on.

The pattern of relations between economic actors (businessmen) and political actors in the reform period still shows predatory and patron-client transactional patterns, which are carried out to obtain rent from the government. This condition is similar to what happened during the New Order era. These similarities are a form of continuation of the conditions in the New Order era, which are still inherited today. We can see the practice of rent-seeking, which then leads to corruption in many corruption cases involving business people (entrepreneurs) and political actors during the reformation period, such as the BLBI case, the Century Bank case, corruption related to the conversion of

forest functions, the beef import quota case, the case of Hambalang, the SKK Migas case, the corruption case for the E-KTP (Electronic- Identity Card) project, the corruption case for the State Electricity Company (PLTU Riau 1) (Widoyoko, 2018, p. 15).

The practice of rent-seeking can be traced to hunting for licenses and then leading to corruption. It is done outside the formal and public arena and with the amount of money given in the lobbying process to influence the authorities in public policymaking. This form of rent-seeking generally occurs in the pattern of corruption during the reform period. Based on data from the Anti Corruption Clearing House, Corruption Eradication Commission (2018), from 2004 to 31 December 2018, 998 public or private officials were involved in corruption in Indonesia. Members of the People's Representative Council (DPR) and the Regional People's Representative Council (DPRD) are the professions that commit the most corruption crimes, namely 247 people. Then, the second most perpetrators were private employees as many as 238 people. Then followed by 199 officials at the echelon I/II/III level.

To overcome and eradicate the rampant rent-seeking in Indonesia, several steps can be taken: first, strengthening information disclosure and democracy, especially by expanding public participation in every public decision-making. In this case, it should be avoided as much as possible. A public policy involving public budgeting is carried out in an “under the table” pattern. Every public decision like that must explain its costs and benefits. Therefore, transparency in this matter is the main thing. In addition, freedom of the press and objectivity are powerful tools in promoting openness and democracy. Freedom of the press must be encouraged to improve further the quality of government institutions, parliaments, political parties and social institutions such as NGOs and other social institutions. It aims to create public accountability for these institutions. Second, there is law enforcement. The existence of law enforcement and making rules that are firm, definite, and non-discriminatory will be an effective tool in eradicating corruption in Indonesia. In addition, for corruptors who are actually harming the state, there must be a punishment for "impoverishing" the corruptors

by confiscating all their assets and using them for the public interest. Third, improve the quality of education and the welfare of state administrators through bureaucratic reform and improvement of the remuneration system. In addition, it is necessary to pay attention to government positions related to decision making, especially in government goods spending activities and promotion of personnel based on a merit system and not based on connections. Fourth, strengthen the teachings of ethics and religion, especially the culture of honesty and discipline, to become traditions inherent in life. Ethical and religious values, such as honesty, should be developed more in the state administration than just ceremonial teachings.

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Content Marketing Insights from Finland and Indonesia

Risqo M. Wahid

Introduction

Digital content marketing (or content marketing in short) can be defined as "the management process responsible for identifying, anticipating, and satisfying customer requirements profitably in the context of digital content, or bit-based objects distributed through electronic channels" (Rowley, 2008, p. 522). Content marketing is consequential for digital marketers. The online realm is obstreperous. Digital content constantly inundates customers. From Meta's products alone (e.g., Facebook, Instagram, and WhatsApp), there has been more than 100 billion messages and 100 billion stories shared daily (Facebook, 2022). This can result in information overload for consumers. Content marketing, with its ability to provide and share valuable content for customers, can be a powerful strategy for brands to be heard in such a noisy world.

Extant research has empirically evidenced the benefits of content marketing for firms. Meire et al. (2019) confirmed that marketer-generated content (MGC) can influence customer sentiment. Notably, posting informational content can increase sentiment by approximately 10% when customers experience negative firm event outcomes; and sharing emotional posts significantly and positively affect customer sentiment regardless of the event outcome. Gao and Feng (2016) also proved that providing content containing news, information, and knowledge related to product categories can enhance brand attitudes. Further, Kumar et al. (2016) found two merits of content marketing through MGC: (1) MGC can strengthen a firm-

customers relationship, and (2) MGC can drive sales. Interestingly, content marketing can also impact investor behaviour and the stock market. Borah et al. (2020) unveiled that, on average, improvised high humorous content with high anticipation can generate $5.1 million in market capitalisation.

As described above, strategies and desirable outcomes of content marketing are multitudes. However, it should be noted that content marketing is highly contextual (Wahid & Gunarto, 2021). Strategies that succeed in one region may experience a defeat in the others. Therefore, insights from prior studies using samples from particular countries may be inapplicable for firms marketing their offerings in other nations. This article aims to discuss content marketing insights focusing only on Finland and Indonesia. Such an effort may benefit both global and local marketers targeting customers in the two markets. Also, theoretically, this review may expand content marketing literature by comparing content marketing insights from developed and developing countries.

Content Marketing Insights from Finland

Taiminen and Karjaluoto (2015) conducted a study about SMEs' objectives, drivers, and usage of digital marketing in Central Finland. Among the findings, they discovered that SMEs in the region are incapable of formulating interesting content on available online platforms such as social media and blogs. This is because SMEs focus more on creating and offering their products or services rather than crafting valuable content. In today's world, this article argues, SMEs need to abandon the old custom. In this digital age, it is more than just buy-and-sell. Before purchasing products or services, customers actively seek information through online content (Malthouse et al., 2013). Therefore, beside their principal business activities, SMEs also must learn and execute content marketing to compete in the market.

Different from Taiminen and Karjaluoto (2015), Järvinen and Taiminen (2016) examined the implementation of content marketing of a large-scale global Finnish firm (i.e., a developer and manufacturer of technologically oriented industrial goods and services for

environmental and industrial measurement). Particularly, the study analysed the use of marketing automation software in supporting two primary organisational goals: (1) the creation and dissemination of valuable and timely content to fulfil customer needs, and (2) the integration of content marketing with B2B selling processes. The findings demonstrate that, in the formulation of valuable content, the case company performs active listening to its customers. This effort will inspire them in producing content that matches customer needs and interests. Further, the firm also leverages experts in different parts of its organisation. Marketers typically interview specialists of specific customer-relevant topics and then develop content in collaboration with them or on their behalf. The content that has been made is available on the firm's website. To access it, customers need to log in or give their contact information on the website. This customers activity activates the marketing automation software and starts the customers' journey in the marketing and sales funnel. The software enables the firm to deliver content at the appropriate phases of customers' purchasing processes. The feature enhances the value and timeliness of the content. The marketing automation software can further integrate content marketing with B2B selling processes. In the beginning, the software identifies customers and nurtures them with content. Once the customers are considered ready to buy (e.g., through scoring), they are then automatically transferred from marketing to the sales department. The decision to deploy the marketing automation software has significantly benefited the Finnish global firm (e.g., increases in efficiency and sales lead quality).

Taking content into a more specific topic of discussion, Taiminen and Karjaluoto (2017) investigated how brand-extended thematic-content in content marketing can influence readers and brands. The research conceptualised brand-extended thematic-content as non-brand focused, thematically bound, and frequently produce messages created in an attempt to repeatedly drive customers to brand's online sphere of influence. Examples of brand-extended thematic-content may include emotional stories and societal issues, which are non-related to products. Taiminen and Karjaluoto (2017) further divided content readers into two distinct categories: avid (i.e., blog readers) and

skim (i.e., Facebook users) types. Avid readers show deeper interests and give higher efforts in their relationship with brands juxtaposed with their skim counterparts. The researchers collaborated with a Finnish brand that actively shares brand-extended thematic-content (e.g., ideas and inspiration related to house construction and decoration) on its blog and Facebook account. Findings of the study show that, although brand-extended thematic-content can make skim readers more brand-aware and influence their positive perception toward a brand, frequent interaction with brand-extended thematic-content has no significant effect on brand attitude. This suggests that, despite being frequently exposed to brand-extended thematic-content, social media users still feel less connected with the brand. Conversely, reading frequency impacts avid readers' brand attitude in the study. Additionally, the factor that heavily drives reading frequency is enjoyment gratification. This confirms that brands need to continually provide enjoyable content for avid readers in order to build a better and longer relationship. Taiminen and Karjaluoto (2017) concluded that the creation and delivery of brand-extended thematic-content can benefit both readers and brands. In particular, brand-extended thematic-content can provide enjoyment and information for readers; and offer positive brand awareness and long-term relationships with customers for brands.

Germane to ethics in content creation, Taiminen et al. (2015) explore the role of transparency of commercial hybrid content. In the research, commercial (or paid) hybrid content can manifest in several formats such as sponsored journalism or native advertising; and the content is circulated outside organisation-owned media platforms. The scholars conducted theoretical analyses and interviews with 10 representatives from PR, media agencies, and marketing communication associations in Finland. The study delineated that the prevalence of organisation-generated content (including commercial hybrid content) in the online sphere may deceive or mislead the public and thus requires regulation. In response to this, the researchers proposed the concept of *transparent communicative organisation*. They further presented four new propositions to support the transparent communicative organisation in the practice of hybrid forms of public

engagement: (1) identification of source to enable trust, (2) two-way transparency by inviting users participation and feedback, (3) stakeholders-centric to enable engagement, and (4) content containing organisational expertise to build long-term relationship and engagement. All in all, the study propounded that the absence of transparency in hybrid content may harm the communicative organisation, media outlets where the content is presented, and the communication profession.

Content Marketing Insights from Indonesia

Although Indonesia is a massive country, content marketing research is still sparse in the region. There are merely two studies relating to content marketing available. The first one is from Kusumasondjaja and Tjiptono (2019). The scholars examined the differences in customer arousal, pleasure, and purchase intention when customers encounter food advertisements on Instagram presented by divergent endorsers and visual complexity levels. In this investigation, endorsers consist of an Indonesian celebrity (i.e., a singer named Raissa) and an Indonesian food expert (i.e., a chef named Farah Quinn). Pertaining to visual complexity, the scholars deemed an advertisement as visually complex when "the ad contains many objects, or it includes objects with irregular or dissimilar shapes or sizes, textures, orientations or colors, or it comprises objects with more detail, such as fine edges, intricate textures, or color variations, or it portrays objects arranged asymmetrically or irregularly". The research used the between-subject experimental method involving higher education students in Indonesia. Results demonstrate that celebrity food endorsement generates more arousal and pleasure than expert food endorsement. Also, food advertisement embedded with high levels of visual complexity produces higher arousal and pleasure than a less complex advertisement. Nonetheless, regarding less complex food advertisements, the ads create higher pleasure when delivered by food experts than celebrities. The study also discovered that arousal and pleasure can significantly mediate the effects of endorser types and visual complexity levels on purchase intention.

The second content marketing research from Indonesia is of Wahid and Gunarto (2021). The study investigated the effects of nonverbal information, verbal information, and content characteristics on engagement on Instagram. In this empirical research, nonverbal information corresponds to media formats such as photos and videos. On the other hand, verbal information refers to textual messages such as captions provided on Instagram posts. For the content characteristics, they denote the types of content created by firms, such as informational and entertaining content. The study conducted a content analysis of 486 posts containing 373,235 likes and 6,933 comments from 19 private universities' Instagram accounts in Indonesia. The findings confirm that sharing posts in carousel formats or disseminating achievement can increase likes. Additionally, placing questions in captions of content or publishing informational content can enhance both likes and comments on Instagram. The results further demonstrate that transactional content (i.e., promotion and competition) lowers likes. More detrimental, providing rational content (i.e., holiday and coverage) for higher education students can reduce likes and comments.

Key Lessons for Content Marketing Practice

Digital marketers need to evaluate the countries where they serve their consumers. Scholars (Abou-Elgheit, 2018; Dwivedi et al., 2020) have warned brands to consider the aspects of demography, culture, geography, and consumer behaviour in digital marketing scheme formulation. This is especially true for content marketing. Studies evidenced that while informative content in the US receives lower social media engagement (Peruta & Shields, 2018), it generates higher engagement in Indonesia (Wahid & Gunarto, 2021). These distinctions underline that generalising content marketing insights may produce deleterious consequences for practice. Therefore, key lessons provided in this article may only be applicable for content marketing implementation in Finland and Indonesia.

In Finland, SMEs have no choice but to learn how to employ content marketing in order to succeed. Given their nature of lacking in resources, governments may intervene by providing continuous

content marketing education for these SMEs. Regarding the bigger scale businesses in Finland, in today's digital era, they need to use marketing automation software for their content marketing strategies. The approach can aid them in enhancing the value and timeliness of their content as well as integrating their marketing and sales department. This eventually can increase efficiency and sales lead quality. In addition, firms need to leave the old custom of focusing only on product-related content. Content creation should evolve by providing brand-extended thematic-content. There are numerous choices relating to the type of content, such as humour and societal issues. This effort may deliver enjoyment and information for customers, and increase positive brand awareness and long-term brand-customer relationships for brands. Further, when sharing hybrid content in the online world, firms need to be transparent about their intent. Transparency may enhance customers' trust and engagement with brands.

In Indonesia, food brands should incorporate celebrities and higher visual complexity when posting content on Instagram. This strategy can improve customers' pleasure and arousal, which in the end promotes purchase intention. In the higher education sector, private universities in Indonesia can share content comprising achievement and information to increase engagement on Instagram. Other methods to amplify engagement are embedding questions in captions and sharing content in carousel formats. In optimising engagement, private universities further need to avoid posting content containing promotion, competition, holiday, and coverage as they reduce engagement on Instagram.

Future Research Agenda

Content marketing research both in Finland and Indonesia is still rudimentary. Although there are a plethora of aspects available, this article spotlight three topics studies can investigate to expand content marketing literature. First, there is a need to examine the platforms where content marketing is executed, particularly social media. This is because content marketing concerns with the "electronic channels" implemented. In the case of social media, the architecture, audience,

and culture differ from one platform to another (Haenlein et al., 2020; Voorveld et al., 2018). For instance, Facebook is more textual (Virtanen et al., 2017), while Instagram is more visual (Koivisto & Mattila, 2020). Facebook is for older generations, whereas Instagram is for a younger audience (Jackson, 2019). Examining usage motivations among college students, Alhabash and Ma (2017) demonstrated that entertainment and self-documentation drive use intensity both on Facebook and Instagram. However, they also suggested contrasting additional predictors for each platform. Convenience and self-expression enhance usage on Facebook, and passing time motivates use intensity on Instagram. Relevant with content characteristics, Coelho, Oliveira, and Almeida (2016) also affirmed that advertising posts insignificantly and significantly affect SME (i.e., likes) on Facebook and Instagram, respectively. The contradictory empirical evidence alerts brands to avoid the "one-size-fits-all" approach in content marketing and social media marketing (Haenlein et al., 2020; Wahid & Gunarto, 2021). Research of content marketing on social media in Finland only focused on Facebook (K. Taiminen & Karjaluoto, 2017), while in Indonesia concentrated on Instagram (Kusumasondjaja & Tjiptono, 2019; Wahid & Gunarto, 2021). Scholars in both nations may explore content marketing in emerging social media platforms such as TikTok.

