JOINT U.S. – KOREA ACADEMIC STUDIES

Volume 15, 2005

The Newly Emerging Asian Order and the Korean Peninsula

Symposium Sponsored by
The College of William and Mary
The Korea Economic Institute, and
The Korea Institute for International Economic Policy

August 25–27, 2004

CONTENTS

WILL KOREA BECOME A HUB FOR INTERNATIONAL FINANCE?

*Edward M. Graham**

CONTENTS

* *Edward M. Graham is a Senior Fellow at the Institute for International Economics, Washington, D.C., and author of* Reforming Korea's Industrial Conglomerates *(2003).*

I. Introduction

High on the agenda of the new generation of Korean policymakers is the creation of an international business hub in the Seoul metropolis. Exactly what this means seems to be subject to somewhat different interpretation that can depend on exactly which policymaker one listens to. But what is common to all such interpretations is that the northwest corner of South Korea should become a locus of regional headquarters operations for non-Korean firms, a place where these headquarters would be established for all of East Asia and not just for Korea itself. Moreover, the emphasis seems to be on financial institutions. Thus, to at least some Korean policymakers, the objective is for greater Seoul, where this includes the growing complex of foreign-controlled operations in the vicinity of the new airport at Incheon, to emerge as a center of international finance.

With respect to this last idea—that Seoul/Incheon should become a center of international finance—it really need not be said that there is quite a lot of competition among a number of plausible candidate cities seeking to become the dominant center of finance in East Asia. Moreover, some of these cities other than Seoul already have what might be termed "incumbency advantages." For example, Tokyo is currently the largest center of finance in East Asia and already serves as the regional headquarters for a significant number of non-Japanese financial institutions as well as most domestic (Japanese) banks and other financial institutions. Hong Kong also seeks to become the dominant center for international finance in East Asia, and a number of important financial institutions have headquarters, or regional headquarters, there. In the meantime, Shanghai is clearly emerging as the largest center of finance for mainland China and is a strong candidate as a center for international finance as well. Singapore already plays the role of dominant financial center in Southeast Asia and seeks to expand this role. And, although political factors probably militate against it, Taipei has also sought to build itself into a regional center of international finance.

This competition does not, however, daunt Koreans, who note among other things that the regional dominance of Tokyo seems to be in decline, in good measure because of the failure of Japan for many years to deal effectively with a banking "crisis" in that country that has festered for more than a decade. Japanese officials believe, however, that this prolonged period is finished, at least for the country's largest, Tokyo-based banks. Also, Koreans are little deterred by the fact that Seoul has no history as a financial center, beyond being a center for domestic financial institutions that have catered until quite recently almost exclusively to South Korea itself. In this matter, Koreans note that, prior to 1970 or so, South Korea was not a leading international supplier of steel, ships, or semiconductors but that Korean firms are world leaders in each of these sectors now. The feeling thus is strong that, if South Korea could move in the span of only about three decades from being essentially a non-industrialized

country to having one of the world's most advanced industrial sectors, much the same feat should be possible with respect to the financial sector.

The successful entry by Korean firms into the various subsectors of the industrial sector was quite a different matter, however, from the creation of an international financial hub in Korea. Korea became a leading industrial economy as the result of certain Korean firms, including newly established ones, overcoming significant barriers to entry into the relevant subsectors. These barriers were, first and foremost, technological in nature; and the rapidity with which Korean firms mastered the technologies of both the relevant products and the manufacturing processes needed to produce those products is quite wondrous. Other barriers—for example, reputational barriers—that needed to be overcome were surmounted as well. Thus, for example, Samsung now has a reputation as a leading supplier of high-technology electronic goods, including advanced semiconductor products. Likewise, POSCO is by reputation possibly the leading firm in world steel markets.

By and large, the task of overcoming such sector-specific barriers was accomplished by a rather small number of firms; these firms had to create capabilities that had not previously existed. Thus, for example, Korea is indeed a leading nation in the world in steelmaking. But there is only one fully integrated, internationally competitive steel company in Korea, although a handful of competitive specialty producers exists as well. Likewise there is only one truly world-class Korean producer of semiconductors although, again, other firms operate in this sector, including one quite large firm that is somewhat less than world class.

By contrast, creation of an international financial center entails the creation of a cluster of firms engaging in a rather broad spectrum of activities. Indeed, it is one of the hallmarks of finance that, historically, large numbers of the most important institutions are geographically clustered. Thus, only a very small number of truly global centers of finance exists worldwide, specifically those of New York, London, and (still, in spite of the remarks above) Tokyo, plus a relative handful of smaller clusters, most of which largely serve national or regional markets.

Finance is not the only sector in which clustering of institutions within one or a small number of geographic centers can be found. For example, electronics and information technology sector firms cluster around San José, California. The cluster is largely located in the rather small but very well-known area usually called Silicon Valley but whose real name is the Santa Clara Valley. Moreover, clusters of other types of activity are to be found all over the world. Even so, in terms of degree of clustering, financial services has been at the high end of the scale. Historically, institutions providing these services have been more markedly clustered in a few specific locations than is the case for almost all other economic activity.

