Strengthening Environment Resistance for Improving Quality Growth

Djoko Pitoyo[1]*, Nataliya Nikolaevna Seraya[2], Rustem Adamovich Shichiyakh[2], E. Laxmi Lydia[3], K. Shankar[4]

[1]Department of Industrial Engineering, Universitas Sangga Buana Bandung, Bandung, Indonesia. Indonesia
[2]Kuban State Agrarian University named after I.T. Trubilin, Krasnodar, The Russian Federation
[3]Professor, Vignan's Institute of Information Technology(A), Department of Computer Science and Engineering, Visakhapatnam, Andhra Pradesh, India
[4]Department of Computer Applications, Alagappa University, India

Abstract

In line with the development of the digital economy, various environment resources at this time can be utilized with the speed of distribution and increasingly good quality. The fast and dynamic digital economy penetration has shaped the landscape of the digital economy in Indonesia to help the environment. Nowadays, Indonesia does not only cover the demand services for environment, e-commerce and financial technology (Fintech), but they also provide internet of things (IoT) services. The projection of digital economy development in Indonesia is shown by the growth of value of e-commerce environment by 1,625 percent to USD 130 billion in the 2013-2020 period. Since economics is an open system, the three main processes (extraction, processing, or production and consumption) all involve the generation of waste that is ultimately disposed of to the environment (air, water or land). Excessive waste in inappropriate locations and time will cause biological changes in the environment, which in turn damages animals, plants and ecosystems. If environmental damage to human health or adversely affect human welfare, economists believe that economic pollution has occurred.

Keywords: Digital economy, Economic resources, National industry, Economic growth

1 Introduction

Economic development in the next five years is aimed to increase economic resistance as demonstrated by the ability to manage economic resources, and in using these resources to produce high value-added goods and services to meet domestic and export markets. The results are expected to encourage quality growth as indicated by the sustainability of the carrying capacity of economic resources that are used to improve welfare fairly and equally (1-4). Economic development will be carried out by two approaches, namely: (1) management of economic resources, and (2) increasing economic value addition. These two approaches form the basis for synergy and integration of cross-sector policies covering the food and agriculture sectors, maritime and fisheries, industry, tourism, the creative economy, and the digital economy. The implementation of these two approaches will be supported by improvements of data to become a reference in monitoring, evaluating development achievements, and improving the quality of policies. The general data protection regulation, a set of rules on data protection and privacy was a step in the right direction, giving citizens, at least, more control over their data (and prompting some Internet companies to extend similar rights to all user globally). As Artificial Intelligence (AI) systems start to be applied in areas like predictive policing,

prison sentencing, job recruitment or credit scoring, a second area of concern is that of algorithmic bias, the worry that when systems are trained using historical data, they will learn and perpetuate the existing biases. Advocates of the use of AI in personnel departments (for example, to scan the resume of job applicants) say using impartial machines could reduce bias. To ensure fairness, AI systems need to be better at explaining how they reach decisions (an area of much research); and they should help humans make better decisions, rather than making decisions for them. Mention AI and the term may bring to mind visions of rampaging killer robots, like those seen in the terminator films, or worries about widespread job losses as machines displace humans. The reality, heading into 2019, is more prosaic: AI lets people dictate text message instead of typing them, or call up music from a smart speaker on the kitchen counter. That does not mean that policymakers can ignore AI, however. As it is applied in growing number of areas, there are legitimate concerns about possible unintended consequences. The immediate concern is that the scramble to amass the data needed to train AI System is infringing on people's privacy (4, 5). Monitoring everything that people do online, from shopping to reading to posting on social media, lets Internet giants build detailed personal profiles that can be used to target advertisements or recommend items of interest.

Corresponding author: Djoko Pitoyo, Department of Industrial Engineering, Universitas Sangga Buana Bandung, Bandung, Indonesia. Indonesia. E-mail: djoko.pitoyo@usbypkp.ac.id.

The best response is not to regulate the use of AI directly, but instead to concentrate on the rules about how personal data can be gathered, processed and stored (6).

