

CLASS STRUCTURE AND CLASS MOBILITY IN EAST ASIA: A COMPARISON AMONG SOUTH KOREA, JAPAN AND TAIWAN*

YOUNG-MIN YUN
Sogang University

The capitalist order varies considerably among post-war East Asian countries. The new class system which has emerged in the course of rapid industrialization is most open in Taiwan, followed by Japan and then South Korea. Gross openness of the class system is affected by two factors: class composition and openness in class structure. Its cross-national variation is determined by the openness rather than the composition in East Asia. It is the class openness that made class order in Taiwan more fluid than in Japan or South Korea. Differences in life chances for farmers mainly determined the cross-national variation in class openness. The life chances were the largest in Taiwan, followed by Japan and then South Korea. Furthermore, these have deteriorated in South Korea, have improved in Japan, and have been stable in Taiwan.

A class scheme composed of four social classes, which is based on Goldthorpe's, is employed to construct mobility tables. A log-linear analysis technique is critically applied. Mobility data are borrowed from recent survey research for South Korea and Taiwan, respectively, and Research on Social Structure and Mobility (1975) for Japan.

INTRODUCTION

Capitalist development in postwar East Asia amazed foreign observers in two different ways. During two decades of high-speed growth, the economy grew a stunning ten plus percent per annum in all three capitalist East Asian countries: Japan, South Korea, and Taiwan. Furthermore, voluminous research has demonstrated time and again that economic inequality remained low or even diminished during the period of rapid economic growth in East Asian countries (see Ahn 1992; Haggard 1990; Bronfenbrenner and Yasuba 1987; Fei *et al.* 1979). Then, what kind of change has the amazing industrialization brought to the social structure of the East Asian societies? Drastic change as much as the stunning economic growth? Open class structure comparable with the fairly equal income distribution? This paper explores these intriguing questions.

Comparative studies in changes in class structure and mobility of East

*I would like to thank Professors Michael Hout, Peter Evans, Doo-Seung Hong, Mau-Kuei Chang, and Kwang-Yeong Shin for their various help.

Asian societies are required not only for discovering differences, if any, in industrialization and social structure, but also for disclosing common features, if any, of social change among them. It is, however, amazing that one can seldom find any serious comparison of class structure and mobility among East Asian societies. This is in striking contrast with the fact that comparative studies of the economic aspect of industrialization in East Asia have been numerous, and that comparative research on class structure and mobility in Europe has already been conducted for more than a half century. This study is designed to fill this unacceptable gap.

In this paper, we will focus on openness in class structure (social fluidity in more fashionable terms) among three capitalist countries: South Korea, Japan, and Taiwan. However, structural mobility will not be excluded from our analysis. This is partly because even the most elementary information about class mobility in East Asia is seldom available to readers, and partly because the relative weight of social fluidity for overall class openness cannot be precisely appreciated without taking the structural component of social mobility into account.

A CLASS SCHEMA FOR CROSS-NATIONAL COMPARISONS

The first decision one should make for mobility research concerns the conceptualization of the social structure on which social mobility takes place. The structure may be based on property, income, occupation, class, status, educational credentials, and so on. John Goldthorpe's threefold categorization of service, intermediate, and working class, which is the simplest of the variants he proposed, is employed with some modification.¹ Goldthorpe proposed different versions of his class scheme (see Goldthorpe 1980; Erikson *et al.* 1982; Erikson and Goldthorpe 1987a, b). The justification of the choice of the threefold over the more popular seven-fold scheme is mainly technical. We need to avoid too many empty cells in a mobility table. While the sample sizes of the data sets used in our analysis are not small, origin class is overwhelmingly composed of farmers, leaving tiny frequencies for other categories. Thus, if we use many categories, our parameter estimates will not be reliable.

Our major elaboration of the simplified Goldthorpe scheme is to treat farming as a separate class. Whether farmers should be considered a social class is a big issue, but treating farmers as a social class is more appropriate

¹For original exposition of the scheme, see Goldthorpe (1980) or Goldthorpe and Hope (1974).

in East Asia than anywhere else in the world. After land reforms during nearly the same period, the class structure in rural areas became remarkably similar in the three East Asian countries. Agriculture in Japan, Taiwan, and South Korea took the form of what Stinchcombe (1966) called family smallholding enterprises. The absolute majority of farmers own the means of production and hold similar amounts of capital (for details, see King 1977).

In addition, skills which are required for farming are virtually the same; smallholding family farmers enjoy the maximum amount of authority and autonomy over their work; farmers including tenants were in the same position in the agricultural market except for farm laborers whose numbers were small; the lifestyle of farmers who were relatively better off was noticeably different from that of poor farmers including tenants and farm laborers. Nonetheless, the differences in income and consumption between them were almost minimal compared to that of urban classes. Consequently, from a Weberian point of view, farmers can be justifiably categorized as a social class in contemporary East Asia.²

Another modification of Goldthorpe's class scheme is the categorization of most clerical workers into the service class. In the state sector clerical and administrative workers are recruited through different tracks. Clerical workers are recruited mainly through an ordinary civil service examination while administrative workers are selected through a higher civil service examination. Only a small number of clerical workers can obtain administrative positions. In the private sector, the dividing line between clerical and managerial jobs is less clear among male employees (so called deadend clerical occupations are mostly for female employees). College graduates as well as highschool graduates begin their careers as clerical workers and then eventually move up to managerial positions (Cole and Tominaga 1976). A rather clear division between production and office occupations in the recruiting process exists, but there is far less division among occupations within office.³

Furthermore, in terms of power and authority, clerical workers are much more similar to administrative workers to production workers. This is particularly true for clerical workers in the state sector. Due to the immense power given to the state in governing economy and society, even the lowest-

²Sorokin and Zimmerman (1929) presented similar reasons in more general terms why farmers should be considered a social class. However, we do not intend to generalize our class scheme being aware of a vast different type of rural class structure in Latin America or North America.

³Goldthorpe (1992) reports the same observation in advanced Western societies.

level clerical workers may wield substantial administrative power in East Asia. Unlike the bureaucracies that narrowly limit the discretion of clerical workers in Europe and America, Asian bureaucracy encourages clerical entrepreneurship. In places where corruption is 'structural' such as South Korea, the administrative power of a position often means extra income on top of official paycheck (for corruption in South Korea, see Kim 1992).

Consequently, we have a fourfold class scheme of service, intermediate, working, and farming classes. For actual measurement of classes, occupation and employment status are taken into account to construct a class scheme for destination class for the three countries. For origin class, information about employment status is not available for Taiwan. Working class is overestimated whereas service class and intermediate class are underestimated for Taiwan.

ANALYSIS OF MOBILITY TABLES

With the modified Goldthorpe class scheme, I constructed the $4 \times 4 \times 3$ mobility table shown in Table 1. Data sets employed here are of relatively high quality particularly for Korea and Taiwan. Data for Japan are from the widely-used 1975 Social Stratification and Mobility National Survey, for Korea from the 1991 Survey on Economic Activity and Life Conditions collected by Dr. Kwang-Yeong Shin and his colleagues in conjunction with Erik Wright and his colleagues' international project on class structure and class consciousness, and for Taiwan from the 1991 Social Change Basic Survey collected by Dr. Hai-Yuan Chiu from Institute of Ethnology.

