Bibliometrics of Studies on the Korean Economy and Business[*]

MoonJoong Tcha[**]   Minsoo Lee[***]

This paper attempts to provide information about studies on the Korean economy and business in the world, and model how the number of publications for an economy is determined.   Using ten years data of publications for the Korean economy and business, this study finds that a country/region's study on Korea is affected by economic variables such as GDP, population and the country's trade relationship with Korea. It is also found that the publications on Korea significantly increased as it experienced the crisis.

JEL Classifications: A10, A11, D20

1. INTRODUCTION

Experiencing dramatic economic growth and turmoil, the Korean economy has provided a variety of interesting research topics to economists.   When one studies the Korean economy or business, does this simply reflect personal tastes and interests, or are there any social or economic forces, which cause the person to be interested in the topic?   While it is virtually impossible to trace the personal history and research tastes of all the economists who write papers about the Korean economy to establish the basis for their interest in

Korea, it may be possible, and provide valuable information to explore what kind of factors drive them to become interested in the subject.

This paper attempts to provide information about studies on the Korean economy and business in the world, and to answer the following questions:

(i) How much work has been done for the Korean economy and business in the world?

(ii) What are the determinants of Korean studies in a country or region?

(iii) Has any specific country or region been carrying out relatively more or less studies on the Korean economy or business than expected?

2. STUDIES ON KOREAN BUSINESS AND ECONOMICS

2.1. Data and Overview

Research works published in refereed journals and books, and other works listed in the database *EconLit*, have been collected and reclassified according to the country (or region) where the study was done[1] for the period covering 1970 to 2000. This study also categorizes published research works on Korea by their major fields in Economics and Business. This information, and the discussion surrounding it, are presented in the following sections. After modelling the production function of papers, the next section empirically estimates the determinants of Korean studies. Data for 1991-2000 are used in this section since relatively few studies on the Korean economy and business were conducted prior to 1991. The last section suggests some reasons why studies on the Korean economy and business should be valued highly by countries in Australasia and receive more attention and funding in the future, by pointing out the significance of the Korean economy and its importance in the most dynamic region in the world.

---

[1] Therefore, there is a limitation concerning the scope of these figures. Some journals and books are not included in this study if they are not listed in *the EconLit*, although it is certain that most of the significant works are listed in the database.

2.2. Korean Studies by Publications

His section provides some relevant figures on Korean studies, such as how many research works on business and economics have been published in selected major countries (or regions) since 1970.[2]   These publications are also disaggregated further according to their fields in Economics and Business.

Table 1 shows how many articles on the Korean economy and business have been published in journals and books, and as discussion papers (by some institutions) in major countries or regions for the last 30 years. Since 1970, according to *EconLit*, 1,371 articles or books have been published on the Korean economy and business,[3] where Korea and the United States (US)[4] outperformed all the other countries.   Korea published 558.1 research outputs, or 40.7% of the total publications, which is followed by the US, publishing 526.9 papers or books, or about 38.4% of total publications. These two countries explain about 80% of total publication on the Korean economy and business. As shown in the table, Australasian (Oceania and Southeast Asian countries) countries published 68.7 articles or books (or 5.0%) during the same period.   While Australia published 42.4 articles and books, other economies in the region, such as New Zealand, Singapore, Taiwan, Hong Kong, Malaysia and Indonesia produced 26.3 works (where most of them were published in New Zealand, Singapore and Hong Kong) throughout the period.   Altogether, the number of Australasia's publications on the Korean economy and business is quite similar to the combined total for the UK and Western Europe (that is 63.2).   Western Europe and the UK follow Australia in terms of the number of publications, with 37.1 and 26.1 outputs, respectively.

Table 1 also shows that the research output on Korea increased dramati-

---

[2] The geographical place of affiliation of the authors was considered when the number of publications in each country/region was counted. When there were more than one author, it was counted as (1/n) where n is the number of authors.

[3] Only the works which consider Korea as the main object of analysis are counted here. If the amount devoted to the Korean economy or business comprises approximately less than one half of the work, it has not been included.