2 Improving the Management of Various Economic Resources

In the 2015-2019 period, food management showed increased production achievements of 4.7 percent for rice, 15.2 percent for corn, and 15.0 percent for meat. The capture fisheries production, including in 11 Fisheries Management Areas (WPP) also increased, reaching 6.9 million tons in 2017. Aquaculture production also increased to 16.1 million, which included 5.7 million tons of cultured fish (including shrimp) and 10.4 million tons of seaweed. Furthermore, salt production in 2017 is 1.1 million tons. The improvement of food production is also supported by the construction of water reservoirs with a capacity of 3m3, 49 reservoirs, and the rehabilitation of 788.6 thousand hectares of critical land. The conservation of aquatic areas as one of the fisheries management tools is also increased to 20.8 million hectares or around 6.4 percent of the total area of waters covering 172 regions in 2018 (7-10).

The management and production improvement of this food source could improve the quality of consumption and nutrition of the community as shown by the Hope Food Pattern (PPH) score of 90.7 / 100, and the food insecurity rate has decreased to 7.9 percent. Community fish consumption also continues to increase until it reaches 47.3 kg / capita / year. Community access to improved drinking water sources also increased to 72.0 percent (11).

The quality of people's lives also improves with access to better energy sources. This can be seen from the electrification ratio (RE) which had reached 98.3 percent in the third quarter of 2018. This achievement was supported by the expansion of the electricity distribution network, the development, and utilization of new and renewable energy (EBT) including through the development of small-scale EBT, the application of smartgrid , and the use of biofuels. The access to other energy sources, such as gas, has also been expanded. Until 2018, a total of 463,643 gas networks have been built (cumulative) for households and 10,942.48 km (cumulative) for transmission and distribution pipelines. The use of natural gas for domestic needs is also quite good with the Domestic Market Obligation (DMO) reaching 61 percent of natural gas production in 2018 (12).

Although some indicators show positive achievements, the management of various economic resources in the future still needs to be improved. In the management of food resources, for example, (1) the connection between food production centers and areas with high food demand still needs to be strengthened, and (2) adequate supply and quality of food in vulnerable regions of hunger, stunting, poverty and borders need to be more focused in food management. The management of water reserves also needs to be improved. National water reserves are actually still in the safe category. However, special attention needs to be given to water reserves in Java that have entered a rare status, and in the Bali-Nusa Tenggara region which is already stressed. The improvements also need to be made for water quality which has tended to decline since 2015 (13-16).

3 Improving Energy Resource Side and National Industry

On the energy resources side, meeting national energy still needs to be improved. National electricity consumption will only reach 1,064 kWh per capita in 2018, or lower than the average electricity consumption in developed countries which reaches 4,000 kWh per capita. The use of EBT also needs to be increased to achieve the target of the EBT mix of 23 percent by 2025. Until 2018, the portion of the EBT mix has only reached 8.4 percent, or about 2.5 percent (9.8 GW) of the existing potential (441, 7 GW). The management of economic resources, such as, food, agriculture, marine, water or energy, is expected to supply quality raw materials to be processed into high value-added products. However, its utilization has not been optimal. This is indicated by the weak linkages between up-downstream agriculture and agricultural commodity trade deficits due to agricultural exports that still rely on oil palm. In addition, there is a limited employment opportunities in rural areas, low young farmers' interest, and the high level of poverty in the agricultural sector (17-20).

The national industry also has not been able to utilize existing resources optimally so that they are still dependent on imports. Around 71.0 percent of total imports are imports of raw materials and intermediate/industrial support materials. Various attempts have been made to reduce import dependency. Unfortunately, the results have not been significant. One of the efforts is by attracting investment for downstream natural resources in industrial estates (KI) and industrial-based Special Economic Zones (KEK) especially those built outside Java. Out of the 21 priority KI/KEK outside Java in 2018, only 8 KI / KEK have been operating, namely KI/KEK Sei Mangkei, KI Dumai, KI Galang Batang, KI Ketapang, KI Bantaeng, KI Konawe, KI/KEK Palu , and KI Morowali. The realized investment value is Rp.179.9 trillion from 58 PMA and PMDN companies. The development of KI and other KEK still faces challenges in land acquisition, management, connectivity, competitive energy access, and low investment. The capacity of national industries to process and export high value-added products is also still limited. This condition causes the growth of national industry added value in the period 2015-2018 is still lower than the average national growth. The contribution of the Gross Domestic Product (GDP) of the industry also tends to stagnate at around 20.0 percent in the last four years (21-26).