It is worth asking why such clusters exist and how and why they have developed; indeed, whether or not there is any realistic hope that a truly important cluster might develop in Korea likely depends on the answers to these two questions. Thus, the next two sections of this paper explore each of these questions. The fourth and final section attempts to assess how likely it is that Korea will become a regional hub for international finance. The main conclusion is that Korea could very well become a major regional center for specialized financial services. However, the likelihood that Seoul will become, for all of East Asia, a dominant center of finance in the way that New York is dominant in North America is rather scant.

II. Why Do Clusters Exist?

The answer to the question posed just above, as seen from the perspective of economics, would seem to have to do with the existence of an "external economy of scale" that is confined to small geographic locations.[1] That is, characteristics of a particular location enable institutions at a specific location to operate at lower cost, or otherwise more efficiently, than if they were operating at some other location. This answer actually explains little, however, because we wish to know why location confers advantage on the institution.

Let us explore this beginning by defining an external economy of scale a little more carefully. An external economy of scale can be defined as existing where costs of doing business are a declining function of total scale of output of the relevant products or services in that location, but where lack of internal scale economies (or exhaustion of these) implies that there is no economy of scale to be gained from consolidating all competing suppliers (institutions) under one organizational roof. This definition is one of those that in fact is more precisely expressed in mathematics than in words.

Let us simplify matters by focusing on cost of goods or services supplied: if each individual supplier *i,* where $i = 1$ to n (there are n suppliers) produces output q_i, and

$$Q = \sum_{i=1}^{n} q_i$$

then the unit cost of output declines as a function of Q but not as a function of q_i, except as reflected in additional q_i contributing to an increase in Q. In other words, if the cluster gets bigger, in the sense that Q increases, the costs of all suppliers will go down. But, if an individual supplier gets bigger, its costs will go down as a function of

1. In preparing this section, the author benefited from many sources; the most notable were Krugman (1991) and Fujita, Krugman, and Venables (1999).

Q, which is a function of q_i, of course, but not as a function of q_i independently of Q. Mathematically expressed, if marginal cost to firm i is c_i, then
$c_i = f(Q, q_i)$, and

$$\frac{\partial f}{\partial Q} < 0 \text{, but}$$

$$\frac{\partial f}{\partial q_i} = 0$$

Note that the latter of these implies that, if one firm increases sales but total market size is constant, as would be the case if the increased sales came by taking market share away from another firm, the former firm makes no efficiency gain. If it were the case that

$$\frac{\partial f}{\partial q_i} < 0$$

there would exist an internal economy of scale; for example, the institution could make itself more efficient relative to its competitors by becoming bigger. But the assertion here is that this opportunity does not exist, or, if it does, it is of limited extent.

If the opportunity does exist, it might in fact be borne out by evidence from efforts at reforming weak banks in Japan and elsewhere by combining them to create bigger banks. The experience seems to be that, in most cases, a bigger bank results, but it is still a weak bank.

Note that these conditions for the existence of an external economy of scale are unlikely to hold exactly true in the real world. As always with economic conceptualization, the pertinent question is: Are real-world conditions close enough to true so that the conceptualization is of some use? My assertion is that, in the case of financial services, the answer is indeed " yes." In the real world, because clustering of financial institutions does occur, this assertion almost has to be true. One should note, however, that in financial services there might be an issue of "external economy of scope" as well as one of external economy of scale. An external economy of scope deals with the range of financial services offered by institutions in a given cluster, whereas an external economy of scale deals with the efficiency (cost) of the individual suppliers. Thus, the assertion really is: clustering of financial services enables both an increased efficiency of the relevant suppliers and enlargement of the scope of services offered, but consolidation of these services under one organization's roof does not create any additional gain in efficiency or scope.

This last does not negate, however, that some minimum scale is needed to run an efficient financial institution. Thus, there can be some reason to combine small institutions if they are not operating at a minimum scale of efficiency. But the lack of internal scale economies beyond some minimum efficient scale does imply that, if this minimum scale for suppliers of financial services is significantly smaller than the total demand for such services, multiple suppliers will operate in the market. However, for some suppliers of intermediate products, as we shall see shortly, the existence of an internal scale economy actually helps to explain why external scale economies can exist.

The key question now is: why does an external economy of scale (or scope) exist? The answer would seem to lie, according to most treatises on the subject (which go back to the person often cited as the father of modern economics, Alfred Marshall [1890]), along three interdependent dimensions, which we examine here:

- The cluster enables the operation of specialized supplier firms;

- The cluster creates what economists term labor market pooling, where, in the case of financial services, labor includes highly skilled and specialized workers; and

- The cluster enables knowledge spillovers.

