別紙４

報告番号	※　　第

主　論　文　の　要　旨

論文題目　The Investigation of Impact of Foreign Direct Investment on Economic Growth in Indonesia
(海外直接投資がインドネシアの経済成長に与える影響に関する研究)

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論　文　内　容　の　要　旨

1. Introduction

Promoting Foreign Direct Investment (FDI) to achieve sustainable economic growth in developing countries has been a top priority for economists and policymakers. FDI's possession of technology and knowledge are critical factors driving economic growth in the host developing countries. As a result, attracting FDI may be one of the most effective policy instruments for developing countries to gear their domestic economies. However, the policy can have a negative impact. One of these is that FDI may exacerbate wage inequality in the host country because FDI frequently offers higher wages than domestic companies, aiming to attract highly skilled workers.

FDI is indispensable to Indonesia's economic development. Since the 1998 Asian financial crisis, when the Indonesian government began to reduce reliance on foreign debt as a source of external funding to stimulate economic growth, FDI has begun to play a role. At least over the last decade, the Indonesian government has aggressively opened investment doors for foreign investors by offering various types of incentives, such as the 2015 issuance of 16 economic policy packages. This policy aims to boost business and trade growth by encouraging competitiveness, increasing export capacity, simplifying business regulations, and improving infrastructure.

However, from 2010 to 2019, Indonesia's share of FDI to GDP fluctuated, and the contribution of FDI to GDP was relatively small (around 2-3%). This implies that FDI is less likely to respond to incentives offered by the Indonesian government. Another major impediment to enhancing economic growth in Indonesia is the unequal distribution of FDI

inflows across provinces. Even though some off-Java provinces have shown a favorable location for FDI during the decade, Java provinces remain the magnet for FDI.

Regarding the backdrop, our study sought to investigate some pertinent issues of FDI associated with Indonesian economic growth. First, what are the important factors affecting FDI to invest in Indonesian provinces and sectors? Second, does FDI inflow in sectors affect provinces' growth in Indonesia? Third, which sector of FDI has the most significant impact on economic growth in Indonesia? Fourth, does FDI affect wage inequality for skilled and less-skilled workers in Indonesia? Fifth, which FDI sector has the inequality-reducing effect on wage inequality in skilled and less-skilled workers?

2. On determinant of FDI inflow in Indonesia: Evidence from sectors and provinces

Our study shows that each sector has specific determinants by employing data FDI at the aggregate and sectors level in 33 provinces in Indonesia during the 2010-2018 period. Furthermore, we found that seven determinant factors are indispensable in attracting aggregate FDI in Indonesian provinces: cumulative FDI aggregate, agglomeration neighboring province (GAD), domestic investment, urbanization, human capital (lower secondary school), bank lending, and foreign trade. In addition, we found that human capital (lower secondary school) and unit labor cost are essential variables in luring FDI in the agricultural sector. Whereas for the manufacturing sector, the leading factors attracting FDI are GAD, foreign trade, and industrial estates. Finally, the critical factors for attracting foreign enterprises in the hotel and restaurant sectors are urbanization, human capital (upper secondary school), and GDP per capita.

3. Does FDI affect economic growth in Indonesia: Evidence from sectors and provinces

Utilizing sectoral data at the provincial level (33 provinces) in Indonesia from 2010 to 2019, our results prove that, in general, FDI significantly positively impacts economic growth in the Indonesian provinces. We also find that FDI in the mining, manufacturing, water, gas and electricity, hotels and restaurants, and real estate sectors has a significant positive effect on economic growth. Meanwhile, only FDI in the agricultural sector has a significant negative impact. Our estimation results confirm that FDI in the manufacturing sector contributes positively and has a considerable impact.

