

Korean Industries' Investment Overseas and Likelihood of Investment Reshoring

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Summary

1. Introduction

(1) Research background and objectives

Whether Korean companies that have invested and set up operations overseas will reshore their investment and operations back to Korea has become an issue of great interest today. U.S. President Obama, for one, ran on a campaign pledge that, if re-elected, he would prompt American companies to bring their operations back home. As a number of household-name corporations have decided to set up new production facilities in the United States, investment reshoring has emerged as an important topic of public debate.

As Korea no longer offers competitively priced labor or other favorable production factors, Korean companies have begun to face increasing challenges in the rapidly changing domestic business environment, and now increasingly consider reshoring their investments back home to create more jobs and foster Korea's econom-

ic growth. These movements have led Korean legislators to enact the Assistance to Korean Offshore Enterprises in Repatriation Act (AKOERA) as a means of providing institutional support for such reshoring.

Nevertheless, companies considering bringing their operations back home still face mounting challenges in Korea. In order to increase the effect of AKOERA and help these companies, it is important to conduct ongoing and in-depth research on the opportunities and challenges that await companies following reshoring. Therefore, this study analyzes reshoring patterns and issues and provides suggestions for rational policymaking on the matter.

(2) Reshoring: definition

Before we proceed, we need to clarify the definition of a reshoring business. There has yet to emerge a universally accepted and undisputed concept thereof, so different studies use the term with different scopes of meaning and examples. The scope of research on reshoring depends on the breadth of scope of the reshoring businesses used in that research, which also bears implications for quantitative analyses and policymaking.

We may narrowly define a reshoring business as one that liquidates its physical facilities and business operations abroad so as to establish new operations or expand existing operations in its home country. More broadly, reshoring businesses may include even businesses that have cancelled their plans to invest overseas and replaced them with plans to increase domestic investment. The narrow definition would more accurately and rigorously define the

scope of businesses entitled to policy support, while the broad definition is unable to help us distinguish reshoring businesses from businesses that merely increase their domestic investment.

Therefore, this study borrows the definitions of reshoring businesses, which are entitled to policy support, as stated in AKOERA. According to the legislation, a reshoring business is:

- 1) A business with no established business location in Korea that liquidates/transfers its operations abroad so as to set up new operations in Korea;
- 2) A business with no established business location in Korea that reduces or maintains its operations abroad while setting up new operations in Korea;
- 3) A business with an established business location in Korea that liquidates/transfers business operations abroad so as to open up new operations and/or expand existing operations in Korea; or
- 4) A business with an established business location in Korea that reduces or maintains its operations abroad, while setting up new operations and/or expanding existing operations in Korea.

2. Literature survey

(1) Main factors of reshoring according to Tate et al.(2013)¹⁾

Tate et al. (2013) identifies the following as the main factors motivating businesses to reshore: (1) reduction in the wage gap between their overseas and domestic operations due rising wage levels abroad; (2) decreased productivity caused by growing demand overseas for skilled labor and shortage of labor supply; (3) fluctuations in energy prices; (4) foreign exchange rate fluctuations; (5) changes in the taxation structure, including the reduction or revocation of tax exemptions and benefits granted to foreign investors abroad; and (6) rising costs of transportation and the need to stay nearer to consumers.

Of these, the main factors influencing the reshoring of Korean businesses are increasing wage levels abroad, declining productivity caused by persistent supply-demand mismatch in skilled labor abroad, and the reduction or revocation of tax benefits and exemptions for foreign investors abroad.

(2) Theoretical model of Chu et al.(2013)²⁾

Chu et al. (2013) analyzes the factors involved in the reshoring of businesses using a mathematical model. The model explains

1) Tate, Wendy L., Lisa M. Ellram, Tobias Schoenherr, and Kenneth J. Petersen (2013), "Global Competitive Conditions Driving the Manufacturing Location Decision," *Business Horizons* 57 (3) May-June 2014, pp. 381~390.

reshoring as a function of capital accumulation abroad, which in turn leads to rising wage levels at overseas operations. Faced with the rising cost of labor overseas and considering the productivity of labor and other such related factors, businesses decide to reshore when it becomes clear to them that it is better to bring production back to their home countries.