Specialized Supplier Firms

In the largest clusters of financial services—New York and London—hundreds of specialized supplier firms are tied to the financial services sector, including specialized or boutique investment banking firms, brokerage firms, and mutual funds. For example, according to the U.S. Securities and Exchange Commission, there are in the United States almost 1,500 brokerage and mutual funds, the majority of which are based in New York (and almost all of the firms not based in New York have operations in New York). In addition, there exist many law firms, accountancy firms, consulting firms, and suppliers of dozens of ancillary specialized services (telecommunications, computers, and software, for example) that one might not normally think of as being part of the financial sector except that, without the existence of a market for their ancillary services, the principal firms might not even exist. These specialized firms all have in common one attribute: they supply input services to the principal financial services firms (those that supply end products), without which these latter firms could not function properly.

If the inputs supplied by specialized firms are necessary to the suppliers of end-product financial services, why do not the principal financial services firms (banks, stockbrokerages, insurance firms, investment banks, money managers, and mutual funds) create internal capabilities to supply these? The answer is that there is some

minimum efficient scale for the supplier of the specialized service such that internal demand for that service in any one principal firm is not sufficient to achieve this minimum scale. Moreover, if a principal firm were to try to achieve this scale by using the intermediate product internally while simultaneously selling it to rival firms, issues of trust could arise. (For example, a principal firm might ask itself: "Is my rival raising my costs by selling the intermediate product at a price that is higher than charged internally?") Consequently, specialized supplier firms are founded to supply a range of intermediate services to multiple principal financial services firms.

Specialized firms are often important sources of innovation in this sector. A typical case might involve development of a new type of product, for example, a risk-management product. Sometimes it happens that an established firm simply is not fertile ground for such a development. This, again, could be simply because of reasons of scale or, in other words, because demand for the new product inside the firm is not great enough to warrant development of the product. Again, if the principal firm developed the product, it might be unwilling or unable to sell that product to competing firms.

Innovation can lead to new specialist-firm creation. Thus, in places like New York and London, it often happens that employees of an established firm recognize that there exists a potential demand for a new product, but they must leave that firm in order to start a new firm to develop the new product and offer it to potential users. Note that there must exist a legal and regulatory framework and, indeed, a culture that allow this to happen. If regulation is such that formation of new business enterprises is discouraged, innovative independent supplier firms might not ever have a chance to get a start. Likewise, if the culture discourages employees of an established firm from breaking away from their employer to start their own businesses, such new business formation will be suppressed.

Why does the existence of specialized firms depend on financial services suppliers being clustered together? The answer is that, if the suppliers are some distance from their customers, they might have difficulty selling the relevant services because the sale depends on regular personal contact between users of the service and suppliers. Little more than one century ago, this need for personal contact typically implied that the sellers of the specialized services had to be within walking distance of their main clients, as would have been the case in lower Manhattan or the City of London. It is clear that today, however, the availability of cheap and fast transportation and modern information technology have combined to reduce or even, in some cases, eliminate this need for close proximity.

One consequence is that all specialized suppliers of services to the financial sector no longer need be located within the main centers of finance or even close to these centers. In New York, for example, some such firms have moved out of lower

Manhattan (the Wall Street area) following the terrorist attack of 11 September 2001. Management of these firms realized that close physical proximity to major clients is no longer necessary and that this proximity creates previously unforeseen risks. In fact, a number of reasons why clusters exist might be eroded as a result of technical improvements.

Nonetheless, even in the era of cheap, mechanized transportation and of information technology being able to transport huge amounts of information at near zero costs virtually instantly, there remain advantages to most specialized suppliers of services to being close to their clients. After all, if a high-level banker needs specialized legal advice, for any number of reasons that banker might want to talk to the relevant lawyers over lunch on short notice rather than over the telephone or via e-mail. This means that both parties—lawyer and banker—might want to be, say, within 30 minutes of the designated restaurant. Moreover, the restaurant itself can be seen as a specialized supplier to the financial sector. Thus, indeed, restaurants, bars, and—in these modern times—even health clubs are probably all to be counted as institutions that enable an external economy of scale to exist in a particular location. Modern technology might reduce the value of proximity but, until human beings themselves can be transported very long distances in very short times at low cost, this technology fails to eliminate the value of proximity entirely.

Labor Market Pooling

A geographic cluster of economic activity of a specific type often creates a pool of workers—a supply of local workers with needed skills who can be hired on relatively short notice—with highly specialized skills needed for that activity. Implied are, first, the turnover of such workers often tends to be quite high, such that rarely do they work for the same firm over their whole lives; and second, typically there is a small excess supply of workers having these skills. The existence of a labor market pool conveys benefit to both workers and employers. Employer firms can find workers with needed skills readily and locally when demand for their products rises. But it is also well understood that these firms can and will lay off these same workers when demand is low. Workers in the meantime are less likely to suffer long periods of unemployment if they live in close proximity to a cluster of firms needing their particular skills than if these firms were not clustered. It is often the case that if one firm needing a particular skill experiences a decline in demand and hence must lay off workers, it is often also the case that some other firm needing the same skill is expanding its workforce. Physical relocation of workers is costly to both the individual worker and the employer, and multiple employment opportunities in the same region enable the existence of a pool of qualified workers, which reduces costs of job change.