The second topic is content characteristics. Although in Finland, Taiminen and Karjaluoto (2017) have examined how brand-extended thematic-content can influence brand familiarity and brand attitude, the scholars treated content as a general category. Content should be examined at its granular level to attain meaningful insights (Kanuri et al., 2018). Future research may investigate specific content topics (e.g., humour and promotion) and their effects on content marketing objectives (e.g., higher social media engagement and word-of-mouth). In Indonesia, albeit Wahid and Gunarto (2021) have designated content into specific topics, there are more content characteristics available. Future research may discuss dance content on TikTok or inspirational fashion content on Pinterest. Third, content marketing scholars should inspect more industries. Research has proven that content marketing is highly contextual (Wahid & Gunarto, 2021). Schultz (2017) found that content characteristics of food and apparel industries influence social

media engagement on Facebook differently. Content marketing studies both in Finland and Indonesia need to explore more sectors such as the beauty and automotive industries. This endeavour may increase understanding concerning content marketing.

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Competitiveness and Firm Performance for the Small and Medium–sized Enterprises (SMEs): a Comparative Analysis between Hungary and Indonesia

Muhammad Masyhuri

Introduction

The concepts of competitiveness and firms performance have become buzzwords around the world today, especially for large corporations in developed countries, which have attempted to formulate appropriate influencing factors for these terms (Bhawsar & Chattopadhyay, 2015; Goshu & Kitaw, 2017). Based on theory and ample empirical evidence, it is found that stronger and appropriate competitive factors can improve firm performance in the future (Hove-Sibanda et al., 2017; Lii & Kuo, 2016).

Meanwhile, it is undisputed that small and medium-sized enterprises (SMEs) make a significant contribution to sustaining national economies around the world, both in advanced and developing countries, especially during the current pandemic crisis. According to the IFC analysis report (IFC, 2019), there are more than 300 million formal SMEs worldwide, with have an average annual growth rate of three percent; and they are projected to be able to provide a large share of the new jobs created worldwide-about 3.3 million jobs each month to absorb the growing labour force in emerging economies by 2030. In European Union (EU) countries, there were more than 25 million formal SMEs, accounting for 99.8% of all businesses, absorbing about two-thirds of jobs and generating more than half of EU GDP (European Commission, 2019; Srebalová &

Vojtech, 2021). In addition, in the East Asia and Pacific region, SMEs account for more than one-third of total SMEs worldwide (IFC, 2019) and generate more than 40% of Asia's GDP (Yoshino & Taghizadeh-Hesary, 2017).

Although the role of SMEs in the economic growth of countries is important, the sustainability or failure rates of SMEs have been quite high when it comes to competing and increasing their performance, especially among young start-up companies (Abdullah et al., 2019; Meyer & Meyer, 2017; Umadia Sr & Kasztelnik, 2020). In other words, such SMEs have problems with competitiveness and also with firm performance to survive in business operations (Cantele & Cassia, 2020; Le & Ikram, 2022; Momaya, 2019; North & Varvakis, 2016). This raises the following important question as the basic motivation of this study: what competitive factors should SMEs possess to be sustainable? How do such competitive factors affect business performance?

In reviewing the literature on SMEs competitiveness and firm performance in emerging markets, the author identified two major gaps: First, only few studies have looked at the various factors of SMEs competitiveness by making a cross-country comparison from different regions (mostly analysing only a single country); and second, few studies have looked at firm performance by using both financial and non-financial factors for SMEs (mostly using only financial factors).

This study aims to examine the impact of SMEs competitiveness factors on firm performance in Hungary and Indonesia. According to IMF and MSCI report (IMF, 2015 & Melas, 2019), Hungary and Indonesia are classified as representatives of emerging markets in Central Eastern European and Asian countries. As far as the global competitiveness index is concerned, both countries are classified as middle-income countries with growing economies and are ranked closer to each other, Hungary in 47th place and Indonesia in 50th place (Schwab, 2019).

SMEs play an important role in both countries. According to the OECD (2020) and the European Commission (2021), SMEs in Hungary comprise more than 724 thousand firms, or 99% of all enterprises, and employ nearly two million workers, accounting for 69% of the labour

force. They also contributed about 55% of the total value added. Similarly, there are more than 64 million SMEs in Indonesia, accounting for 99% of the total enterprise population and employing about 70% of the country's labour force (OECD, 2018, 2020).

This study is divided into several sections. After a brief literature review on the definition of SMEs, competitiveness, and firm performance, the author will explain the research methodology. Next, the results of the survey and discussions are presented using quantitative and statistical analysis to compare the two countries. Finally, the conclusion, limitations, and implications for management conclude the paper.

Literature Review on SMEs Definition, Competitiveness and Firm Performance

There are no uniform standard definitions for the concept of SMEs, and it generally depends on country-specific standards. However, most country-specific institutions around the world agree that SMEs comprise three different categories of enterprises, namely micro, small and medium-sized enterprises, which are classified into different categories based on the number of employees, turnover (annual sales) and total assets (Badan Pusat Statistik, 2019; European Commission, 2019; IFC, 2019; OECD, 2018; Tambunan, 2019; World Bank, 2019). Table 1 can be summarise of the SMEs definition criterias from different institutions.

Table 1. SMEs definition by categorization

Institutions	Items	Micro SMEs	Small SMEs	Medium-sized SMEs
IFC, World Bank	**Employees (person)**	< 10	10 - 49	50 - 300
	Turnover level	US$ 100,000	US$ 100,000 – < 3 Million	US$ 3 Million – 15 Million
	Total Assets	< US$ 100,000	US$ 100,000 – < 3 Million	US$ 3 Million – 15 Million

European Commission (EU)	**Employees (person)**	< 10	10 - < 50	50 - < 250
	Turnover level	< € 2 Million	< € 10 Million	< € 50 Million
	Total Assets	< € 2 Million	< € 10 Million	< € 43 Million
Badan Pusat Statistika & UU No 20, 2008 (Indonesia)	**Employees (person)**	1 - 4	5 - 19	20 – 99
	Turnover level	< IDR 300 Million	IDR (300 – 2,500) Million	IDR (2.5 – 50) Billion
	Total Assets	< IDR 50 Million	IDR (50 – 500) Million	IDR (0.5 – 10) Billion

Sources: (Badan Pusat Statistik, 2019; European Commission, 2019; IFC, 2019; OECD, 2018; Tambunan, 2019; World Bank, 2019)

As mentioned above, competitiveness has a multi-layered concept. It can be defined from many angles, be it national or state, industry, organisational, business and management, cultural, or other perspectives (Bhawsar & Chattopadhyay, 2015). Based on the resource-based view, competitiveness can be defined as the interdependent bundle of resources and capabilities that enable the creation or development of valuable competencies (Barney, 2001; Hamel & Prahalad, 1990; Lafuente et al., 2020). In this study, firm competitiveness is described as the ability of a firm to outperform its competitors based on specific competitive advantages that arise for the firm either through minimised costs or maximised business opportunities (Hove-Sibanda et al., 2017). According to Maniak (2006), the competitiveness of a company is determined by the specific behaviour of a company. Therefore, in order to be competitive in the market, a company should first achieve a competitive advantage, which refers to the fact that the company performs its activities better or differently than its competitors (Barney & Mackey, 2005). In this study, the measurement of a company's competitiveness will be based on the ten pillars of competitiveness developed by Lafuente et al., (2020) which defines "competitiveness is the interdependent set of ten pillars-human capital, product, internal market, networks, technology,

decision making, strategy, marketing, internationalisation, and online presence"

Similarly, the firm performance term has a variety of concepts and definitions, which is due to the gap in the existing literature and the changing trends in business, as well as natural, global, and technological factors that affect organisational dynamics, with most of the old literatures focusing only on measuring financial performance (Goshu & Kitaw, 2017). According to Santos & Brito, (2012), firm performance can be defined as a subset of organisational effectiveness that includes operational and financial outcomes. In addition, Taouab & Issor (2019) argue that performance measurement should include more than just financial indicators and add three other important performance indicators, including customers, business processes, and innovation and learning. Therefore, this study will provide a balanced view of financial and non-financial business performance of SMEs. For this study, the performance measurements of SME firms were adopted and modified from (Hove-Sibanda et al., 2017). These include export, sales performance, profitability (turnover), employee satisfaction and retention, investment, customer satisfaction and retention, new product development, and innovation and learning.

Based on the theory and numerous empirical evidences of the positive relationship between competitiveness and firm performance (Lii & Kuo, 2016; Cantele & Cassia, 2020; Momaya, 2019), the main hypothesis of this research is that firms competitiveness of SMEs in both countries, i.e. Hungary and Indonesia, has a positive impact on their firm performance.

Research Framework, Design and Methodology

Figure 1 shows the research framework of this study; the two latent variables, where SMEs firm competitiveness (FC) as the independent variable (IV) consists of 10 indicators and SME firm performance (FP) as the dependent variable (DV) consists of 8 indicators.

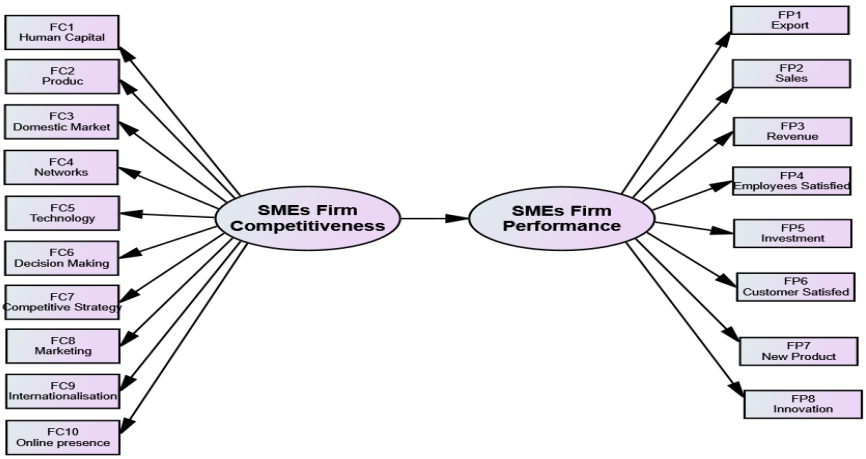


Figure 1. The Research Framework

Creswell (2009) defines that research designs are plans and procedures for research that encompass decisions from more general assumptions to specific methods of data collection and analysis. In this study, a quantitative research design was used by conducting surveys among SMEs participants in both Hungary and Indonesia. A quantitative research is considered much more objective and systematic by using structured procedures and formal instruments for data collection, as it is not influenced by the subjectivity of the researcher (Queirós et al., 2017). In a quantitative study, an ideal sample can represent the population from which it was selected. For this study, a non-probability sample was used through a purposive sampling technique based on certain criteria. These include that the firm has its own legal identity number, has been in business for at least two years, is for-profit, and has at least two employees including the owners. The reason for using the purposive sampling technique is to obtain the relevant characteristics of the SMEs populations in both countries (Etikan et al., 2016; Sekaran & Bougie, 2016; Zikmund et al., 2010).

As Sekaran & Bougie (2016) note, a sample size of more than 30 and less than 500 is more appropriate for most studies. To determine the sample size, this study used G-power software to calculate the minimum sample size required (Faul et al., 2009). With an alpha level

(5%), required power (95%), and mean effect size (0.3), the required sample size according to G-power analysis was 111. In addition, (Hair Jr et al., 2017) argue that a sample size of at least 100 is sufficient for most applications as long as the value of the average variance extracted (AVE) is more than 0.50.

Due to the pandemic situation since 2019, the data sample was collected through an online system for primary data collection. The survey instruments/questionnaires were developed using LimeSurvey software. Once the survey items were set and activated online, the software generated the link https://exam.ktk.pte.hu/limesurvey/index.php/359936, which was sent to respondents via emails, Facebook, WhatsApp, Instagram, and other social media platforms. The primary data collection took place from October 2020 to May 2021. Approximately 1,000 respondents in both countries were contacted cross-sectionally, of which a total of 379 completed questionnaires (Hungary 218 and Indonesia 161 respondents) were submitted for analysis. This number represents a response rate of thirty-eight percent (38%). This number of observations is sufficient as it exceeds the minimum sample size required for analysis using structural equation modelling (Hair Jr et al., 2017).

The results of data collection in this questionnaire was analysed using the Statistical Package for the Social Sciences (SPSS) version 26 and the Analysis of Moment Structure (AMOS) version 24. SPSS was used to code the participants' responses to the items presented in each variable, while AMOS was used for covariance-based structural equation modelling (CB SEM) because the research aimed to test the theory and prove the causal model between variables (Joseph F Hair et al., 2014; Hair Jr et al., 2017). First, this study conducted a data screening to check the normality distribution of the data by analysing the kurtosis and skewness index (Kline, 2015; Field, 2013). The study also checked the collinearity assumption to ensure that there was no multicollinearity problem in evaluating the structural model fit by determining the variance inflation factor (VIF). Kaiser-Meyer-Olkin analysis (KMO) was then tested to determine the suitability of the sample for conducting a factor analysis using exploratory factor analysis (EFA). In general, an EFA prepares the variables to be used for

cleaner structural equation modelling and should always be performed for the validity of new data sets (Gaskin & Lim, 2016). Next, the internal consistency of the constructs was examined using Cronbach's alpha (α) to assess the reliability of the measurement model (Field, 2013). Next, a confirmatory factor analysis (CFA) was conducted to determine the factor structure of the dataset which consist of composite reliability (CR), factor loadings (λ), convergent validity, namely an average variance extracted (AVE), and discriminant validity, namely maximum shared variance (MSV) (Gaskin & Lim, 2016). Then, model fit was examined to assess measurement fit. Three model fit measurements were performed: (1) Absolute Fit Indices, namely: the goodness of fit index (GFI), root mean square error of approximation (RMSEA), standardised root mean square residual (SRMR), chi-square/degree of freedom ($\chi 2$ /d.f.); (2) Incremental Fit Indices, namely: Normed Fit Index (NFI), Tucker Lewis Index (TLI), Comparative Fit Index (CFI); and (3) Parsimony Fit Indices, namely Adjusted Goodness of Fit Index (AGFI) (Gaskin & Lim, 2016; J F Hair et al., 2019). Finally, the path analysis of the model was examined by determining the structural relationship of the variables, standardised beta coefficients, t-values, and p-values (Gaskin & Lim, 2016; Hair Jr et al., 2017).

Results Findings and Discussion

Figure 2 shows SMEs characteristics based on the number of employees in both countries in the sample. In both countries, micro SMEs dominate with a share of more than half of the total sample, while medium-sized SMEs with more than 50 employees only account for a share of less than 10 percent, with the average number of employees in Hungary and Indonesia being 27 and 21 persons, respectively. In the real situation, according to Eurostat (2020), most SMEs in all European countries, including Hungary and Indonesia, are dominated by microenterprises with fewer than 10 employees (Badan Pusat Statistik, 2019).

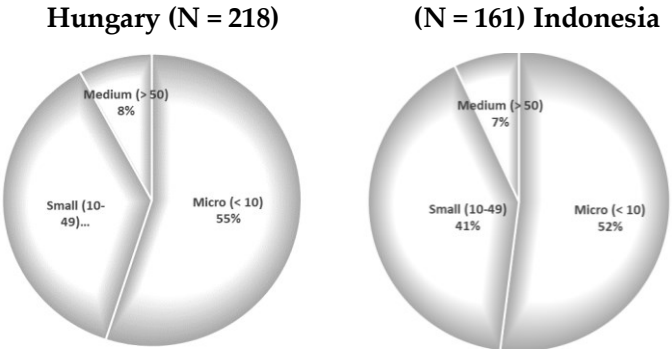


Figure 2. SMEs by Profile Sized

Regarding the year of establishment of SMEs, 59% of Hungarian SMEs are much more developed than Indonesian SMEs, with more than 10 years, while only 6% of newly established SMEs were established less than 5 years. On the other hand, the majority (43%) of Indonesian SMEs were established between 5 and 10 years. It is believed that the Hungarian SMEs are much more resilient than their counterparts (Figure 3). On average, Hungarian SMEs were established within 16 years, compared to an average of 11 years for Indonesian SMEs.