Outflows and Inflows

1. Farming Class

Massive migration from agricultural to non-agricultural sectors such as manufacturing and service industries during industrialization is a nearly universal pattern (Kuznets 1966). East Asia is not an exception. In South Korea, 6.72 million, or 78.9 percent of total gainfully-employed population of both sexes were farmers in 1960, the eve of rapid growth. But about thirty years later, there were only 3.38 million farmers, or 19.3 percent of the total labor force. Not only has the relative importance of farmers among the population dramatically declined, but their absolute number has been reduced by half (KSY 1961, 1990). In Taiwan and Japan, the reduction was less dramatic, but it was still remarkable. In Taiwan, there were 1.73 million, or 46.0 percent of total labor force in 1965 (the first year for which reliable

TABLE 1. INTERGENERATIONAL MOBILITY TABLES FROM EAST ASIAN SOCIETIES (ONLY MALES)

Origin Class	Destination Class				Row Total
	SC	IC	WC	FC	
(A) South Korea					
SC	130	31	15	7	183 (15.6)
IC	61	32	27	6	126 (10.8)
WC	24	24	25	5	78 (6.7)
FC	196	129	156	304	785 (67.0)
Col. Total	411 (35.1)	216 (18.4)	223 (19.0)	322 (27.5)	1,172 (100.0)
(B) Japan					
	SC	IC	WC	FC	Row Total
SC	286	54	85	20	445 (21.3)
IC	159	117	110	16	402 (19.3)
WC	80	37	123	13	253 (12.1)
FC	251	133	322	305	985 (47.2)
Col. Total	750 (36.0)	341 (16.4)	640 (30.7)	354 (17.0)	2,085 (100.0)
(C) Taiwan					
	SC	IC	WC	FC	Row Total
SC	175	43	59	14	291 (21.0)
IC	57	34	40	3	134 (9.7)
WC1	941	381	132	151	279 (20.1)
FC	193	84	187	220	684 (49.3)
Col. Total	519 (37.4)	199 (14.3)	418 (30.1)	252 (18.2)	1,388 (100.0)

Notes: SC=service class, IC=intermediate class, WC=working class, FC=farming class.

Sources: The 1991 Survey on Economic Activity and Life Conditions from South Korea; the 1975 Social Stratification and Mobility National Survey from Japan; the 1991 Social Change Basic Survey from Taiwan.

figures are available). Twenty-four years later, the figure fell to 1.06 million, only 12.8 percent of the total labor force (SYRC 1990). Similar reduction took place in Japan. During the period between 1950 and 1975 when Japan experienced the most rapid economic growth of her entire history, the number of farmers declined from 17.00 million, or 47.7 percent of the total labor force, to 6.52 million, or 12.6 percent of the total labor force (SYJ 1951, 1976). Thus more than half million people left farming or rural areas every year.

Marginal distributions of the origin class in the mobility tables appearing in Table 1 reflect cross-national differences in class structure. In South Korea where the non-agriculture sector was far less developed, 67 percent of the origin class were farmers while 49 percent and 47 percent were farmers in

Taiwan and Japan, respectively.⁴ Among sons of those farmers, 61 percent found themselves in nonfarming classes in South Korea. Among those movers, 41 percent settled in the service class, 27 percent in the intermediate class, and 32 percent in the urban working class. In Taiwan, 68 percent of farmers' sons were movers, among whom 41.6 percent reached the service class, 18 percent the intermediate class, and 40 percent the urban working class. In Japan, 69 percent were movers, among whom 33 percent climbed the service class, 20 percent found themselves in the intermediate class, and 47 percent in the working class.⁵

Marginal distributions of the destination class represent the class structure of the point when the survey was carried out. The proportion (27.5 percent) of farmers in South Korea is still greater than in Taiwan (18.2 percent) or in Japan (17.0 percent). Among the sons who become farmers, nine out of ten are farmers' sons in South Korea, Japan and Taiwan. This is hardly surprising since sons of nonfarmers rarely enter the farming class in industrial societies. However, entries into the farming class from the outside are especially rare in East Asia (for comparison, see Featherman and Houser 1978; Lipset and Zetterberg 1966). Probably it is because the path for upward mobility within the agricultural sector was almost closed in East Asia while the non-agricultural sector has expanded remarkably, generating large opportunities for occupational success.

2. Service Class

It is the service class that has expanded most while the farming class has declined most.⁶ The proportions of the service class among origin classes were 16 percent for South Korea and 21 percent for Taiwan and Japan, respectively. The proportions have increased remarkably during industrialization. At present, the service class represents at least one third of the male working population in Japan, South Korea and Taiwan.

A large majority of sons of the service class stayed in the class. 71 percent of the sons were able to obtain a position of the service class in South Korea, 64 percent were able in Japan, and 60 percent in Taiwan. These percentages indicate that sons of the service class enjoy a greater advantage in entering

⁴For reference, only 23.4 percent of the origin class were farmers in a survey of the U.S. in 1973 (Featherman and Hauser 1978).

⁵The proportions of movers among farmers' sons in East Asia were not particularly high. In the U.S., 60.6 percent of farmers' sons were movers according to the 1973 survey (see Featherman and Hauser 1978).

⁶I remind you that we are analyzing only male population. If female working population is included, the proportion of the service class will be far lowered. Women are substantially underrepresented in the service class.

the service class over other classes. However, it does not appear that the degree of the advantage in East Asian societies differs notably from a pattern found in European nations where the percentages drop to somewhere between 70 and 50 percent (for European data, see Erikson and Goldthorpe 1987a, b). The service class is defined more loosely in our cases than in Erikson and Goldthorpe's. Accordingly the percentages of stayers in the service class are somewhat overestimated in our cases. Nonetheless, the East-Asian pattern does not substantially deviate from the European one.⁷

Another interesting aspect of the outflow from the service class is that only 8 percent of sons of the service class drop to the working class whereas 20 percent do in Taiwan and 19 percent in Japan. That is, sons of the service class traverse downwardly in long distances far less frequently in South Korea than in Taiwan or Japan. This must be caused by the difference in the sizes of the working class between South Korea and Taiwan or Japan.

Among those who enter the service class, five out of ten in South Korea and four out of ten in Taiwan are farmers' sons. In Japan, only three out of ten were farmers' sons, next to sons of the service class, who constitute 40 percent of current service-class members. In South Korea, self-recruitment in the service class is 32 percent, the next is 15 percent from intermediate class, and the least (6 percent) from the working class. In Taiwan, 34 percent are from the service class itself, 18 percent are from the working class, and 11 percent are from the intermediate class. In Japan, 21 percent are from the intermediate class and 11 percent are from the working class. It is interesting that nearly one out of five members of the service class come from the working class in Taiwan, which holds a higher proportion of the population in South Korea and Japan. However, the discrepancy mainly comes from the class structure. Working class composes a much larger proportion of the origin class in Taiwan than in South Korea and even Japan (see marginal distributions of the origin class in Table 1).