(3) Other studies

Studies on reshoring by American and German businesses show clear differences between the two countries. Studies on American businesses point to the growing gap in the production cost between the United States and China as the major factor motivating businesses to reshore. Studies on German businesses, on the other hand, tend to emphasize more qualitative factors, such as the elasticity of supply or improvement in product quality. Nevertheless, both kinds of studies agree that changes in the management environment overseas, which have the effect of increasing the incentives to reshore, lead companies to reshore.

In studies on both American and German companies, government and policy support is attributed less importance than other diverse factors associated with changes in the management environment abroad. In other words, governments can encourage businesses to reshore only insofar as they help improve the man-

2) Chu, Angus C., Guido Cozzi, and Yuichi Furukawa (2013), "A Simple Theory of Offshoring and Reshoring," MPRA Paper No. 44557, Munich Personal RePEc Archive

agement environment in their home countries relative to the management environment overseas.

3. Korean industries' presence overseas and demand for reshoring

(1) Analysis of Korean businesses' investment overseas by industry

Of the manufacturing industries in Korea, those that lead investment overseas are the electronics, automobile, chemical, and primary metal manufacturing industries. Also increasing their presence abroad are the Korean metal processing, textile, apparel, and food processing industries.

Our analysis of the motives behind investing overseas revealed that, in most Korean industries, the need to increase exports and make inroads into new markets abroad were the most important factors. Until the 1990s, when the Korean government had just begun to liberalize investment abroad, most Korean companies had invested abroad with the goal of increasing exports. By the first decade of the new millennium, however, more and more companies came to invest as a means of pioneering new markets.

Overseas investment motivated by cheaper labor overseas, which is more prone to fluctuations in the wage structures abroad, is of less significance than either increasing exports or pioneering new markets, and its relative significance has declined steadily over time. The electronics industry, which has made significant amounts of investment abroad so far, tends to favor locations that

offer cheap labor. The automobile, chemical, and primary metal manufacturing industries, on the other hand, rarely make investment overseas for that reason. Therefore, chances are slim that changes in the relative international wage structure would motivate these industries to reshore to Korea. Other Korean industries that tend to make investment overseas in order to capitalize on cheaper labor abroad are the textile, apparel, and metal processing industries, making it more likely that they will return to Korea when the cost of labor abroad rises. Yet these industries have branched out abroad because production at home lost its competitiveness long ago. Even if they were to reshore to Korea, these industries would not be able to generate as much value-added or create as many decent jobs as hoped.

In other words, Korean industries continue to increase their investment abroad because they are facing increasing demand to localize their production abroad. Businesses that have invested abroad for this reason are unlikely to reshore to Korea even with the support and encouragement provided under AKOERA. Our analysis thus leans toward skepticism regarding the likelihood and the ultimate effect of these businesses reshoring to Korea.

(2) Literature on Korean industries' presence overseas and demand for reshoring

Instead of directly polling people working at Korean businesses abroad, this study analyzed the established literature and poll results in order to gauge Korean industries' presence overseas and the demand for their reshoring. This was a choice made because

(a) it was impossible to poll people working at myriad Korean businesses abroad and (b) the established literature and polls offer relatively recent results. However, even the established literature and polls encompass only very few of the Korean businesses abroad. We therefore sought to provide as broad an overview of the presence of Korean industries abroad as possible by introducing the fact-finding results of diverse prior studies.

