The Opportunity of Internet Literacy to Increase Consumption and Attract Foreign Investor in Indonesia

Suryaning Bawono STIE Jaya Negara Taman Siswa Malang, Indonesia

Abstract: This study aims to determine the response and impulse of the variables of consumption, investment, and internet users. Where investment in this study focuses on FDI or foreign direct investment. Because FDI has a direct impact on the real sector and is a net cash inflow. To achieve this goal, an vector autoregressive is used. All data are secondary data from world banks. We found that the internet is a medium that unites the world community through a computer network known as a digital network. Internet literacy indicated by the number of internet users called internet users provides new opportunities and hopes for increasing consumption and attracting foreign investors to invest in Indonesia.

Keywords: : Internet User, Consumption, FDI

JEL Classification: A10, C01,O14

1 Introduction

Since being hit by the Covid-19 pandemic, people tend to choose to shop online to complete their daily needs as seen from the increase in digital shopping transactions. People's shopping habits have shifted during the Covid-19 pandemic. Many now tend to choose to shop online to meet their needs. Actually, this online shopping habit is not only happening now but before the Covid-19 outbreak in Indonesia. However, the ongoing pandemic has caused the online shopping trend to increase. Digital shopping is considered to be the right solution because people do not need to leave their homes, so they can avoid the risk of Covid-19 transmission. Furthermore, people prefer to shop online because of the social restriction policies implemented by the government some time ago. Digital shopping is considered to be the right solution because people do not need to leave their homes, so they can avoid the risk of Covid-19 transmission. Furthermore, people prefer to shop online because of the social restriction policies implemented by the government some time ago (Nanda et al,2021).

Since the outbreak of the Covid-19 pandemic and the public is advised to stay at home, online shopping transaction activities have increased rapidly. E-commerce companies also get a lot of profit from these transactions. There are several driving factors that make online shopping activities increase rapidly. First, because of the promo programs offered by e-commerce companies. During this pandemic, various online shopping promotions were offered, whether it was on social media or on billboards outside of electronic digital, with various promos. If there is a promotion, people are more interested. Second, with the Covid-19 situation, people are more required to avoid crowded places. Automatically to meet their needs, people tend to choose to shop online. According to him, this online shopping trend will continue to increase in the future (Alaimo et al,2021).

Foreign investment can be an important stimulus in an effort to accelerate the national economic recovery. Global economic conditions due to the spread of the Covid-19 pandemic are certain to continue to worsen. The United Nations in May 2020 predicted a worsening of inequality, both within the country and between countries in the world (United Nations , 2020). The pandemic will harm the manufacturing and tourism business sectors, depress revenues, reduce government transfers and social protection. Indonesia, which continues to improve its business climate and reduce inequality in business regulations based on global best practices. Although viewed as potential, Indonesia is relatively unattractive to foreign investors due to the complexity of the applicable regulations.

The Indonesian government needs to strengthen the efforts that have been made to improve these conditions, such as the abolition of regulations that are not investment-friendly and the integration of the licensing process through Online Single Submission. The interest of foreign investors to invest in Indonesia has been observed to decline in value. This condition is in line with the weakening global economy affected by the coronavirus pandemic. The impact of COVID-19 has had an impact on consumption and investment in Indonesia, which in turn has an impact on economic growth (Gandasari & Dwidienawati,2020).

Internet use is increasingly massive during this pandemic, including online shopping, which is a factor that needs to

be observed in addition to investment and consumption. This study tries to look back at the direction of influence of internet literacy or internet use in Indonesia, consumption behavior in Indonesia, and investment in Indonesia before the Covid 19 pandemic entered Indonesia. By looking at the direction of influence and looking at the impulse response between variables, it can be seen which variables are the most rational to be improved in an effort to get out of economic difficulties during the pandemic as well as to answer challenges in the level of consumption of the Indonesian people and investment in Indonesia.