3. Working Class

The service class was followed by working class in terms of the

⁷Ishida *et al.* (1991) compare the Japanese case with the European cases with a definition of the service class closer to Erikson and Goldthorpe (1987a, b). They find that the proportion of sons of the service class entering the service class is notably lower in Japan than Europe. I think they take too narrow definition of the service class in Japan for the purpose of comparison. They choose formal identity over substantial identity. In other words, they achieve rigorous formal comparability at the cost of classificatory relevance. Interestingly, sons of the second highest class, routine nonmanual workers, in their class schema enter the service class noticeably more in Japan than Europe. This implies that discrepancy between our findings and theirs comes from different definitions.

magnitude of expansion during the period in question. The working class constitutes 7 percent of the origin class but 19 percent of the destination class in South Korea; 20 percent of the former but 30 percent of the latter in Taiwan; 12 percent of the former but 31 percent of the latter in Japan. These percentages indicate that the demographic formation of the working class was substantially retarded in South Korea in comparison with Taiwan or Japan.⁸

Outflow of the working class has little relative importance for overall social mobility in South Korea. As is shown in the first panel of Table 1, the sample of the origin working class is so small that sampling error is inevitably large. Interpretation of the outflow can hardly be reliable.

Since the working class grew so rapidly from being such a small class, inflow is more important than outflow for overall social mobility in South Korea. The working class recruited 70 percent of its members from the farming class, 12 percent from the intermediate class, 11 percent from the working class, and 7 percent from the service class. In terms of class origin, the South Korean working class is extraordinary homogeneous. Its members are predominantly of farm-origin.

Unlike South Korea, Taiwan had a considerably large origin working class. Accordingly, both outflow and inflow are important to measure overall social mobility in Taiwan.⁹ 47 percent of sons of the working class stayed in the working class, 34 percent entered the service class, and 14 percent entered the intermediate class. The proportion which entered the farming class is negligible. It is remarkable that half of the working-class sons stayed in the working class. This is more astounding since the origin working class includes all the self-employed blue-collar workers who are otherwise classified into intermediate class.

The working class also recruited most (45 percent) of its members from the farming class, 32 percent from the working class itself, 14 percent from the service class, and 10 percent from the intermediate class. It is notable that recruitment from the farming class is considerably smaller than in South Korea. It is also impressive that recruitment from the service class is sizable. In terms of class origin, the working class is far more urban in Taiwan than in South Korea.¹⁰

⁸I remind you that size of the working class in each country is heavily underestimated because female workers are excluded from the samples examined.

⁹With regard to classification of origin classes for Taiwan, I remind you that the working class is somewhat overestimated while intermediate class is somewhat underestimated.

¹⁰Relatively high level of selfrecruitment of the working class supports Michael Hsiao's argument that the "second generation of the working class" appeared in Taiwan in the mid1980s (Hsiao 1986).

Outflow of the working class in Japan is strikingly similar to that in Taiwan. About half (49 percent) of the sons of the working class stayed in the working class, 32 percent entered the service class, and 15 percent entered the intermediate class. The proportion which entered the farming class is again negligible.

The working class recruited 50 percent from the farming class, 19 percent from the working class, 17 percent from the intermediate class, and 13 percent from the service class. In terms of class origin, the working class in Japan is as urban as its counterpart in Taiwan.

4. Intermediate Class

According to our class schema, the intermediate class is supposed to consist of small employers and production supervisors.¹¹ However, in reality, our data indicate that the number of production supervisors are so small that petty employers make up about 90 percent of intermediate class in each country. Thus, the intermediate class is virtually identical with petty capitalists. Then, the major issue with regard to intermediate class is proletarianization. We will read the data for the intermediate class keeping this issue in mind.

If proletarianization means transforming petty bourgeoisie including small-landholding farmers into industrial workers who do not own their means of production, the thesis undoubtedly holds for East Asia.¹² This is, however, a relatively unexciting finding. As is mentioned above, numerous small-landholding farmers have migrated to cities and a number of them have become industrial workers. A more interesting question is whether the urban petty bourgeoisie has been massively transformed into wage labor in East Asia.

The intermediate class substantially increased in South Korea from 11 percent among origin classes to 18 percent among destination classes in South Korea. An analysis of official statistics confirms this trend. Urban petty bourgeoisie steadily increased from 12.9 percent of economically active population in 1963 to 21.6 percent in 1983 (see Table 12 in Seo 1984). It seems to increase somewhat in Taiwan. However, if we take sampling and measurement error into account, 4 percent (from 10 to 14 percent) is not large enough to be considered real change. Hence, we would say that the increase, if any, was very small in Taiwan. In Japan, the intermediate class

¹¹This category excludes the poorest element of petty bourgeoisie such as street vendors or peddlers.

¹²In the advanced countries, Marxists use the notion of proletarianization to tap the so called downgrading of routine whitecollar occupations (Braverman 1974).

seems to have declined somewhat. Its proportion decreased from 19 percent among origin classes to 16 percent among destination classes. However, the difference may be due to sampling error. An analysis based on popular censuses indicates that urban petty bourgeoisie did not change considerably. If there were any change, it somewhat increased rather than decreased.¹³ We presume that urban petty bourgeoisie had expanded to reach fifteen to twenty percent of total economically active population in each country at the time of survey.

Outflow of the intermediate class is important in addressing the issue of proletarianization. In South Korea, 48 percent of sons of intermediate class entered the service class, 25 percent remained in the intermediate class, and 21 percent fell to the working class (see the first panel of Table 1). In Taiwan, 43 percent entered the service class, 25 percent stayed, and 30 percent fell to the working class (see the third panel of Table 1). In Japan, 40 percent entered the service class, 29 percent stayed, and 27 percent fell to the working class (see the second panel of Table 1). The movement from the intermediate class to the farming class is negligible. It is remarkable that four out of ten sons from the intermediate class entered the service class while two or three fell to the working class. This strongly indicates that the Marxist thesis of progressive proletarianization of urban petty bourgeoisie does not have empirical ground in East Asia (for a typical Marxist argument, see Seo 1984: 58). Rather it supports Max Weber's view that small property-owners tend to be absorbed "into the expanding category of skilled manual or non-manual salaried workers" rather than becoming members of the proletariat (Giddens 1973, p.48). It is noteworthy that one out of four sons stayed in the intermediate class.

Cross-national variation in inflow of the intermediate class is larger than that of outflow. In South Korea, the intermediate class recruited 60 percent of its current members from the farming class, 15 percent from the intermediate class, 14 percent from the service class, and 11 percent from the working class. In Taiwan, the proportions are 42 percent, 17 percent, 22 percent, and 19 percent respectively. In Japan, the proportions are 39 percent, 34 percent, 16 percent, 11 percent respectively. It is no wonder that the intermediate class recruited the most from the farming class in East Asia

¹³See Table 6.1 in Morioka (1987); Tables 2 and 9 in Seo (1984). Urban petty bourgeoisie (self-employed and family workers) increased from 13.3 percent in 1950 to 15.5 percent in 1975 (Table 9 in Seo 1984). Percentages may be slightly different depending on operationalization of urban petty bourgeoisie. In the table cited, the percentage is the percent of self-employed households engaged in commerce and manufacturing among total households excluding self-employed professionals (see Seo 1984).

where the farming sector was relatively large until recently. What is most interesting is that one third of its current members were recruited from within the intermediate class in Japan. This is a much higher proportion than in South Korea or Taiwan. It is also interesting that the intermediate class recruited its members almost evenly from the urban classes. If we combine the analysis of marginal, outflow and inflow, we can conclude that the intermediate class has been remarkably stable in Japan unlike Taiwan or South Korea.