Despite the stagnant performance of the manufacturing industry, the opportunity to drive higher economic growth in the future is still bigger. These opportunities contributed to the development of tourism and the creative and digital economy. The contribution of tourism in the creation of foreign exchange increased from USD 11.2 billion in 2014 to USD 15.2 billion in 2017. The increase in foreign exchange was generated from an increase in foreign tourist arrivals (tourists) to enjoy natural and cultural tourism in Indonesia from 9.4 million people in 2014 became 15.8 million people in 2018 (27, 28). The tourist activity also increased from 252 million people in 2014 to 277 million people in 2017. In total, the contribution of the tourism sector to the national economy is estimated to increase from 4.2 percent in 2015 which became 4.8 percent in 2018 (29, 30).

The utilization creativity and integration of economic and cultural resources also encourages the development of creative economic activities. Some of the indicators include the growth of value added creative economy which reached 4.9 percent in 2016, with the contribution of exports reaching USD 19.9

billion or 13.8 percent of total exports. The number of workers absorbed in the creative economy sector also increased from 15.5 million people in 2014 to 17.4 million people in 2017. The achievement of exports and creative economy workers has exceeded the targets in the 2015-2019 RPJMN (31-35).

4 The Digital Realm Accelerates and Economic Growth

The digital realm accelerates its encroachment into nearly every aspect of our lives. While Bitcoin, a decentralized digital (DP) or crypto currency (CC) was first introduced in 2009, it was not until Facebook made a spectacular announcement in June 2019 that their Company was preparing to launch the "Libra", its own so called stable digital currency in 2020, that debate flared up as to whether the new DPs or CCs would become accepted new currencies that would out compete flat money – including all currencies as means of payments that society is familiar with – or whether they would remain just another kind of financial assets that investors and speculators trade in the markets (36).

Economic growth has succeeded in creating quite high jobs. During 2015-2018, on average, every 1 percent of economic growth can create 460,000 jobs, 9.4 million new jobs and open unemployment decreasing from 6.2 percent (2015) to 5.3 percent (2018). The service sector was able to create the highest employment, which was around 9.8 million workers, while the industrial sector was only able to absorb around 3.0 million people, and the workforce in the agricultural sector declined around 3.3 million people. The proportion of formal workers also increased from 42.3 percent in 2015 to 43.2 percent in 2018 (37).

The activities to increase added value in various sectors have not been able to fully encourage structural improvements in the economy. Affirmation efforts are still needed specifically to increase the capacity and value added of micro, small, and medium enterprises (MSMEs). This is important considering that MSME employs around 97.0 percent of the workforce in Indonesia. These various development achievement is also supported by improvements in development governance. One of the achievements was shown from the improvement in Ease of Doing Business (EoDB) ranking from 106 in 2015 to 72 in 2017. The EoDB rating dropped to 73 in 2018, although the EoDB distance to frontier (DTF) score showed an increase from 61.2 in in 2015 to 67.9 in 2018. This shows the challenge that even though Indonesia continues to improve EoDB, other countries can improve more quickly. The acceleration in improving EoDB is expected to encourage an increasingly conducive business climate (38, 39).

5 Conclusion

The results of the EoDB improvement in the 2015-2018 period were also shown from an increase in the realization of investment value from Rp.545.4 trillion in 2015 to Rp.721.3 trillion in 2018. The Domestic Investment (PMDN) continued to increase, although the proportion was new by 45.6 percent. This condition shows the challenges to improve the investment quality by increasing the proportion of domestic investment. The distribution of investment is also an aspect that needs to be improved, considering that investment realization is still focused in Java (56.2 percent). The acceleration of infrastructure development, the preparation of skilled labor, the certainty of land, and the harmonization of regulations are the key to spread investment outside Java. These aspects are also the key to accelerate the development of industrial estates and tourism zones as new growth centers outside Java.

The improvement of governance was also shown in improving the quality of data and information. The Economic Census conducted in 2016 has provided the foundation for economic analysis and the business world for future development. The improvement of quality of rice production data in 2016 has also become the basis to improve the food policy. The structuring of maritime, tourism, creative economy, and investment data are also carried out to improve the accuracy of the development targets achievement and the basis for policy making.

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