# INDONESIA'S PROSPECT OF THE HALAL FOOD INDUSTRY AFTER COVID-19 PANDEMIC

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#### Abstract

This article discusses the prospects of the halal food industry in Indonesia after the COVID-19 pandemic. How with the real condition happened in society during this pandemic, especially for the halal food industry? And What are the opportunities and challenges of the halal food industry? This study observes that Indonesia has various opportunities to be maximized in developing the halal food industry after the COVID-19 pandemic. These opportunities can be an exploration of natural resources into halal food products, such as increasing export of Indonesia's halal food, developing e-commerce for halal food products, and globalizing the halal food events. Meanwhile, this study explains more about several challenges that need to be considered such as aspects of human resources, infrastructure, a production that has not created a model for the integrity to the halal industry from upstream to downstream, technology and information, and also the role of Islamic financial institutions as a distributor of capital.

Keywords: Halal Food, COVID-19 Pandemic, Indonesia's Prospect, Halal Certification.

#### **1. INTRODUCTION**

COVID-19 was first detected in Wuhan, China, on December 31, 2019, and designated a pandemic by the World Health Organization (WHO) on March 11, 2020 (who.int, 2021). As of November 14, 2020, more than 53,281,350 cases had been reported in over 219 countries and regions worldwide. This resulted in more than 1,301,021 deaths, while more than 34,394,214 people recovered (who.int, 2021). Mobility restrictions, social distancing, lockdown, quarantine, and isolation were implemented to prevent the spread of the disease (Rais, 2021). The pandemic is caused by food problems not considered for health, making the rules applied by Islam in recommending food options fundamental (Farnoosh et al., 2020). Epidemiological studies on primary cases of COVID-19 showed that the cases occurred at the food market in Wuhan. This market provides food from animals considered haram for consumption. Furthermore, another study stated that the sustainable consumption of halal food would reduce the risk of pandemics such as COVID-19 in the future (Amalia et al., 2020). This shows that eating halal food is a solution to prevent infectious diseases and maintain health. The COVID-19 pandemic also affects education, social life, and economic conditions. The impact changes economic activity, stops some production, and significantly alters consumer purchasing habits, changing business operations (Hidayat et al., 2021). Although all business sectors were affected, the halal food industry experienced a positive impact.

The performance of the Indonesian halal food sector, one of the Muslim-majority countries, recorded positive growth during the COVID-19 pandemic, though with a slowdown compared to the previous year. This development causes the share of the Islamic economy to increase in the national economy. The growth of the halal food sector and agriculture as the main supporter of \*Coressponding author. *Email address:* ekafy1104@gmail.com

the halal value chain (HVC) in Indonesia exceeds the national gross domestic product (GDP). Additionally, the export value of halal food ingredients increased from around USD 30 billion in 2019 to USD 34 billion in 2020 (Bank Indonesia, 2021). This industry has also experienced an increase globally during the COVID-19 pandemic. Until 2019, Indonesia has not entered the top ten best halal food countries worldwide. However, it experienced a significant increase in 2020, ranking the 4<sup>th</sup> world's best halal food country (Bank Indonesia, 2021).

There are several studies regarding Covid-19 and the halal food industry. As research conducted by Yudha, Candra, and Kafabih (2021). In their writings, they found that the MSME-based halal industry would be able to be a solution for poverty alleviation, distribution of consumption, public service media and other relevant instruments after the Covid-19 pandemic (Yudha et al., 2021). Then the research conducted by Hidayat, Rafiki, and Nasution (2021) which found that the COVID-19 pandemic might change consumer behavior, not only in the short term but maybe in the long term. This will open up great opportunities for the halal food industry (Hidayat et al., 2021). The potential of the world's halal food industry is suspected to be growing after the COVID-19 outbreak. Subsequently, this study aimed to analyze the prospects of the Indonesian halal food industry after the COVID-19 pandemic. The study question was about the opportunities and challenges of the halal food industry. Indonesia has various opportunities that could be maximized in developing the halal food industry after the COVID-19 pandemic. However, it should pay attention to various challenges ahead to enable the halal food industry to compete globally.

### 2. LITERATURE STUDY

#### The Development of the Halal Food Industry in Indonesia

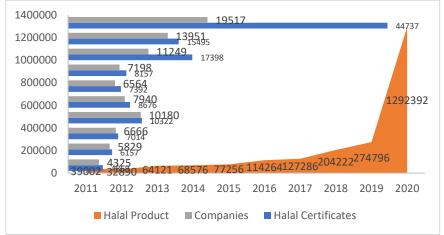
The development of the halal food industry in Indonesia began with cases of *haram* food that shocked the community, specifically Muslims. It started in 1988 when Tri Soesanto, a lecturer at the University of Brawijaya, examined products in supermarkets that allegedly contained pork elements. The findings caused panic among the wider community, including food product producers (Chao, 2021). These issues led to a decrease in sales turnover of several food companies. The producer of instant noodles, Indomie, admitted that its sales decreased by 20-30 percent from its turnover of 40 million packs per month. Similarly, the sales of ABC Soy Sauce fell by 20 percent, and the Campina ice cream product linked to the study decreased by 40 percent (Yunita, 2018). Consequently, the government began establishing a halal assurance institution known as the Institute for the Study of Food, Drugs, and Cosmetics-Indonesian Ulema Council usually called by LPPOM MUI.