[4] Hereafter, publications from Canada is included in the US data.

cally dramatically in 1994 (the reason for this surge is not known yet) and then stagnated, which increased again since 1998. For five years since 1996, amongst the various countries and regions, Korea produced the largest output, 310.5 papers or books, followed by the US with 236.4 papers or books. For these five years, these two countries produced more than three quarters of total publications on the topic. Australia shows the strongest upward trend of research on Korea. Considering the five years since 1996, Australia published 32.6 works on Korea, which is about 4.6% of the world's total publications for the same period, and, significantly, outperformed all other countries except Korea and the US. If publications from Southeast Asia and New Zealand are included, Australasia published 48.6 research works for the five years, which is 6.9% of the world total. It is noteworthy that there was a rapid decrease in the number of publications in the UK during the second half of the 1990s, compared to the first half. In contrast, publications from Japan has a strong increasing trend in the second half of the 1990s. Publications from Western Europe are rather consistent over the periods.

Table 2 reports the composition of research by field.[5] The two most popular fields are 'Money & Banking/Finance/International Finance' and 'Trade and related topics,' which together explain 31% of total publications. 'The Korean Economy – General' and 'Growth and Development' are also boast of a large number of publications, which are almost comparable to 'Trade and related topics'. This proves that the miraculous economic growth and trade expansion of Korea aroused considerable interest amongst overseas researchers, and dominated research in Korea, the US and Australia. It is also noteworthy that 61 works regarding the economic crisis were published throughout the world. Bearing in mind that the economic crisis hit Korea in November 1997, and that time lags are a factor in publishing research works in journals or books, it is reasonable to suppose that the papers devoted to the crisis would appear in print after 1998. From 1998 to 2000, 492 research works were published and, to our surprise, 61 were devoted to the crisis,

[5] When a paper is related to more than one field, a fractional point is given according to the number of fields related.

which represents more than 20% of all publications. Virtually it is the second most popular topic since 1998, only next to 'Money & Banking/ Finance/International Finance'. The significance of this topic will be even greater if we consider that a large number of works classified as other categories in this period also touch the issues related to crisis either directly or indirectly. This result indicates how fashionable it became recently to write articles on the economic crisis. Korea produced the largest number of papers on crisis (= 24), followed by the US (= 17).[6]

## 3. MODELLING KOREAN STUDIES ON ECONOMICS AND BUSINESS

3.1. How Are Papers Produced?

In brief, research outputs (products) related to the Korean economy and business in one country, will be decided by the number of scholars or researchers (labor or human capital) who specialize on Korea, and the amount of research funds available (capital). Figure 1 summarizes how research outputs are produced in a certain country in detail.

The number of researchers (or the amount of human capital) in a country (say, country A) specializing in Korean studies could be determined by two factors: the level of interest in Korea in country A and a scaler, where the scaler is the population in the country. It is expected that, as either the level of interest or population increases, the number of scholars interested in Korea will also increase. The level of interest is considered to be closely related to, and interacts with, the volume of research funds available. As country A's level of interest in Korea increases, more research funds will be made available, which, in turn, will attract more people to conduct research on Korea.

The level of interest is, in turn, influenced by many factors. The most

---

[6] The data for these figures are not summarized and reported in this paper.