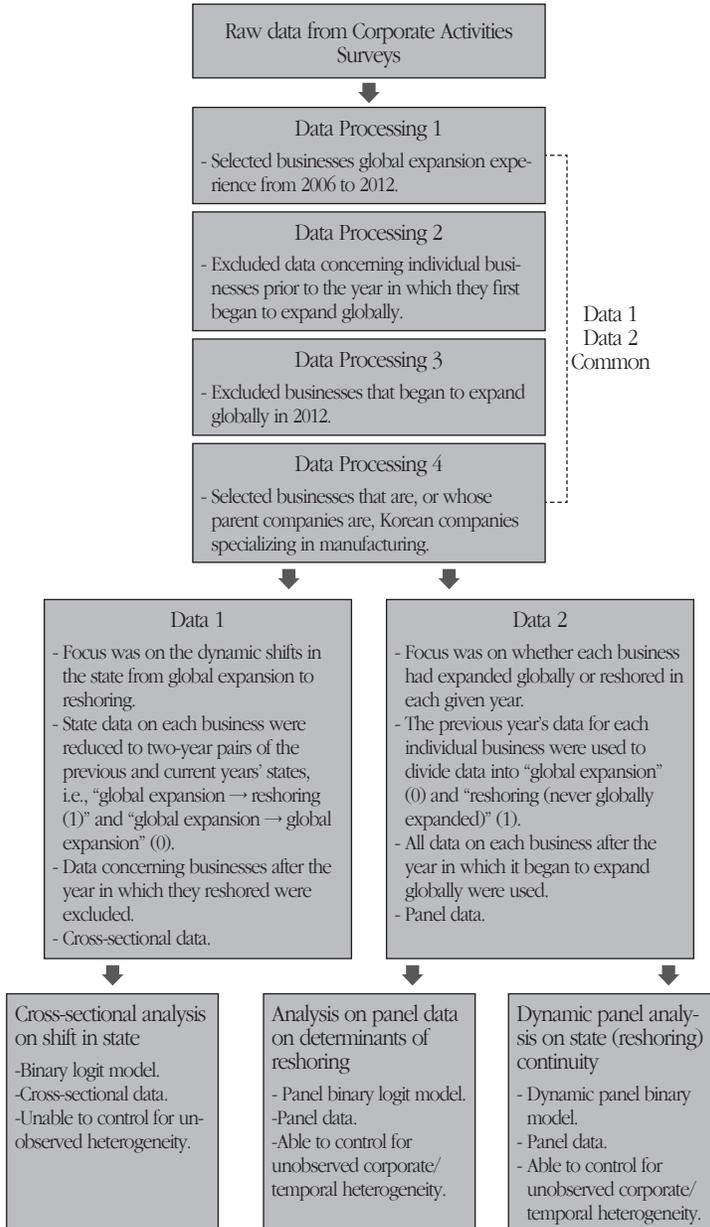
The prior studies included in our analysis point to the rising cost of labor and the need to pioneer new markets abroad as the two most important reasons for Korean businesses investing abroad. They identify the rising cost of labor abroad, rollback of incentives for foreign investors by local governments, and increasing regulation as major factors motivating businesses to reshore. Reshoring businesses point to the difficulty of liquidation abroad as the greatest obstacle to reshoring, while expressing the greatest concern over the high cost of labor and labor supply shortage at home. Therefore, Korean businesses planning to reshore seek financial support, assistance with liquidation, human resources support, support for the purchase of land for new factories in Korea, and tax benefits from the Korean government.

4. Quantitative analyses of reshoring factors

(1) Overview

In Chapter 4, we analyze Statistics Korea's Corporate Activities Survey data from the years 2006 through 2012, which include completely enumerated panel data on Korean corporations, to deter-

Figure 1. Overview of the Quantitative Analyses of Reshoring Factors



mine the current state of the reshoring of Korean businesses. Our goal was to conduct a quantitative analysis of how diverse corporate characteristics used in general corporate analyses, as well as a wide range of related factors (e.g., strategic partnership and transactions with and equity-holding in related companies), affect businesses' decision whether to reshore back to Korea. We then tested the possible state dependence involved in Korean businesses' expansion abroad and reshoring.

More specifically, as Figure 1 shows, we divided the corporate activities data into two types ("Data 1" and "Data 2") and processed them separately so as to survey the overall state of reshoring. We then grouped the businesses included in each data group according to reshoring-related criteria and sought to determine whether and what kinds of differences existed between the groups. Next, we performed the following quantitative analyses: (1) a cross-sectional binomial logistic regression analysis on the dynamic shift from global expansion to reshoring; (2) a random-effect binomial logistic regression analysis of the determinants of businesses' reshoring; and (3) a dynamic random-effect panel binomial logistic regression analysis on the continuity of the state of reshored businesses.

(2) Findings of empirical analysis

Table 1 summarizes the findings of our quantitative and empirical analyses on the diverse factors involved in the reshoring of Korean businesses.