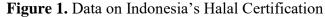
LPPOM MUI has become the first and most trusted Halal Certification Agency in Indonesia. It is increasingly showing its existence as a credible national and international halal certification agency. The formation of LPPOM MUI was based on a Government mandate. MUI played an active role in alleviating cases of lard in 1988. Majelis Ulama Indonesia (MUI) or Indonesian Council of Ulama plays an important role in realizing the need of religious direction for Muslim community in Indonesia. It provides interpretation of religion through fatwa. Fatwa is considered as an alternative to solve contemporary issues from religious perspective. In facing serious and pressing issue, fatwa is arguably the only solution of the society, even though fatwa has no place whatsoever in the formal legal establishment in Indonesia (Syafei, 2017). LPPOM MUI was established on January 6, 1989, to carry out halal inspection and certification. In 1996,

MUI signed a Memorandum of Understanding with the ministries of Religion and Health to strengthen its position. The memorandum of understanding was followed by issuing the Minister of Religion Decrees (KMA) No. 518 of 2001 and KMA No. 519 of 2001. This strengthened MUI as a halal certification agency to inspect or audit and issue fatwas and halal certificates.

In implementing halal certification, LPPOM MUI collaborates with the Food and Drug Monitoring Agency (BPOM) and the ministries of Religion, Agriculture, and Cooperatives, and SMEs. It also collaborates with the ministries of Trade, Industry, Maritime Affairs, and Fisheries, Tourism, and Creative Economy. Moreover, LPPOM MUI collaborates with other higher education institutions in Indonesia, including IPB University, Muhammadiyah University, Dr. Hamka, Djuanda University, UIN, Wahid Hasyim University Semarang, and the Indonesian Muslim University Makassar (Salman et al., 2018). Cooperation with institutions has been established with the National Standardization Agency (BSN), the Indonesia, and Research in Motion (Blackberry). The MUI halal certificate is required to include a halal label on the packaging for products circulating in Indonesia, especially with the BPOM.

In 2017 and 2018, LPPOM MUI obtained the SNI ISO/IEC 17025: 2008 Accreditation Certificate for Halal Laboratories and SNI ISO/IEC 17065: 2012 and DPLS 21 for Halal Certification Agency from the National Accreditation Committee (KAN). This standard is recognized in Indonesia and the United Arab Emirates Accreditation Board or ESMA (Rangkuty, 2019). Furthermore, the halal certification and assurance system designed and implemented by LPPOM MUI has been recognized and adopted by foreign agencies, reaching 45 institutions from 26 countries.





Source: according to data based on the Institute for the Study of Food, Drugs and Cosmetics - Indonesian Ulema Council, 2022

The government has also issued regulations on halal food. The government has also established special authorities, such as the Halal Product Assurance Agency. The agency aims to accommodate the large potential of the domestic halal product market to help strengthen the religious tendencies of the Indonesian population. The sharia economic development potential is mainly supported by the awareness of the Muslim community towards the consumption of halal goods and services. The 2018 Halal Economy and Strategy Roadmap stated that Indonesia's

consumption of halal goods and services in 2017 was around 218.8 billion dollars. This number is estimated to grow by an average of 5.3 percent and reach 330.5 billion dollars in 2025. In 2017, Indonesia was ranked first in Muslim Food Expenditure, with 170 billion dollars (Nirwandar, 2020). Sharia Economics Observer from the Institute for Development of Economics and Finance (Indef) Abra Talattov regrets that Indonesia's position as a producer of halal goods is still below the non-Muslim Australia and Singapore nations (Asa, 2019). This means that Indonesia has not caught the domestic market potential of the halal industry.

#### Indonesian Halal Food Industry during the COVID-19 Pandemic

The COVID-19 pandemic has entered the new normal period, reducing health quality and economic stability. The economic decline in the new normal era shocks real economic fundamentals and damages the smooth market mechanism between supply and demand. The disruption of the vital economic, supply, demand, and the supply chain means the impact of the crisis would be felt evenly across all social levels. Furthermore, the difference in the resilience of each level, specifically the decreased production, suggests the impact on the real sector would spread to the financial sector. The sector is depressed because many capital owners would lose their market share. Therefore, as a country with the largest Muslim population worldwide, Muslims could provide their best role through various models of the halal industry.

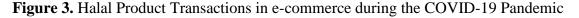
Indonesia ranks first in halal food consumption worldwide, reaching 144 billion dollars (Muryanto et al, 2021). Although it has the largest number of Muslims worldwide, this country cannot dominate the market share of world halal food products as a producer. Indonesia has been dominant as a consumer of halal products. Therefore, the government issued Law number 33/2014 concerning Halal Product Assurance as a reference for business actors to increase halal food production. The food and beverage industry has also been affected by the spread of COVID-19. According to Adhi S. Lukman, the Indonesia Association of Food and Beverage Entrepreneurs, the growth of the food and beverage industry before the Pandemic grew by more than 7 percent on average (detik.com, 2022). This growth was only around 4-5 percent in 2020 due to declined household consumption.

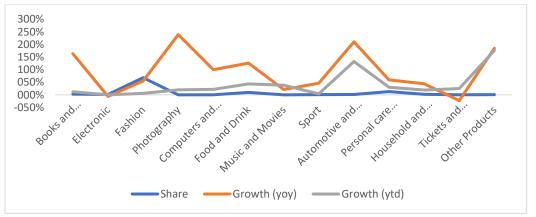
The COVID-19 pandemic does not completely negatively impact the halal industry, specifically the food sector. The level of public awareness of healthy, clean, and hygienic products is increasing. This understanding would become increasingly popular because consumers equate halal food with healthy and hygienic food (Ambali and Bakar, 2014). In line with this, business actors turned to the online system to distribute clean and hygienic halal food during the pandemic. People are competing to provide halal food because the COVID-19 pandemic is spread due to the absence of a healthy and clean lifestyle, making the virus multiply (Hidayat et al, 2021).