Pooling of labor is highly characteristic of the very large financial centers of New York and London. Although high rates of job turnover in principle could impose significant costs on financial services firms in these centers, in practice this does not seem to be the case. The reason seems to be the depth of the labor pool. Almost whatever the set of skills and/or on-the-job experience might be required by a firm, persons are available who possess these skills. Moreover, persons with those skills, even if laid off, tend not to be unemployed for long periods of time. In periods of extremely high demand for financial services, an excess demand for labor is likely; in these times, firms actually will endeavor to hire workers with the needed skills from other firms. Such practices might seem predatory and costly, and one effect is to drive up wages associated with the skills that are most needed. But this in fact provides some cushion for workers who might lose their jobs in the inevitable future downturn. During good times, then, workers earn enough to be able save a portion of their monetary income that can be used to cover costs of living during a downturn.

Implied of course is a need for a high degree of labor market flexibility in these markets. One potential snag that might be faced by Korea in establishing a financial hub is that Korea has not historically been characterized by high labor turnover, and certainly not at the professional level. High labor mobility does seem to be a strong characteristic of the most successful clusters of financial services such as New York and London, however. One worry that might be expressed by Koreans is that labor market flexibility might be associated with worker dissatisfaction and/or relatively low rates of compensation plus a high risk of unemployment. It needs to be remembered that in those financial services clusters where high flexibility is the norm, such flexibility would seem to be more associated with prosperity of workers than the opposite. Again, the existence of labor market pooling—implying labor market flexibility—is of advantage to workers as well as to employers.

Spillovers of Knowledge and Other Intangible Assets

A spillover of knowledge—for example, technical knowledge—occurs when productive use of the knowledge can be achieved by firms that are not the original source of the knowledge. The spillover can be deliberate: if firm A, which holds proprietary technology, licenses firm B to produce products embodying that technology such that the requisite knowledge is transferred from firm A to firm B, then firm A deliberately creates a spillover. But spillovers can also be involuntary and/or unintended: firm A could hire away key technical persons from firm B, and those persons could enable firm A to learn technologies that were previously closely held by firm B and that firm B sought to avoid "spilling" to firm A. Thus, spillovers can be linked to labor market flexibility and also linked to the labor pooling described in the preceding subsection. If labor markets are flexible, spillovers are more likely to occur than if labor markets are rigid.

An important source of technological spillover can be informal exchanges of information, exchanges that often takes place after the sun has set. This exchange seems to happen especially when professional-level workers, often relatively young ones, meet each other at bars and restaurants and discuss the day's activities over drinks or dinner. Indeed, in both London and New York, certain establishments have become known as information trading centers. Information, even sometimes of a rather confidential nature, is shared because it can be of mutual benefit to each of two persons who work for competing firms to part with some information to gain other information. They could of course withhold information, but, by doing so, other people's useful information would also be withheld. In a word, the sharing of information is "positive sum": each party gains more than it loses. Thus, the existence of specialized suppliers of services such as restaurants and bars can actually accelerate the rate of spillover.

This net gain to two parties is reflected in the overall effect of knowledge spillovers: while such spillovers can potentially cause harm to individual agents (for example, firms), especially those whose major asset might be certain types of knowledge, the spillovers are good, economically speaking, for society at large. The spillovers tend, in net, to reduce the private value of certain types of knowledge, essentially because the ability of any one agent to use the knowledge to achieve market dominance or monopoly is reduced. But the wide and rapid dissemination of the knowledge might actually increase the value of that knowledge to society as a whole because of networking and other effects.[2] Indeed, this increased value of knowledge becomes one important reason why a country might want to be the location for certain clusters of economic activity: the cluster enables a greater rate of knowledge spillover, and a faster rate of spillover can benefit the economy as a whole.

An Additional, Noneconomic Dimension: Legal and Regulatory Frameworks

To these three economic dimensions of external scale economies must be added a fourth, noneconomic dimension that has been shown to be particularly important in the case of financial services: the legal and regulatory framework under which the sector functions should be well functioning. In financial services, such intangibles as trust among parties and faith of the general public in the integrity of the relevant institutions are important. Thus, a regulatory framework that sets standards that must

2. A so-called networking effect occurs in the case of technological dissemination if, to the user of a particular type of knowledge, the value of that knowledge increases as more and more parties acquire the knowledge. Thus, for example, if the number of people who have access to e-mail increases, the value of being able to use e-mail increases for each individual user because each such user can use e-mail to communicate with a growing number of other users.

be met by these institutions is important. Standards must pertain to solvency, transparency, risk of institutional failure, and conduct of operations. Firms that do not or cannot meet the standards must be excluded from operating in the sector, and firms that violate standards, voluntarily or involuntarily, must face penalties and corrective measures imposed by relevant public authorities.