Analysis of inflow and outflow is important to the extent that it shows openness of class structure which people *directly experience, feel, and perceive* in a society. It has particularly strong implications for class formation. However, the analysis of inflow and outflow does not take into account the change in class composition into account. We do not know whether to attribute the crossnational difference we found to change in occupational (thereby class) composition or to inherent openness of class structure. The analysis of the mobility flows may disguise restricted life chances for people from low classes engendered by other factors. To resolve the issue we must use a statistical model that separates relative life chances, the association between class origin and destination, from class structure (marginal distribution).

Life Chances for Various Social Classes

The log-linear model technique has proved to be innovative in the analysis of mobility tables since the 1960s.¹⁴ First of all, we fit conventional log-linear models to discover patterns of social mobility in East Asia. The first model is the statistical translation of the hypothesis that a son's class position is not related to his father's class position although it allows cross-national variation in composition of origin and destination classes. This model is often called conditional independence (perfect mobility when only one country is analyzed). It is also called the baseline model in the sense that various constraints on the marginal are added to the model to test more specific hypotheses. Fitting this model against the mobility table produces 989.56 loglikelihood Chi-square (L^2) with 27 degrees of freedom (df) (Model 0 in Table 2). The discrepancy between observed values and values estimated on the basis of the conditional independence model is so big that it should be rejected at any conventional confidence level. It indicates that

¹⁴For application of log-linear models to mobility tables, Hout (1983) and Goodman (1984) are the most important references. Throughout this chapter, a statistical package called GLIM was used to fit various log-linear models to the data.

there exists association between son's and father's class position that cannot be attributed to the differences in class structure and sampling errors.

The next model is the hypothesis that sons are likely to hold the same class position as their fathers more often than other class positions. This hypothesis is often called class inheritance model. In Table 1 frequencies on diagonals are generally largest in each row, and we easily guess that class positions are somehow inherited between generations, although the meaning of class inheritance is ambiguous. Model 2 in Table 2 hypothesizes that there exists no association between son's and father's class position except for class inheritance which varies across the countries. In this sense, this model is called quasi-perfect mobility. Fitting this model to the mobility table yields 54.99 L^2 with 15 DF, which is also rejected at any conventional confidence level. However, this model reveals important points: this model remarkably improves upon the baseline model. It reduces L^2 by 94.4 percent, which implies that phenomena of class inheritance is essential to understand openness of class system in East Asia.

The parameters which are included to reproduce perfectly the frequencies on diagonals may be considered to be indicators to show how much class inheritance takes place in each class and each society. Since this model does not fit the data, estimates of the parameters are inevitably biased to a certain extent, but are still worth considering. In particular, these parameters have the merit that their meanings are intuitive. Estimates of inheritance rates are 3.79 for South Korea, 3.20 for Japan, and 2.18 for Taiwan for the service class, 1.13, 1.76, and 1.55 (in the same order) for the intermediate class, 1.44, 1.48, and 1.65 (in the same order) for the working class, and 9.11, 7.00, and 7.60 (in the same order) for the farming class.

Above all, it is surprising that inheritance rates of intermediate and working classes are not so large as to be statistically significant in South Korea. Even if the margin of errors is sufficiently taken into account, the inheritance parameters of intermediate and working classes are surprisingly

TABLE 2. GOODNESS OF FIT STATISTICS FOR SELECTED MODELS FOR $4 \times 4 \times 3$ TABLES

#	Model	L^2	df
0	O*C + D*C	989.56	27
1	O*C + D*C + DIAG	69.65	23
2	O*C + D*C + DIAG*C	54.99	15
3	O*C + D*C + O*D + CP1 + CP2 + CP3	33.61	18
4	O*C + D*C + O*D + CP1 + CP2 + CP3 + DIAG (C)	21.69	17

Note: O = Origin class, D = Destination class, C = Country, DIAG = Diagonal parameters, CP1 = Crossing Parameters, DIAG (C) = Constrained Diagonals.

low. The difference in inheritance rates of the intermediate class between South Korea and Japan is marginally significant whereas the difference is not statistically significant between South Korea and Taiwan or between Japan and Taiwan.

It is remarkable that the inheritance rates of the working class for all three societies are not statistically significant. The difference in inheritance rates of the service class is not statistically significant between South Korea and Japan, but is significant at the 95 percent confidence level between South Korea or Japan, on the one hand, and Taiwan, on the other. Finally, the inheritance rates of the farming class are the largest of all parameters. It implies that the parameter for the farming class contributes most to the improvement on the fit (of the class inheritance model) from the conditional independence model. However, the differences in these rates among South Korea, Japan, and Taiwan are not statistically significant.

We are reluctant to interpret these parameters too seriously until we examine some more models since the model does not fit the data. The fit may be improved by adding some more parameters on this model. The most popular are the so-called associational models, but the critical limit in using these models is that it requires an order among class categories (Goodman 1984). We don't assume a clear order among classes as we discussed in the previous section. The problem is related to the farming class. We do not know exactly where we should place it within the class structure.

One model that is attractive is the so-called crossing parameters model. Inheritance rate is a concept which is biased towards immobility by focusing on stayers rather than movers. The crossing parameter model is based on the concept of a class barrier, which is a more positive conception which perceives class mobility as movement across a class barrier or boundary (see Hout 1983). A barrier between some classes may be difficult to cross (so it may be said to be high) and barrier between other classes may be relatively easier to cross (so it may be said to be low). The class barrier works as a hindrance to people from a lower class but works as a shield against downfall for those who are from a higher class. The crux of this modelling is that, if a serious barrier stands between two social classes, intra-class mobility is likely to be much more frequent than inter-class mobility.

The crossing parameters model yields an acceptable fit ($L^2 = 33.61$, $df = 18$). Examination of parameter estimates discloses that the outcome does not differ much from the findings of the class inheritance model above. The most serious barrier, which is called sectoral barrier, in each society exists

between the farming class and non-farming classes. The estimates of the sectoral barriers are virtually the same for the three societies, meaning that for farmers' sons to obtain a nonfarming class position (or by the same score, for nonfarmers' sons to become farmers) is difficult in the same degree in South Korea, Japan and Taiwan. I remind you that the class inheritance rates of the farming class are also virtually the same. The barrier between the service class and other classes is also serious. The difference in barriers is not statistically significant between South Korea and Japan, but is marginally significant between South Korea and Japan, on the one hand, and Taiwan, on the other. This also confirms the findings from the class inheritance model. Another parameter is required to complete the model. It does not have any substantive meaning.