In this new normal era, the opportunity for the halal industry is large because people demand hygienic and halal products. LPPOM MUI is collaborating with MUI halal-certified companies. It invites around 260 companies to meet and synergize with the theme of Gathering and Synergy of LPPOM MUI and Halal Certified Companies in the Success of the Indonesian Halal Industry in the New Normal Era (Muslih et al., 2021). LPPOM MUI expects to become a liaison medium for accelerating the industrialization of halal products in Indonesia. Subsequently, MUI's biggest achievement is the LPPOM MUI halal certification standard recognized worldwide. LPPOM MUI has achieved SNI ISO/IEC 17065 from the National Accreditation Committee (KAN). In 2019, it was accredited for adding the abattoir (RPH) and the United Arab Emirates

(UAE) S.2055-2.2016 scheme. The MUI Halal Laboratory has also won the SNI ISO IEC 17025:2017 Accreditation. Consequently, 45 world halal certification agencies have adopted and followed the MUI halal standard.

During the pandemic, LPPOM MUI also made efforts to maintain the quality of halal certification registration services. It registered through cerol-ss23000, which has been using this method for the last 8 years. Another step is the Modified On-site Audit (MOsA) protocol to ensure halal certification services run smoothly online. MOsA compares audit evidence with the 11 HAS criteria required by LPPOM MUI. The protocol stipulated by the MOsA does not contradict the reference to SNI ISO/IEC 17065 set by the National Accreditation Committee (Latif et al., 2021). This means that it could be a reference in determining *halalness* by the MUI Fatwa Commission. The development of the halal certification process in Indonesia with registrations increasing from February to June 2020 could be due to increased efficiency in response to the COVID-19 pandemic. As a result, halal food and beverage product transactions in e-commerce keep growing. This indicates that the prospects for the halal food industry are optimistic amid COVID-19 with the use of digital technology.





Source: Islamic Economic and Financial Report issued by Bank Indonesia in 2020

Figure 3 shows that halal food and beverages during the COVID-19 pandemic reached the third-largest market share after Fashion and Personal Care and cosmetics (Bank Indonesia, 2020). The products also experienced a high growth of 126 percent per year and 43 percent year to date. This shows that the halal food industry is increasingly in demand during the pandemic.

# 3. RESEARCH METHODOLOGY

This research is a descriptive research qualitative with a phenomenological approach. This research is a library research which using secondary data obtained through scientific articles and other relevant documents. The data obtained is then analyzed by producing a descriptive explanation in the form of words, pictures or symbols that are linked with the object of this research. Data analysis in this study was carried out in three stages, namely data reduction, categorization data, and data verification. Data reduction in This research was conducted by selecting all data through truncation and simplification of data available according to the research topic. Next categorization of the data that has been reduced according to the research topic, namely

the role of halal food industry in the Indonesian Economy. Stages the last is data verification to draw conclusions which is the researcher's interpretation of the data. Verification is done by triangulation technique, namely compare one data source with another other data sources.

# 4. RESULT AND DISCUSSION

Indonesia is the largest halal food producer and market share for consumption with its abundant natural resources, though this opportunity has not been fully utilized. The Muslim population in Indonesia and the world continues to increase over time. The 2019 Global State of Islamic Report explained that Indonesia is one of the countries with a large potential for the halal industry, with 3000 trillion rupiahs per year. Among the sub-sectors with the greatest potential is the halal food industry, with the potential to reach 2,422 trillion rupiahs. According to the Master Plan for Islamic Economics, the growth of the middle class increased by 7-8 percent per year, increasing the purchasing power (Chang et al., 2019). This represents a large target market, specifically for Indonesia, which population is mostly Muslim. Moreover, public awareness to consume halal food has increased, while the access of business actors, specifically micro, small and medium enterprises (MSMEs), to the international market is limited. LPPOM MUI has achieved the UAE 2055:2-2016 standard from the Emirates Authority for Standardization and Metrology (ESMA) to open the international halal market. The MUI halal certificate has also been accepted by the global market, particularly the United Arab Emirates.

### Halal Food Industry Opportunities After the COVID-19 Pandemic

a. Exploration of natural resources into halal food products

Indonesia has great potential to develop its abundant natural products into halal food products. In 2016, the country was the largest producer of coconut, cinnamon, and cloves worldwide. It was also the second-largest vanilla and nutmeg plant producer worldwide. In contrast, banana and coffee yields rank third (Calicioglu et al., 2019). The agricultural sector supports the national economic competitiveness, specifically in developing the halal food industry after the COVID-19 pandemic. Indonesia is also rich in marine and fishery resources.

The development of the halal food industry in marine and fishery products has become a food item demanded by consumers during the COVID-19 pandemic because the nutritional content increases immunity. The sea is one of the natural features of waters in Indonesia, including lakes, swamps, and straits. It covers about 5.8 million km2, with a coastline of 81.00 km, the second-longest productive coastline worldwide (BPS, 2019). According to the Indonesian Ministry of Fisheries and Maritime Affairs (KKP), the sustainable potential of marine fish resources is estimated at 12.54 million tons per year (KKP, 2022). It is spread over territorial waters and the exclusive economic zone (EEZ). The area of the mapped coral reefs reaches 25,000 square kilometers. About 5.3 percent of the coral reefs are in very good condition, 27.18 percent are in good condition, 37.25 percent are quite good, and 30.45 percent are not good.