4. The impact of FDI on wage inequality in Indonesia: Evidence from sectors and provinces

Based on data from 33 provinces and 10 sectors in Indonesia from 2010 to 2019, our findings suggest that the association between FDI (both aggregate and sectoral) and wage

inequality between high-skilled and low-skilled workers in Indonesian provinces is non-linear. Meanwhile, the impact of sectoral FDI varies significantly. FDI in agriculture and mining is associated with reducing wage inequality. In contrast, FDI in the manufacturing sector increases wage inequality early and late stages. Furthermore, the impact of FDI on the service sector is ambiguous.

5. Conclusion

Our dissertation addressed several critical issues concerning the role of FDI in promoting Indonesian economic growth. We summarized the findings in three parts as follows. First, the empirical results of our analysis provide essential findings that the determinants of FDI inflow at the provincial level in Indonesia vary at the aggregate level and across economic sectors. In a broad view, FDI resource and efficiency-seeking can be the common motive for foreign enterprises to invest in Indonesia. The argument is that human capital and labor cost is a matter for attracting FDI as those factors can be perceived as low-cost factors that push foreign firms to engage with international production.

Second, overall, our finding shows that sectoral FDI positively impacts economic growth in the Indonesian provinces. Furthermore, we confirm that FDI in the manufacturing sector contributes positively and has a significant impact. This suggests that promoting FDI in the manufacturing sector is critical for accelerating economic growth. Third, we discover that FDI has a non-linear relationship with wage inequality, and the effect varies significantly by sector. FDI in agriculture and mining is associated with reducing wage inequality. In contrast, FDI in the manufacturing sector increases wage inequality early and late stages. Furthermore, the impact of FDI on the service sector is ambiguous.

6. Policy Recommendation

Attracting FDI while promoting economic growth in Indonesia should be carried out by Indonesian policymakers carefully and measurably. Based on the finding of our study, we suggest the following policy measure that enables accelerating economic growth.

First, the government may consider human capital the most critical factor when promoting FDI if the government intends to attract FDI while promoting economic growth. Second, to attract FDI, policymakers should develop specific policies for specific sectors. Third, the government must recognize that not all FDI sectors can be defined as direct drivers of economic growth, which means that the government must determine which sectors of FDI stimulate economic growth.

Fourth, encouraging FDI in the manufacturing sector would be more successful in

stimulating economic growth. However, encouraging FDI may increase wage disparities between skilled and unskilled workers. Fifth, attracting FDI as an instrument policy to reduce the wage gap between high-skilled and low-skilled employees until the threshold is strongly recommended. Sixth, the Indonesian government should consider the country of origin of FDI in each sector to determine whether it positively or negatively impacts wage inequality.

Seven, promoting FDI in the manufacturing sector to have a more significant impact on lowering wage inequality should be undertaken by improving some industry sub-sectors to be more productive. Eighth, encouraging FDI in the agricultural sector must be done carefully to accelerate economic growth while reducing inequality. Ninth, policy recommendations for other sectoral FDI to reduce wage inequality should be undertaken appropriately by evaluating the current and the threshold level of FDI in each sector.

Furthermore, our study has several drawbacks, which can be a limitation in assessing the role of FDI in economic growth. First, as the difficulties in collecting data at the provincial level in Indonesia, this study may suffer from omitted variables in explaining province-specific characteristics such as institutional quality and provincial economic policy, which could better explain our study's investigation into determinants of FDI inflow.

Second, our research does not look into which absorptive capacity channels (such as human capital and domestic firms) in the host province for FDI can affect economic growth. In addition, the connection between foreign firms and domestic firms is needed for gearing the technological and knowledge transfer brought by FDI, which domestic firms can provide intermediate inputs for foreign firms. Thus, this motivation can be triggered future studies to sharpen the analysis of the impact of sectoral FDI on economic growth. Third, this study does not employ data for sectoral wage, which is believed more appropriate to measure the effect of FDI by sector on wage inequality. Future research can address this issue by assessing the impact of sectoral FDI on inequality within-sectoral wages and cross-sectoral wages.