The quantitative analyses converged on most of the results. In all the models, we find that, the larger the business, the stronger its

Table 1. Findings of Empirical Analysis: Summary and Comparison

Main factors	Binomial logit	Panel binomial logit	Dynamic panel binomial logit
State continuity (having reshored/globally expanded the previous year and continuing to do so)	N/A	N/A	+
Headquarters located in Seoul-Gyeonggi		-	-
Business size and revenue	-	-	-
Number of subsidiaries/affiliates abroad	-	-	-
Investment in subsidiaries/affiliates abroad (in units of KRW 1,000,000)			-
Ratio of investment by parent company			+
Revenue-to-export ratio (export concentration)	-	-	-
Ratio of subsidiaries/affiliates' exports to total exports		-	-
Ratio of subsidiaries/affiliates imports to total imports		-	-
Trade volume of subsidiaries/affiliates			-
Ratio of foreign capital to total capital			+
Capital concentration (total capital/total number of full-time workers)	-	-	-
Operating income ratio (operating income/revenue)		-	-
R&D intensity (own R&D cost/revenue)		-	-
Number of patents in possession/use			-
Strategic partnerships with domestic businesses		-	-
Strategic partnerships with overseas businesses		-	-

performance, and the higher its export concentration, the less likely it is to reshore. Companies with subsidiaries or affiliates abroad are also less likely to reshore, as are companies with high capital concentration ratios, which serve as a stand-in for the productivity of labor.

(3) Implications of quantitative analyses

The findings of our quantitative analyses suggest that companies that reshore after having failed at their global expansion attempts are likely to be lower performers than companies that do not reshore. This bears important implications for policies supporting reshoring. A significant number of businesses that reshore had expanded globally for the simple purpose of capitalizing on cheaper labor abroad. It is thus questionable whether fiscal policy support should be marshaled to encourage these businesses to reshore.

Many of the businesses that have expanded globally and do not reshore are likely to perform better in terms of size, sales, and labor productivity. These successful businesses have reasons not to reshore. It is therefore important for policymakers to review, at a fundamental level, whether the right kinds of reshoring incentives have been provided and the management environment in Korea has been reformed in a way that encourages these successful businesses to reshore.

Businesses with subsidiaries or affiliates abroad (e.g., subcontractors or suppliers that have expanded globally along with large corporations) are also less likely to reshore. The future reshoring policy should, therefore, consider the need to provide support not only for individual businesses but for all diverse stakeholders involved in the same value chain producing a given finished product.

We have also found, using a dynamic panel binomial logit model, that state continuity is noted among businesses that have expanded globally and then reshored. This finding also bears some

implications for the reshoring policy. First, the fact that Korean manufacturing businesses that have reshored will continue in that state may provide a factual basis for enacting laws and policies in support of such businesses. Empirical evidence that businesses that have reshored to Korea continue to create jobs and other ripple effects is needed in order to justify policy measures supporting reshoring businesses. This study finds that businesses that have expanded globally and then reshored are unlikely to leave Korea again for offshore locations.

Second, we need more policy incentives and measures that are more effective at bringing Korean manufacturing businesses back to Korea. This study finds that businesses that have either expanded globally or reshored are likely to maintain that state, suggesting that businesses that have successfully globalized are unlikely to reshore in the absence of dramatic improvements in the business conditions at home. Significant policy measures and support will therefore be needed to improve the business environment in Korea so as to bring back these businesses.

5. Policy support for reshoring

(1) AKOERA vs. Foreign Investment Promotion Act

The current AKOERA provides support and incentives to Korean businesses in all sectors and industries that return to Korea after reducing or liquidating their operations abroad. The levels of support for reshoring businesses are on par with those provided to foreign investors entitled to government support under the Foreign

Investment Promotion Act (FIPA). Under the FIPA, foreign investors that invest in Korean businesses which are deemed necessary to strengthen the global competitiveness of the Korean economy and/or invest over USD 30 million in Korean manufacturing. Even Korean businesses that set up new operations in Korea while retaining their overseas operations are treated in the same vein as foreign manufacturers that invest over USD 10 million in Korea. The Korean government also provides space/location support and employment subsidies to reshoring businesses on par with those provided to foreign companies that invest significant amounts of money in Korea.