The crossing parameters model improves upon the class inheritance model conceptually as well as statistically. However, it also has some critical weaknesses: a statistical problem with the crossing parameters model is that the model is relying on the aggregate of many averages. For instance, the sectoral barrier ignores distinctiveness of mobility from farming class to each non-farming class and its reverse mobility (from each nonfarming class to farming class), all of which are captured by one mean (a single level of parameter). In the same way, mobility among nonfarming classes and mobility within farming class are represented by one mean (another single level of parameter). Distinctive sorts of social mobility are lumped together and therefore the parameter may be insufficiently sensitive to actual cross-national variation.

Another problem is conceptual. For instance, what would sectoral barrier concretely mean to farmers' sons? It is well-known that farmers and their offspring have much difficulty in adapting to urban environment whereas non-farmers have even more difficulty in becoming farmers. The sectoral barrier is supposed to measure these difficulties at the same time. What is the social meaning of the barrier in the world? Is the barrier good or bad for farmers' sons (or non-farmers' sons)? As soon as one attempts to probe into the parameter, one will realize that its social meaning is ambiguous. The inheritance rate is at best a descriptive measure quantifying that which needs an explanation without offering the explanation (see Hout 1984 for an elaboration; also see Hout 1989).

The crossing parameter model may be improved by adding parameters. However, we should make a critical decision at this juncture. We may further fit log-linear models along the conventional line. Or we may step back and ask what is it that we are trying to discover and whether the measurement really serves our goal. We will take the latter.

1. Farming Class

One thing clearly stands out so far with regard to social mobility in East Asia. Evaluation of overall social mobility or openness will depend on how the farming class or movers from the farming class have fared in social mobility. As is seen above, no class surpassed the farming class in terms of magnitude of the change experienced in the course of industrialization. The farmers constituted the largest social class that has declined the most drastically. Inheritance rate of the farming class is highest and class boundary between farming and non-farming classes is also most prominent. Nonetheless, log-linear models, associational models in particular, do not take this relative importance into account.

In addition, neither inheritance rate nor class barrier is satisfactory as a measure of life chances of farmers' sons. From a farmer's standpoint, social openness will be evaluated according to how successful farmers' sons are in occupational (thereby class) attainment in non-farming sectors, particularly relative to non-farmers' sons. Historically, this was especially true in East Asia since upward social mobility through accumulation of wealth in the farming sector was nearly blocked as is mentioned above. Occupational (or class) attainment which was considered to be upward mobility by farmers and farmers' sons was accomplished by becoming high-level government officials, business managers including owners, professionals such as doctors, lawyers and college professors, teachers or at least some sort of office workers, categorized as the service class in our analysis. Since the vast majority of farmers were land-owners (although their holdings were small) mobility into the intermediate class was, in most cases, horizontal rather than upward, and mobility into working class was downward or at best horizontal. In addition, few barriers existed for farmers' sons to join urban working class since urban industries, which have continued to expand rapidly, created more than a sufficient number of working-class positions for the movers in all three societies in East Asia. Consequently, in East Asia the subjective as well as the objective meaning of life chances of farmers' sons is the probability of attaining a service-class position.¹⁵

It is obvious that notions of both inheritance rate and sectoral effect can hardly tap into this concept of life chances of farmers' sons. The relative mobility rate may be a better conceptual tool. However, we do not apply this notion to a conventional mobility table. First, the non-farming classes of

¹⁵Sewell (1985) takes the same position with respect to France in the 19th century, but Blau and Duncan (1967) discusses and rejects it for the American case.

origin class are collapsed into one category to make the contrast between farming and nonfarming classes. Second, we combine the non-service destination classes to make a clear contrast between the service and non-service class destinations. Due to this modification of the mobility table, we can no longer claim that change in class structure is precisely controlled for. However, our measure of association between origin and destination class is not tainted by structural effects. The odds ratio is not affected by the marginal distribution. The odds ratio ($f_{11}f_{22}/f_{12}f_{21}$) that is calculated from the new 2-by-2 mobility table will be used as a measure of life chances of farmers' sons.¹⁶

Odds ratios estimated under the preferred model (Model 2 in Table 3) are 3.90 for South Korea, 2.96 for Japan, and 2.26 for Taiwan. These odds ratios are distinct. Linear country effect (denoted by ODC_L) is statistically significant (see the note to Table 3). It means that being a nonfarmer's son raises the odds of attaining a service-class position to attaining a nonservice-class one by a factor of 3.90 in South Korea. This factor is smaller in Japan and even smaller in Taiwan. We see that farm-origin people had the most disadvantage in class attainment in South Korea and the least in Taiwan among the East-Asian countries. This finding clearly shows that *life chances for farmers' sons are not the same among the three countries*. However, it does not necessarily contradict the findings from the conventional models above. Combining the findings, we may conclude that at the genotypical level, the "overall mobility" chances of farmers' sons were similar, but "upward mobility" chances were high in Taiwan, Japan, and South Korea in descending order.

This is an extremely important piece of evidence to reveal that mobility chances at the gross level disguise the serious disadvantage of farmers' sons in life chances at the genotypical level. In other words, massive change in class structure allowed farmers' sons to experience better life chances in

TABLE 3. FITTING RESULTS OF LOGLINEAR MODELS TO THE REDUCED $2 \times 2 \times 3$ TABLE

#	Loglinear Models	df	L^2	P
0	$O^*C + D^*C$	3	296.29	.000
1	$O^*C + D^*C + O^*D$	2	10.26	< .005
2	$O^*C + D^*C + O^*D + ODC_L \dagger$	1	0.30	> .10

Note: †The preferred model. Estimate of $ODC_L = 0.7607$ (anti-log of -0.2735 ; SE 0.0866).

¹⁶The L^2 for independence in the collapsed table relative to the L^2 for independence in the 4-by-4 table measures the proportion of total origindestination association captured in the new 2×2 table. For Korea, Taiwan, and Japan the proportions are 0.40, 0.31, and 0.18.

Taiwan or South Korea than in Japan, but once the structural effect is controlled for, one can see that the pattern of development impeded life chances for farmers' sons more in South Korea than in Japan while in Taiwan farmers' sons were disadvantaged, but less so than elsewhere.

In addition to the cross-national comparison of aggregate mobility rates, we are also interested in how life chances of farmers' sons have historically been changed for succeeding generations in each country. Comparing the historical pattern of the life chances will lay far more solid ground work than the cross-sectional analysis alone for the substantive conclusions that will be eventually made.

The problem is that a good measure of historical patterns of social mobility which would invite little controversy is not available. The easiest solution may be cohort analysis. Admitting that cohort analysis in general is a weak measure that cannot replace real historical analysis, it is necessary to interpret findings with caution. Fortunately in analyzing cross-national variation in historical patterns of life chances in East Asia, cohort analysis has a better chance to yield clear interpretation. The size of age cohort has been changed in a similar pattern: since after the post-war (Pacific War and Civil War in China and Korea and Pacific War in Japan) baby-boom generation, the size of age cohorts has gradually declined without interruption in East Asia. In addition, the occupational progression over the life course was similar except that on average a young man entered the labor force a little later in his life in Taiwan and South Korea than in Japan. The military conscription system in Taiwan and South Korea kept most young men in military service for about three years before they joined the labor force. Consequently, we can safely assume that both cohort and age effects are controlled for and thereby attribute any cross-national difference in changes in the life chances to period effects.