It also is important that the public has faith in the integrity of these regulatory authorities themselves, as well as in the integrity of those firms and other institutions that actually provide financial services and intermediate products that are inputs to providing these services. The Asian financial crisis of 1997 that heavily affected Korea resulted in part because the integrity of both the financial institutions and, in some cases, the relevant public authorities was called into question, and for good reason. Korea has since made much progress in restoring (or in some cases simply creating) integrity to these two sets of institutions; nonetheless, the negative legacy of this crisis does linger.[3]

III. Why Does a Cluster of Financial Services Form in a Particular Location?

The previous section details why, from an economics perspective, clusters of activity can be found where multiple agents produce and sell the same or related products and services. The explanations offered also shed some insight on why, once such a cluster or center forms, it persists even if circumstances might change so as to make its location nonoptimal. But these explanations explain nothing about why or how such clusters form at a particular location in the first place. Thus, the explanations might explain why a cluster of financial services institutions can exist and persist on the island of Manhattan in New York City, but these same explanations do not explain why this cluster formed in New York rather than in, say, Topeka, Kansas. One might expect financial services to cluster near the users of those services, and Topeka is closer, on average, to more major economic activities that use financial services that take place in the United States than is New York. Topeka thus might be a more logical location for the U.S. financial services hub than New York City. But the fact remains that Topeka, Kansas, is not the location of such a hub, while New York is.

3. One stands in amazement at how far public trust in U.S. financial institutions and relevant regulatory bodies has fallen in recent years, in large measure because of malfeasance within both sets of institutions. Although this erosion of trust was primarily the result of exposure of a number of what amounted to dishonest practices involving securities, including creative accounting to inflate reported earnings in the expectation that this would raise stock prices, it was almost surely exacerbated by a lack of quick response by public regulatory officials. For example, for a considerable time, the U.S. Securities and Exchange Commission sat idle while abuses were widely known to be occurring in the U.S. securities industry; this idleness almost surely further eroded trust at a time when this trust was already in jeopardy.

Some economic historians explain the initial location of any particular cluster of activity as simply an accident of history, that the main reason why any particular cluster formed in a particular place is determined more by chance than by any other factor. Once embedded in a particular location, the cluster develops over time, and the mere fact of its existence creates or reinforces incumbency advantages that enable it to persist as a center of some relevant activity. Thus, for example, one clear prerequisite for the existence of a center of financial activity is the availability of excellent telecommunication services. The history of the major centers of finance reveals that the infrastructure for telecommunication services actually was created in order to service an existing financial center rather than the other way around. In other words, examined from an historical perspective, financial centers do not exist because financial services providers were attracted to a particular location because of the availability of an excellent telecommunications infrastructure or indeed any other infrastructure. Rather, excellent telecommunications (and other necessary infrastructure)—over time a necessary condition for a particular location to be a financial center—were created in centers that already existed. Thus, arguably, this infrastructure is not sufficient to create a financial hub although this infrastructure is necessary for such a hub to flourish.

Without a doubt, a particularly good telecommunications infrastructure creates an incumbency advantage for any particular center. But this does not explain why such centers as New York and London exist in the first place. After all, these cities were centers of financial activity before telecommunications even existed.

Explaining away such centers as historic accidents is not entirely satisfactory either. In the case of the United States, for example, the first major center of financial services was not New York, but Boston. During the nineteenth century and especially during the latter half of that century, however, Boston was overtaken and then surpassed by New York as the dominant financial center in the United States. In fact, a number of institutions that started in Boston migrated to New York toward the latter part of the nineteenth century (First Boston, now part of Credit Suisse, is an obvious example). Historic accident that creates incumbency advantages thus cannot explain to any satisfaction why New York became the dominant center of financial services in the United States because such an explanation would lead one to conclude that the center should have remained in Boston.

A more convincing story is told if one looks a little more closely at why there is a financial services sector at all. The main function performed by the sector—reduced to one phrase—is to intermediate savings into investment. Savings is the excess of personal income over personal consumption, where one must count, for these purposes, retained earnings of corporations and other economic institutions as an unrealized component of the personal income of the shareholders of the institution. Likewise,

any public sector surplus or deficit must be treated as an unrealized component of personal savings, where of course public deficits are negative savings. Investment in this context means fixed capital formation. The question is, then, why is there required a set of financial institutions to perform this intermediation? Why don't individuals simply directly place their savings in new (or enlarged) economic activities and thus avoid financial intermediaries that, after all, charge fees for their services?

The answer can be, as any undergraduate who studies financial economics can attest, broken into two parts. Financial institutions serve to pool funds of investors so as to finance investments that are too large for individuals to finance on their own; also, these institutions offer products or services enabling investors to manage risk where the investors could not do so individually. The two functions of financial institutions are not entirely separable; for example, risk management requires a pool of investors. Nonetheless, the two functions can be seen as a means to overcome two somewhat different types of obstacles standing in the way of effective intermediation of savings into investment.[4]

Accordingly, financial institutions each year channel the savings of hundreds of millions of individuals worldwide into many thousands of investment undertakings. The total number of such undertakings is much smaller than the number of individuals who finance them, but they require, on average, much larger funding than the average individual is able to provide. It is hoped that, in performing an aggregation role, financial institutions also perform an effective screening role—that they channel savings into those undertakings offering the best returns to the individuals who turn their savings over to these institutions.