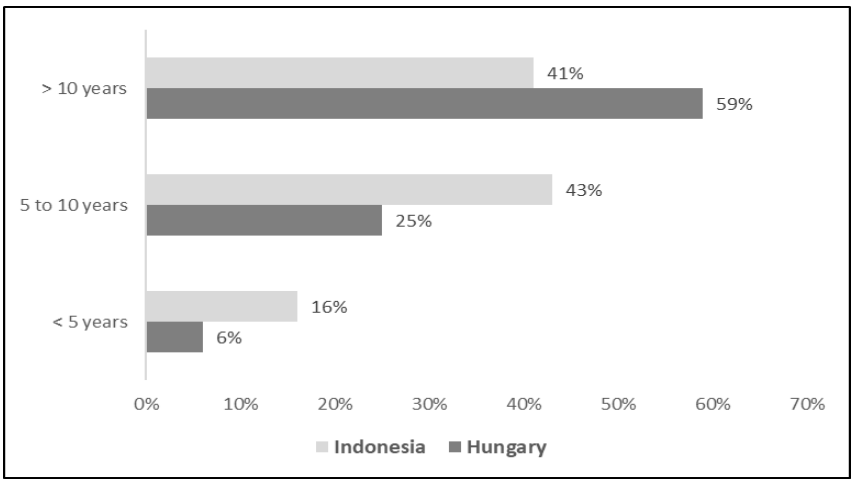


Figure 3. SMEs Establishment Year Profile

Figure 4 shows interesting figures. Nearly 50% of Indonesian SMEs belong to the manufacturing sector, followed by wholesalers / retailers with about 19%. As Badan Pusat Statistik (2019) and Tambunan (2019) notes, the manufacturing sector in Indonesian SMEs is mainly dominated by home industries producing food and beverages and garments. In contrast, the profile of SMEs in Hungary is nearly equally divided between manufacturing and wholesale/retail trade.

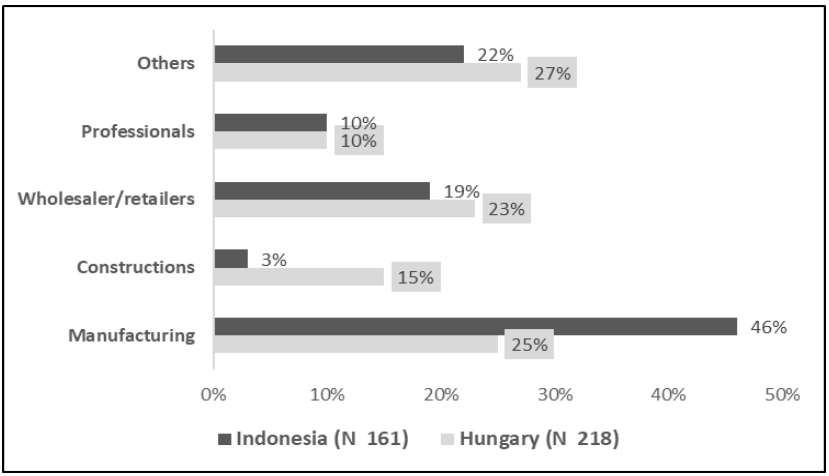


Figure 4. SMEs Profile by Industry Cluster

The test for normality using skewness and kurtosis analysis shows that the data set is normally distributed for all variables. According to Kline (2015), a kurtosis and skewness value between -3 and +3 is considered normal. In addition, there are no multicollinearity problems for both the FC and FP variables. Sampling adequacy was also measured to assess the suitability of the data for factor analysis. Sampling adequacy was measured using Kaiser-Meyer-Olkin (KMO). As a rule of thumb, Field (2013) suggested that KMO values greater than 0.5 can be considered adequate; however, a value of 0.8 to 1.0 is excellent. For this study, KMO values above 0.8 were set for both FC and FP, which is considered perfectly appropriate for the data. In terms of exploratory factory analysis (EFA), all indicators with a value greater than 0.5 are valid (Gaskin & Lim, 2016). In addition, the reliability test

using Cronbach's α also shows the reliable results with a value greater than 0.7 (Gaskin & Lim, 2016). Table 2 summarises the analysis of all the above measurement results.

Table 2. Normal Distribution, Multicollinearity, KMO, EFA and Cronbach α Tests

Test items	Variable/Parameter	Hungary	Indonesia	Remarks
Normal distribution (-3 < x < +3) (Kline, 2015)	FC Skewness	0.173 to 0.629	-0.439 to 0.061	Normal
	FC Kurtosis	-1.229 to -0.017	-0.698 to -0.094	Normal
	FP Skewness	-0.003 to 1.152	0.266 to 1.077	Normal
	FP Kurtosis	-0.606 to 1.960	-0.428 to 0.737	Normal
Multicollinearity (VIF< 10) (Kline, 2015)	FC	1.761 to 4.908	2.430 to 9.977	No multicollinearity
	FP	2.797 to 8.456	1.353 to 3.797	No multicollinearity
KMO (> 0.5) (Field, 2013)	FC & FP	0.816	0.805	Perfect adequate
EFA (>0.5) (Gaskin & Lim, 2016)	All FC indicators	0.674 to 0.880	0.761 to 0.939	Valid correlations
	All FP indicators	0.827 to 0.943	0.536 to 0.885	Valid correlations
Cronbach α (> 0.7) (Gaskin & Lim, 2016)	FC	0.941	0.953	Reliable
	FP	0.940	0.839	Reliable

Source: own analysis

Using AMOS, confirmatory factor analysis (CFA) was conducted to determine the factor structure of the dataset (Gaskin & Lim, 2016). A composite reliability (CR) of greater than 0.7 is considered completely reliable. Values greater than 0.5 are accepted for factor loadings (λ). A test for convergent validity using an average extracted variance (AVE) value greater than 0.5 is considered valid, and a test for discriminant validity using a maximum shared variance (MSV) less than AVE is considered valid. Table 3 summarises the above measurement results. However, some indicators in the variables FC and FP were excluded because their factor loading values are less than 0.5 and thus cannot be appropriately used for model fit analysis in the next phase.

Table 3. Validity and Reliability Tests Using CR, AVE, MSV and Loading Factors

Test items	Variable/ Parameter	Hungary	Indonesia	Remarks
CR (> 0.7) (Gaskin & Lim, 2016)	FC	0.878	0.929	Perfect Reliable
	FP	0.938	0.853	Perfect Reliable
AVE (> 0.5) (Gaskin & Lim, 2016)	FC	0.597	0.767	Convergent Valid
	FP	0.793	0.545	Convergent Valid
MSV (< AVE) (Gaskin & Lim, 2016)	FC	0.105	0.021	Discriminant Valid
	FP	0.105	0.021	Discriminant Valid
	Firm Competitiveness (FC)			
	FC1. Human capital	0.821	Excluded	
	FC2. Product	Excluded	Excluded	
	FC3. Domestic market	0.642	0.924	

Factor loadings (λ > 0.5) (Gaskin & Lim, 2016)	FC4. Networks	Excluded	0.956	Hungary: 5 FC and 4 FP indicators are excluded since the factor loading < 0.50 Indonesia : 7 FC and 4 FP are excluded since the factor loading < 0.50
	FC5. Technology	0.584	0.893	
	FC6. Decision making	Excluded	Excluded	
	FC7. Competitive strategy	0.886	Excluded	
	FC8. Marketing	Excluded	Excluded	
	FC9. Internationalization	Excluded	Excluded	
	FC10. Online presence	0.879	Excluded	
	Firm Performance (FP)			
	FP1. Export	Excluded	Excluded	
	FP2. Sales	Excluded	0.609	
	FP3. Revenue	Excluded	Excluded	
	FP4. Employee satisfaction	0.782	0.741	
	FP5. Investment	0.921	Excluded	
	FP6. Customer satisfaction	0.991	0.684	
	FP7. New product development	0.856	Excluded	
	FP8. Innovation	Excluded	0.981	

Source: own analysis

According to Hair et al., (2019) , the goodness of fit (GOF) test is required before it is used for hypothesis testing in structural path model analysis to indicate how well the user-specified model mathematically reproduces the observed covariance matrix between indicator positions.

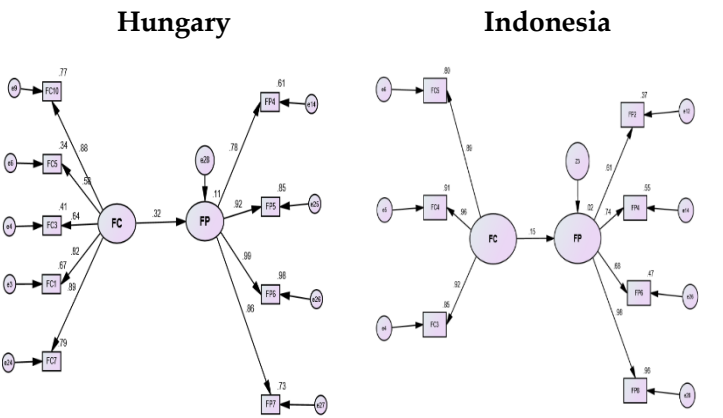
Table 4. GOF Test Results Analysis

GOI Test Analysis	Threshold	Hungary	Indonesia	Remarks
Absolute Fit Indices (J F Hair et al., 2019)	GFI > 0.90	0.966	0.912	Good Fit
	RMSEA < 0.08	0.041	0.07	Good Fit
	SRMR < 0.10	0.019	0.041	Good Fit
	(χ2 /d.f) < 3.00	1.360	1.793	Good Fit
Incremental Fit Indices (J F Hair et al., 2019)	NFI > 0.90	0.976	0.915	Good Fit
	CFI > 0.90	0.994	0.960	Good Fit
	TLI > 0.90	0.991	0.950	Good Fit
Parsimony Fit Indices (J F Hair et al., 2019)	AGFI > 0.80	0.942	0.871	Good Fit

Source: own analysis

In other words, the GOF test indicates how well the specified theoretical structure reproduces reality as represented by the data. For the excellent GOF test results, the three test fit indices are applied, namely the absolute, incremental and parsimony tests, which consist of 8 tests. In this study, all 8 GOF tests exceeded the accepted threshold (Table 4), which means that the whole data set can be appropriately used for specifying the hypothesised theory.

Figure 5 shows the final structure of the model path analysis in both sample countries. For the Hungarian data set, the estimated relationship between FC and FP is 0.324 and 0.148 for Indonesia. This means that there is a positive causal relationship between the two variables. However, in terms of the magnitude of the relationship, Hungarian SMEs are much more significant than Indonesian SMEs with a p-value of less than one percent, while the significance level of Indonesian SMEs is less than 10 percent with the p-value of 0.073.



Source: own analysis

Figure 5. Structure Model of Path Analysis

It is assumed that Hungarian SMEs are much better developed and that their competitiveness indicators include more elements than its counterparts do. All in all, the hypothesis that SME competitiveness has a positive impact on business performance in both countries, i.e. Hungary and Indonesia, is supported and accepted. Table 5 summarises of the results of the structural equation modelling and the results of the hypothesis test.

Table 5. SEM Results and Hypothesis Test

Sample Country	ß estimate	t-statistics	p-value	Decision
Hungary	0.324	4.542	***	Supported
Indonesia	0.148	1.792	0.073*	Supported

Source: own analysis. Sig.*p < 0.10; **p < 0.05; ***p < 0.01

From this empirical study, it found there is a causal relationship between firm competitiveness and firm performance of SMEs in Hungary and Indonesia. Interestingly, although the SMEs in Hungary and Indonesia have different characteristic profiles, they have similarities in terms of the causal relationship. The significant effect of firm competitiveness on firm performance in this study is consistent with the findings of Cantele & Cassia (2020), Hove-Sibanda et al. (2017), Lii & Kuo (2016), and Momaya (2019).

Another interesting finding for the study is that both countries have similar indicators of firm competitiveness, namely a domestic market and technology as supporting factors for the path measurement model. It suggests that these factors are much more important for the competitiveness of today's SMEs, regardless of the country of origin. This result is confirmed by Dwyer et al. (2016), Mahajan et al. (2020), Ndiaye et al. (2018), and Palacios-Marqués et al. (2015). In addition, both countries also have similar stressors on firm performance, namely employee and customer satisfaction. Employee and customer satisfaction are always considered important for firm performance, both for SMEs and larger firms, regardless of the country of origin. This is confirmed by the Huang et al. (2015), Koch et al. (2020), and Querbach et al. (2020) studies.

In addition to the similarity, both countries have different and specific indicators that are considered unique factors. In Hungary, the most important indicators of business competitiveness are human capital, competitive strategy, and online presence, while in Indonesia, the indicator of networking is considered to be much more important for the competitiveness of SMEs to run their daily business. This is confirmed by the research study of Adam et al. (2020) and Febrian et al. (2020). As for the business performance variables, the indicators of investment and new product development are considered important in Hungary, while the indicators of sales and innovation are much more important in Indonesia.

Conclusion, Managerial Implications and Limitations

In this study, a quantitative research study was conducted in which data were analysed using SPSS and AMOS software. The empirical results of this study have shown that business competitiveness has a positive impact on the performance of SMEs in Hungary and Indonesia. In terms of the extent of the relationship, Hungarian SMEs are much more significant than Indonesian SMEs, suggesting that Hungarian SMEs are much more developed and their competitiveness indicators include more elements.

In terms of management implications, SME owners or managers in both countries should consider their company's unique competitive factors for the region in order to improve SME performance. In addition, they need to constantly look for other specific competitive indicators that can improve the company's performance.

Due to the pandemic situation and time constraints, there are some limitations to this study: This study uses only a single independent and dependent latent variable, and data collection is only through an online survey. In order to obtain a more comprehensive and better result, a mix of methods including a quantitative and qualitative survey is needed for the future research study.

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Marketing The Sustainable Tourism Destinations in Europe: Lesson Learn for Indonesia

Sita Dewi Kusumaningrum

"***In the hospitality industry, intangible products, such as customer service and experiences, are more important than tangible products*** **(Kotler et al., 2021:34)."**

Introduction

Tourism is a potential sector for achieving Sustainable Development Goals established by the United Nations. The United Nations World Tourism Organization (UNWTO) has also responded to this issue as stated in their International Tourism Highlight that "*Sustainability and competitiveness go hand in hand as destinations and businesses can become more competitive through the efficient use of resources, the promotion of biodiversity conservation and actions to tackle climate change* (World Tourism Organization, 2019:5)." Therefore, tourism plays an essential role in the achievement of the World Sustainable Development Goals number 8 (by promoting inclusive and sustainable economic growth), number 12 (by ensuring sustainable consumption and production patterns), and number 14 (by promoting the sustainable ecosystem of coastal and marine tourism)[3].