We construct four age-cohorts: 20-30, 31-40, 41-50, and 51 and over. Among these cohorts for our cases, those in the oldest one in East Asia experienced some massive historical event such as Pacific War, Civil War, or colonization when they were teen-ager or adults. It is not realistic to presume that sociological laws which apply in normal periods were not disrupted in such a period. Thus, we will avoid interpreting odds ratios for the oldest cohort. Once we ignore them, we find strikingly different patterns of life chances over the age-cohorts in East Asia.

Fitting results of several models appear in Table 4. The preferred model for the data from South Korea and Japan is Model 2, while the preferred model for the data from Taiwan is Model 1. In South Korea, (expected) odds ratios have increased proportionally increased (2.35, 3.22, 4.40) from the old

cohort to the young (Table 5). In Japan, (expected) odds ratios have decreased proportionally (4.28, 3.02, 2.13). In Taiwan, (expected) odds ratios have virtually been unchanged (1.97, 1.97, 1.97). These odds ratios mean that farmers' sons have faced increasing disadvantage relative to nonfarmers' sons in attaining membership to the service class in South Korea, decreasing disadvantage in Japan, and relatively stable disadvantage in Taiwan. In other words, life chances of farmers' sons measured by the upward mobility rate have worsened in South Korea, improved in Japan, and changed little in Taiwan during the course of industrialization in the period examined.

We will not draw more out of cohort analysis, being fully aware of its limitation. The findings above are admittedly not decisive but once they are combined with the findings from the cross-sectional analysis, we will have a more solid picture of the life chances of farmers' sons in East Asia. In sum, we find that barriers to move out of the farming sector were similar, but life chances measured by chance to obtain a service-class position varied substantially historically as well as geographically in East Asia: the life chances were not only lowest but also have worsened in South Korea, highest and stable in Taiwan, with Japan somewhere between the two, but having improved during the course of rapid industrialization.

TABLE 4. FITTING RESULTS OF LOG-LINEAR MODELS TO THE TABLES OF NON-FARMING AND FARMING CLASSES BY AGE-COHORT

#	Loglinear Models	df	South Korea		Japan		Taiwan	
			L ²	p	L ²	p	L ²	p
0	O*A + D*A	3	63.56	.00	113.96	.00	31.65	.00
1	O*A + D*A + O*D	2	2.55	>.10	6.34	<.05	2.49	>.10
2	O*A + D*A + O*D + ODA _L	1	0.11	>.10	0.08	>.10	2.48	>.10
3	O*D*A	0	0.00	1.00	0.00	1.00	0.00	1.00

Note: A = Agecohort. L² and P-value for the preferred model for each country are in bold-type.

TABLE 5. EXPECTED ODDS RATIOS UNDER THE PREFERRED MODEL

Country	41-50	31-40	20-30
South Korea	2.3482	3.2168	4.4042
Japan	4.2841	3.0237	2.1344
Taiwan	1.9664	1.9666	1.9669

Ratios of odds ratios:

Korea: 1.3696 (anti-log of 0.3145, SE = 0.2019)

Japan: 0.7058 (anti-log of -0.3484, SE = 0.1391)

Taiwan: 1.00.

2. Urban Classes

Once the farming class is separated from the class structure for analytical purposes, we are left with nonfarming classes, which may be called urban classes.¹⁷ Among urban classes, the hierarchy is undisputable.¹⁸ Service class, intermediate class, and working class are in clearly in descending order as we discussed above. Thus, associational models can be applied to urban classes. Since our class scheme has only three urban classes, the uniform association model, the simplest of this group, may suffice for our analytical purpose. This model assumes that distances between neighboring classes are equally a unit, which is an admittedly strong assumption.

The uniform association model is conceptually close to the regression model (see Hout 1983). Put into ordinary English, it hypothesizes that the higher the origin class position, the higher the destination class position. The model precisely states that one unit (level) increase in the origin class linearly raises logits (log odds) on entering the next higher class to a social class by a specific increment, which is constant between any adjacent classes. If the uniform association model fits the data from all the countries being compared, uniform association parameters (slopes) may be directly compared to judge in which country class background has a greater effect on class attainment.

Fitting results are presented in Table 6. The uniform association model produces a good fit for South Korea, an acceptable fit for Taiwan, and a poor fit for Japan. Thus, direct comparison of the parameters among the three countries is not straightforward. However, some cautions make a meaningful comparison possible.

First of all, the advantage in social mobility endowed by being from a higher origin class is more prominent in South Korea than in Taiwan. Adjacent odds ratios are 1.78 for South Korea and 1.44 for Taiwan. The difference in the two odds ratios is marginally significant. Since the uniform association model fails to give an acceptable fit, the parameter estimate is biased for Japan. However, assuming that it is not seriously biased, we may place Japan somewhere between South Korea and Taiwan. The odds ratio is 1.56 for Japan.

¹⁷Non-farming classes are not identical with urban classes. In terms of community non-farming classes are not precisely urban. A number of nonfarmers commute from rural areas. However, in terms of workplace, non-farming classes are predominantly urban. Thus, we will use the terms interchangeably keeping this discrepancy in mind.

¹⁸We do not assume any specific relationship between hierarchy and exploitation.

TABLE 6. FITTING RESULTS OF LOGLINEAR MODELS TO THE SUBTABLE OF URBAN CLASSES FOR EACH COUNTRY

#	Loglinear Models	df	South Korea		Japan		Taiwan	
			L^2	p	L^2	p	L^2	p
0	O + D	4	43.93	.00	123.91	.00	61.64	.00
1	O + D + DIAG	1	0.03	>.10	0.03	<.05	0.46	>.10
2	O + D + UA	3	1.92	>.10	33.13	<.05	7.67	>.05
3	O + D + UA + DIAG	1	0.03	1.00	0.03	1.00	0.46	1.00

Note: see Note for Table 4.

(Estimates of UA parameters under Model 2)

	South Korea	Japan	Taiwan
Estimates (S.E.)	0.5775 (0.0937)	0.4478 (0.0488)	0.3620 (0.0508)
Anti-log of estimates	1.78	1.56	1.44

An analysis of residuals tells that the failure of fitting for the Japanese data comes from the large discrepancy between the actual frequency (117) and the frequency (81) estimated under the uniform association model for immobility of the intermediate class, the amount of which is substantially larger than that estimated under the hypothesis of the linear relationship. If we fit this cell exactly (in other words, we ignore the cell), the uniform association model produces a very good fit for all three societies. Therefore, we may conclude that (family) class background affects class attainment more strongly in Taiwan, Japan, and South Korea in an ascending order. However, a qualification is required for interpretation: the cross-national difference is small. Only the difference between South Korea and Taiwan is marginally significant. Thus, the cross-national variation should not be emphasized too much.

At this point, we move away from the conventional log-linear model to examine life chances for each urban class as we did for the farming class. Saving detail, we report a short summary of analysis. The relative mobility rates for the service class are similar among the three societies. The parameter estimate is 3.18 for the three countries. In other words, a person from the service class has substantial advantage over one from other urban classes. However, the advantage is more or less the same for the three societies.