Figure 1   How Are the Studies on Korea Formulated?
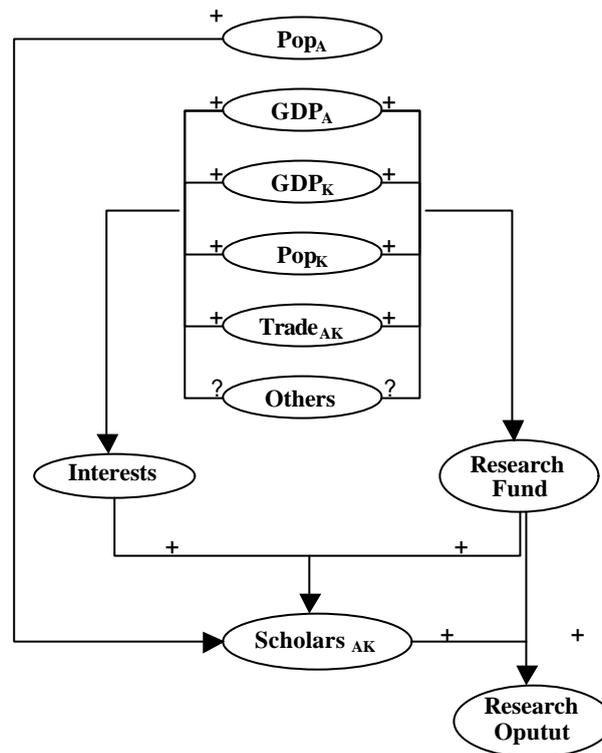
prominent variables may include country A's GDP, Korea's GDP, the size of the population in Korea, the volume of merchandise trade and other economic transaction variables (such as direct foreign investment, migration, tourism, etc.) between the two countries, and 'other factors' (such as the recent economic crisis).   All these factors are expected to have positive effects on the level of interest, while the effect of 'other factors' will be determined differently across different cases.

The amount of research funds available is also affected by those factors, which are expected to affect the level of interest. It is expected that as the magnitude of factors (except 'others factors') increases, the more research funds will become available.

Table 3 Population and GDP for Selected Countries

	USA		Australia		UK	
	Population (million)	GDP (US $ billion)	Population (million)	GDP (US $ billion)	Population (million)	GDP (US $ billion)
1980	227.76	2795.6	14.7	156.4	56.33	536.3
1990	249.95	5803.2	17.06	307.6	57.56	1072.4
1991	253.25	5986.2	17.28	311.6	57.81	1093.5
1992	256.63	6318.9	17.49	306.0	58.01	919.5
1993	260.01	6622.3	17.66	298.0	58.19	947.0
1994	263.19	7054.3	17.84	339.6	58.39	1058.7
1995	266.32	7400.5	18.05	364.5	58.61	1106.7
1996	265.46	7813.2	18.07	408.4	58.80	1283.8
1997	268.01	8300.8	18.31	408.7	59.01	1331.9
1998	270.56	8790.2	18.52	364.5	59.06	1416.7
1999	273.13	9299.2	18.73	394.1	59.11	1440.2
2000	281.56	9963.1	18.96	381.7	59.74	1395.1

Source: *International Financial Statistics Yearbook* (various years).

Among the independent variables suggested above, GDP and the population of Korea (and some of 'other factors') will apply to Korean studies in other countries as well. Therefore, when comparing country A's studies on Korea with other major countries', the factors to be considered are GDP and the population of country A, as well as the amount of economic interaction between Korea and country A. Table 3 shows some basic figures on GDP and population for selected countries with the largest numbers of Korea-related publications; the US, Australia and the UK.[7]   The size of the population and GDP of Australia are, as reported in the table, much smaller than those of the UK, not to mention the US. The larger populations of the US and the UK suggest that these countries would have much larger pools of scholars than Australia, and, therefore, potentially greater numbers of Korean specialists. Also, a higher level of GDP indicates the possibility that the level of interest in foreign countries would be higher in these countries. The higher levels of GDP of the US and the UK imply that these countries might

---

[7] Due to rapid depreciation of Australian and the UK currencies against the US dollar in the late 1990s, the two countries' GDP appeared to decrease in some years.

be able to provide more research funds on Korean studies, other things being equal.   Consequently, when we consider population and GDP for the countries, it is natural to conclude, *ceteris paribus,* that Korean studies in Australia are likely to produce fewer outputs than those in the US and the UK. However, our previous observation informed us that Australia produced more research outputs than the UK did. It may be argued that a country's intensity of interest in Korea depends on Korea's relative importance in terms of trade to that country.[8]   Table 4 reports the importance of Korea in terms of trade to the three countries with the most publications. As shown in the table, in 2000, the total value of trade between Australia and Korea was about US$7.6 billion, which was a little higher than that between the UK and Korea (US$7.4 billion), and much lower than that between the US and Korea (US$68.2 billion).   However, due to the size of the total trade of each country, Korea's weight to the UK's trade (in other words, the ratio of the UK's trade with Korea to the UK's total trade with the world) in 2000 was just 1.4% (0.7% for exports and 1.6% for imports), while it was about 6% (7.5% for exports and 4.2% for imports) for Australia, and 3.4% (3.5% for exports and 3.3% for imports) for the US. Another important fact that needs to be discussed is that, in general, the US and the UK recorded trade deficits with Korea (although the US recorded surpluses just before the economic crisis), while Australia has consistently recorded a surplus.   This suggests that Korea is an important market for Australia, while it is an important import source for the UK. It is not clear at this stage how this difference affects their interest in Korea.