Data shows that sustainability issue has become a new lifestyle in traveling[4]. Nevertheless, travelers might still lack knowledge on executing their sustainability consciousness which should become a

[3] https://tourism4sdgs.org/tourism-for-sdgs/tourism-and-sdgs/

[4] The term of tourism and travel/travelling is often used interchangeably

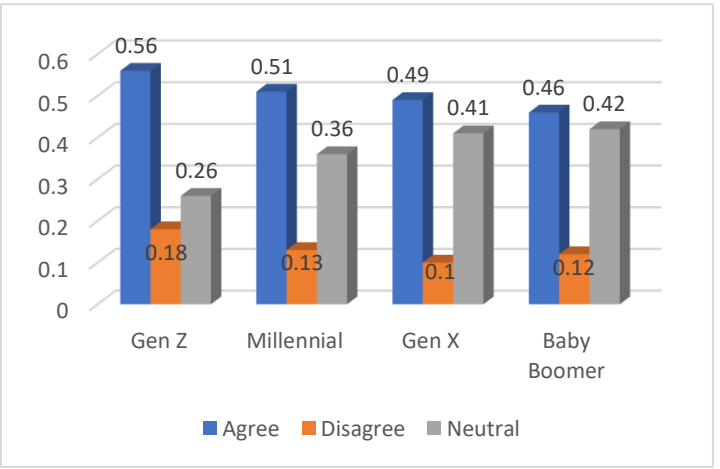
critical note for the tourism sector. In their findings of Sustainable Travel Report 2019, Booking.com revealed that travelers struggle when deciding on sustainable travel, as presented in Table 1.

Table 1. Challenges on Deciding Sustainable Travel Based on Travelers Opinion in 2019

Statements	Global Respondents Who Agree
I do not know how to make my travel more sustainable	37%
I cannot afford the extra expenditure of sustainable travel	36%
Although I do see options to travel more sustainably, other options tend to appeal more	34%
My agenda constrains me in the sustainable choices I can make	34%
Sustainable travel destinations appeal to me less than other destinations	34%

Source: https://globalnews.booking.com/bookingcom-reveals-key-findings-from-its-2019-sustainable-travel-report/

Booking.com regularly reports the sustainable travel behavior among travelers, which is also valuable for sustainable tourism practices. Based on its findings in 2019 (Table 1), more travelers are aware of sustainable travel (the demand) but need more information (from the supplier) to decide the right choice so that the supply can match its demand. The statement "I do not know how to make my travel more sustainable", which percentage in 2019 is still low (below 50 percent), means a lack of information on credible certification.



Source: https://www.statista.com/study/9996/tourism-worldwide-statista-dossier/

Figure 1. Share of Travelers Opinion in Choosing an Environmentally-friendly Travel Option as of January 2020, by Generation

Nowadays, sustainable tourism destinations need to develop their tourism services by considering the triple bottom line theory, which consists of social/cultural (people), environmental (planet), and economic (profit) dimensions, as more and more travelers want to choose an environmentally friendly travel option. As seen in Figure 1, a global survey conducted by STR and retrieved from Statista.com shows that Generation Z and Millennials are more concerned with environmentally friendly travel options in the four generations. At the same time, Generation X and Baby Boomer are more neutral with environmentally friendly travel options. Nevertheless, in 2021, the opinion from 83 percent of almost 30,000 travelers/respondents across 22 countries in Booking.com Sustainable Travel Report 2021 stated that they believe in the importance of sustainable travel[5]. These prove that sustainable tourism destinations have become a critical tourist value. Destination Management Organizations should also see this as a good opportunity for recovery strategy after the Covid-19 Pandemic.

[5] https://globalnews.booking.com/bookingcoms-2021-sustainable-travel-report-affirms-potential-watershed-moment-for-industry-and-consumers/

In the tourism marketing and destination branding context, a sustainable tourism destination can be one way or even a primary tool (CABI, 2020) to increase the destination competitiveness, which is in line with the Sustainable Development Goals (SDGs) or the Global Goals of Development. Further, marketing is one primary way to communicate sustainability initiatives in offering services and experiences of sustainable tourism destinations so that the supply can match the demand. Moreover, tourism marketing practices should consider the theoretical and empirical sources to attain a better result. Therefore, this chapter will present the best practices of sustainable tourism destinations in Europe by focusing on their marketing practice and elaborating on the lesson learned for sustainable tourism marketing in developing countries such as Indonesia.

Best Practices In Europe

European countries have been implementing sustainable tourism and following several assessments on the progress. The European Union consistently develops and promotes places to achieve environmental, cultural, and socially sustainable tourism through European Destinations of Excellent (EDEN) as a network established in 2007. Further, this EDEN is becoming more than just a network but a tourist movement which is friendly to nature and humankind. Based on the report from Euromonitor International on Top Countries for Sustainable Tourism which the title is "Embracing a Green Transformation for Recovery in Travel" (Bremner & Dutton, 2021), Scandinavia and Europe are set as sustainable travel leaders. There are seven sustainable travel pillars in the assessment, i.e., 1) environmental sustainability, 2) social sustainability, 3) economic stability, 4) risk, 5) sustainable demand, 6) sustainable transport, and 7) sustainable lodging. Therefore, this book chapter will present four best practices of sustainable tourism destinations from Scandinavian and European Countries, namely Sweden, Finlandia, Austria, and Slovenia.

The Case of Sweden and Finland (Western Europe and Scandinavian Countries)

Sweden is the first rank in the Sustainable Travel Index Rankings 2020 developed by Euromonitor International. As one of the Scandinavian countries, Sweden focuses on climate action, biodiversity conservation in the Arctic, and a carbon-free circular economy. It aims to achieve net-zero emissions by 2045 (OECD, 2020). This country develops efficient transport infrastructure and alternatives to flight to support sustainable tourism. Moreover, an inspired environmentalist activist who popularized the eco-friendlier transportation with the "flight shaming" movement comes from Sweden, Greta Thunberg[6]. Sweden also has become a role model in sustainable lodging with the Nordic Eco-chic architecture. The three most visited cities in Sweden are Stockholm, Gothenburg, and Malmö. Gothenburg is Sweden's second-largest city, which was declared the world's most sustainable destination for three years.[7] In this city, the eco-friendly atmosphere is the best experience. Sweden has created the actions and experiences for more sustainable living as its tourism product.

The two organizations responsible for promoting tourism programs in Sweden are *Tillväxtverket* (Swedish Agency for Economics and Regional Growth) and Visit Sweden (State Owned Company). *Tillväxtverket* is responsible for promoting tourism at the national level, while Visit Sweden, which has representatives in seven countries, is responsible for branding and conducting tourism marketing internationally. Visit Sweden promotes sustainable nature and ecotourism in rural areas of Sweden to emerging markets such as India and China. However, in 2021, Visit Sweden will conduct marketing activities for international and domestic target groups (Wennberg & Oosi, 2021), such as organizing marketing campaigns, ensuring social media visibility, co-operating with tour operators, and inspiring foreign media to feature Sweden as a travel destination. Visit Sweden also launched "the Edible Country", promoting the tourist experience to enjoy healthy food in the corner of forest, lakes, and meadows.

[6] https://time.com/person-of-the-year-2019-greta-thunberg/

[7] https://www.bbc.com/travel/article/20200223-is-gothenburg-europes-greenest-city

In the case of Finland, it is the second rank in the Sustainable Travel Index Rankings 2020 developed by Euromonitor International. The biggest international group of visitors in Finland comes from Germany, followed by Sweden, Estonia, and United States[8]. The inbound tourism for Finland is potentially affected by sustainable tourism and travel behavior, digitalization, and Finland's key strengths, namely nature, security, cleanliness, and authenticity. It targets to be carbon neutral by 2035[9]. Although Finland is still facing price competitiveness and seasonal tourism challenges, it will go to the new tourism strategy with the theme of "Achieving More Together-Sustainable Growth and Renewal in Finish Tourism" to become the most sustainable destination in the Nordic Region (OECD, 2020). There are four key priorities to promote growth and renewal in the tourism sector: support activities that foster sustainable development (embed sustainability and nature tourism), respond to digital change (to become an innovative, pioneering destination that provides the best customer journey and experience), improve accessibility, and ensure an operating environment that supports competitiveness (OECD, 2020).

Finland has three levels of the tourism governance body, i.e. at the national level (Visit Finland/Business Finland and Tourism Industry Associations), at the regional level (Regional Tourism and Destinations Management Organisations), and the local level (Local Tourist Information Offices and Tourism Destinations Offices). Visit Finland as part of the Business Finland has a significant task to promote Finland as a tourist destination and is responsible for promoting inbound tourism while assisting the Finnish travel companies to go international, develop, and market high-quality travel products.

The Case of Austria (Western Europe)

Austria is the third rank in the Sustainable Travel Index Rankings 2020 developed by Euromonitor International. The top destination state in Austria in 2019 is Tyrol, followed by Vienna and

[8] https://www.statista.com/statistics/435522/visitor-arrivals-in-finland/
[9] https://new.visitfinland.com/en/practical-tips/facts-about-finland/

Salzburg[10]. The success of Austria as one of the most sustainable tourism destinations in the world is due to the advantages of natural landscapes, mountains, lakes and natural parks, the towns and cities, the cultural diversity, and the Austrian cuisine from high-quality regional products. One of the main pillars for Austrian tourism is the culinary experience (BMNT, 2019; Michael, 2012). Nevertheless, the government's commitment and relevant stakeholders play an essential part.

The Federal Minister for Sustainability and Tourism has launched "Plan T," a Master Plan for Tourism in 2019, implemented for five years. This master plan is the guideline for implementing sustainability and achieving CO2 emissions reduced by 36 percent in 2030 (BMNT, 2019). There are nine fields of action and some activities from three objectives. The development of tourism marketing is one of the actions. Several activities are also relevant to marketing, such as strengthening tourism awareness, positioning Austria as a "green destination," making Austria a culinary destination. Further, Austria has a national tourism marketing organization: The Austrian National Tourist Office (NATO), as part of the national team to support the tourism plan. It is responsible for conducting market research, managing brand, marketing, establishing tourism networking, and providing information (OECD, 2020).

The Case of Slovenia (Eastern Europe)

Slovenia is one of the smallest countries in the world in terms of land area and population located in South-Central Europe, bordered by Austria to the north, Hungary to the east, Croatia to the southeast, the Adriatic Sea to the southwest, and Italy to the west. The Slovenia's regions consist of beautiful landscapes, including mountains, karsts, lakes, and coasts. Ljubljana is the capital and largest city in Slovenia. The most popular tourist destination in Slovenia for international visitors in 2019 is the mountain resorts, followed by Ljubljana (the

[10]https://www.statista.com/statistics/1172135/international-arrivals-in-austria-by-destination/

capital city), seaside resorts, other municipalities, health (spa) resorts, and urban municipalities[11].

Slovenia consistently implements sustainable tourism in all areas, including economic, social, cultural, and environmental sustainability. Slovenia is one of the global leaders in responsible tourism. Slovenia's unique green tourism experiences have received numerous prestigious awards and recognitions. For example, Ljubljana was the European Green Capital in 2016. In addition, Slovenia ranks number 10 out of 99 countries in Euromonitor International's Sustainable Travel Ranking Index 2020. Several tourism destinations in Slovenia also won the European Destinations of Excellence (EDEN) from the European Commission, such as Podčetrtek in 2019, Koper in 2017, Brda in 2015, Lasko in 2013, Idrija in 2011, River Kolpa in 2010, Solcavsko in 2009, and The Soca Valley in 2008. Moreover, Slovenia has launched the Green Scheme of Slovenian Tourism (GSST) in 2014, a certification program with globally recognized criteria through Slovenia Green labels of Platinum, Gold, Silver, or Bronze for destinations and Slovenia Green Accommodation, Park, Travel Agency, Attraction, Cuisine, or Beach labels for service providers within and outside Slovenia. Currently, more than 100 destinations are certified under the label of Slovenia Green.

The central national agency supports the success of Slovenia's tourism marketing through its Slovenian Tourist Board which plans and develops the tourism marketing strategy and program at home and abroad. The Slovenian Tourist Board has been the winner for Destination Leadership from the National Geographic World Legacy Awards in 2017[12]. To support the national goal to be one of the world's most sustainable countries, the Slovenian Tourist Board has launched a vision for Slovenia tourism destinations as "*A green boutique global destination for high-end visitors seeking diverse and active experiences, peace, and personal benefits. A destination of five-star experiences*[13]." Further, the Slovenian Tourist Board has focused on brand development as one of

[11] https://www.statista.com/statistics/1061035/international-tourist-arrivals-in-slovenia-by-destination-type/

[12] https://www.nationalgeographic.com/worldlegacyawards/winners.html

[13] https://www.slovenia.info/en/business/about-slovenian-tourist-board

the powerful marketing tools for more than a decade. The name of Slovenia as the only country with the word love in its name is an added value for designing Slovenia's tourism brand, namely "**I feel** S**LOVE**nia" and "S**LOVE**nia **GREEN**" as depicted in Figure 2.

Source: slovenia.info

Figure 2. The Brand of Slovenia

Well-designed communication is a critical point in marketing. The Slovenian Tourist Marketing Board has designed MY WAY as the new communication platform to support the brand of Slovenia in promoting tourist destinations in Slovenia for the international market. It is an interactive communication platform to accommodate the changes in tourist expectations. The millennial generation and current tourist behavior expect more experiences than the product. Therefore, MY WAY aims to create more emotional and experiential communication in line with the vision of Slovenian tourism. The Tourist Marketing Board also provides a complete manual as a professional guide for implementing and using MY MAY (Slovenian Tourist Board, 2018).

Lesson Learn for Indonesia

Indonesia is in the emerging process for sustainable tourism, and there are still many challenges. For instance, Indonesia's diverse culture and low cost of living that attract tourists worldwide might go against the local wisdom protection (Maspul, 2021). Moreover, Indonesia is still ranked 92 out of 99 countries according to Sustainable Travel Index Rankings 2020 that released by Euromonitor International in March 2021. Nevertheless, Indonesia has been preparing for sustainable tourism through the stipulation of Regulation of the Minister of Tourism of the Republic of Indonesia No. 14/2016 on Guidelines for Sustainable Destination. Further, based on that

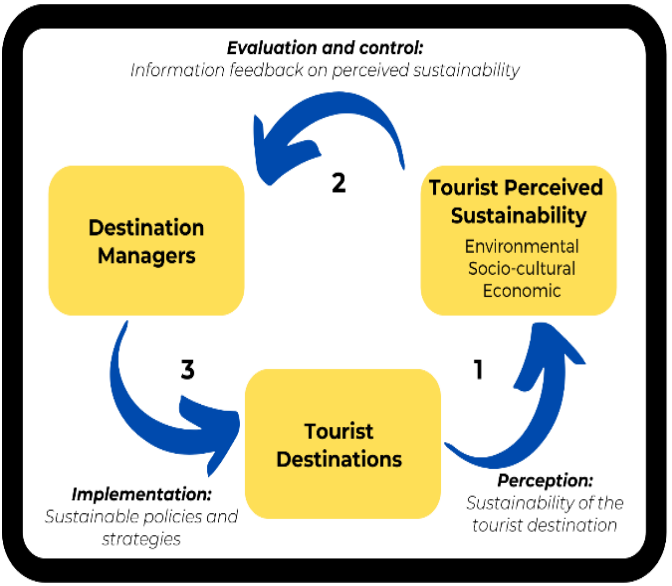
regulation, Indonesia also launched the first Indonesia Sustainable Tourism Award (ISTA) in 2017 to promote sustainable tourism principles, covering four criteria, i.e., sustainable tourism destination management, economic utilization for local communities, environmental protection, and cultural preservation for the community and visitors. Therefore, an appropriate tourism marketing strategy is required to support this effort. The best practices in Europe and insight from relevant literature can be valuable lessons for Indonesia.