It is complicated to measure life chances for the intermediate class. One has to settle issues such as how to interpret immobility and how to reflect upward and downward mobility to the measurement of life chances. For various reasons, excluding immobility from the measurement, we employ

the ratio of upward mobility rate over downward mobility rate as life chances for the intermediate class. The ratios are 0.99 for Taiwan, 0.85 for Japan, and 0.69 for South Korea.¹⁹ These ratios have intuitive interpretation. In the case of Taiwan, the ratio, 0.99, means that the probability of upward mobility of sons of the intermediate class is about the same as the probability of downward mobility, controlling for class structure. We do not know whether the ratios are statistically distinctive, but the order of the ratios among the three countries is not surprising. Sons of the intermediate class in South Korea have the worst mobility pattern among them. We will not make much out of the difference between Taiwan and Japan. As is seen above, the inheritance rate is somewhat higher in Japan but the chances for mobile sons are better in Taiwan. Furthermore, the differences are not that large. The data do not allow any clear evaluation.

Life chances of the working class may not be crucial to understand formation of the working class in the societies in the period examined here. The structural mobility far outweighs the circular mobility. However, evaluating an industrial society from social fairness requires one to examine life chances for the working class. Social institutions or mechanisms, i.e. class barriers, which obstruct improvement of life chances for the working class, may be hidden behind the apparent high mobility that is mainly generated by compositional change in class structure.

As we do for the service class, we employ the ratios of two kinds of odds: odds of a person from urban nonworking class (service or intermediate class) on entering urban non-working class to entering the working class; and odds of a person from the working class on entering urban nonworking class to entering the working class. It measures how much the working class son is disadvantaged in comparison with a son of the service or intermediate class in class attainment.²⁰ The results of analysis are that the odds ratios estimated under the preferred model are generally 3.22. That is, a son of urban nonworking class has 3.22 times better odds than a son of the working class to attain a position within the urban nonworking class rather than within the working class. And the odds are the same for South Korea, Japan, and Taiwan. This is consistent with the finding from the fitting of the class inheritance model. These findings strongly indicate that life chances for the working class vary little among South Korea, Japan, and Taiwan.

¹⁹To calculate the ratios, we consider only cases of which both origin and destination classes are urban.

²⁰This measure is conceptually very similar with the one that was used as an indicator of openness of class structure by Miller (1960).

SUMMARY AND DISCUSSION

Before drawing conclusions, we need to summarize the findings. Our analysis of inflow and outflow on the mobility tables for the three countries reveals a number of important facts: (1) the farming class has rapidly declined as the three societies have been swiftly industrialized. South Korea experienced more radical change than Japan or Taiwan. (2) The farming class was the largest supplier of manpower for each urban class except the service class in Japan, which was already recruiting mostly from within the class. (3) Farmers' sons achieved upward mobility, meaning entering the service class, more in Taiwan or South Korea than in Japan. (4) The service class experienced the largest expansion and holds one third of present class composition in East Asia. (5) High proportion of sons of service class stayed in the same class. The proportion is large in South Korea, Japan, and Taiwan, in descending order. The differences are not large. (6) Long-distance downward mobility from the service class is substantially less in South Korea than in Taiwan or Japan. (7) The working class experienced the second largest expansion. The working class constitutes about 30 percent of male working population in Japan and Taiwan while 20 percent in South Korea. (8) The working class recruited the absolute majority (70%) of its members from the farming class in South Korea, with far less in Japan (50%) and Taiwan (45%). (9) Sons of the working class stayed in the same class substantially more often in Taiwan and Japan (50% each) than in South Korea (30%). (10) The long-distance upward mobility from the working class is of about the same amount among the three countries. (11) The intermediate class has expanded the most in South Korea. Its size (the proportion among the male working population) is similar among the three societies at present. (12) One out of four sons stayed in the same class in each of the EastAsian countries. (13) Self-recruitment of the intermediate class is much greater in Japan than in South Korea or Taiwan. (14) A greater proportion of movers from the intermediate class entered the service class rather than the working class, which is counter-evidence to the thesis of proletarianization.

We summarize the findings which are directly related to the common-sense class openness. As far as farmers' sons are concerned, the common-sense class openness was greater in Taiwan and South Korea than in Japan. Upward mobility from the farming class was greater in Taiwan and South Korea than in Japan. In terms of downward mobility from the service class, the class openness was somewhat greater in Taiwan than in Japan, and

substantially greater in Japan than in South Korea. There was the same amount of long-distance downward mobility in Taiwan and Japan but somewhat greater amount of downward mobility in Taiwan than in Japan. There was not only the least amount of downward mobility but also the least amount of long-distance downward mobility in South Korea. In terms of upward mobility from the working class, South Korea led Taiwan and Japan somewhat. Short-distance upward mobility was greater in South Korea than in Taiwan or Japan. There was little difference in the amount of stayers or the pattern of movers of the intermediate class. These findings tell that society in Taiwan indisputably experienced the greater amount of the common-sense class openness than South Korea or Japan. South Korea led Taiwan in upward mobility from the working class but the magnitude of upward mobility was a little different and its average distance was rather short. Thus, we do not think that the little edge in the working class mobility could compensate for the diametric difference found in the mobility of farming and service classes. We can hardly judge which country led among South Korea and Japan.

The finding that Taiwan led South Korea in terms of the common-sense class openness is a bit surprising. The farming class has declined more radically and the service class has expanded also somewhat more in South Korea than in Taiwan. In other words, the structural change which is supposed to be conducive to class openness was greater in South Korea than in Taiwan. Then, how did Taiwan experience more common-sense class openness than South Korea? The common-sense class openness has two components induced by different factors: one component is the openness which is generated simply by change in occupational (or class) composition; the other is the openness which is engendered by lowering class barriers. We suspect that society in Taiwan may have lower class barriers than in South Korea. This leads us to the summary of life chances (class openness) controlling for structural change.

(1) The farming class has the highest inheritance rate among social classes in East Asia. The inheritance rates are similar among the three countries. The sectoral barrier is also the highest among the class barriers and is nearly constant among the countries. (2) Inheritance rate of the service class is the highest in South Korea, Japan, and Taiwan, in descending order. The barrier between the service class and the other classes is also considerably large. It is similar between South Korea and Japan, but somewhat lower in Taiwan. (3) Inheritance rate of the working class is similar among the three countries. (4) Inheritance rate of the intermediate class is similar between Japan and Taiwan, but lower in South Korea.

(5) Upward mobility chances, life chances in our definition, of farmers' sons were the highest in Taiwan, Japan, and South Korea in descending order. (6) Life chances of farmers' sons have worsened in South Korea, been stable in Taiwan, and have improved in Japan.

(7) Among urban classes, class background affects class attainment more strongly in South Korea, Japan, and Taiwan in the descending order. The cross-national difference, however, is not large. (8) A person from the service class retains a substantial advantage over a person from the other urban classes in class attainment. However, the advantage is the same for the three societies. (9) The intermediate class has worse life chances in South Korea than in Taiwan or Japan. (10) Life chances for the working class vary little among the countries.

