

Determinants of FDI in Transition Economies and Implications for North Korea

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I. Introduction

North Korean authorities have been seeking changes in North Korea's economic policy since the Kim Jong Un regime took power. Along with decentralization, the government is trying to increase efficiency and productivity within the socialist economic system, and as part of this policy it has designated 27 economic development zones to attract foreign investment. Foreign direct investment plays a crucial role in economic growth for low-income countries such as North Korea, which lacks capital and technology.

This study discusses North Korea's foreign investment policy and tasks ahead of its government to revitalize the economy, based on the premise that nuclear negotiations between North Korea and the US proceed smoothly. First of all, in order to derive policy tasks, we compared and analyzed the achievements and policies of transition countries in Asia and Eastern Europe in terms of attracting FDI, also

analyzing the determinants of FDI inflows, after which we present policy tasks for North Korean authorities. As South Korea may very well become the largest investor in North Korea, our study also discusses tasks for the Korean government to pursue in order for Korean companies to successfully invest in North Korea.

II. Methodology and basic statistics of database

Based on data provided by the Doing Business project at the World Bank, this study investigates changes in the investment environment of each transition economy and compares their investment environment, institutions, and correlations with FDI inflows. During our quantitative analysis of determinants of FDI inflows in transition economies, we came upon many cases where statistics were unstable or difficult to secure, which is why this study limits target group to 24 countries. For FDI inflow data, we used OECD statistics

and conducted our analysis through system GMM estimation, a method in wide use recently. In addition to the determinants of FDI inflows for all transition economies, we also performed a separate analysis of the Visegrad Group (the “V4”) and the Baltic states, which are considered to be successful in attracting FDI, classified into one group.

In addition, we analyzed the income categories by classifying them as transition economies with per capita GDP less than US\$2,000 and those above. In the case of transition economies, we postulated that accession to the WTO or EU would have a great effect on FDI inflows for these nations. Based on this premise, we measured FDI inflows by using dummy variables based on when the nation joined the WTO or EU. In the case of the V4 and the Baltic states, the initial conditions were the externally determined independent variables. The most important success factors for investment in the early stages of the transition were the pace of reform and level of openness. This is because the performance of investment inducement policy depends on how wide open the economy has been rendered and reformed rapidly to be incorporated into the world economy.

III. FDI inflows and investment environment in transition economies

Based on statistics from international organizations, this study first analyzes the FDI inflows in transition economies. The business

environment of transition economies is highly correlated with reform and opening up. However, in the cases of China and Vietnam, these nations succeeded in attracting investment by drastically improving business conditions in special economic zones while conducting gradual reform and partial opening policies.

The Baltic states, Macedonia and Georgia all have limited domestic markets, which has led to these countries attracting investment by carrying out drastic improvements in their business environments, thus positioning themselves as a base for advancing into adjacent and larger markets. Among the evaluation factors, efforts to improve the environment in the trade sector were prioritized. In other words, efforts were made to attract into the country investment being made to establish sales bases in neighboring large markets by radically improving procedures and reducing the time and costs required in the import and export process. In the regional characteristics of the transition country's business conditions, the EU member states as well as the transition countries adjacent to the EU generally receive better evaluations in the trade sector than any other assessment factor.

There are many instances of transition economies not included among the top 20 nations on the “Ease of Doing Business” ranking announced by the World Bank benefiting from a larger market or abundant resources in adjacent regions. This includes Poland in the Middle East and Europe, Russia and Ukraine in the CIS adjacent to the EU, Kazakhstan in Central

Asia, and China in East Asia. Of course, efforts toward reform and opening and improvements in the business environment were made, but the size of the market and the abundance of resources played a significant role in FDI inflow compared to neighboring competitors. Kazakhstan has actively attracted FDI through improving its business environment, developing its own resources and utilizing this as the foundation for economic development. Even in Russia, which is not a rapidly transitioning nation, the rich potential for development of abundant resources attracted large amounts of FDI. China, now a “G2” economy, also attracted a huge amount of FDI despite carrying out reform in a gradual manner and opening its market only partially.

In addition, improving relations with the Western world, such as the US and the EU, is one of the major success factors for transition countries to attract investment. There are many cases in the leading group of transition economies where joining the EU served as a decisive factor to increase FDI inflow, while efforts to strengthen their relationships with the EU added a similar impetus for the late stage group. Serbia, once a leading figure in the former Yugoslavia federation, continued to clash with the UN due to the Baltic Wars and its own civil wars, but is recently seeing a dramatic improvement in its FDI inflow following efforts to join the EU and improve relations with the West. Vietnam's approval of Permanent Normal Trade Relations (PNTR) with the US in December 2006 served as a new opportunity to increase its inflow of FDI.