For simplicity, suppose that the number of publications in one country has a Cobb-Douglas function with three independent variables, population, GDP and trade relationship.   Then country *i*'s publications Pi (we suppress the time subscripts) can be written as

$$P_i = K\ (L_i)^a (G_i)^b (T_i)^c \qquad\qquad (1)$$

---

[8] Nominating which variable is the most appropriate to explain the intensity of interest may arouse controversy. This paper nominates 'trade relationship', without any rigorous tests being conducted, since the main purpose of this paper is simply to present a possible explanation for the determinants of a country's studies on the Korean economy.

Table 4 Import and Export Shares in Relation to Korea
(in US $ millions)

	USA		Australia		UK	
	Exports	**Imports**	**Exports**	**Imports**	**Exports**	**Imports**
1991	15518 (3.7%)	17742 (3.5%)	2689 (6.4%)	984 (2.5%)	1835 (1.0%)	1627 (0.8%)
1992	14630 (3.3%)	17362 (3.1%)	2632 (6.2%)	1103 (2.7%)	1148 (0.6%)	1639 (0.7%)
1993	14776 (3.2%)	14910 (2.5%)	2920 (6.9%)	1266 (3.0%)	1195 (1.1%)	1618 (0.8%)
1994	18028 (3.5%)	20375 (3.0%)	3424 (7.2%)	1297 (2.6%)	1570 (0.8%)	1681 (0.7%)
1995	25413 (3.5%)	24891 (3.2%)	4474 (8.4%)	1674 (2.9%)	1851 (0.8%)	2464 (0.9%)
1996	26583 (4.3%)	23297 (2.8%)	5726 (9.5%)	1865 (3.0%)	2038 (0.7%)	3184 (1.2%)
1997	25067 (3.6%)	23798 (2.6%)	4978 (7.9%)	2136 (3.5%)	2001 (0.7%)	3653 (1.2%)
1998	16538 (2.4%)	24805 (2.6%)	3852 (6.9%)	2619 (4.3%)	1131 (0.4%)	3818 (1.2%)
1999	22165 (3.2%)	31836 (3.0%)	4046 (7.2%)	2513 (3.8%)	1535 (0.6%)	4713 (1.5%)
2000	27338 (3.5%)	40911 (3.3%)	4742 (7.5%)	2830 (4.2%)	2051 (0.7%)	5307 (1.6%)
Total	206056	239927	39483	18287	16355	29704

Note: Numbers in parentheses are trade share of Korea to each country.
Source: *Direction of Trade* (various years).

where L_i is country i's population, G_i is country i's GDP, T_i is (some kind of) trade relationship and K, a, b and c are constants.   From 1991 - 2000, the US population was about 13 times larger, and US GNP was about 22 to 25 times greater than Australia's.   In contrast, during this period Australia produced 42.4 articles while the US produced 490.9; that is, the US produced about 12 times more publications than Australia.   This result implies that either Australia's K, a, b or c is higher than the US's, or, if a, b and c are assumed to be the same across countries, strong diseconomies of scale (such as $a + b + c$

< 1) exist in the number of Korean studies published. Alternatively, the relative importance of Korea to Australia might be advanced to explain why relatively Australia outperformed the US in publications on Korea. Korea is Australia's second or third largest trade partner throughout the period while it is the fifth or sixth largest trading partner of the US.

3.2. Modeling Research Publications

To explore the issue of research publication topics further, we can use a panel analysis of research publications. As shown in Table 1, we select seven countries/regions for analysis, not including India, Others and Unknown. For each country/region, ten years of data are available for 1991-2000. By combining time-series and cross-section data, 70 observations become available.