From the findings about life chances a clear order emerges: life chances are greater in Taiwan than in Japan, and in Japan than in South Korea. Farmers' sons have most life chances in Taiwan; class effects on class attainment are the smallest; Taiwan is tied with Japan in life chances of the intermediate class, ahead of South Korea; South Korea was the last in life chances for the farming class and the intermediate class; South Korea displays the largest class effects on attainment of a position within urban classes.

With regard to life chances for the farming class, there is a clear order among the three countries. In contrast, cross-national differences in life chances for urban (nonfarming) classes are not salient enough to allow a strong conclusion. Class effects on urban class attainment are in an order but are not large. Life chances for service and working classes are the same for the three countries. Life chances for the intermediate class in Taiwan and Japan are larger than in South Korea. However, we cannot deny that the variation for the intermediate class is based on shaky ground.

Combining findings about the common-sense class openness and life chances together, we conclude that the capitalist class system which has emerged in the course of rapid industrialization is most open in Taiwan among the three East Asian countries. This class openness in Taiwan was generated by both a shift in class composition and openness in class structure. The openness in class structure is especially important because it is the factor that made society in Taiwan more open than the others. The cross-national difference in openness was mainly determined by cross-national variation in life chances for the farming class and the intermediate class. Finally the cross-national difference in life chances for the farming class was decisive in generating the cross-national variation in overall class openness.

We do not have space for speculating on causes of the cross-national variation in class mobility (for some attempts, see Yun 1994). However, we can conclude that industrialization has been accompanied by substantial differences and commonalities in class structure and mobility in East Asia. Our next agenda will be to discover the mechanism which has generated such intriguing patterns of class mobility.

REFERENCES

- Ahn, Kook-Shin. 1992. "Trends in the Size Distribution of Income in Korea." *Korean Social Science Journal* 18: 27-47.
- Blau, Peter M., and Otis Dudley Duncan. 1967. *The American Occupational Structure*. New York: John Wiley & Sons.
- Braverman, Harry. 1974. *Labor and Monopoly Capitalism*. New York: Monthly Review Press.
- Brofenbrenner, Martin, and Yasukichi Yasuba. 1987. "Economic Welfare." Pp. 93-136 in *The Political Economy of Japan: Volume 1. The Domestic Transformation*, edited by Kozo Yamamura and Yasukichi Yasuba. Stanford: Stanford University Press.
- Cole, Robert, and Ken'ichi Tominaga. 1976. "Japan's Changing Occupational Structure and Its Significance." Pp. 53-95 in *Japanese Industrialization and Its Social Consequences*, edited by Hugh Patrick. Berkeley: University of California Press.
- Erikson, Robert, and John H. Goldthorpe. 1987a. "Commonality and Variation in Social Fluidity in Industrial Nations. Part 1: A Model for Evaluating the 'FJH Hypothesis' " *European Sociological Review* 3 (May): 54-77.
- . 1987b. "Commonality and Variation in Social Fluidity in Industrial Nations. Part 2: the Model of Core Social Mobility Applied ." *European Sociological Review* 3 (September): 145-66.
- Erikson, Robert, John H. Goldthorpe, and Lucienne Portocarero. 1982. "Social Fluidity in Industrial Nations: England, France and Sweden." *The British Journal of Sociology* 33 (March): 1-33.
- Featherman, David L., and Robert M. Hauser. 1978. *Opportunity and Change*. New York: Academic Press.
- Fei, John C. H., Gustav Ranis, and Shirley W. Y. Kuo. 1979. *Growth with Equity: The Taiwan Case*. New York: Oxford University Press.
- Giddens, Anthony. 1973. *The Class Structure of the Advanced Societies*. New York: Harper & Row.
- Goldthorpe, John H. 1980. *Social Mobility and Class Structure in Modern Britain*. Oxford: Clarendon Press
- . 1992. "Employment, Class, and Mobility: A Critique of Liberal and Marxist Theories of Longterm Change." Pp. 122-46 in *Social Change and Modernity*, edited by Hans Haferkamp and Neil J. Smelser. Berkeley: University of California Press.
- Goldthorpe, John H., and Keith Hope. 1974. *The Social Grading of Occupations: A New Approach and Scale*. Oxford: Clarendon Press.
- Goodman, Leo. 1984. *The Analysis of Cross-Classified Data Having Ordered Categories*. Cambridge: Harvard University Press.

- Haggard, Stephan. 1990. *Pathways from the Periphery: The Politics of Growth in the Newly Industrializing Countries*. Ithaca, NY: Cornell University Press.
- Hout, Michael. 1983. *Mobility Tables*. Beverly Hills: Sage.
- _____. 1989. *Following in Father's Footsteps: Social Mobility in Ireland*. Cambridge: Harvard University Press.
- Hsiao, Michael. 1986. "Development Strategies and Class Transformation in Taiwan and South Korea: Origins and Consequences." *Bulletin of the Institute of Ethnology* 61 (Spring).
- Ishida, Hiroshi, John H. Goldthorpe, and Robert Erikson. 1991. "Intergenerational Class Mobility in Postwar Japan." *American Journal of Sociology* 96 (4): 954-92.
- Kim, Young Jong. 1992. *Corruptionology*. Seoul: Soong-Sil University Press.
- King, Russell. 1977. *Land Reform: A World Survey*. Boulder, CO: Westview Press.
- Kuznets, Simon. 1966. *Modern Economic Growth*. New Haven: Yale University Press.
- Lipset, Seymour Martin, and Hans L. Zetterberg. 1966. "A Theory of Social Mobility." Pp. 561-73 in *Class, Status, and Power: Social Stratification in Comparative Perspective*, edited by Reinhard Bendix and Seymour Martin Lipset. New York: The Free Press.
- Miller, S. M. 1960. "Comparative Social Mobility." *Current Sociology* 9: 1-89.
- Morioka, Koji. 1989. "Japan." Pp. 140-76 in *The Capitalist Class: An International Study*, edited by Tom Bottomore and Robert J. Brym. New York: New York University Press.
- Seo, Kwan-Mo. 1984. *Class Structure and Class Differentiation of Contemporary Korean Society*. Seoul: Korean Sociological Association.
- Sewell, William H., Jr. 1985. *Structure and Mobility: The Men and Women of Marseille, 1820-1870*. New York: Cambridge University Press.
- Sorokin, Pitirim, and Carle C. Zimmerman. 1929. *Principles of Rural-Urban Sociology*. New York: Henry Holt and Company.
- Stinchcombe, Arthur. 1966. "Some Empirical Consequences of the Davis-Moore Theory of Stratification." Pp. 69-72 in *Class, Status, and Power: Social Stratification in Comparative Perspective*, edited by Reinhard Bendix and Seymour Martin Lipset. New York: The Free Press.
- Yun, Young-Min. 1994. "Economic Development and Social Fluidity: Capitalist Developmental State and Class Mobility in Japan, South Korea and Taiwan." Unpublished Ph.D. dissertation. University of California, Berkeley.

Yearbooks

- Korea Statistical Yearbook (KSY)* 1961, 1990
Statistical Yearbook of Republic of China (SYRC) 1990
Statistical Yearbook of Japan (SYJ) 1951, 1976

YOUNG-MIN YUN received his Ph.D. in sociology from University of California at Berkeley in 1994 and is currently a lecturer at Sogang University.