2 LITERATURE REVIEW

There are two keys that can save the Indonesian economy from the brink of recession, namely household consumption and investment. An economic recession occurs when a country experiences a contraction or its economy goes down for two consecutive quarters. Indonesia with a very large population has a high level of consumption and has the potential to encourage economic growth. To meet the needs and consumption of society required production to produce goods and services (Juhro & Iyke,2020). Investment plays a role in encouraging the production of these goods and services. Investment can also be interpreted as saving money in a certain amount and period of time in investment instruments with the hope of getting returns or profits in the future. Investing is often likened to postponing pleasure in order to get a better life in the future. Delaying this pleasure is usually the most difficult thing for people to do (Qian,2021).

From the point of view of personal finance, the purpose of investing is to stay away from bad things that may happen in the future with all forms of uncertainty in life. Because change and uncertainty in the world is absolute, it is very important to prepare yourself from now on. There are many investment instruments that we can choose as a way our wealth such protect as having livestock/plantation business, gold, land, property, stocks, bonds, savings, deposits, and others (Lussier,2013). From a macroeconomic point of view, investment is divided into two, namely direct investment, namely direct investment in the real sector and portfolio investment in the form of securities (McGee,2016). Unlike investment, in the perspective of personal finance, consumption is an action that does not delay enjoyment. As living beings, consuming our daily needs is an absolute and obligatory thing because otherwise we might die. Sometimes many people consume or buy something not because of need or function but because of prestige or just showing off. Even though buying consumer goods only costs money and the

value of the goods is also sure to decrease as soon as we buy them. Macro is the level of public consumption in general (Keller et al,2017).

The rapidly spreading and 'deadly' Covid-19 caused WHO to declare it a Global Pandemic on March 11, 2020. The Covid-19 pandemic, which initially only affected health, also affected the national and global economy (WHO,2020). The economic growth of a country is determined by 5 (five) components, namely household consumption, government consumption, investment spending, exports, and imports. Of the five components, the components that can be relatively pushed by the Government in the short term are household consumption and government consumption. Meanwhile, for investment, it takes a relatively long time. For exports, it requires more effort because the national business world has not recovered and global economic conditions are still sluggish (McEachern, 2016). Consumption creates demand and drives production. When production increases the impact on employment. When the workforce is absorbed, more people will have income which in the end encourages consumption, and consumption is encouraged to encourage production and rotate like that so that the economy can continue to grow. Consumption and investment growth encourages production and consumption that continues to rotate and get bigger which results in economic growth and the creation of prosperity. The activities of consumers who use the internet as a medium in conducting online economic activities involve individual personal data, both those formed by technology such as the use of cookies, as well as part of the interaction between business actors and consumers.

It is undeniable, the pandemic that has occurred over the past year has had a major influence on the adaptation of internet use by the community. With most work, school, and worship activities carried out at home, people are increasingly encouraged to take advantage of digital services to meet their daily needs. The utilization of information and communication technology occurs in almost all lines of human life, including in the economic field. When referring to the history of internet development, the economic sector is a pioneer in the use of the internet after its use for military needs in the ARPANET (Advanced Research Projects Agency) project. the use of the internet encourages the growth of new economic sources known as the digital economy (Overby & Audestad, 2018). The digital economy gives birth to innovations that rely on the use of technology, especially mobile internet, Internet of Things (IoT), cloud computing and big data, and advanced analytics. Various new business models have emerged offering customized services. Customized services that are tailored to user needs and the principle of sharing that makes prices more competitive are the strengths of this technology-based business model. It is not surprising that the services produced are in demand by consumers, such as the concept of ride-hailing in application-based (online) taxis. As with the emergence of the internet itself which has benefits and risks simultaneously, the implementation of activities in the digital economy corridor also raises several things that need to be observed and anticipated. Protection of personal data and cybersecurity is one of the things that is of concern along with the spirit to take full advantage of the digital economy. Furthermore, cybersecurity itself has a vital role in building trust or trust for consumers and building a conducive digital economy ecosystem for business actors. For this reason, in line with the government's enthusiasm to make Indonesia one of the centers of the digital economy, at least the issue of personal data protection and cybersecurity needs to be a concern.

3 RESEARCH OBJECTIVE AND METHODOLOGY

This study aims to determine the response and impulse of the variables of consumption, investment, and internet users. Where investment in this study focuses on FDI or foreign direct investment. Because FDI has a direct impact on the real sector and is a net cash inflow. To achieve this goal, an vector autoregressive is used. With the econometric equation as follows:

 $Yt = \beta 0 + \beta 1PAt1 + \beta 2Et2 + et$

Where Y is a employment income in agriculture, t is a time period, β is constant, P is work participation in agriculture or employment in agriculture, E is education investment in agriculture, and e is error term.