The Indonesian Sea has around 8,500 species of fish, 555 species of seaweed, and 950 species of coral reef biota. Fish resources cover 37 percent of the world's fish species. Several fish species in Indonesia have high economic value, such as tuna, shrimp, lobster,

reef fish, various types of ornamental fish, shellfish, and seaweed (Oktavilia et al, 2019). Furthermore, the sea stores the potential of abundant non-biological resources. These marine resources are a huge opportunity to develop the halal food industry after the COVID-19 pandemic.

### b. The increase in Indonesia's halal food exports

The export value of Indonesian halal food materials has increased due to the demand from the global market that keeps growing amid the COVID-19 pandemic. The country's halal food exports reached 34 billion dollars or 483 trillion rupiahs in 2020. This amount is equivalent to 17 percent of the total global exports of 200 billion dollars (Susilawati, 2020). Export is one component of Gross Domestic Product (GDP) that can encourage national economic recovery (PEN). The Ministry of Trade has five strategies to encourage these exports. The five strategies involve; first, to maintain export markets and main products. Second, to focus on export-oriented small and medium enterprises (SMEs). Third, to penetrate non-traditional markets. Fourth, to take the advantages of trade agreements. Last, to create regulatory reform, in particular the derivatives of the Job Creation Act.

Indonesia's main product and main export market must be maintained because it has a fairly large contribution. Of the 10 main export destination countries, they contribute 70 percent of Indonesia's total exports. Meanwhile, Indonesia's 10 main export products contributed 60 percent of Indonesia's total export products (Sugiharti et al., 2020). The local government has fully supported the increase in the export share of Indonesian halal food products. The government has developed strategies to increase the exports, such as combining various available instruments. First, the government utilized policy instruments, such as export-import relaxation for halal products for export purposes. Second, it strengthened market access for halal products in foreign markets using good facilities. Third, the government initiated several programs that strengthen business actors in exporting halal products. In this situation, the Ministry of Trade facilitates halal certification for micro and small businesses.

c. Development of e-commerce for halal food products

Indonesia is a potential e-commerce market that has experienced a sharp increase since the COVID-19 pandemic. The use of e-commerce has increased by five to ten times. In line with this, Bank Indonesia recorded an increase of 49.52 percent in nominal transactions for halal products through the e-commerce marketplace between May and December 2020 compared to 2019 (Priambodo et al., 2021). In recent years, the e-commerce development in Indonesia has increased quite rapidly. Based on the current condition, there are more than 1,500 startups in Indonesia (Setyadi, 2019). E-commerce must follow the regulations regarding the digital commerce. The rules related to e-commerce consist of Law Number 7 of 2014 concerning trade. In addition, e-commerce must comply with the provisions of the ITE Law.

In Law Number 7 of 2014 explained that every business actor is required to provide complete and correct data. Business actors are prohibited from using systems that are not

in accordance with the data and information displayed on e-commerce pages. E-commerce has also received full attention from the government. In 2020, Indonesia's medium-term target sets a vision as a digital economy country (Margiansyah, 2020). The high potential of the Indonesian and world e-commerce markets is a development opportunity for halal food business actors. The country has an opportunity to have a global halal product-commercial platform. Therefore, business actors need digital innovation and cooperation with investors to expand their halal products online

d. Global halal food event

Organizing international halal food events is a branding of the Indonesian food industry to the global community. The international meeting could be an arena for the government to evaluate the development of the halal food industry. This way, the government could create a roadmap for the future halal food industry more strategically. Various international halal food events have been held annually, such as the Malaysian International Food and Beverages Trade Fair (MIFB), Indonesia International Halal Expo (INDHEX), World Halal Forum (WHF), Summit World Halal Research (WHR), International Halal Congress, and Halal Food World.

At the 2022 International Halal Congress event, Indonesia would be the host at the Bangka Belitung Islands Province (babelkemenag.go.id, 2022). This event could be an opportunity to promote the halal food industry to the world. It is a big prospect in developing the halal food industry after the COVID-19 pandemic

e. Halal food article development

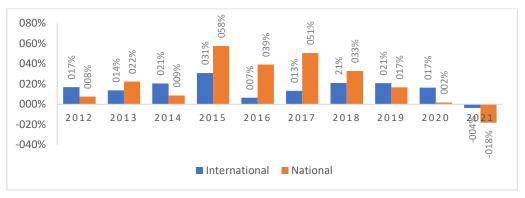
Scientific articles on halal food are benchmarks for developing a country's halal food industry. Table 4 shows an overview of the development of international and national halal food scientific articles:



Figure 4. Number of Several Halal Food Scientific Articles

Source: created by authors, according to data based on google scholar, 2022

### Figure 5. Development of Several Halal Food Scientific Articles



Source: created by authors, according to data based on google scholar, 2022

The figure shows the yearly growth of scientific articles on halal food. In the COVID-19 period from 2020 to 2021, the publication of scientific articles experienced a decline on international and national scales. Therefore, studies should redevelop scientific articles on halal food after the COVID-19 pandemic

# Challenges of the Halal Food Industry after the COVID-19 Pandemic

a. Human Resource Aspect

The main challenge in developing the halal industry is the human resource aspect. This aspect would positively impact the rapid development of the industry because it provides a better market perception and understanding. Human resources play an important role in the industry. Good management of human resources and effective utilization would optimally run the industrial operating system. This industry involves human resources starting from Top, Personnel, and Financial Management, as well as Halal Supervisors (Razalli et al., 2013). Other human resources with an important role in providing halal products include auditors, slaughterers, product analysts, and tour guides.