The Marketing Process and Sustainability Perceived Value

The marketing process is essential for a sustainable destination because marketing is the primary tool to communicate sustainability initiatives in offering services and experiences. Kotler et al. (2021:27) highlighted that "*Marketing's task is to provide real value to targeted customers, motivate purchase, and fulfill consumer needs*." Based on the marketing task, there are five steps of the marketing process, i.e. 1) understanding the marketplace and customer needs, 2) Designing customer value-driven marketing strategy, 3) Preparing an integrated marketing plan and program, 4) Managing customer relationships and capturing value, and 5) Capturing value from the customer. This book chapter will elaborate on steps one to three of the marketing process.

The first step in the marketing process is identifying what the market and customers need and want to create value for customers and society. After that, in the second step, the destination manager should select the target market and offer a value proposition. In this context, the destination value proposition is sustainable tourism. These two steps become an essential foundation for Destination Management Organizations (DMOs) in creating a marketing program that delivers superior customer value. Delivering the value of sustainability is the main aim of sustainable tourism destinations. Kotler et al. (2021:27) argued that "*Creating customer value and satisfaction is at the heart of hospitality and travel industry marketing.*" Therefore, the DMOs should propose the value of sustainability to tourists and investigate its positive influence on visit intention (Melé et al., 2020). In addition, as the marketing perspective focuses on customers, the DMOs should

consider the tourists' perspective in valuing the sustainability concept (tourist perceived value), which is still limited in practice (Aydın & Alvarez, 2020; Guizzardi et al., 2021; Sánchez-Fernández et al., 2018). Customer/tourist value always refers to "perceived value," which, according to Rekettye (2019:22), is *"The trade-off between the benefits offered to the customer by the product or service and the* costs (monetary and non-monetary) incurred by the customer."



Source: Sánchez-Fernández, Iniesta-Bonillo and Cervera-Taulet (2019)

Figure 3. Frameworks of Sustainability Strategies at Tourism Destination

In practice, the DMOs can follow the framework in Figure 3 that explains how a tourism destination can implement a sustainability strategy (Sánchez-Fernández et al., 2018). The continuous cycle process consists of 1) tourists' opinions on the sustainability of the destination (perception), 2) evaluation and control by destination managers based on tourist perspective, and 3) sustainability program implementation (value proposition). This framework will also help identify the source of value on sustainability from the tourist perspective, mainly cycle 2.

This framework applies tourist value on sustainability as tourists perceived sustainability.[14]

Further, in the second step of the marketing process, evaluating tourists perceived value of sustainability is also critical for the segmenting process. Sustainability has become a global target throughout all sectors, including tourism. However, not everyone cares about sustainability issues when visiting a tourist destination, or in other words, tourists might have different perceptions of sustainable destinations. Therefore, the branding and marketing manager of the destination should carry out a sustainability marketing strategy such as segmenting, targeting, and positioning based on the sustainability criteria (Kumar et al., 2012) to offer an excellent service and experience to the right target. An exemplary segmentation process will allow destination managers to choose the targeted market before the value proposition.

The Embedded Product and the Role of Destination Branding

The third step of the marketing process is preparing an integrated marketing plan and program. This step will transform the marketing strategy of sustainable tourism destinations into action. In this step, the DMOs should develop the main 4Ps of an integrated marketing mix, i.e., product, price, place, and promotion. Based on the presented best practices, this book chapter will focus on the product.

Nowadays, DMOs should be creative in differentiating their offer (products and services) through creating and managing tourist experiences with their destination brand (Kotler et al., 2021) on sustainability issues. Sustainable value in tourism destinations can be an example of an individual lifestyle experience. However, as mentioned before, not all tourists care about sustainable travel and tourism destinations, although there is positive progress. Therefore, DMOs should be aware of the Sustainability Marketing Myopia phenomenon that they should not only focus on what they do to

[14] Tourist perceived sustainability is defined as "*The tourist's cognitive-affective evaluation of sustainability policies implemented at a particular destination by managers and destination marketing organizations* (Sánchez-Fernández, Iniesta-Bonillo and Cervera-Taulet, 2018:3)."

provide sustainable products and services (sustainable tourism destinations) and do not recognize the potential benefit that might be brought for the society to behave more sustainably (Villarino & Font, 2015). Instead, the DMOs should focus on the memorable experience in sustainable tourism destinations. In this concern, Hanna et al. (2018) suggest that the value of sustainability should be embedded within the product, which makes all tourist experiences more sustainable. The case of Sweden, Finland, and Austria in the best practices section are strong examples of embedded sustainability in tourism destinations. Sweden put a more serious concern in the climate action, biodiversity conservation in the Arctic, and a carbon-free circular economy movement. Besides, Sweden successfully brings memorable tourist experiences with its real sustainability effort. In addition, Finland embeds sustainability as a core component for their tourism product while Austria pushes authentic culinary as one of the tourist experiences in sustainability.

Destination branding is another essential marketing tool. Destination branding can have a meaning as "*Creating a differentiated destination image that influences travelers' decision to visit a destination and conveys the promise of a memorable experience that is uniquely associated with the destination* (Kotler et al., 2021:545)." Slovenia is a sustainable tourism destination with a strong brand. Its slogan "**I feel** S**LOVE**nia" is giving persuasive information to visit Slovenia. Learning from the case of Slovenia, branding a tourist destination should have considerable care for not too commercial and receive support from its stakeholders, considering the supply and demand perspectives (Konecnik & Go, 2008). A systematic branding process is needed, which has been implemented in the case of Slovenia (Konecnik Ruzzier & de Chernatony, 2013). Finally, in branding a sustainable tourist destination, the value of sustainability should be incorporated; as (Ruzzier et al., 2015) assessed in the case of Slovenia that sustainability issues were systematically incorporated so that the brand's focus on nature and sustainability concept is straightforward.

Conclusion

This book chapter presents four cases of marketing sustainable tourism destinations in European countries, namely the case of Sweden and Finland in Western Europe and Scandinavian Countries, the case of Austria in Western Europe, and Slovenia in Eastern Europe. There are several lessons learned from the literature and best practices. First, the marketing process and customer perceived value are fundamental for marketing a sustainable tourism destination. Second, in the hospitality industry, tourist experience is critical. Third, there should be an embedded sustainability tourism destination to attract more visitors, such as a nature-based or an eco-friendly tourism destination. Fourth, building a solid destination brand can be good guidance for eco-friendly tourists to decide. Last but not least, sustainable tourism destinations need commitment and cooperation from all stakeholders. Nevertheless, tourism marketing is not one size fits all solution; it needs leadership, creativity, and innovation.

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Cryptocurrency: Opportunities and Challenges in Hungary and Indonesia

Wira Prabowo Madjid & Alif R Triscyananda Defvyanto

Introduction

Following the 2008 global financial crisis, public trust in traditional banking systems was shaken. The first hints of economic trouble emerged on March 16, 2008, when Bear Stearns and Lehman Brothers filed bankruptcy (Wilson, 2019). Also in 2008 global financial crisis, an anonymous person, group, or organization operating under the pseudonym 'Satoshi Nakamoto' created an electronic peer-to-peer system based on the cryptocurrency bitcoin (Rejeb, Rejeb, & Keogh, 2021). The rapid rise of the crypto ecosystem opens up new possibilities. Payments and other financial services will become cheaper, faster, and more accessible as technology advances, and they will be able to cross borders easily. Crypto asset technology has the potential to make cross-border payments more efficient and cost-effective. Bank deposits can be turned into stablecoins, which allow instant access to a wide range of financial products via digital platforms and currency conversion. Decentralized finance has the potential to provide a platform for more innovative, inclusive, and transparent financial services (IMF, The Crypto Ecosystem and Financial Stability Challenges, 2021)

However, the technology extends well beyond simply delivering financial services to the unbanked. It has the potential to enable billions of individuals to engage in online commerce, allowing them to make and receive payments for products and services outside of traditional banking and credit card infrastructure. Micropayments in near-real

time may be possible with bitcoin transactions. Credit cards, for example, were not permitted to be used to download a product or service from the internet for a one-cent fee. Cryptocurrency systems promise to simplify and simplify micropayments, allowing companies to offer real-time pay-per-use consumption of their products such as video, audio, mobile phone service, utilities, and so on.

Cryptocurrency

The term "cryptocurrency" has become a buzzword to describe a wide range of technological advancements that make use of a method known as cryptography. In basic terms, cryptography is the process of encrypting (or converting) information into an unreadable format that can only be decoded (or decrypted) by someone who has a secret key (Houben & Snyears, 2018). Cryptocurrencies are a type of digital currency that is based on either centralized institutions or a decentralized network (Trautman, 2014). Cryptocurrency is a digital asset that is intended to function as a medium of exchange by employing powerful encryption to safeguard financial transactions, regulate the production of extra units, and verify asset transfers. To put it simply, cryptocurrencies are a new sort of currency (Duque, 2020).

Cryptocurrencies use decentralized control instead of centralized digital currencies and the Central Bank system (Widyastuti & Hermanto, 2021). Even for industry participants and experts conducting study in this subject, the bitcoin business is fairly complicated and difficult to comprehend (Fry & Cheach, 2016). A cryptocurrency system is a system for issuing tokens that are intended to be used as a general or limited-purpose medium of exchange and that are accounted for using a digital ledger that is frequently collectively maintained and that uses cryptography to replace trust in institutions to varying degrees. In this context, cryptocurrency can refer to a token created by a cryptocurrency system that can be used for general or specific-purpose exchange (Pernice & Scott, 2021).

There are 10.397 cryptocurrencies have entered the market since 2013 (Coin Market Cap, Statista, 2022). Aside from the hype, cryptocurrencies are now being used to purchase physical goods and

services. Cryptocurrencies mark a considerable deviation from conventional financial system design, administration, as well as control. Blockchain technology is responsible for the growing adoption of cryptocurrencies. The global Cryptocurrency market capitalization today is $1,71 Trillion per March 7, 2022 (Coin Market Cap, 2022).

Blockchain

Blockchain, like any new technology, has seen several stages of development. From the early stages of exploring options through the maturation of structure and content, the market defines its practical worth. As blockchain technology matures, developers are beginning to widen its application to address new technological and organizational challenges (FAL, 2021).

A blockchain is a distributed database, also known as a public ledger, that contains records of all completed transactions or digital events that are shared among participants. Each transaction in the public ledger is double-checked by the majority of the system's members. It is not possible to delete information once it has been entered. Every transaction ever made is recorded in the Blockchain, which is unique and verifiable. To illustrate, stealing a cookie from a cookie jar stored in a remote location is far easier than stealing a cookie from a cookie jar placed in a marketplace while hundreds of people are watching (Crosby, Nachiappan, Pattanayak, Verma, & Kalyanaraman, 2015). Blockchains are computer software-encoded digital number sequences that enable the secure exchange, recording, and broadcasting of transactions between individual Internet users anywhere in the world (Campbell-Verduyn, 2018).

Because Blockchains contain a single shared and verified version of the data, proper implementation of this technology can provide the same information to all participants, removing the need for centralized authority and reducing the amount of paper used (paperless trade), as well as the time, costs, and complexities of bilateral trade communications. Furthermore, if advanced cryptographic methods are used to store data on the Blockchain (blockchain data is not encrypted by default). In addition, to encrypted electronic communication

between the parties, far more secure services, allowing traceability and analysis of data dynamics, may be given. (Perboli, Musso, & Rosano, 2018).

Bitcoin is the most well-known example of a cryptocurrency that is closely tied to blockchain technology. It is also the most troublesome since it creates a multibillion-dollar global market for anonymous transactions that is uncontrolled by the authorities. As a result, it oversees a wide variety of regulatory issues impacting national governments and financial organizations.

Bitcoin

With the rise of Bitcoin in 2008, the word cryptocurrency was used to describe a system that allowed a network of individuals connected by peer-to-peer digital communications infrastructure to create digital tokens and move them amongst themselves while safeguarding the process using cryptography (Pernice & Scott, 2021). In the same year, a paper titled "Bitcoin: A Peer-to-Peer Electronic Cash System" was published by an individual or group writing under Satoshi Nakamoto. This paper described a peer-to-peer electronic cash system that would allow online payments to be sent directly from one party to another without going through a financial institution. This concept was first realized in Bitcoin. The term "cryptocurrency" now refers to all networks and mediums of exchange that use cryptography to secure transactions instead of systems in which transactions are routed through a centralized trusted entity.

Bitcoin is a decentralized digital currency that was first introduced in 2008 and gained popularity in 2009. It was a retaliation against financial companies that frequently privatized profits while socializing losses (Lerer & McGarrigle, 2018). Bitcoin and other cryptocurrencies are protected using this method, which employs an inventive public and private digital keys system. Cryptocurrency is a relatively new phenomenon that is gaining popularity. On the one hand, it is built on cutting-edge technology that has yet to attain its full potential. In its current form, however, it provides similar services to other, more conventional assets.

For two willing individuals to execute a transaction made online Instead than relying on a third party, Bitcoin employs cryptographic evidence via the InternetEach transaction is protected by a digital signature. Each transaction is digitally signed and transferred to the receiver's "public key" using the sender's "private key." To spend money, the cryptocurrency owner must demonstrate ownership of the "private key." The entity receiving the digital currency validates the digital signature on the transaction using the sender's "public key", verifying possession of the associated "private key". (Crosby, Nachiappan, Pattanayak, Verma, & Kalyanaraman, 2015). Bitcoin's market capitalization is at $723,362,215,168 per March 7 2022 (Coin Market Cap, 2022).

Opportunities

The fast growth of the crypto ecosystem creates new opportunities. As technology progresses, payments and other financial services will become cheaper, faster, and more accessible, and they will be able to transcend borders effortlessly. Crypto asset technology has the potential to improve the efficiency and cost-effectiveness of cross-border payments. Bank deposits can be converted into stablecoins, which allow rapid access to a wide range of financial commodities through digital platforms and currency conversion. Decentralized finance has the potential to provide more creative, inclusive, and transparent financial services (IMF, The Crypto Ecosystem and Financial Stability Challenges, 2021).

Despite being a relatively new commodity, the potential for cryptocurrencies appear to be bright. Despite the fact that its price and value have risen, the fruits and future prospects are still being sought. The next section analyzes the practical potential for bitcoin consumers, investors, and governments (Fauzi, Paiman, & Othman, 2020). Cryptocurrency holds a distinct position as a pioneer in potentially disruptive technologies for established financial institutions. Because it is a peer-to-peer system, it may fill gaps in existing financial technology and aid in the resolution of conventional banking concerns. Napster, another peer-to-peer technology, changed the music business by removing the middleman (Kelly, 2014). Transformative innovations

begin by addressing a specific industry challenge. Cryptocurrencies, for example, have the potential to help solve difficulties faced by unbanked customers.

Since the dawn of the internet, Blockchain has been considered as one of the greatest platforms and most advanced technologies. In terms of security and secrecy, it improves the efficiency of online transactions. The Blockchain can protect confidential information while also eliminating the need for any institution to act as a middle-man (Ying , Jia, & Du, 2018). Using a cryptocurrency algorithm is safer and more secure than using a credit card. Cryptocurrency boasts substantially lower processing fees and provides secure transactions, despite the fact that it is currently understudied. The authentication of buyers and sellers is the process for transferring cryptocurrency. Fraudsters will be prevented from initiating new transactions or delaying refund transactions if both parties are verified. As a result of the procedure, forging has occurred and will continue to occur in regard to credit cards (Alstyne, 2014).