We adopt a Cobb-Douglas form of research production function, which is explained in equation (1), where a country's research output on Korea is determined approximately by total population (*POP*), GDP per capita (*GPC*) and its trade relationship with Korea (*TRD*).[9] Taking the logarithmic for each side of the equation gives

$$\log (PUB_i) = a_0 + a_1 \log (GPC_i) + a_2 \log (POP_i) + a_3 \log (TRD_i). \qquad (2)$$

While trade ratios are included as (2) to catch the intensity of the relationship between the two economies, geographical distance (*DIST*) may influence the level of a country's knowledge of Korea. Therefore, geographical distance is also included, which is measured by the distance

---

[9] In calculating the trade ratio for country A, the formula used is $[(X_{AK} + M_{AK})/(X_{AW} + M_{AW})]$, where X_{Ai} and M_{Ai} stand for country A's exports to and imports from i ($i = K$ or W); and K and W stand for Korea and the rest of the world respectively. Therefore, if we calculate the trade ratio following this formula, the trade ratio for Korea will be zero, which is not consistent with our intuition. Alternatively, we can regard $X_{KK} = M_{KK} = TP_K - X_{KW}$, where TP_K is GDP for Korea; i.e. the total value of Korean exports to (and imports from) Korea itself is the difference between its total product subtracted by its total exports to the world. However, for simplicity, we arrange '100%' for trade ratio of Korea, which is intuitively correct as Korea must be the most important to itself.

between capitals. For Western Europe and South East Asia, the distances between Seoul and Paris and Seoul and Singapore, respectively, are used.

It has already been explained that the number of publications used in this study was taken from the *EconLit* database, where research works published in languages other than English are usually not included. The possibility exists therefore, that this data is biased towards publications from English-speaking countries. In order to overcome this dilemma, a dummy variable (*DENG*) was introduced to arrange '1' for English-speaking countries/regions and '0' for the others.

It has also been pointed out that a particular type of event or shock such as Korea's accession to OECD in 1996 and the economic crisis in 1997, that attacked some East Asian countries as well as Korea, may render studies on the region more attractive and encourage more outputs. A sequence of time specific dummy variables that captures the chronicle effects is consequently added (T_{1992}, T_{1993}, .., T_{2000}) for each year from 1992 to 2000. The countries/regions in this analysis are not chosen randomly. They cover all the major areas where Korean studies have been done and published. Therefore, we believe that over time, behavioral differences between individual regions may be captured by the regional dummy variable or intercept.

While English is not an official language, scholars in Korea still may have a comparative advantage in publishing research works on Korea. Although a certain degree of comparative advantage may be already captured by its trade ratio variable, which is 100% for Korea, a regional dummy variable (*DKOR*) is arranged to find whether its performance is better than all the others when all the other variables are equal.[10]

Taking into account all of the variables, the estimation should be

---

[10] Regional dummies for other countries/regions were introduced; however, neither of them turned out to be significant.   They also incur multicollinearity problems.   As none of them is significant, for better fitness and parsimony of the model, we discard regional dummies with an assumption that regional differences other than variables already included in equation (3) are negligible.

$$\log (PUB_{it}) = \boldsymbol{a}_0 + \boldsymbol{a}_1 \log (GPC_{it}) + \boldsymbol{a}_2 \log (POP_{it}) + \boldsymbol{a}_3 \log (TRD_{it})$$

$$+ \boldsymbol{a}_4 \log (DIST_i) + \boldsymbol{a}_5 DENG + \boldsymbol{a}_6 DKOR$$

$$+ \sum_{j=1}^{9} \boldsymbol{t}_j T_{1991+j} + u_{it}, \tag{3}$$

where u_{it} is an error term.