Halal industry producers usually lack a good understanding of information concerning the provision of halal products. This is reflected in the financing, raw materials, production, marketing, and supply chain control. Since the average production division does not come from sharia experts, the understanding of the processing of halal products on average is still limited. This causes weak production innovation, meaning innovation is still not as good as the conventional industry (Grais and Pellegrini, 2006). Furthermore, innovation is strongly influenced by human resources' capacity to understand halal-based production. The problem of innovation also causes obstacles to the growth of the halal industry. This is due to the low intellectual property rights that limit the strengthening of innovation. The halal industry is only oriented to the fulfillment of religious principles, not to sustainable business innovation, specifically for the utilization of spatial potential

b. Infrastructure and production

Infrastructure is a challenge in developing the halal food industry because it should meet the aspects of distribution, sales, and marketing. It should also support Research and Development (R&D), the need for raw material sources, and production. In this case, production aspects that need consideration are from upstream to downstream, which still lacks a model for the integrity of the halal industry (Zailani et al, 2010). Furthermore, there are no protective and preventive efforts to ensure that halal industrial products are maintained after experiencing various processes and distribution channels with supply

chain handling activities (Noordin et al., 2009). This issue is dominated by regulatory aspects and the industry's low knowledge of human resources regarding supply chain integrity. Consequently, this problem is mainly faced by the halal food and beverage industry, which should pay attention to assurance from upstream to downstream. All parties in the supply chain from upstream to downstream should take individual and collective responsibility to protect halal industrial products from intentional or unintentional non-halal contamination. Moreover, the industrial supply chain should aim to achieve customer satisfaction and ensure that the products' halal status remains intact in the process.

#### c. Technology and Information

Many issues should be considered in the halal industry. These issues include the lack of ingredients, addictive substances with correct halal standards, and quality products in Muslim countries. Other issues are the fragmented halal industry, global brands from Muslim countries, and a lack of an approach to the supply and value chain (Tieman, 2013). These issues could be overcome with technology and the philosophy of halal excellence and ecosystem.

The importance of technology in overcoming challenges in the halal industry. An example of the application of technology in the halal industry is Blockchain. Islamic organizations providing halal certification could be connected through distributed ledgers to trace the supply chain using the Blockchain (Muwafaq, 2017). This is due to the challenge of differences in halal certification in several Islamic countries. For instance, civet coffee is halal in Indonesia but non-halal in Malaysia.

Another technology supporting the halal industry is the Internet of things (IoT). IoT could be used in the product delivery process, monitoring, accounting, inventory, asset and stakeholder management, and after-sales service (Tarmizi et al, 2020). The application of IoT in the halal industry supports automation, digitization, system tracking, and real-time monitoring. The halal industry also requires integration and collaboration among stakeholders by adopting technology

d. The role of Islamic financial institutions as a capital distributor

In the Indonesia's Islamic Economics Master Plan 2019-2024, one policy in promoting the development of the halal food industry is synergy with Islamic banking. This synergy would strengthen the supply value chains of the halal industry. Bank Indonesia, for instance, has a division in charge of Islamic finance. It is also endeavouring to maximize lawful (halal) supply chain development in the financial sector, integrated agriculture, halal food and beverages, muslim fashion, renewable energy and halal tourism (Fauzia et al., 2020). Therefore, one major issue related to synergy is to promote the role of Islamic banking, specifically concerning funding. One of the contracts useful in funding the halal food industry is Mudharabah, a system, and a product. Mudharabah is a system that guides Islamic banks in conducting their transactions. As a product, its application in Islamic banking has two forms. First, the customer is a depositor or the owner of capital, while the secon is Islamic bank functions as a fund manager that runs a business (Paino et

al., 2011). This implies strengthening Islamic bank financing to improve export performance and develop the halal food industry.

Data from the Indonesia's Financial Services Authority in 2019 showed that Islamic bank financing is dominant in the wholesale and retail trade, construction, and processing industries (Putri et al., 2019). Two sectors are related to the halal food industry, specifically in the downstream business context. However, in the upstream business context, the realization of financing for sectors that supply raw materials is still low, such as the agriculture and food sectors. Therefore, Islamic banking should promote upstream and downstream financing to improve overall development.

#### 5. CONCLUSION

This study found that Indonesia's prospect of the halal food industry after COVID-19 pandemic was supported by the increasing demand for these products during the pandemic. COVID-19 pandemic has increased people's awareness to consume nutritious, healthy, and halal food. Moreover, agricultural and marine products are the most sought-after foods by consumers during the pandemic because they are highly nutritious and increase immunity. Indonesia has abundant agricultural and marine resources as good prospects in developing the halal food industry after COVID-19 pandemic. Cited on the Indonesian Ministry of Fisheries and Maritime Affairs, the sustainable potential of marine fish resources is estimated at 12.54 million tons per year spread over Indonesian territorial waters and the exclusive economic zone (EEZ).

Additionally, there was an increase in the export value and the development of e-commerce for halal food products during the pandemic. These are good prospects to continue developing the halal food industry.

The Ministry of Trade has five strategies to encourage these exports. The five strategies involve; first, to maintain export markets and main products. Second, to focus on export-oriented small and medium enterprises (SMEs). Third, to penetrate non-traditional markets. Fourth, to take the advantage of trade agreements. Last, to create regulatory reform, in particular the derivatives of the Job Creation Act. The next prospect is the e-commerce development for halal food products in Indonesia during the Covid-19 pandemic. In this case, Indonesia is a potential e-commerce market. Businesses using e-commerce have experienced a great increase since the COVID-19 pandemic. The use of e-commerce in Indonesia has increased in five to ten times.