Challenges

Despite its many advantages, cryptocurrency still faces numerous challenges. Because of the risks and challenges that trading and investing in cryptocurrency poses, onlookers and new investors have probably taken a cautious approach to decide whether or not to invest heavily. Many traditional financial operations face an existential threat due to the rise of cryptocurrencies. Cryptocurrencies rely on a peer-to-peer system to eliminate the "middle man," a financial institution. For example, in the realm of cryptocurrencies, no bank account or credit card is required to transact. A Bitcoin "wallet" does perform the same purpose as a bank vault. Given that over two billion people are unbanked, a revolution in financial inclusion is possible with smartphones and the internet (Findex, 2017).

Then there is the issue of legal legality, which is a vital issue in putting it in place in any country. On the other hand, Fiat money is safe to use because a country's central bank regulates it. The central bank has complete control over all policies and the country's monetary

policy outcome. Anyone can create multiple accounts at no cost when it comes to cryptocurrency. There are no centralized vetting procedures in place, and they are not required to use their real names (Böhme, Christin, Edelman, & Moore, 2015). This procedure is a little murky, and the assumption of illicit activity underlying all cryptocurrency registration and trade might be a scam in some way. Being anonymous on the internet is excellent for crooks and fraudsters to carry out their plans. This trading platform might be used by cybercriminals to carry out illicit operations such as fraud and cheating (Kethineni, Cao, & Dodge, 2017).

Another challenge of the cryptocurrency system is the energy consumption needed to be able to create a new currency and maintain that the whole system is working properly. Creating a new cryptocurrency on a blockchain system is not an easy task to do. The process is known as mining, mining involve solving a complex computational math problem and sending it to the blockchain system to be approved by all of the participants of the blockchain ledger to be able to accept as a new crypto coin based on a peer-to-peer system (Malone & O'Dwyer, 2014). This process needs a sophisticated hardware to solve the complex problem and much energy to be done. Aside from the initial cost of acquiring the gear, another big cost for a miner is energy usage (Hayes, 2017). Mining the digital currency has been discovered to consume more electricity than the benefits provided by solving a block. The great majority of these currencies rely on proof of work, which necessitates a significant amount of power consumption due to the mathematical work performed by the hardware involved. This is particularly dangerous in large-scale mining operations. As a result, bitcoin mining will become a new concern, adding to carbon dioxide emissions and threatening to destroy the globe due to global warming. More research of bitcoin's environmental impact is needed. It is not worth endangering the environment in order to gain quick money. If it can be demonstrated that mining will do more harm than good, nations, including the United Nations, should step in to safeguard the environment (Fauzi, Paiman, & Othman, 2020).

Hungary-Indonesia

Although separated into different continents, Hungary and Indonesia have several similar problems that could be tackled by utilizing cryptocurrency and its ability as a novel form of currency. Based on the Global Corruption Index data published by Transparency International in 2021, Hungary and Indonesia still had a problem with corruption. Hungary and Indonesia Corruption Perception Index scored 43/100 and 38/100, respectively. Peer-to-peer system, which means all the transactions are recorded on a bitcoin ledger and available to the whole currency ecosystem, and the ability to remove any form of middle-man on all economic activities, means it could prevent enormous scale corruption conducted by the large institution or systematic robbery of wealth from the people. This could prevent the accumulation of wealth based on bribery, theft, or corruption and helped create a new economic ecosystem based on a hierarchy of competence, leading to general prosperity for all the members in those ecosystems.

The next problem is the instability caused by depending the whole economy on the US Dollar-backed economy system. After US President Richard Nixon suspended the convertibility of the Dollar into Gold in 1971, the global economic system changed into a new system of fiat currency, where the value of a currency is backed by nothing in value but in the trust of the government of the country which the currency represents (Islam, Rizal, & Imad, 2018). One of the problems is the cyclical economic crash caused by the non-responsible economic decision. Such as Asian Financial Crisis in 1997-1998. This crisis circulated in Asia and hit Asian country economies complex. The Indonesian rupiah was down by 80%, the Thai baht by more than 50%, the South Korean won by over 50%, and the Malaysian ringgit by 45%. In the first year of the crisis, the economies of the impacted nations suffered a decline in capital inflows of more than $100 billion (Ba, 2021).

In 2007-2008 crisis caused by the Sub-Prime Mortgage-backed security in the US caused the global economic meltdown and the defaulting of America's two most important financial institutions Lehman Brothers and Bear Stearns, while also dragging down the whole world economies with them. The health and economic crisis

caused by COVID-19 will also grow into another big crisis in the future, depending on how the US tries to solve the economic and healthcare problem caused by this pandemic. An increasing amount of money supply caused by the Quantitative Easing decision made by the Federal Reserve of America could lead to another bubble that will eventually crash and once again drag the world economies with them. The new economic system based on cryptocurrency could be an option to be considered in this time of instability.

Introducing crypto-based currency could also become another step hurdle toward this new economic system where government and private entity presence is required to deliver the new system to be accepted by society in general. Adapting from Indonesian transition from cash-based currency into cashless currency promoted by the introduction of OVO, GoPay, or Linkaja, a financial platform where the economic activities such as daily transportation, bank transfer, paying for utilities, or even paying for shopping in-shop or mall could be performed instantly, is one way to introduce a new way of conducting economic activities. The demand to provide a way of the easy, reliable, and fast transaction will be a way to absorb cryptocurrency not only as an instrument of investing but also as an instrument of payment that both parties in economic activity accept.

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Two Sides of Leadership Ethics How an Ethics of Leadership is Measured?

Dina Safitri

I. Introduction

Ethics of leadership nature becomes the center of attention since the business environment opprobrium of American companies such as Enron scandals, Lehman Brothers, Nortel, WorldCom bankruptcy, AIG (Northouse, 2016; Bedi et al., 2016; Brown, Treviño, and Harrison, 2005), and also appeared in the realm of politics (Northouse, 2016). Despite the business scandals that have become the world's attention, we also notice that many business leaders (such as Larry Page, Sergey Brin, Bill, and Miranda Gates from Microsoft) make their companies among the most coveted employers in the world. On the political stage, Aung San Suu Kyi with the global issue of Rohingya, Adolf Hitler during WW II, Bill Clinton's impeachment are just a few to name. Angela Merkel has won global praise for one and half decades due to her leadership as Germany's Chancellor. Jacinda Ardern showed her leadership towards the Christchurch attack in Wellington in March 2019.

Ethical leadership has attracted scholars from multi-disciplines; however, the literature is scarce and has few findings of the dimensions of leadership ethics (Brown, Treviño, and Harrison, 2005).

Ciulla et al. (2018) mentioned that leadership ethics primarily focused on leaders for many reasons. Firstly, they will affect people in two ways, whether it will be the advantages for other people or become dangerous to people's psychology; pivotal part of daily human life. Secondly, leaders interact with people time by time, but leadership ethics has many facets and areas as philosophy covers.

Albeit leadership ethics is still arguable due to different perceptions for people and the community. The wide range of leadership ethics philosophy, development of internet and social media that distributes the issues of leadership ethics within seconds, raises many questions, such as, is there any ideal of leadership ethics? Are there any impacts in leadership ethics, and who are the most impacted? What are the challenges and best applications for leadership ethics? This paper focuses on answering the closest philosophy of leadership ethics and response to the arguable issues. The initial part will exhibit the definition, theory, and concept of leadership ethics, followed by the dark side of leadership ethics, positive and negative impacts of ethics of leadership, how the leadership ethics is portrayed, and the last is the fittest leadership ethics in the organization.

II. Leadership Ethic: Definition, Theory, and Concepts

According to Northouse (2016, pp. 321), '*ethics is concerned with the kinds of values, morals, virtuousness of an individual or a society finds desirable or appropriate*. Ethics comes from the Greek word 'ethos,' which means to 'conductor 'character.' When ethic connects to leadership, ethical leadership is reversible with moral leadership, which concentrates on ethical virtue and develop the individual character, such as righteousness and genuineness (Grandy and Sliwa, 2017). Brown, Treviño, and Harrison (2005) defined leadership ethics as the normatively appropriate exhibition of individual acts. It is intrapersonal connections and the elevation to the followers of such conduct in decision-making and reciprocal communication and support. Rooted to Ciulla (1995), leadership ethics connect to human relationships that interact with each other and with the type of any living things. Leadership ethics comprises the study of evil, good, justice, fairness, rights, obligations, right, wrong, duty, virtue, etc. Ethics of leadership includes moral problems in its distinctive sets of relationships. Differing from another type of leadership, ethical leadership covers those types of leadership, including transactional and transformational leadership (Badrinarayanan, 2019), which Den Hartog and Belchak (2012) debated that they are connected. Still,

somehow, ethical leadership upholds distinctive differences and may have a different result from these two styles.

Ethical leaders are defined as leaders who value honesty, reliability, and equality to people and avoid favoritism. They also fulfill their promises, appreciate the idea and contributions of the followers, deliver each person's responsibilities and expectations (Solinger, Jansen, Cornelissen, 2020). Brown, Treviño, and Harrison (2005) and Zhu et al. (2017) argued that ethical leaders pose the role of both as a "moral person" (cordial, reliable and outspoken, and compassionate to the employees). As "managers of morals" with the quality of being a good example, they can apply the rewards and punishments with norms, guidance, procedures, and standards. The concept of a moral person and the moral manager highlights that the leader is decorated and designed to be a stable model in ethical acts and fit to represent the ideals of ethical leadership (Owen et al., 2019).

Ethical leadership has the expanding emotional aspects in the organizational lives and intertwines between irreconcilable and opposite goods.

In conflict resolution, ethical leaders often have to make difficult decisions with moral use to consider the followers' virtue and dignity. It can inevitably be so painful and hurt both leaders and their followers. Ethical leaders are requested to comply with the moral principles, which are free of ambiguity, avoid contradiction, and not invite fuzziness and baffles (Amiridis, 2018).

Despite the nobility of ethical leadership, ethical leadership has been portrayed in multiple ways (Yukl, 2003). Ethical leadership offers not only engagement in actions and behaviors that may give advantage to others, but also ethical leadership may be harmful to others. Ethical leadership overlays in some territories with the constructs of behavior-oriented in the literature of leadership. The sample of leaders' behavior, such as supplying support empowering others, encourages the skills and self-confidence of the employees. It has not been resolved yet to measure ethical leadership, leading to critical confusion about ethical leadership dimensions. Brown, Trevino, and Harrison (2005) stated that leadership ethics dimensions vary, including transformational

leadership and charismatic leadership. The dimensions are relevant to various values such as compassion, altruism, justice, fairness in granting rewards and benefits, and keeping people accountable in their actions, whether ethical or unethical. Avey, Palanski, and Walumbwa (2011) added that ethical leadership also has ambiguity integrity. This concept is applied in various ways linked to consistency, courage, wholeness, and other general generalities moral behaviors.

Additionally, there is a lack of attention to the situation where ethical leadership is considered practical or less effective and leads to inaccurate conclusions. It is suggested that identifying the factors that mitigate the impact of leadership ethics in organizations is necessary.

Ethical leaders claim to be the sample of moral behaviors that send strong messages about upholding and valuing ethical behaviors and moral principles. However, this invites criticism that the subordinates might perceive as superior (Owen et al., 2019). Thus, Levine and Boaks (2013) suggested that ethical leadership should be explained further, as it is insufficient to make someone the leader by only posing the values.

III. The Two sides on Ethical Leadership

The majority of studies linked the leadership ethics upsides positively to the followers and the organization as the result of common characteristics (Ciulla et al., 2018; Avey, Palanski, and Walumbwa (2011); Brown and Trevino, 2005; Den Hartog and Belschak, 2012; Bouckenooghe, Zafar, and Raja, 2015; Ruiz, Ruiz, and Martínez, 2011; Walumbwa and Schaubroeck, 2009; Ruiz-Palomino, Sáez-Martínez, and Martínez-Cañas, 2013). However, fewer studies linked ethical leadership to the negative impact on the followers. Stouten *et al.* (2013) and Fu *et al.* (2020) found the curvilinear negative effect of ethical leadership on the subordinates. These adverse effects increase the anxiety behavior amongst the employee. They worry and feel dwarfed whether their behaviors at the workplace fulfill the standard of their ethical leader and trigger the followers' psychological well-being. As a consequence of this anxiety, ethical leader contributes to the well-being degradation of the employee at work.

However, the literature on leadership ethics assuredly outweighs the positive and negative impacts to the followers that are caused linearly by '**ethical leadership** and **unethical leadership'** (Howell and Avolio, 1992; Walumbwa and Schaubroeck, 2009). While Brown, Trevino, and Harrison (2005) and Ciulla (2018) used and defined only terms of ethical leadership to correlate to the organization's positive and negative impact. Thus, rather than debating leadership ethics into classification ethical or unethical, positive or negative, focusing on how to utilize the leadership ethics to influence and positively affect the followers is much more important to discuss.

III.1 The Advantage of Ethical Leader

As validated by the scholars, leadership ethics is claimed to have some positive impacts on the employee, the organizations, and communities that can be summarized as follows:

1. Organization citizenship behaviors

Ethical leaders have confirmed that they influence their followers to discourage negative moral behaviors at the workplace and induce positive organization citizenship behaviors (OCB) to both individual and organizational (Avey, Palanski, and Walumbwa, 2011; Gerpott et al., 2019). OCB relates to an individual's altruism, voluntarily attitude of the followers to take extra-role performances in the organizations with less or without compensation (Gerpott et al. 2019; Ruiz-Palomino, Ruiz-Amaya, and Knörr, 2011).

The followers that uphold positive OCB to their organizations prefer to give hands to their team members when needed, perform a low rate of absenteeism, protect their organization and its property, and cohere to the organization's formal and informal regulations.

2. Higher level of job performance

The outcome of the employee working in the organization with ethical leaders is highly related to a high level of job satisfaction (Hassan, Wright, and Yukl, 2014; Badrinarayan, 2019). Ethical leaders

stimulate employee motivation through social exchange and social relationships. The reason for this outcome is that ethical leaders are fulfilled the expected standards and help their followers, in consequences, lead to the increase of the job satisfaction of the employee (Avey, Wernsing, and Palanski, 2012; Kuk-Kyoung and Changhoon, 2018; Ren and Chadee, 2017).

3. Strengthen the commitment and loyalty to the organization

It is proven that the followers can be influenced in beneficial ways by ethical leaders.

The organization that the ethical leaders lead accelerates the followers to have higher stay intention and commitment to the organizations (Brown, Treviño, and Harrison, 2005) and the loyalty to the organizations (Cooper-Hakim and Viswesvaran 2005; Hassan, Wright, and Yukl, 2014; Lee *et al.*, 2019; Mitonga-Monga, and Cilliers, 2016). Therefore, this loyalty and organization commitment implies a lower level of turn-over and turn-over intentions in the organizations.

4. Inspire the followers to conduct ethical behaviors

Ethical leaders who exhibit ethical behaviors tend to inspire their employees to produce ethical behaviors (Presbitero and Teng-Calleja, 2019) as they learn and observe those behaviors from the role modeling process. The imitable acts, inappropriate manners, experiences, and behaviors unintentionally impact similar modes of actions and responses (Mayer et al., 2012; Resick et al., 2011), which can use by ethical leaders to influence their followers to have similar conduct.