Thus, most investment undertakings are too large to be financed by the savings of just one individual.[5] In modern times, especially, most investment opportunities require funding at scales that most individual investors cannot achieve. It is not clear, however, that this was the case 300 years ago, when the forebears of modern financial institutions were beginning to take form. Significant clusters of financial services activities could already be observed in certain large cities—most especially in Amsterdam, formed by the end of the 1500s and the first modern financial center, and in London by the end of the 1600s. How can we explain the formation of these clusters at a time when it was not clear that the aggregation role was necessary?

4. Here, effective intermediation implies that risk-adjusted returns to investors are maximized, thus ensuring that savings are invested in activities of greatest utility to society.

5. Bill Gates is one individual who could individually finance a large undertaking, but there are far fewer persons who are this wealthy than there are large undertakings of potential merit that require Gates-level funding to be realized.

Early clustering might be better explained by the second role of financial services institutions: enabling effective risk management.[6] In fact, historic accounts suggest that, in the early days, risk management was the chief service offered by budding financial institutions. Aggregation came later. In the 1600s, often the most attractive investment opportunities available to investors involved trading, which, more often than not, took place via oceangoing ships. In fact, during this era of landed aristocracy, there were sufficient numbers of individuals whose income or wealth was large enough to finance an individual ship to enable oceanic commerce to proceed at what, for that time, were satisfactory levels. In those days, however, an ocean voyage was a risky and dangerous undertaking. With dismaying frequency, ships were lost to storms at sea, piracy, and other mishaps. A ship could be lost because the wind died and the ship drifted into shoals, for example. But, from the point of view of the investor, ships were also lost because a crew sometimes simply took possession of the ship on which they served and sailed to a harbor where they could sell the cargo and evade prosecution. In those times, a large number of men were willing to undertake the physical risks associated with long-distance commercial sailing, so the supply of crew was never a problem. In shorter supply were investors willing to take the financial risks of individually underwriting a voyage that had the potential of a large payoff but also carried the risk of a total loss.

This dilemma could have been answered in one of two ways:

- Creation of syndicates, whereby investors pooled their funds to finance multiple voyages by many ships. This pooling fulfilled quite a different role than aggregation. Pooling served to spread the risks so that a positive return to the investor could almost be certain. If one in ten ships did not return to port, nine in ten did; and if the syndicate financed enough ships, the 10 percent loss became sufficiently close to certain such that, if the remaining 90 percent of voyages earned a high enough reward, the investors could count on a positive return. The pooling was thus to manage risk, not to aggregate funds to levels required by individual undertakings.

- Offer of insurance for individual voyages by financial intermediaries that charged fees for their services. The insurance paid investors the value of their stake in the voyage if their ship failed to return to port. Of course, insurance paid nothing if the ship did return. The individual investor could thus count on a return equal to the value of the trade enabled by the voyage minus the costs of the insurance if the ship completed its voyage, and the investor could also count on recovery of costs if the ship disappeared. The financial institution that offered

6. This and following paragraphs are based in part on Bernstein (1996).

> the insurance pooled risks by offering insurance on many voyages. Investors in these institutions provided funds to pay off insured parties who submitted legitimate claims but collected the fees for the insurance. This worked to the investors' advantage if the number of policies written was large and the expected number that had to be paid was known with some certainty; fees simply would be set high enough to cover the costs of expected claims plus administrative costs and still leave a profit.

By the mid-seventeenth century, both forms of risk management were well developed in Amsterdam. The Dutch East India Company was an example of a syndicate formed initially to pool risk (this company also acquired monopoly rights for certain types of trading). Also the first large-scale issuance of maritime insurance occurred in Amsterdam. As England acquired empire and overtook Holland as the leading trading nation worldwide, similar activities plus a few more (for example, the beginning of a securities industry) developed in London.

The founders of the relevant institutions in both Amsterdam and London were often Jews whose family roots lay in Lisbon, where they had created a budding financial sector during the heyday of Portugal as a trading nation in the sixteenth century. The Jewish businesspeople who pioneered these activities largely fled Portugal because of religious persecution, and they found greater opportunities for their talents in Holland, with Amsterdam the destination of choice. Descendants of these immigrants to Amsterdam later migrated to London, where they perceived even greater opportunities. As a result, so-called Ladino names, actually of Jewish persons of Portuguese descent, are often associated with London's oldest and most venerable financial institutions. Note that these migrations and family ties caused skills that originally developed in one location to be transferred to other locations.

Thus, financial services in the earliest years and continuing until well into the nineteenth century were closely associated with international trade and, in particular, maritime shipping. It is no accident of history that major clusters of financial activity formed in major seaports, starting perhaps with Lisbon, later blossoming in Amsterdam and, later still, in London. Later still, the same association led to the formation of other clusters of financial services in Boston, New York, and San Francisco; in Asian cities such as Tokyo/Yokohama, Hong Kong, and Shanghai; and elsewhere. In the days before telecommunication services existed, it was vital that the financial services providers were located in close proximity to shippers because contracts had to be written and agreed to by parties representing both the financial services providers and the shipowners. Without both sets of parties operating in close proximity to each other, these transactions would have been slow and costly.