We use the Parks' (1964) estimation method as it would be reasonable to assume that the error term u_{it} in (3) has a first-order autoregressive AR(1) error structure with contemporaneous correlation between cross sections, i.e. $u_{it} = \boldsymbol{r}_i u_{i,t-1} + \boldsymbol{e}_t$, where $E(u_{it}^2) = \boldsymbol{s}_{ii}^2$, $E(u_{it} u_{jt}) = \boldsymbol{s}_{ij}^2$, $E(\boldsymbol{e}_{it}) = 0$, $E(u_{i,t-1} \boldsymbol{e}_{jt}) = 0$, $E(\boldsymbol{e}_{it} \boldsymbol{e}_{jt}) = \boldsymbol{f}_{ij}$, $E(\boldsymbol{e}_{it} \boldsymbol{e}_{js}) = 0$ $(s \neq t)$, and $E(u_{it} u_{jt}) = \boldsymbol{s}_{ij}^2 = \boldsymbol{f}_{ij}/(1 - \boldsymbol{r}_i \boldsymbol{r}_j)$. Thus, the covariance matrix for the vector of random errors $\underline{u}$ can be expressed as follows:

$$E(\underline{u}\underline{u}') = V = \begin{bmatrix} \boldsymbol{s}_{11}^2 \underline{\Omega}_{11} & \boldsymbol{s}_{12}^2 \underline{\Omega}_{12} & \cdots & \boldsymbol{s}_{1N}^2 \underline{\Omega}_{1N} \\ \boldsymbol{s}_{21}^2 \underline{\Omega}_{21} & \boldsymbol{s}_{22}^2 \underline{\Omega}_{22} & \cdots & \boldsymbol{s}_{2N}^2 \underline{\Omega}_{2N} \\ \vdots & \vdots & \ddots & \vdots \\ \boldsymbol{s}_{N1}^2 \underline{\Omega}_{N1} & \boldsymbol{s}_{N2}^2 \underline{\Omega}_{N2} & \cdots & \boldsymbol{s}_{NN}^2 \underline{\Omega}_{NN} \end{bmatrix}, \tag{4}$$

where
$$\underline{\Omega}_{ij} = \begin{bmatrix} 1 & \boldsymbol{r}_j & \cdots & \boldsymbol{r}_j^{T-1} \\ \boldsymbol{r}_i & 1 & \cdots & \boldsymbol{r}_j^{T-2} \\ \vdots & \vdots & \ddots & \vdots \\ \boldsymbol{r}_i^{T-1} & \boldsymbol{r}_i^{T-2} & \cdots & 1 \end{bmatrix}.$$

The covariance matrix V is estimated by a two-stage procedure, and then the estimation of model regression parameters is carried out by generalized least square (GLS) method.

In estimation, the figures for PUB could not be used directly with logarithm, since some of PUB values were 'zero'. To avoid the problem, we added a small number ($= 0.1$) to all publication numbers, which may change our interpretation of the estimated coefficients. While $\boldsymbol{a}_1$, $\boldsymbol{a}_2$ and $\boldsymbol{a}_3$ in

equation (3) reflect the elasticity of publication with respect to relevant variables, the coefficients estimated using log (PUB_{it} + 0.1) as a dependent variable are not directly regarded as elasticities. More specifically, when a number **d** is added to *PUB*, the elasticity of *PUB* with respect to a certain variable *X* is

$$\boldsymbol{h}_X = \frac{\partial \log (PUB)}{\partial \log X} = \frac{\partial \log (PUB)}{\partial \log (PUB+\boldsymbol{d})} \frac{\partial \log(PUB+\boldsymbol{d})}{\partial \log X}$$

$$= \frac{\partial (PUB)}{\partial (PUB+\boldsymbol{d})} \frac{(PUB+\boldsymbol{d})}{PUB} \boldsymbol{a}_X \,,$$

where $\boldsymbol{a}_X$ is the coefficient for *X* estimated from regression, i.e. $\boldsymbol{a}_X. = \frac{\partial \log(PUB+\boldsymbol{d})}{\partial \log X}$. As our result indicates that the average value for *PUB* is 15.1, the elasticity is, finally,

$$\boldsymbol{h}_X = 1.007 \ \boldsymbol{a}_X,$$

which is in fact very close to $\boldsymbol{h}_X.$

Table 5 presents the results of regression and we can summarize our findings in the following way:

1. GDP per capita and population variables perform very well in explaining a country/region's Korean studies, both being significant at the 1% level. A 1% increase in GDP per capita and population in one economy corresponds with 1.4% and 0.7% increase respectively in publications about the Korean economy and business.
2. The trade ratio is also significant; however, the magnitude is somewhat moderate (compared to GPC or POP) at 0.66 indicating that the elasticity of publication in response to a 1% increase in trade share of Korea to a

specific country/region, increases publications on Korea by 0.66%.