IV. Determinants for FDI inflow in transition countries

In this study, several factors affecting the FDI inflow of East European and Central Asian transition countries over the 20 years from 1995 to 2014 were examined through statistics of OECD countries' direct investment towards transition economies and gravity model. The analysis was conducted using the System GMM and the random effects panel data analysis. The target transition countries are mostly from Eastern Europe and two from Central Asia. Overall, it was analyzed that institutional and structural changes in the transition countries such as competition policies and the size of private markets affect the FDI inflow.

The empirical analysis of the target transition economies for the entire term showed that the more competitively-oriented the countries' level of competition policies, the greater the FDI inflows from OECD countries, and that trade openness had a negative impact on FDI inflows contrary to general expectations. In addition, the larger the size of domestic credit, the greater the FDI inflow, and the higher the proportion of manufacturing industries in the transition countries, the greater the FDI inflow. On the other hand, it turns out that direct investment companies in OECD countries prefer FDI towards the transition countries that maintain a stable public sector, even if the taxation level is high, indicating a positive relationship between their tax burden and FDI inflow.

Applying the same analysis on the transition economies classified into high-income and

low-income, the results indicate different determinants for FDI inflow depending on income levels. The level of competition policies in place and proportion of manufacturing in the transition economies were analyzed to have a significant impact on the FDI inflow in the high-income transition economies, but the effect was not seen in the low-income ones.

The negative relationship between trade openness and the amount of FDI inflow of transition economies carries a statistical significance regardless of their income level, and the positive effect of the scale of domestic credit on the FDI inflow has also been shown to be independent of income levels. The entry of low-income transition economies into the WTO has been shown to decrease the FDI inflow contrary to the general expectation, as such entry secures the trade convenience, easing the entry through exports.

On the other hand, further analysis was attempted for the first half of the analysis period 1995-2005 to examine the factors determining the FDI inflow during the period when the intensive transition took place. Unlike the analysis applied for the entire period, the result of the analysis attempted for the first half shows many variables of which the estimated coefficients are not significant.

The competition policy level of transition economies has been shown to have a positive impact on FDI inflow regardless of income level. The trade openness showed negative relationship in the analysis of the entire transition economies, but did not carry a statistical

significance in the analysis that classified transition economies according to the income level. According to the analysis of low-income transition economies, the larger the scale of domestic credit, the greater the FDI inflow. On the other hand, it was analyzed that the level of infrastructure in the transition economies affects the FDI inflow in the early period of the transition.

In this study, further analysis was made on Visegrad/Baltic transition economies, the successful FDI host countries. For the whole period analysis on the transition economies showed that the level of price liberalization has a negative impact on the FDI inflow, and it was confirmed that the expansion of price volatility due to price liberalization reduced direct investment of OECD companies. However, the effect of price liberalization was not observed at the beginning of the transition.

The level of competition policy in Visegrad/Baltic countries showed a positive relationship with the FDI inflow, and the impact of such level of competition policy was estimated to be greater at the beginning of the transition. The larger the domestic credit or the lower the inflation, the more direct investment was made in Visegrad/Baltic transition countries. The effects of inflation are not observed in the first half of the transition period, and it is analyzed to be a factor that has a long-term effect on the FDI inflow of the transition country.

On the other hand, except for some variables borrowed from the EBRD's transition index, the same analysis was carried out for the

Southeast Asian and Central Asian transition economies. The effect of FDI inflow due to institutional changes regarding the analysis of these non-European transition economies could not be confirmed. Rather, macroeconomic stability represented by low inflation, economic structure with a high proportion of manufacturing, and inclusion in the international trade order due to WTO membership have been shown to have a decisive impact on the FDI inflow into non-European Asian transition economies. In addition, the level of infrastructure of non-European Asian economies in the early stage of transition is analyzed as a factor that affects the FDI inflow.

V. Conclusion

Based on the quantitative analysis on the determinants of FDI inflows by transition countries, and an analysis of the results of investment and reform in the transition countries, 11 policy implications were drawn for North Korea, as follows: efforts will be necessary to ① secure support in advance from international financial institutions, ② normalize trade relations with the US, ③ expand market size and location, ④ maximize leveraging of geographical proximity with other countries, ⑤ attract foreign capital through competition-promoting policies, ⑥ expand trade openness, ⑦ expand its private sector, ⑧ foster the manufacturing industry, ⑨ ensure stable provision of public services and macroeco-

economic stability, ⑩ incorporate the North Korean economy into the international trade order through regional trade agreements and membership in the WTO, and ⑪ improve elements evaluated on the Doing Business index.

Finally, we suggest for the South Korean government to consider the following policy tasks: ① ease US export control regulations (EAR) for Korean companies to enter North Korea, ② resolve rules of origin issues to secure export markets for Korean companies, and ③ transfer experiences of SEZs to attract FDI into North Korea. **KIEP**

References

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