III.2 The Disadvantage of Ethical Leader

Brown and Mitchell (2010) have claimed that ethical leadership consists of the dark side of its diverse forms. The character traits of ethical behaviors are harmful and infectious for the followers and the organization. Opposite from ethical behaviors in positive manners, the dark side of ethical leaders is cited in many references as unethical leadership. The acts of the ethical leader can be damaging as they invite negative and defective behaviors from the employee. Jones

(1991) argued that unethical behaviors contain unlawful, unaccepted acts that are incompatible with the broader society in the community. Those unethical acts revealed by the scholars include abusive leadership (Eissa, Lester, and Gupta, 2020; Tepper, 2000), toxic leadership (Behery, 2018; Fosse *et al.*, 2019), dictator leadership (Geyer, 1999), and enhance the destructive supervision (Krasikova, Green, and LeBreton, 2013). Therefore, the dark side of ethical leadership can be summarized as flows:

1. Oppressive behavior

Jha (2019) claimed that unethical leaders show oppressive behavior toward their followers. The followers found that they were emotionally abused as in the theory of social exchange, there is emotional reciprocity between the leaders and their followers. The oppressive leader displays antagonistic behavior, both verbal and non-verbal. This trait has become the main reason for the employee turning over and leaving the organization.

2. Abusive behavior

The followers that the leaders lead with abusive behavior are proven linked to the employee's negative behavior. The kind of abusive behaviors can include:

- Mocking and degrading the employees.
- Treating them to disconnect the work contract with the organizations.
- Intimidating.
- Calling them with bad names.
- Openly criticizing them.

These aggressive behaviors turn to defensive silence from the followers because of the power imbalance (Lam and Xu, 2019) and the anxiety of losing their economic sources such as fringe benefits, employment, and career development. Lukacik and Bourdage (2019) also found that a leader's abusive behavior led to a higher rate of turnover, emotional burn-out, and stress in the workplace.

3. Manipulative behavior

Lin *et al.* (2017) argued that manipulative leaders could conceal their true intention by using their power on their followers. As a result, the employee tends to doubt their leader's sincerity and decrease their power over their followers. This behavior shows the low level of efforts of leaders to make their supervision obligatory and authorize the employee to assess and evaluate the supervision works of the leaders correctly.

4. Designedly and calculating supervision and exploitative

Related to organizational justice, the leaders frequently pose the confusion of justice to their employees. Consequently, the leaders would weigh, design, and calculate their employee contributions. The leader will consider their supervision works to be calculated and weighted (Tepper, 2000).

IV.1 How Leadership Ethics is Portrayed, Power of Digital Media, and Followers' Adjudicating

Last ten decades, Information and Communication Technologies (ICTs) have increased. They are used by every individual for various purposes, including organizations, as the development of digital media, including social media, catalyzes the fast adaptive media to be adoptive and competitive (Kraft, 2019). Notwithstanding, the leaders and the followers are requested to be adaptive as a response to digital media change (Braun et al., 2019). The comprehensive coverage of the internet to reach global audiences also creates the platform to portray the leaders both in business and politics. The news spread in the digital media platform can reach wide users within a second, covering the current global issues.

The acts of individuals, including the leaders, are easily shared amongst the global followers. As the end-users, the followers become judgemental as their response to what they read or watch on the internet (Peres et al., 2020).

Amsalem et al. (2000) precisely detailed that news coverages give politicians more space as digital media become the tools to adjudicate

their political success between business leaders and politicians. The media visibility towards the leaders in politics makes the audiences understand the character traits of the politicians. Thus, this visibility makes them worthy or not for the societies. These behaviors attached to the leaders are portrayed by digital media and provoke the followers on a global scale. Strengthened by Amsalem et al. (2000), the leaders' visibility of character traits can affect the leaders and their followers in three ways; improving their profiles and gaining success in the election, influencing other leaders, building their reputation, and vice versa. To relate to this, Jacinda Ardern was re-elected for the second time as New Zealand's Prime Minister last year in 2020. The followers still remember her ethical leadership in the Christchurch crisis, while Donald Trump experienced the second impeachment due to the insurrection of the United States. Those two leaders fit the study of Egorov et al. (2020) that the followers are concerned about the moral principle's violation of the leaders. The digital media activates the followers' perception of the leaders' ethical and unethical behavior. In short, digital media plays a pivotal role to the leaders as their followers surprisingly can control and adjudicate the leaders to be attentive to their behaviors and expected to reduce unethical behaviors of the leaders (Peres et al., 2000).

IV.2 The Fittest of Ethical Leadership Character Traits for The Organizations

Brown, Trevino, and Harrison (2005) suggested that leadership ethics should pose the positive character traits dubbed as positive ethical and make the positive outcome from the employee and the followers. The scholars have recognized the characteristics of leadership ethics to successful organizations should consist of these below qualities:

1. Honesty

Honesty is one of the must-have characteristics of ethical leaders. Avey (2011) suggested that telling the truth to the followers benefits the leaders' credibility, is considered a winning personality for the leaders to be their followers' role model and shows sincerity and

consistency. This trait is associated with the moral person by presenting the leadership ethics moral standard, and become the followers adjudicating whether the leaders are deserved to be imitated as the leaders are matched to stick to the facts, demanded to recognize wrong and right (Brown and Treviño, 2006). Ethical leaders who manifest honesty in their leaderships tend to enhance the positive impact on their followers, decrease job stress, accommodate support to the followers, take-and-give relationships, and create respect for others (Den Hartog and Belschak, 2012).

2. Fairness

The ethical leaders that perform and treat fairness to their followers based on organizational justice (procedural, distributive, informational, and interpersonal) will influence the attitude and behavior of the followers (Avey, 2011; Sosik et al., 2018). The treatment of fairness that the leaders give to the followers affects the employee voice of behavior toward decision-making, trade the information through better communication, higher work engagement, sense of belongings to the organization, self-worth, and respect to each individual within the organizations. On the contrary, the unfairness of the leadership ethics declares the feeling of marginalized and disrespect within the organization (Ciulla et al., 2018).

3. Idealized influence

Ethical leaders are believed to influence their followers to imitate the leader's positive behavior, which leads to the organizations' positive impact. The capability to influence the idealized behaviors acts as the mechanism that easily recognizes the apparent right or wrong attitude and behaviors. Leadership ethics motivated their followers to be moral persons (Sosik et al., 2018; Ciulla et al., 2018).

4. Integrity

Integrity is defined as the completeness of the leader's values, consistent with his claimed actions and words in social attitude, unchanging behaviors in adversity, challenge, or temptation, being authentic to themselves. The followers perceived integrity as the trait

of stability and covered the reliability of the leaders (Brown and Trevino, 2006). Those kinds of traits are believed to be harmful, unethical behaviors. However, leadership with integrity can differ across environments, contexts, and cultures (Ciulla et al., 2018).

5. Respect

Leaders' treatment of the employee respectfully is one of the actions forms of ethical leadership. The concept of respect will be balanced when both leaders and followers present and see similar actions in the same way, including speaking and fulfilling the agreement. The absence of respect in ethical leaders can lead to conflict, tension, and disturbance behaviors of the followers (Den Hartog and Belschak, 2012). Respectful leadership is essential for the self-determination of the followers. They help in some adversity situations, including in the occurrence of conflict in the organizations.

6. Trustworthiness

According to Rosseau (1995), trustworthiness is a social contract perception that strives amidst two agents and acts as a calculus concept.

Trustworthiness is measured continuously to examine the leaders' integrity, ability, and benevolence to gain trust. The leadership ethics that can perform these three elements of trustworthiness will influence the followers to trust the leaders based on their perception of the low possibility of betrayal (Sosik et al., 2018).

7. Ethical principles of decision making

Leadership ethics is required to have the capability to consider a decision based on the consequences or outcome not only short-term but also long-term. When there are several problem-solving possibilities, ethical leaders would have some procedures, including an analysis tool on cost and benefit, to produce a decision that brings the most significant impact on people's well-being and happiness of one's employees and followers. The most benefited alternative that will bring a more significant good impact to their followers is usually considered the correct action (Rani, Krishna Prasad, and Gowri Shankar, 2015).

V. Conclusion and Recommendations

To conclude, ethical leadership differs from the other types of leadership, as this covers aspects of ethics as a moral person and moral manager. Leadership ethics is also found to be overlapping with other types of leadership.

Like other leadership, ethical leadership bears both benefit and its dark side. Ethical leadership impacts the followers as the preference of ethics to result positively while ethics dyad with negative impact. Ethical leadership gains its spotlight with the aid of digital media, and global followers are easily adjudicating the leader as ethical or unethical.

Hence this paper is limited only to literature research; this idea is assumable and needs to be proved through appropriate research and to fill the gap of ethical leadership to determine and split it from its overlapping function.

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Impact of Economic Globalization on Agriculture in Asian Developing Countries

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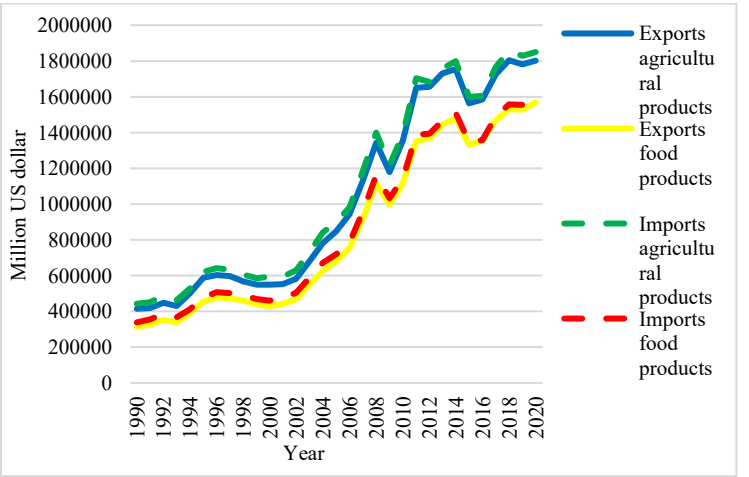
Introduction

Economic globalization (EG) is a process in which governments rapidly liberalize international trade, investment, and finance (Torres, 2001). EG has continued to increase in the previous four decades (KOF Swiss Economic Institute, 2021). There are several different forms of EG employed today, both in trade and finance (Bataka, 2021). Several trade activities and policies related to EG, including export and import (Nigh, 1997), economic reform policy (Awad & Youssof, 2016), create trade zone (Pozo et al., 2011), product diversification (Pinilla & Rayes, 2019), join the trade agreement (Ching et al., 2011) or trade region (Gezmİş, 2016) and others. Meanwhile, financial aspects related to EG such as foreign direct investment (Fonchamnyo & Akame, 2017), debt (Bataka, 2021), the exchange rate (Fonchamnyo & Akame, 2017), monetary policy (Gochoco-Bautista, 2009), and other activities or policies.

Many economists investigated EG, resulting in debate regarding its impact in different places, both in developed dan developing countries. EG can increase trade (Fig. 1) and investment (Fig. 2) in agriculture globally. In Hungary, for example of developed countries, the value of agricultural product imports has increased 8.8-fold over the previous three decades, while exports have risen 4.2-fold (FAO, 2021). Hungary's entry into the European Union has been shown to increase farm economic size by 22%, agricultural income has nearly six-

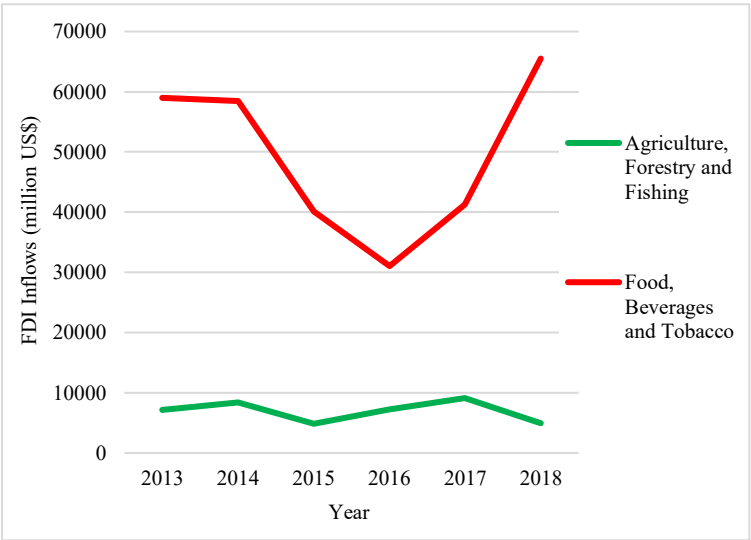
folded, assistance to Hungarian farmers has reached 7.4 billion euros (under the Common Agriculture Policy scheme), and food accounts for a declining share of household expenditure in Hungary (European Commission, 2014).

EG also boosts output and income for some developing countries, but it may also lead to broader income disparities, employment instability, and economic vulnerability (Torres, 2001). Scholte (2005) revealed that globalization is dominated by a single global-Western conglomerate, failing developing countries' economic, social, technical, political, and cultural mobilization. Many EG agreements became stagnant and eventually fell. For instance, the initial deadline of 2005 for concluding the Doha Round has already been missed due to ongoing disputes between developed and developing countries on trade barrier reform (Chakraborty & Khan, 2008).



Source: WTO (2021)

Figure 1. Export and import of agricultural and food products in the world 1990-2020



Source: (FAO, 2021)

Figure 2. Agricultural FDI inflows in the world 2013-2018

Western countries also apply double standards, pushing for trade liberalization for their exports while protecting industries vulnerable to competition with developing countries, such as agriculture (Ghosh, 2009). Hence, many countries have violated the agreement on agriculture (AoA) under the WTO (Losch, 2004). Even though the AoA promised to reduce protectionist trade practices and eradicate a variety of trade distortions and barriers (Ghosh, 2009). Thus, developing countries are wary of implementing EG in agriculture (Gupta & Kumar, 2020). Furthermore, agriculture remains the most challenging sector to negotiate on international trade agreements, has low competitiveness, and frequently faces market distortions that obstruct economic diversification into higher-value-added businesses (Draper et al., 2013).

Based on this, we try to present a paper that aims to determine the impact of EG on agriculture in developing countries, especially Asia. We believe Asia's position is critical since the global economic recovery has shifted from Europe and North America to Asia at this moment (Park, 2017). In 2017, Asia accounted for 38% of world exports and 31% of global imports, respectively. From 2002 to 2017, each Asian

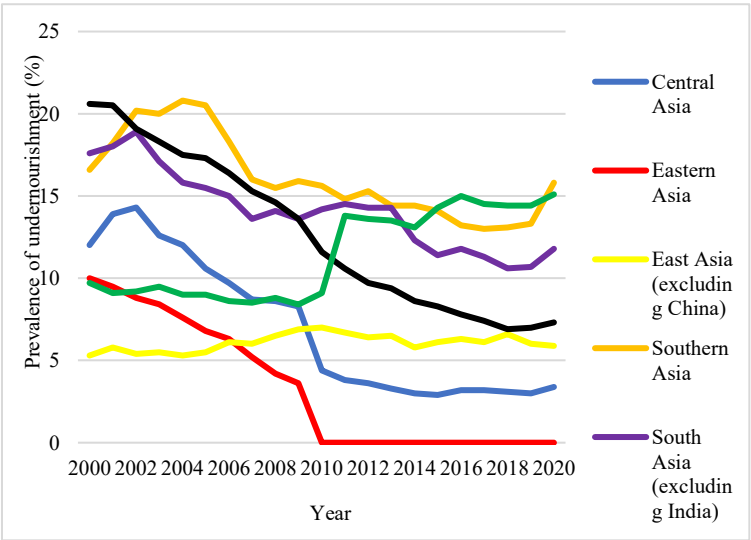
country's exports and imports averaged 26% and 23% of GDP, respectively (Gopalan et al., 2020). In addition, international trade helped the fast industrialization of Asian countries with a significant comparative advantage in manufacturing (van Neuss, 2019).