3. The distance variable shows a positive sign which contradicts to the standard argument. We suspect that the variable has a strong correlation with the English dummy variable; most English-speaking countries are relatively far from Korea and most non English-speaking countries such as Korea and Japan are close to Korea. This multicollinearity can possibly distort the sign of the coefficient.

4. As expected, the English dummy turns out to be very important in determining the number of publications. Coefficients are significant and positive, implying that English-speaking countries/regions produce papers and books on Korea relatively more frequently than non English-speaking counterparts. As discussed earlier, this finding is believed to reflect the fact that the data used in this study, EconLit, mainly includes works written in English.

5. The regional dummy variable for Korea turns out to be the most influential and significant variable in our analysis and it is apparent that scholars in Korea surely have a strong comparative advantage in publishing research works on Korea.

6. Each time specific dummy variable is significant. The F-test on the null hypothesis that the estimated coefficient for each year is the same is rejected at the 1% significant level (Table 5). The time series plot (Figure 2) shows the evidence that Korea's accession to OECD in 1996 and the economic crisis in 1997 did lead to a substantial and continuous increase in publications on the Korean economy or business, at least up to 1999. As we would expect, it has already been observed in the previous section that the number of papers on economic crisis was fairly large.

Table 5 Determinants of Studies on the Korean Economy and Business

Variable	Time Effect		Country/ Region	
Const	-32.74^{**} (2.23)	t_{1992}	0.804^{**} (0.038)	Australia	0.336^{*}
GDC	1.36^{**} (0.11)	t_{1993}	0.737^{**} (0.040)	South East Asia and New Zealand	-0.319^{*}
POP	0.71^{**} (0.11)	t_{1994}	0.760^{**} (0.041)	Japan	0.171^{*}
TRD	0.66^{**} (0.12)	t_{1995}	0.582^{**} (0.045)	USA	0.414^{*}
DIST	0.65^{**} (0.15)	t_{1996}	0.583^{**} (0.041)	UK	0.132^{*}
DENG	1.19^{**} (0.27)	t_{1997}	0.984^{**} (0.043)	Western Europe	-0.102^{*}
DKOR	8.15^{**} (0.81)	t_{1998}	1.129^{**} (0.056)	Korea	-0.436^{*}
		t_{1999}	1.196^{**} (0.047)		
		t_{2000}	0.952^{**} (0.045)		

F-value $= 1636^{**}$; $Pr > F = 0.0001$

$H_0 : t_{1992} = t_{1993} = \cdots = t_{2000}$, F-value $= 31.21^{**}$; $\Pr > F = 0.0001$

Note: The figures in parentheses are the standard errors. The superscripts * and ** indicate the 5% and 1% significance levels, respectively.

Figure 2 Time Specific Effects
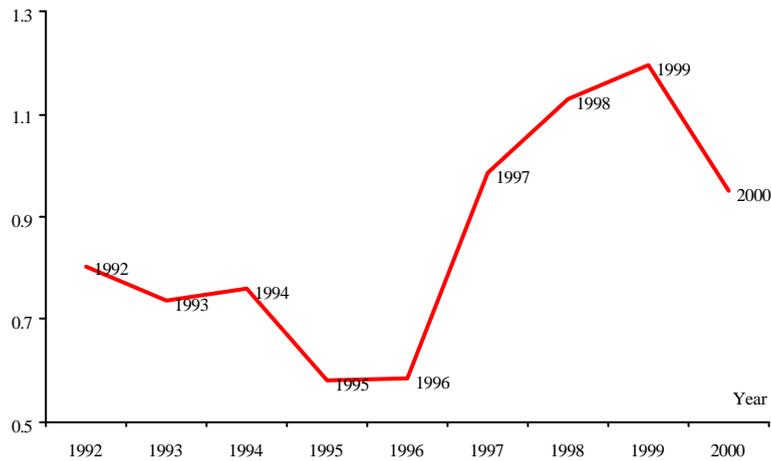
4. WHY STUDY KOREA?