The reason why New York overtook Boston as the major center of finance in the United States now can be easily explained. The opening of the Erie Canal in New York State in 1825 marked the beginning of the decline of Boston as the largest U.S. seaport, a status Boston had achieved because the earliest industrialization in the United States had been concentrated in the Boston vicinity.[7] The Erie Canal enabled New York to overtake and surpass Boston as a seaport because the canal created a transportation link between the port city of New York and the newly opened U.S. Midwest that did not exist for Boston. Goods produced in the Midwest were more economically shipped from New York than from Boston after construction of the canal. Boston's handicap was one of topography: the Berkshire Mountains, although one of the world's least rugged mountain ranges, nonetheless created a natural obstacle for commercial transportation to points west of the mountains that was not overcome until the opening of a major railroad tunnel in the late 1800s. By contrast, the Erie Canal connected the Great Lakes, which enabled water transport to the Midwest, with the navigable Hudson River that conveniently flowed right by Manhattan.

By the time the railroad tunnel was built, it was, for Boston, already too late. By then, railroads had already supplanted the Erie Canal as the main transportation link between the Midwest and New York. By the time of the U.S. Civil War during the 1860s, the canal was in fact already in decline because of competition from the railroads. Much more important, by that time New York had emerged as the clear winner in what had in fact been a nearly two-century competition to be the major U.S. port on the North Atlantic coast; with this, New York also developed a much larger cluster of financial services than existed in Boston. Although Boston had been in the lead early, by the time Boston was able to get back into the game as a major port, important incumbency advantages had already developed in the financial services sector in New York—advantages that would keep the financial services institutions there.

The importance of New York as a port has declined greatly since its heyday, but by the second half of the nineteenth century—well in advance of the decline of New York as a port—the link between financial services and maritime shipping had also begun to erode. New markets for financial services were emerging in the land transport sector, mostly in the railroad business, and in the industrial sector such that, by the time the century ended, financing and insuring ocean shipping were no longer the important elements of the financial services sector. Instead, shipping-related financial services had become a relatively small specialty subsector of this sector. But the incumbency advantages created by the rise of New York as a provider of shipping-related financial services carried over to the financing of other activities. Thus, to this

7. Several histories of the Erie Canal and its role in elevating New York City as the leading U.S. seaport are available; see, for example, Shaw (1966).

day, New York remains as one of the world's two largest clusters of financial activity, sharing the top spot with London.

IV. What Does This Mean for Korea?

The analysis thus far, when applied realistically to Korea, suggests that the prospects for Korea to become a major international hub for financial services are rather dim. Instead, prospects are much brighter for Korea to become a regional center for specialized services. Let's review some of the reasons why.

The first and by far most important reason for a negative outlook is that Korea lacks incumbency advantages held by existing clusters of international financial services. It is not a secret that, in its rapid rise from a rather poor country to the advanced industrial nation that Korea has today become, development of financial services was accorded a rather low priority by government planners. This low priority was reflected in the financial crisis of 1997, which demonstrated that the financial services institutions of Korea (including the central bank) were quite weak. The weakness was not simply one of weak balance sheets. It was also realized at this time that Korea's banks and other financial institutions were, by world standards, devoid of skills and talent. Indeed, the best and brightest of Korea's university graduates who had gone to work in the private sector worked for industrial firms, the large *chaebol* in particular.[8] Thus, before 1997, few of these best and brightest wound up working in the financial sector.

It is also true, however, that much has changed since 1997 Asian financial crisis. The strong emphasis in Korea on reforming and upgrading the financial sector has provided tangible results. For example, in spite of the very weak balance sheets of Korean banks, which in 1997 were saddled with large amounts of nonperforming loans (including loans that were not listed as such until the dam broke in December 1997), these sorts of problems were effectively resolved over the next few years. Thus, Korea avoided a prolonged and devastating banking crisis similar to Japan's, which began well before the crisis in Korea and even now is not fully resolved. The managerial and technical skills of Korean banks have been significantly upgraded as well.

However, this rapid reform and upgrading of Korean financial institutions is of recent vintage, and it is still not wholly clear that Korea possesses the deep pools of persons with the broad range of skills needed in a major financial hub. To be sure, this pool is significantly deeper in 2004 than it was in 1997, but it is still rather shallow when compared with the pools in New York, London, or even Frankfurt or Hong Kong.

8. Many of the best and brightest did not work in the private sector at all; they worked for the government of Korea.

Of course, one way to make the pool deeper is to bring in foreign talent. This is happening in Korea, and it is estimated that today there are several hundred thousand non-Koreans residing in the Seoul/Incheon metropolitan area, not counting military personnel. Even so, Korea is still regarded by high-level professionals, not Korean or of Korean ancestry, in the financial services sector as a less desirable place to be located than, say, Hong Kong or Shanghai.[9] In this regard, Korea suffers from its historic image as the Hermit Kingdom, one where foreigners were not particularly welcome.

Again, however, this statement must be tempered. Seoul today has become a much more cosmopolitan city than it was 20, or even 10, years ago, and its attractiveness to foreign, professional-level persons is almost surely rising, although this is hard to measure.