However, a number of Korean businesses that reshore are involved in the so-called “dying industries,” which were forced to globalize in the first place because they were unable to compete successfully in Korea. These businesses, moreover, have reshored because they failed to compete effectively abroad. It is therefore absurd to provide policy support of such significant amounts for these businesses without careful discrimination and review, especially as it is doubtful that these businesses will be capable of generating any substantial benefit for the Korean economy and its industries.

(2) Comparing AKOERA to reshoring policy measures abroad

The U.S. government encourages multinational corporations to reshore as part of its policy to support the U.S. manufacturing sector. In Japan, support for reshoring businesses is usually a matter handled by local governments rather than the central government.

The Korean government thus provides far more systematic forms of support for reshoring businesses at the central government level than either the U.S. or Japan.

Taiwan, on the other hand, similarly provides systematic support for reshoring businesses at the central government level. Unlike AKOERA, which supports all reshoring businesses that have reduced or liquidated operations overseas, Taiwan's policy provides significant support for only reshoring businesses that meet a wide range of criteria, thus ensuring that the ultimate goal of the reshoring policy, i.e., increasing value-added and jobs in the domestic economy, is met.

6. Policy implications

(1) Enhancing the rigor and effectiveness of the reshoring support policy

AKOERA provides support and privileges for almost all reshoring manufacturing businesses on par with the treatment accorded to foreign companies that invest in the key competitive industries of Korea or invest USD 10 to 30 million in Korea under FIPA. AKOERA, however, lacks crucial considerations of whether the beneficiary businesses are indeed capable of making tangible contributions to the Korean economy and its global competitiveness. The current practice of providing support for businesses that merely reduce or liquidate their overseas operations is unlikely to help the legislation meet its intended goal, which is to effectively revitalize manufacturing in Korea. Therefore, it is time for policymakers to

revisit the qualification criteria of AKOERA.

Most importantly, the legislation should be amended so as to enhance the qualitative effect and benefits of reshoring rather than focusing on numbers only. The legislation should designate different amounts and types of support for different industries in consideration of their varying capabilities to generate value-added and create decent jobs. Also, the legislation should provide stronger incentives for businesses that reshore and seek to create jobs in Korea. In this respect, Taiwan's policy provides a helpful example.

(2) Increasing the appeal of reshoring to manufacturers seeking to localize production abroad

More and more manufacturing businesses in Korea today are looking to invest overseas with the goal of pioneering new markets rather than increasing exports. In other words, we need to give due consideration to Korean companies' localization needs before trying to encourage them to reshore.

However, in its current form, AKOERA fails to provide incentives strong enough to encourage these enterprising Korean companies to abandon their dreams of localization. There is a significant amount of opportunity cost involved, from the perspective of these companies, in forgoing localization, as doing so would necessarily limit their ability to respond promptly to the rapid changes in consumer demand worldwide and thereby weaken their positions in overseas markets. AKOERA offers no suitable compensation for such potential losses that companies could incur by reshoring.

One key way to compensate for the possible losses associat-

ed with reshoring for these companies is through the “Made in Korea” effect. In order for this effect to work, businesses that are about to reshore to Korea must set up (or already be operating) production facilities that produce middle- to high-end products. Before selecting reshoring businesses to receive government support, policymakers therefore need to provide measures catering to such businesses producing middle- to high-end products in Korea on the basis of thoroughgoing research. Moreover, in order to maximize the synergy between free trade agreements and business reshoring, policymakers need to facilitate the efforts of reshoring businesses to make use of FTA privileges.

(3) Overcoming reverse discrimination against businesses that have stayed in Korea

There are countless proud Korean businesses that have struggled to keep their operations at home, despite the increasing difficulty and uncertainty in the domestic business environment since the 1990s. The current AKOERA, which provides benefits to reshoring businesses just for returning to Korea after causing massive leakages of domestic capital, losses to domestic output, and decreases in the number of jobs, bluntly violates the principle of equity and, in effect, ends up inflicting reverse discrimination against businesses that have stayed home and sustained the Korean business environment.