This paper does not investigate the number of researchers in each country who specialize in Korea, or the volume of research funds available for Korean studies, as they are in general very hard to measure. Instead, this paper reviews variables which might affect the factors mentioned earlier – the level of interest and amount of research funds available - and compares them with one another. From this comparison, it is concluded that GDP per capita, population, the trade relationship and language, are in general, important explanatory variables. It is also found that Korea has a strong advantage in studying itself, and some historical events the country experienced, such as participation to the OECD or financial crisis attracted substantially more attention from researchers.

Research outputs have two important characteristics: they are public goods and they have externalities. When a country produces one research output on the Korean economy or business, the contents of the output, such as information and models, can be used by all the people in the country (or more widely, in the world) with insignificant marginal cost. If it is true that Korean studies in a certain country fall below the optimal level, this state of affairs is more likely to represent a loss to that economy, as well as to Korea.

In case reasons exist why Korean studies are really undervalued in some countries/regions, which are not discussed in this paper (such as unnecessary distortions or misperceptions about Korea,[11] we would like to suggest why these unnecessary distortions should be corrected and Korean studies should be considered important:

Korea is one of the most dynamic countries in terms of structural change, especially since the economic crisis. Related topics worthy of examination include what kind of structural adjustments, market

---

[11] For example, it has been argued frequently (incorrectly) that Australians have tended to regard Korea as a small and insignificant country in the world economy. See Garnaut (1989), Dupont (1992) and Cho (1996) among many other articles.

liberalization measures, and technological requirements are needed to sustain Korean economic development.

Korea has unique industrial organization, especially the chaebols which are also the source of serious domestic problems. Their operations, labor/management relations, land ownership and future, will provide various important future research topics.

One of the most important reasons why Korean studies should be encouraged is that they can be used as a key to open and understand what is likely to be the most powerful economic region in the future, but one, which is likely to suffer from ongoing tensions between the countries of which it is comprised. Moreover, as a result of consistent efforts to restore a unified sovereign state in the peninsula, in the long term, the Korean economy will become ever more dynamic as it progresses along the road to cooperation and unification with the North. While the size of population, even after reunification, would be smaller than that of China or Japan, it will still be one of the most significant economies in the world and a focal point for balancing the superpowers in the region.

These are some of important reasons why Korean studies should not be understood as a residual of Japanese or Chinese studies. It should not be seen as a field in which specialists on Japan or China, who label themselves as 'also Korean specialists', can promote themselves and exert influence. Only those who specialize in the Korean economy and business with a thorough knowledge of East Asian economies can conduct accurate and professional research and maximize the potential benefits to both countries.

While this paper examines a variety of variables determining the level of Korean studies, it is not necessarily applicable to Korea only. By accumulating more variables and observations – for longer periods and more countries - studies or research interests on specific countries and regions, as well as Korea, can be estimated and analyzed more accurately. We are confident that the interesting results produced in this study might act as a catalyst for future discussion and research on related subjects.

REFERENCES

Cho, B., "Promotion of Economic Cooperation between Korea and Australia ," paper presented at *the Third Pacific and Asia Conference on Korean Studies*, University of Sydney, 1996.

Dupont, A., "Australia's Relations with the Republic of Korea: An Emerging Partnership," Discussion Paper, Center for the Study of Australia-Asia Relations, Griffith University, 1992.

Garnaut, R., *Australia and the Northeast Asian Ascendancy*, Canberra: Australian Government Publishing Service, 1989.

IMF, *International Financial Statistics*, Washington D.C.: International Monetary Fund, various years.

Parks, R. W., "Efficient Estimation of a System of Regression Equations when Disturbances are Both Serially and Contemporaneously Correlated," *Journal of American Statistical Association*, 62(318), 1964, pp. 500-509.

The EconLit was used as one of the databases.

World Bank, *Direction of Trade Statistics Year Book*, Washington D.C.: The World Bank, various years.