It could be argued that the Seoul/Incheon metropolitan area—in particular, the new airport at Incheon from which flights depart to just about everywhere in the world on a daily basis as well as Korea's particularly good information technology infrastructure—has created advantages in terms of infrastructure that are attractive to international financial institutions. Whether advances in transportation and information technologies actually work to Seoul's advantage in terms of its potential to be a financial hub is not, however, an issue with a clear answer. It could be argued that these advances have in fact reduced the external economies of scale that enable financial hubs to exist in the first place, suggesting that such hubs might eventually dissipate or even disappear. If hubs were to disappear (an unlikely turn of events), creating an international financial hub in greater Seoul would be like swimming against the tide. On the other hand, if hubs do not disappear, it is not clear that Seoul can overcome the incumbency advantages held by cities—Tokyo, Hong Kong, and Shanghai—that are already in the game. Infrastructure is necessary, but both Hong Kong and Shanghai also have impressive new airports and have made substantial new investment in information technology infrastructure. Moreover, these cities hold incumbency advantages that Korea does not currently hold.

Does this then mean that Seoul/Incheon as a financial hub is, in effect, a bridge too far? My response is, "not necessarily, but the obstacles are formidable and, indeed, greater than obstacles faced by Korean firms when they ventured into various industrial sectors." Korea does, however, hold some advantages. Among the most important of

9. This opinion is stated on the basis of admittedly limited discussions by this author with such persons. Some of these persons are employed by major financial institutions that are based in Hong Kong. None anticipated a large likelihood that their employer firms would be transferring headquarters or regional headquarters operations to Seoul at any time in the near future.

its advantages are a newly created and effective set of regulatory agencies and an accompanying newly found emphasis on good regulation, including an emphasis on transparency in corporate and financial accounting. One consequence of Korea's reforms has been that bond markets in Korea, for both corporate and government bonds, have developed rapidly and are arguably deeper than such markets in either China or Japan. Asset management skills in Korea have also deepened considerably since the 1997 crisis.

Accounting and disclosure in Korea are perhaps not quite as reformed as one might have hoped, however, as witnessed in the recent SK situation—which, admittedly, seems to have led to further reform and improvement of accounting and disclosure standards—that took place after effective reform of accounting practices supposedly had been implemented.

Other obstacles can be identified, however. For example, development of the all-important bond market in Korea is hampered, as least as far as foreign institutional investor participation is concerned, by regulation that effectively establishes a quota system for foreign investors. This, in effect, limits the total amount of bonds that can be bought by non-Korean financial institutions. Bond market development has also been set back by licensing procedures by which the limitation on foreign investors is enforced; the licensing requirements are seen by foreign firms as major entry barriers to Korea.

Efforts by Korea to build within its boundaries a major international hub could also be affected by events that cannot be foreseen. For example, in its efforts to build such a hub, Seoul inevitably is in competition with Hong Kong and Shanghai, and whether political developments in China will continue to encourage foreign financial institutions to locate major offices in these two cities is not wholly clear. At the present time, according to interviews conducted by this author with persons in the financial services sector, Hong Kong is seen as a more open location for a foreign financial services firm to set up shop than is Seoul, but Seoul is seen as more open than Shanghai. Moreover, Hong Kong is now within the sovereign jurisdiction of China. Any breakdown in political stability in China, or reversion to policies unfriendly to foreign investment, could cause offices now located in Hong Kong to be relocated to places beyond the reach of the Chinese authorities; this could benefit Korea as a future center of international financial activity although it is not clear that such a breakdown would be in Korea's overall interests in areas beyond finance.

Korean leaders do seem to be determined to create a regionally dominant hub for international financial services in the Seoul/Incheon area. At the very least, it will be greatly interesting to outsiders to follow developments to see whether Korea succeeds in this undertaking. The odds of success are probably lower than they were for other

activities that Korea has built up, but these odds are not so low that one might want to bet against Korea. Indeed, my guess is that, while Korea will fall short of becoming the dominant regional hub for international finance in Asia, it could emerge as an important center for specialized financial services such as asset management, placement of bonds to finance infrastructure (perhaps even for non-Korean infrastructure projects), and certain other activities. Indeed, one can easily see a future in which there actually is no dominant hub for financial services in Asia, a possibility increased by developments in information technology that are reducing the overall importance of external economies of scale in this sector. In this event, one would expect financial services in Asia to exist in a series of mini-clusters, some of which might be quite specialized. If so, it is a good bet that Seoul/Incheon will be one of these.

REFERENCES

Bernstein, Peter L. 1996. *Against the Gods: The Remarkable Story of Risk.* New York: John Wiley and Sons.

Fujita, Masahisa, Paul Krugman, and Anthony J. Venables. 1999. *The Spatial Economy: Cities, Regions, and International Trade.* Cambridge: MIT Press.

Krugman, Paul. 1991. *Geography and Trade.* Cambridge: MIT Press.

Marshall, Alfred. 1890. *Principles of Economics.* London: Macmillan.

Shaw, Ronald E. 1966. *Erie Water West: A History of the Erie Canal, 1792–1854.* Reprinted, Lexington: University of Kentucky Press, 1990.