The biggest prospect for increasing the branding of halal food products is at the international halal congress to be held in Indonesia in 2022. Through this event, Indonesia can use this opportunity to promote Indonesian halal food industry to all over the world. This can be a very big prospect in the development of the halal food industry after the Covid-19 pandemic. Lastly, the scientific articles development on the halal food is one of the benchmarks for the country's halal food industry development. It can be a very good potential for the development of the halal food industry in Indonesia.

This also found several challenges that need consideration, such as lacking human resources and infrastructure to support production, distribution, and marketing. The production lacks an integrity model for the halal industry from upstream to downstream. Furthermore, technology and information in providing halal certification have not been connected through a distributed ledger to trace the halal supply chain. The role of Islamic financial institutions as distributors of capital to the halal food industry is also not optimal.

The main challenge in developing the halal industry is the aspect of human resources which will have a good impact on the rapid development. It is because it provides a better perception and understanding of the market. These human resources play an important role in the industry. Good management and utilization of human resources will run the industrial operating system optimally. Moreover, the infrastructure is a challenge in the development of the halal food industry because it deals with the aspects of distribution as well as the sales and marketing. Infrastructure must also be able to support Research and Development (R&D), raw material sources requirements, and production. Furthermore, the importance of technology in overcoming challenges in the halal industry is also justified by Saaidal Razali. One example of the technology application is the use of Blockchain. With the Blockchain, Islamic organizations that provide halal certification can be connected through distributed ledgers with the aim of tracing the halal supply chain. Finally, the challenge in the prospect of the halal food industry in Indonesia especially in Islamic bank financing is dominant in the wholesale and retail trade, construction and processing industries. Both of the three sectors are related to the halal food industry, especially in the downstream/finish business context. However, in the upstream business context, the realization of financing for sectors that supply raw materials, such as the agriculture and food sectors, is still low. In order to support overall development, Islamic banking needs to encourage financing from both upstream and downstream sides.

### References

- Ahmad Tarmizi, H., Kamarulzaman, N. H., Abd Rahman, A., & Atan, R. (2020). Adoption Of Internet Of Things Among Malaysian Halal Agro-Food SMEs And Its Challenges. *Food Research*, 4(1), 256-265. doi: 10.26656/fr.2017.4(S1).S26.
- Al-Qasimi, Jalaludin. (1995). Mau'idhah al-Mukminin min Ihya' 'Ulum al-Din, Dar al-Fikr, Beirut.
- Al-Ghazali, Abu Hamid. (1993). *Kitab al-Halal wa al-Haram min Ihya' 'Ulum al-Din*, Cet. III, Dar al-Kutub al- 'Ilmiyyah, Beirut.
- Ambali, A. R., & Bakar, A. N. (2014). People's awareness on halal foods and products: potential issues for policy-makers. *Procedia-Social and Behavioral Sciences*, 121(3), 25. doi: 10.1016/j.sbspro.2014.01.1104

- Amalia, Fatya Alty; Wang, Kung Jeng; Gunawan, Arie Indra. (2020). Covid-19: Can Halal Food Lessen the Risks of the Next Similar Outbreak?. *International Journal of Applied Business Research.* 2(02), 86-95. doi: 10.35313/ijabr.v2i02.112
- Asa, Rokshana Shirin. (2019). An overview of the developments of Halal certification laws in Malaysia, Singapore, Brunei and Indonesia. Jurnal Syariah, 27(1), 173-200. doi: 10.22452/js.vol27no1.7
- Babelkemenag.go.id. *Babel Tuan Rumah Kongres Halal Internasional Tahun 2022*. <u>http://babelkemenag.go.id</u> (Februari 01, 2022)
- Badan Pusat Statistik. (2019). Statistical yearbook of Indonesia 2009. Statistics Indonesia.
- Baharuddin, Gunawan, and Asmak Ab Rahman. (2020). Aligning Entrepreneurial Intention Towards Sustainable Development Among Muslim Youth In Indonesia. *Journal Of Indonesian Islam* 14(2), 407-430. doi: 10.15642/JIIS.2020.14.2.407-430
- Bank Indonesia. (2021). *Laporan Ekonomi dan Keuangan Syariah Tahun 2020*. Jakarta: Bank Indonesia.
- Calicioglu, O., Flammini, A., Bracco, S., Bellù, L., & Sims, R. (2019). The Future Challenges Of Food And Agriculture: An Integrated Analysis Of Trends And Solutions. *Sustainability*. 11(1), 222. doi: 10.3390/su11010222
- Chang, A. Y., Cowling, K., Micah, A. E., Chapin, A., Chen, C. S., Ikilezi, G., ... and Qorbani, M. (2019). Past, Present, And Future Of Global Health Financing: a Review Of Development Assistance, Government, Out-Of-Pocket, And Other Private Spending On Health For 195 Countries, 1995–2050. *The Lancet*. 393(10187), 2233-2260. doi: 10.1016/S0140-6736(19)30841-4
- Chao, En-Chieh. (2021). Science, Politics, And Islam: The Other Origin Story Of Halal Authentication In Indonesia. *In: Rethinking Halal. Brill*, 128-150. doi: 10.1163/9789004459236\_007
- Charity, May Lim. (2017). Jaminan produk halal di Indonesia (Halal products guarantee in Indonesia). *Jurnal Legislasi Indonesia*. 14(1), 99-107.
- Debata, B., Patnaik, P., & Mishra, A. (2020). COVID-19 pandemic! It's impact on people, economy, and environment. *Journal of Public Affairs*. 20(4), e2372. doi: 10.1002/pa.2372
- Detik.com. (2021). Skenario Terburuk Industri Makanan Imbas Corona, https://www.detik.com/tag/industri-makanan-dan-minuman (January 11, 2022)
- Farnoosh, G., Alishiri, G., Zijoud, S. H., Dorostkar, R., and Farahani, A. J. (2020). Understanding the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and coronavirus disease (COVID-19) based on available evidence-a narrative review. *Journal of Military Medicine*. 22(1), 1-11. doi: 10.30491/JMM.22.1.1