Impact of economic globalization on agriculture in Asian developing countries

1. Benefits

EG can boost agricultural yield and farmers' income in Asian developing countries. This is because EG improves agricultural infrastructure, providing farmers with an incentive to reach markets, lower transportation costs, and access credit (Kamran et al., 2021). Increased agricultural yields allow farmers in Asia to sell more products and improve food security (Fig. 3). Moreover, EG has expanded farmers' marketing area through export (Ghazal et al., 2021). The world agricultural trade volume increased by 2.55 times gradually from 1986 to 2016 (Qiang et al., 2020). An example of a country that has benefited from EG is Viet Nam. Following the implementation of EG, Viet Nam became the largest exporter of rice and other cereals (mainly maize), coffee, cocoa, cashew nuts, and pepper (Maitah et al., 2020).

Meanwhile, agricultural trade policy reforms in the 1980s and 1990s allowed Indonesia and the Philippines to raise agricultural prices and export volumes. Lower agricultural export tax rates and the removal of export restrictions were hallmarks of these reforms (Laiprakobsup, 2014). Increased agricultural production is also good news for animal feed production and the development of renewable energy sources (biofuel). Oakleaf et al. (2019) said that Asia has enormous potential for biofuel development because of its abundant agricultural production.



Source: FAO (2021)

Figure 3. Prevalence of undernourishment (%)

Another impact of EG is improving agricultural products' quality and competitiveness. Farmers and agricultural companies will compete to create the most excellent agricultural products based on customer demand. Today, consumers are very concerned about their food quality and safety. This is what globalization of food quality standards is attempting to address, and EG is one approach to do it. For example, EG and internal reforms prompted Vietnam to become a rice exporter on the international market. As a result, besides increasing producer rice prices, this also improves farmers' rice quality (Thoburn, 2004).

Various food certifications and regulations have emerged to increase food quality (Qiang et al., 2020). For example, food must be free from Sanitary and Phytosanitary to maintain its quality and safety and has organic certification (Paarlberg, 2002). Food certification also serves to expand market access to other countries. For example, farmers in India who already have organic certification from "Indocert" can sell their products in European and North American markets (Thottathil, 2014).

The next advantage of EG is the increased diversification and value-added of agricultural products. Interregional competition has proven to make products more competitive due to the rise of diversified and processed agricultural products (Atici & Furuya, 2008). Meanwhile, Nugroho et al. (2021) claim that FDI and exports boost agricultural value-added in developing countries, including Asia. This demonstrates that Adam Smith was correct when he claimed that free trade causes specialization of agricultural commodities (Salvatore, 2013).

Next, EG can help improve the food supply chain. Many global agricultural firms invest in Asian developing countries and establish links between upstream and downstream industries (vertical integration). They serve as producers, processors, food retailers, and provide agricultural production materials (Kazuyuki, 2018). Hence, EG can increase the availability of raw materials for industry and ensure the continuity of the food supply chain.

In the social aspect, farmers get benefits from EG. Farmers in Thailand receive extensive education, boosting their ability to access financing from village development grants, modernizing their farms, and starting small businesses. They were also the driving force behind the Red Shirt demonstration in Bangkok in 2010 to demand Thailand's democracy (Rambo, 2017).

Finally, EG produces technology and knowledge spillovers that boost developing country economies' total potential (Mihalache-O'keef & Li, 2011). These various technologies can increase agricultural yield and reduce production costs. The Green Revolution was mainly responsible for the international spread of modern crop varieties into Asian developing economies. Over 80% of the area planted in wheat and over 60% of the area planted in maize, rice, and other cereals were modern varieties in Asia, especially Chinese agriculture (Maskus, 2006). In another case, Thailand's agricultural modernization began around 1980, introducing new production relations that linked farmers and agribusiness without the state's participation. In 1987, agricultural and agri-industrial exports and manufactures accounted for roughly the same percentage of overall exports in terms of value (Goss & Burch, 2001). The technology may also help agricultural companies develop

their business and market in the face of global competition (Camargo & Wang, 2015). As an illustration, China's domestic market for seed and planting materials values approximately $3.0 billion in 2002. Of course, this is a lucrative business for multinational agricultural companies (Maskus, 2006).

2. Challenges

Globalization is having a devastating effect on the lives and livelihoods of peasants whose primary source of income is agriculture. For example, farmers' per capita income in Kazakhstan, Uzbekistan, and Turkmenistan were about 1,000 USD in 2017, and just 250 USD in Tajikistan and Kyrgyzstan. Lower than the country's other sector workers' per capita income (Ma & Sun, 2021). This has increased the debt burdens of farmers and agricultural laborers, price shocks, input costs, and decreased agricultural land size and quality (Ding et al., 2016). Van Neuss (2019) also said the labor force and value-added in agriculture have fallen in Asian developing countries, while the services share has grown. However, according to Kuznets (1973), the massive shift of labor from agriculture was a natural result of structural changes after EG.

EG also harmed farmers' survival, as seen by the high rural suicides (Ding et al., 2016). Even after EG, India's agricultural sector has slowed (Ahluwalia, 2006). The contribution of agriculture to Sri Lankan GDP declined from 2.2% in 1980-90 to 2.0% in 1990-94 (Mendis, 2001). Likewise, regional agreements that are still not optimal increase trade volume. For example, agricultural trade growth between intra SEA countries is still slow due to trade barriers (Feridhanusetyawan & Pangestu, 2003). Another reason is SEA countries conduct more agricultural trade with non-SEA countries (Alias et al., 2014).

Next, EG threatens food security in some Asian developing countries. The primary cause is a reliance on imported food. As an illustration, China relies heavily on global agricultural trade to fulfill its food demand and conserve its agricultural resources. However, to better meet local demand, China must continue to purchase agricultural products through international trade and diversify its

import sources. China's global agricultural trade networks have shifted from exporter to most significant importer because of a large population, scarce land, and water scarcity (Qiang et al., 2020). China increased its imports of transgenic agricultural products from 80,000 tons in 1996 to 2.83 million tons in 1999, accounting for 5.2% of global transgenic product trade (Ma et al., 2006). Hence, these countries will be affected by a worldwide food crisis (Atici, 2005). Inequality in food security can also exist between neighboring countries. Kazakhstan has risen to prominence as a significant global grain exporter, with consistently low malnutrition estimates during EG. On the other hand, Tajikistan, neighboring Kazakhstan, is plagued by poverty and malnutrition (Schroeder & Meyers, 2016). This contrasts because EG can't help resolve the neighboring country's food security issues.

In Kyrgyzstan, the annual dynamics of food import dependency are growing. The Eurasian Economic Union's (EEU) membership of Kyrgyzstan is expected to provide up chances for households to export their products. However, Kyrgyzstan's grain production is reliant on the foreign market. Imported wheat is mostly utilized for consumption, with 95% coming from Kazakhstan, 0.5% from Russia, 4.5% from Uzbekistan, and other countries. In comparison to imported wheat, Kyrgyzstan grain has a lower gluten content, making it of lower quality (Tokobaev, 2014).

The same problem occurs in India, where agricultural imports have increased significantly while domestic foodgrain output has decreased (Ghosh, 2009). Another cause is limitations in food policy settings. Historically, such countries' food policies have tried to achieve self-sufficiency in food grain production while avoiding dependency (Ghosh, 2009). However, Asian developing countries have little policy room to give agricultural commodity subsidies under the WTO regime, limiting their flexibility to address food security challenges (Ding et al., 2016). The last reason is the increase in domestic and world food prices. Agricultural commodity prices in Asian developing countries were lower than international market prices in the 1980s before agricultural liberalization. However, during the 1990s, the tendency has shifted, notably since the WTO conducted liberalization that called the special and differential treatment for agriculture (Ghosh, 2009).

EG also increased Asian developing countries' reliance on external factors. Historically, periods of economic crisis for agriculture in developing countries have been marked by declining incomes and worsening employment opportunities, resulting in adverse outcomes such as the loss of land rights due to debt and lower nutrition levels for the poorer majority of the population (Patnaik, 2003). The global economic crisis of 2008 has made the Philippines' agricultural exports begin to decline, reducing domestic demand and rising inflation. Due to the increased level of uncertainty, banks have grown hesitant to give loans, particularly to farmers (Gochoco-Bautista, 2009). Agribusiness in Malaysia has also become more reliant on foreign labor, resulting in increased agricultural vulnerability to external production factors (Kazuyuki, 2018).

EG has some negative social impact in Asian developing countries. First, increase labor exploitation. Landlords pay low wages to their workers, and the net product of surplus labor is shared between landlords and primarily foreign-owned industries (Sugden, 2013). Second, increase the use of child labor in agriculture (Table 1). Children are potentially being exploited and prevented from attending school. More child labor obstructs youth education by preventing them from completing their education or attending school (Lin, 2021). Third, force people to migrate from small farms to cities with several billion people. For example, the high-income disparity between urban and rural areas makes cities more appealing to Kazakhstan’s rural. Moreover, the agriculture industry's per capita income in Kazakhstan was only 27.40% of the whole industry in 2000. A similar situation happened in Tajikistan, where urbanization was widespread because industrial workers' income in 2018 was 9.7 times that of agricultural workers (Ma & Sun, 2021). The structure of monetary incomes of the population in Kyrgyzstan differs significantly between urban and rural areas. The share of income from labor activity in the total cash income for city dwellers was 78.0%, and for village residents – 63.4%. The leading cause of the significant difference in income is the flow of migrants from rural areas to urban and other neighboring countries. This has brought about the dependence of rural dwellers on remittances (National Statistical Committee of the Kyrgyz Republic, 2019). Thus,

the supply will be reduced, and food security will be disrupted (Hodges et al., 2014).

Table 1. The number of child laborers aged 5 to 17 in Asia by economic activity (in 2020)

Region	Children in employment (thousands)			
	Agriculture	Industry	Service	Total
Eastern Asia	7357.8	2025.1	4863.9	14246.9
South-Eastern Asia	11778.9	2515.1	6249.2	20543.2
Southern Asia	20054.6	5299.1	6704.3	32058.0
Central Asia	1921.3	373.0	1143.7	3438.1
Western Asia	1364.8	330.6	1017.7	2713.1

Source: (ILO, 2021)

Finally, EG also has significant environmental consequences and hinders the development of sustainable agricultural practices in Asian developing countries. Chemical technologies are frequently used in agribusiness activities, pollute water sources, poison farmland, and cause severe environmental damage (Mihalache-O'keef & Li, 2011). The use of superior crop varieties sweeps biodiversity and ecosystems. Even more concerning, EG has spurred massive conversion of agricultural land into housing, private industry, and the service sector uses. Many agricultural land rights have changed from small farmers to major multinational corporations (Sud, 2014). Many policymakers, business people, and governments encourage clearing mountains, plateau, and forests for agricultural land (Hodges et al., 2014). It also causes a serious shortage of drinking water, a scarcity of firewood, and a drop in subsoil water levels (Patnaik, 2003).

Policy implication

Developing countries must implement several policies to gain from agricultural trade. The country's government must focus on: **First,** strengthen its bargaining position in negotiations with developed countries. When negotiating agricultural trade agreements, developing countries must have the courage to "elevate their status" in front of developed countries. They should be viewed as partners, and their role

as providers of industrial raw materials in developed countries is critical. In the face of changing conditions and policies that affect their exports, developing countries must join international agricultural commodities groups to increase cooperation. Aside from that, developing countries must evaluate their agricultural strengths to counter any unfavorable arrangements or protections in developed countries.

Second, develop human resource capacity. Agricultural production training must continue to be provided to farmers in developing countries. Climate change is putting the world's food supply in jeopardy. Counseling must be complemented by organic plant growing to match contemporary consumer preferences. Farmers also need organizational management, processing, marketing, and negotiating support. Farmers' weakest vulnerabilities result in poor bargaining positions and unfair pricing. We believe that farmers will interact directly with foreign partners in the future, build global business relations, and adapt to globalization's economic and political problems. Agricultural extension staff must also participate in capacity-building programs, notably in the area of information and communication technology. This is required to speed up and broaden the reach of agricultural extension. Finally, governments in developing countries must invest in capacity building. In reality, ineffective bureaucracy and corruption may prevent EG from positively influencing agriculture. It is vital to enhance governance to increase EG policies' accuracy.

Third, intensify research and technology. Food production will rise in quantity and quality, total resource efficiency will improve, and environmental impact will be reduced due to technological advancements. Some of the projects that can be undertaken include modern manufacturing technology, mechanized equipment, and environmentally friendly production. Given that EG might cause a country's food dependency on imports, raising food production is vital nowadays. Variations in international food prices frequently jeopardize the food security of importing countries. Likewise, consumer requests for food certification are becoming more diversified due to increased awareness of health and environmental sustainability.

This has an inescapable impact on producers' concerns about obtaining certification utilizing research and technology outcomes.

Fourth, enhance agricultural industry partnerships with farmers. Contract farming should be made mandatory in the agriculture business by the government. All parties involved will benefit from this. Partners will provide farmers with production factors, financial support, pricing and market certainty, and technology transfer. Meanwhile, the company will continuously supply high-quality raw materials while lowering production costs. This is also a phase of vertical integration in which agricultural products gain value. The larger the food sector, the fiercer the rivalry to provide customers with physically and economically accessible food.

Fifth, eliminate disincentive policies to increase agricultural trade. Agricultural trade interventions must be gradually reduced in developing countries, particularly those that hurt the local economy. Developing countries must apply "friendlier" policies on FDI inflows into agriculture and reduce complex bureaucracy. This activity, however, must be done with prudence to guarantee that the investment produces high-value agricultural products that are also environmentally friendly.

Conclusion and future research

There are various types of EG in Asian developing countries, including economic transformation policies; financial market liberalization; and bilateral, regional and international cooperation or agreement. In Asian developing countries, there is debate concerning the beneficial and destructive effects on agriculture. On the one hand, EG can boost quantity, quality, value-added, and product diversification; increase farmers' income; strengthen the supply chain; enhance trade volume; and speed up technological progress. However, some scientific findings and data suggest the reverse. EG disrupts farmers' lives, jeopardizes food security, increases the country's reliance on foreign factors, causes workforce challenges, and degrades environmental quality. We recommend several future research related to the impact of EG on farmer institutions, agricultural product retail or firms, and agribusiness agency services.

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ECONOMIC AND BUSINESS TRAJECTORY

Indonesia, Asia and Europe

McKinsey Global Institute, a global business and research agency, forecasts that Indonesia will be the 7th largest economy in the world by 2030. Further, Indonesia's economy will rise to fourth place by 2050, surpassing advanced economies such as Japan and Germany, according to Pricewaterhouse Coopers (PwC).

To turn projections into reality, we need to have the ability to seize all opportunities that can provide economic benefits from various sectors, such as financial technology (Fintech), circular economy, bioenergy, tourism, disaster management, higher education, business, and Small Medium Enterprises (SMEs), agriculture, and other industries.

In this book, we examine the economic activities of other countries in Asia and Europe to explore how they can add value to the Indonesian economy. The majority of the content in this book is based on academic research conducted by 25 authors from 5 countries, including several European Professors.

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