A significant proportion of Korean businesses that relocated overseas did so because they were unable to compete effectively in the changing business environment at home, and many have

even failed abroad as well despite the more favorable business conditions offered by other countries. In order to prevent Korean businesses that fought to stay home from feeling a sense of relative deprivation and resentment, it is crucial to develop measures that rigorously review and select only the most worthy of all reshoring businesses before providing them with incentives and support.

(4) Considerations for reshoring anchor businesses: distinguishing SMB from local policies and overcoming local regulatory issues

Our opinion poll shows that Korean businesses that relocated overseas often find it difficult to return to Korea because they have already forged well-established ties to the Korean MNCs with extensive operations abroad. Therefore, it is important to develop measures that enable anchor businesses to reshore to Korea along with their suppliers and partners. The current AKOERA, however, lacks any distinctive support measures for the reshoring of anchor companies. This reflects the absence of a centralized system for deciding and implementing support measures for reshoring businesses. AKOERA merely defines the scope of incentives and support, which are then provided (or not) according to such diverse legal grounds as the Government Announcements of Local Investment Promotion Subsidies, enforcement ordinances of diverse incentive legislations, and the Restriction of Special Taxation Act (which governs matters of tax exemptions and benefits). The multiplicity of legal grounds and sources of support is what renders the current AKOERA akin to the small-and-medium business (SMB) support

and local development policies in effect.

It is thus crucial to establish a centralized and extensive system capable of incentivizing anchor companies to reshore to Korea. Providing incentives for MNCs, however, may incur public resistance and opposition. Therefore, it is important to provide incentives for only MNCs that are guaranteed to have job-creating and production-inducing effects after reshoring and that will reshore with a multiplicity of related partner businesses. Incentives should not be provided for these anchor companies all at once, but phase-by-phase and based on their production of tangible results in terms of employment and production. And incentives may be increased for anchor companies that return with a multiplicity of other related businesses. Furthermore, policymakers need to research the areas in Korea to which anchor companies would prefer to reshore and find effective measures to discourage their concentration in the Seoul-Gyeonggi region. As balanced local development is a central issue on the Korean policy agenda, it may be better to encourage these businesses to set up their operations outside the Seoul-Gyeonggi area by providing additional incentives rather than penalizing them for locating in Seoul-Gyeonggi.

In today's system of international division of labor centered on value chains, Korean companies are more likely to retain research and development functions in Korea than other activities. Thus, it is important to add the manufacturing function of reshoring anchor businesses and related companies to the existing research and development functions in Korea by developing clusters that facilitate the creation of value-added and enhancement of innovative capabilities simultaneously. Policy incentives may be needed to encour-

age reshoring businesses to locate their R&D operations alongside their manufacturing operations in the same cluster.

(5) Protection of businesses that attempt to reshore while retaining operations abroad

The existing literature points to the difficulty of the liquidation process as the greatest obstacle hindering Korean businesses from reshoring. These businesses fear the possible disadvantages and loss of local clients they might experience if they reshored to Korea. Also, once it becomes public that Korean businesses are planning to reshore, other related Korean businesses operating in overseas locations might be subjected to possible disadvantages by foreign governments.

In its current form, AKOERA fails to address any of these fears, leaving it entirely up to businesses themselves to handle the liquidation process and risk the possible disadvantages for themselves or their partner businesses after reshoring. Therefore, it is crucial for the Korean government to find measures to ensure that reshoring businesses and their partners abroad retain their clientele and suffer no such disadvantages for reshoring to Korea.

(6) Establishing a centralized and prompt system of policy incentive execution

AKOERA is an innovative legislation rarely seen in other countries, as it aspires toward guaranteeing systematic and specific incentives for reshoring businesses. However, as it is still in its in-

fancy, the legislation is apt to undergo numerous trials and errors during its implementation in the coming years, and will therefore need to be updated and amended on a regular basis.

Most importantly, the dispersed systems and sources of support for reshoring businesses need to be centralized into a single effective policy framework. This would involve, among other things, clarifying and simplifying the procedure through which reshoring businesses apply for policy support so as to avoid any unnecessary costs. Such a centralized system should also provide an integrated stream of services, from application to decision-making, in order to maximize the convenience of applying businesses. Finally, the system should include effective feedback channels through which difficulties and failures may be shared.