Fauzia, Ika Yunia and Riyadi, Abdul. K. (2020). New Trens in Economic Behavior: The Phenomenon of the Anti-Usury Movement in Indonesia. *Studia Islamika*. 27(3), 515-550. doi: 10.36712/sdi.v27i3.11038

Ghebreyesus. (2020). *Together for a Healthier World*. <u>http://www.who.int/</u> (December 30, 2021)

- Grais, W., and Pellegrini, M. (2006). Corporate governance and Shariah compliance in institutions offering Islamic financial services. *World Bank Publications*. (Vol. 4054).
- Hardiwinoto, H., Sukesti, F., and Ethica, S. N. (2021). Investment Prospect of Halal Products in Indonesia: A Review. *Enhancing Halal Sustainability*, 215-234. doi: 10.1007/978-981-33-4854-7\_19
- Hasan, M. R. (2019). The Importance of Halal Certified Products in Samarinda City: in the light of Maqasid Al-Syari'ah. *Borneo International Journal of Islamic Studies (BIJIS)*. 2(1), 41-69.
- Hidayat, Sutan Emir; Rafiki, Ahmad; Nasution, and Muhammad Dharma Tuah Putra. (2021). Halal industry's response to a current and post-COVID-19 landscape and lessons from the past. *Journal of Islamic Marketing*. doi: 10.1108/JIMA-06-2020-0180
- Hidayatullah, M. S. (2020). Sertifikasi dan Labelisasi Halal Pada Makanan dalam Perspektif Hukum Islam (Perspektif Ayat Ahkam). *YUDISIA: Jurnal Pemikiran Hukum dan Hukum Islam*. 11(2), 251-270.
- Jackson, J. K. (2021). Global economic effects of COVID-19. Congressional Research Service.
- Kamali, M. H. (2013). *The Parameters of Halal and Haram in Shariah and The Halal Indsutry* (*Vol.23*). North America: The International Institute of Islamic Thought.
- Kemenag, R. I. (2003). Al-Qur'an Transliterasi Perkata dan Terjemah Perkata.
- Kemenperin. (2020). Industri Makanan dan Minuman Siap Jalani Tatanan New Normal. http://kemenperin.go.id (December 25, 2021)
- KKP RI. Konservasi Perairan Sebagai Upaya menjaga Potensi Kelautan dan Perikanan Indonesia, https://kkp.go.id/djprl/artikel/21045 (January 22, 2022)
- Latif, Abdul, et al. (2021). Halal Certification Online to Drave Halal Value Chain (HVC) During the Covid-19 Pandemic. *International Journal of Islamic and Social Sciences (ISOS)*, 1(2), 64-72.

LPPOM MUI. Sejarah LPPOM MUI, 2021. http://halal.go.id/ (December 15, 2021).

Lynarbi, I., et al. (2020). Analisis Pengaruh Lahirnya UU No. 33 Tahun 2014 tentang JPH dan Terbitnya PP No. 31 Tahun 2019 tentang JPH terhadap Keputusan Melakukan MoU dan Perjanjian Kerja Sama Calon LPH dengan BPJPH. *International Journal of Social, Policy and Law.* 1(1), 88-110.

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- Margiansyah, Defbry. (2020). Revisiting Indonesia's Economic Diplomacy In The Age Of Disruption: Towards Digital Economy And Innovation Diplomacy. *Journal of ASEAN Studies*, 8(1), 15-39. doi: 10.21512/jas.v8i1.6433
- Masood, A., and Rahim, A. A. (2021). *3rd International Halal Management Conference (3rd IHMC 2021).* In E-Proceedings Halal International rd 3 The Management Conference (p. 13).
- Muryanto, Yudho Taruno; Kharisma, Dona Budi; Nugraheni, and Anjar Sri Ciptorukmi. (2021). Prospects And Challenges Of Islamic Fintech In Indonesia: a Legal Viewpoint. *International Journal of Law and Management*. 64(2), 239-252. doi: 10.1108/IJLMA-07-2021-0162
- Muslih, Muhamad, et al. (2021). Prospects for the Development of Halal, Thoyib, and Hygienic Food Production During the New Normal Covid-19 Period as Supporting Pillars of National Food Security. *Unram Law Review*, 5(2). 239-261. doi: 10.29303/ulrev.v5i2.184
- Muwafaq Fadhil, J. (2017). Optical microfiber-based sensor and pulse fiber laser incorporating graphene saturable absorber/Muwafaq Fadhil Jaddoa. University of Malaya: Doctoral dissertation.
- Nirwandar, Sapta. (2020). Halal Gelatin and its Business Opportunity in Indonesia. *International Journal of Halal Research*, 2(1), 50-57. doi: 10.18517/ijhr.2.1.50-57.2020
- Noordin, F., and Jusoff, K. (2009). Levels of job satisfaction amongst Malaysian academic staff. *Asian social science*. 5(5), 122-128.
- Oktavilia, S., Sugiyanto, F. X., and Rachman, M. A. (2019). Competitiveness of Indonesian fishery commodities. *In IOP Conference Series: Earth and Environmental Science* (Vol. 246, No. 1, p. 012006). IOP Publishing.
- Othman, B., Shaarani, S. M., and Bahron, A. (2016). The potential of ASEAN in halal certification implementation: A review. *Pertanika Journal of Social Sciences and Humanities*. 24(1), 1-24.
- Paino, H., Bahari, A. B., and Bakar, R. A. (2011). Shariah, social responsibilities and corporate governance of the Islamic banks in Malaysia. *European Journal of Social Sciences*. 23(3), 382-391.
- Priambodo, I. T., Sasmoko, S., Abdinagoro, S. B., and Bandur, A. (2021). E-Commerce Readiness Of Creative Industry During The COVID-19 Pandemic In Indonesia. *The Journal of Asian Finance, Economics and Business.* 8(3), 865-873.
- Putri, A. K., Fitriyanti, E., Sulistiana, I., and Fahria, I. (2019). The Effect of Islamic Social Reporting Index on Islamic Banking Financial Performance in Indonesia. *Humanities & Social Sciences Reviews*. 7(4), 609-616.