And the vector autoregressive model is as follows: FDI C(1,1)*FDI(-1)+ C(1,2)*FDI(-2)C(1,3)*CONSUMPTION(-1) + C(1,4)*CONSUMPTION(-2) $C(1,5)*INTERNET_USER(-1)$ $C(1,6)*INTERNET_USER(-2) + C(1,7)$ CONSUMPTION = C(2,1)*FDI(-1) + C(2,2)*FDI(-2) +C(2,3)*CONSUMPTION(-1) + C(2,4)*CONSUMPTION(-2) $C(2,5)*INTERNET_USER(-1)$ $C(2,6)*INTERNET_USER(-2) + C(2,7)$ $INTERNET_USER = C(3,1)*FDI(-1) + C(3,2)*FDI(-2) +$ C(3,3)*CONSUMPTION(-1) + C(3,4)*CONSUMPTION(-2) $C(3,5)*INTERNET_USER(-1)$ $C(3,6)*INTERNET_USER(-2) + C(3,7)$ All data are secondary data from world banks.

4 RESULTS AND DISCUSSION

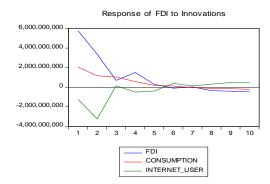
The following are the estimation results that we have done:

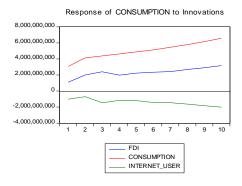
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FDI = 0.533678584406*FDI(-1) - 0.328276649843*FDI(-2) -
0.288415334221*CONSUMPTION(-1)
0.356924145703*CONSUMPTION(-2)
1179.57156259*INTERNET_USER(-1)
1408.58561753*INTERNET_USER(-2) - 14900482747.2
CONSUMPTION
                        0.119777604544*FDI(-1)
0.0143614170203*FDI(-2)
1.36409388858*CONSUMPTION(-1)
0.338816747105*CONSUMPTION(-2)
345.211518451*INTERNET_USER(-1)
414.523962651*INTERNET_USER(-2) + 2666599470.65
INTERNET_{USER} = -0.000130168066789*FDI(-1)
0.000317108727082*FDI(-2)
0.000461328898078*CONSUMPTION(-1)
0.000540580612973*CONSUMPTION(-2)
0.367547521683*INTERNET_USER(-1)
0.907120250971*INTERNET_USER(-2) - 18883092.4203
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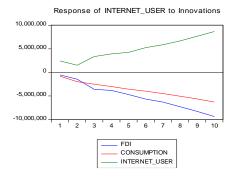
FDI or investment in the past has a direct and significant relationship with current FDI. FDI also has a direct relationship with consumption and internet users. This indicates that FDI from abroad to Indonesia has contributed to the development of the digital economy sector. Where FDI has a significant impact on internet literacy. Public consumption also has a significant influence on future consumption or past consumption has a significant influence on current consumption. Consumption also has a significant relationship with FDI and Internet Users. This shows the growth of online shopping which encourages internet use in Indonesia and brings FDI in terms of increasing expectations of foreign investors.

Internet users also have a significant impact on FDI and Consumption as well as the increase in Internet use in the future. This shows that the digital sector in Indonesia provides hope and opportunity for economic recovery and economic growth in Indonesia. To see the response and impulse of each variable can be seen from the results of the impulse response as follows:

Figure 1. The response and impuls each variabel graph







From the impulse response results between variables and the estimation results, it can be seen that internet literacy has an impact and is able to provide an impetus to consumption in the community and attract foreign investors to invest in Indonesia. This provides hope and opportunity in developing the Indonesian economy in the future

5 CONCLUSION

The internet is a medium that unites the world community through a computer network known as a digital network. Internet literacy indicated by the number of internet users called internet users provides new opportunities and hopes for increasing consumption and attracting foreign investors to invest in Indonesia.

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