- Rais, Isnawati. (2021). The Impact of COVID-19 Pandemic on Divorce Rates Among Indonesian Muslim Societies. Indonesian Journal of Islam and Muslim Societies. 11(2), 271-297. doi: 10.18326/ijims.v11i2.271-297
- Rangkuty, Dewi Mahrani. (2019). Indonesia's Halal Commodity Supply for International Trade Market. *In: International halal conference & exhibition 2019 (IHCE)*, 133-138.
- Ratanamaneichat, C., & Rakkarn, S. (2013). Quality Assurance Development Of Halal Food Products For Export To Indonesia. *Procedia-Social and Behavioral Sciences*. 88, 134-141. doi: 10.1016/j.sbspro.2013.08.488
- Razalli, M. R., Yusoff, R. Z., & Mohd Roslan, M. W. (2013). A Framework Of Halal Certification Practices For Hotel Industry. Asian Social Science. 9(11), 316-326. doi: 10.5539/ass.v9n11p316
- Salman, Abdul Matin, et al. (2018). Halal As a Competitive Distinction For Islamic Higher Education In Preparing Muslim Millenials. *Indonesian Journal of Islamic Literature and Muslim Society*. 3(2), 111-122. doi: 10.22515/islimus.v3i2.1922
- Samori, Z., Ishak, A. H., & Kassan, N. H. (2014). Understanding the development of halal food standard: Suggestion for future research. *International Journal of Social Science and Humanity*. 4(6), 482-486. doi: 10.7763/IJSSH.2014.V4.403
- Setyadi, E. (2019). Constraint Review and Implementation of audits on technology-based Startup Companies in Indonesia. *Jurnal AKSI (Akuntansi dan Sistem Informasi)*. 4(2), 101-107. doi: 10.32486/aksi.v4i2.54
- Sholeh, Asrorun Ni'am dkk. (2015). *Sertifikasi Produk Halal*. Jakarta: Lembaga Kajian Islam dan Hukum Islam Fakultas Hukum Universitas Indonesia.
- Sucipto. (2012). Halal dan haram menurut Al-Ghazali dalam kitab Mau'idhotul Mukminin. *ASAS*. 4(1). doi: 10.24042/asas.v4i1.1671
- Sugiharti, L., Esquivias, M. A., and Setyorani, B. (2020). The Impact Of Exchange Rate Volatility On Indonesia's Top Exports To The Five Main Export Markets. *Heliyon*. 6(1), e03141. doi: 10.1016/j.heliyon.2019.e03141
- Sukesi; Akbar Hidayat, Wanda Gema Prasadio. (2019). Managing the Halal Industry and the Purchase Intention of Indonesian Muslims the Case of Wardah Cosmetics. *Journal of Indonesian Islam.* 13(1), 200-229. doi: 10.15642/JIIS.2019.13.1.

Suryana. (2009). Makanan yang Haram dan Haram. Jakarta: PT. Mapan.

Susilawati, C. (2020). Role of The Halal Industry in Recovering the National Economy in Covid-19 Pandemic. *International Journal of Nusantara Islam.* 8(2), 202-214. doi: 10.15575/ijni.v8i2.10807

Published by AFEBI Economic and Finance Review

- Syafei, Zakaria. (2017). Tracing Maqasid Al-Shari'ah In The Fatwas Of Indonesian Council Of Ulama (MUI). *Journal Of Indonesian Islam*. 11(1), 99-124.
- Tieman, M. (2013). Establishing the principles in halal logistics. *Journal of Emerging Economies* and Islamic Research. 1(1), 19-31.
- WHO. (2020). *Getting Your Workplace Ready for COVID-19*. http://www.who.int/ (December 30, 2021)
- Yudha, Ana Toni Roby Candra, and Abdullah Kafabih. (2021). Halal Industry During the Covid-19 Pandemic Is The Hidden Blessing: Industri Halal Selama Pandemi Covid-19 Adalah Berkah Tersembunyi. *El-Qist: Journal of Islamic Economics and Business (JIEB)* 11(1), 17-32. doi: 10.15642/elqist.2021.11.1.17-32
- Yunita, Hanna Indi Dian. (2018). Studi Tentang Peluang Dan Tantangan Industri Pangan Halal Terhadap Perekonomian Di Indonesia. *Diss*. Universitas Brawijaya.
- Zailani, S. H. M., Ahmad, Z. A., Abd Wahid, N., Othman, R., and Fernando, Y. (2010). Recommendations to strengthen halal food supply chain for food industry in Malaysia. *Journal of Agribusiness Marketing*. Special edition, October 2010, 91-105.