Consequences of Rapid Fertility Decline in the Republic of Korea: — Issues and Solutions —

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During the last three decades, efforts to deal with population problems in Korea have focused largely on reducing population growth. The national population control program has been a major means of achieving this goal.

Between the early 1960s and 1990, evidence from a national survey in 1991 indicates that the percent of current use of contraception rose from about 12 percent to 80 percent and the total fertility rate fell to 1.6, representing one of the most rapid fertility transitions in the developing world. In conjunction with this rapid reduction in fertility, mortality also improved significantly during this period. Thus, Korea has virtually completed the demographic transition from high birth and death rates to low birth and death rates during the same period. It is widely recognized that Korea has reached demographic maturity and has also achieved remarkable econmic development at the same time.

The world's demographic history shows that the demographic transition which almost every industrialized country has gone through from a predominantly rural, illiterate society with high birth and death rates, to a predominantly rural, illiterate society with high birth and death rates, to a predominantly urban, educated society with low birth and death rates –usually takes well over a century, but in Korea, that process has taken only a few decades.

On the other hand, the consequences of a rapid fertility decline bring about various demographic and social issues which we have to take into consideration for future socioeconomic development policy concerning the well being of the Korean people. Some of issues for policy consideration can be broadly summarized as follows;

- 1. Gradual imbalance of sex ratio at birth due to traditional son preference behavior.
- 2. Latent effect of inevitable population ageing and increasing dependency burden on behalf of the elderly for the public sector.
 - 3. Changes in family life cycle and rapid transformation form a large to a small family.
- 4. Increasing demand for now social roles for women, supported by easing of childcare burdens within households,

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I. Introduction

Until the early 1960s, the Republic of Korea had a high annual population growth rate of 2.9 percent. It was, however, underdeveloped economically and socially as well. Korea was one of the poorest countries with a per capita income of U.S. \$82 in 1961. Thus, Korea experienced population problems that led to social problems such as housing shortages, food shortages, and education and transportation difficulties, so the government endeavored to limit the growth of its population. In recognition of the need to curb the rapid increase in the population growth rate effectively, the Korean government initiated a national family planning program in 1961.

Korea has experienced a pronounced fertility decline since the 1960s when both the family planning program and a series of five-year economic development plans were introduced. The total fertility rate decreased from 6.0 in 1960 to 1.7 in 1985 and 1.6 in 1990, and the annual growth rate declined from 2.9 percent in 1960 to 0.9 percent in 1992. Many studies of Korea's fertility decline have suggested that both socioeconomic development and the family planning program have played a key role in the decline. That is, factors such as a strong family planning program supported by the government, females' high educational attainment, econmic development, the prevalence of mass media and transportation, have impacted on the rapid fertility decline.

It is, however, also true that Korea has maintained a rather low level of female labour force participation and a low level of gender equality in labour force compared to other countries with similar high levels of socioeconomic development and fertility decline.

The rapid decline in the fertility rate has brought about many positive results in the socio -economic sphere. It has alleviated such social problems as the housing shortage, the food shortage, and education and transportation difficulties. Such problems could otherwise have become worse. The rapid decline in fertility has also played a significant role in Korea's development. Economists generally say that every percent of population growth requires 3 or 4 percent growth in the gross national product. This means that a population growing at 1 percent a year needs to consume 3 to 4 percent of the GNP in order to provide the same of living for the added population. In this respect, with the rapid fertility decline, Korea could save a large proportion of the GNP for reinvestment in the economy. It is generally recognized that the rapid fertility decline and thus swift decrease in population growth rate made great contributions to the Korea economy.

On the other hand, it is also true that the rapid decline in fertility has caused negative effects in the korean society. In this paper, mainly the issues resulting from the rapid fertility decline will be discussed.

II. Type of Fertility Decline

The fertility decline in Korea during the last three decades was typical. The overall decline in the 1960s and the 1970s resulted mainly from a drastic fertility decline in the older age groups of 30 and over. As can be seen in Table 1, the age-specific fertility rates of the 30 or over groups decreased almost by half between 1960 and 1970, and decreased more significantly in the 1970s. The younger groups, however, showed a relatively minor decline during this period. This phenomenon was reflected also in the age-specific marital fertility rate trend, which is presented in Table 2. As the table

shows, while the marital fertility rate of the 20-24 age group remained at almost the same level between 1960 and 1980, those of the groups of 30 or over declined remarkably. In fact, the fertility rate of the 20-24 age group decreased to some degree between 1960 and 1970. This was caused by an increase in age at marriage, and its contribution to the overall level of fertility was minor.

Table 1. Age Specific Fertility Rate in Korea

Unit: per 1,000 women

Year	CBR(%)	TFR	15~19	20~24	25~29	30~34	35~39	40~44	45~49
1960	4.20	6.0	37	283	330	257	196	. 80	14
1966	3.19	5.4	15	205	380	242	150	58	10
1970	2.95	4.3	18	185	307	197	101	44	13
1974	2.47	3.6	11	159	276	164	74	29	3
1980	2.40	2.8	8	168	263	93	24	5	· —
1985	1.64	1.7	9	119	162	40	8	2	0.4
1990	1.56	1.6	3	62	188	50	7	1	_

Source: 1) Economic Planning Board/Bureau of Statistics, Report on the Vital Statistics, 1989.

2) Korea Institute for Health and Social Affairs, The 1991 National Fertility and Family Health Survey, 1992.

Table 2. Trend of Marital Fertility Rate

Unit: per 1,000 Married women

Year	20~24	25~29	30~34	35~39	40~44	45~49
1960	447	351	298	232	117	22
1970	450	356	223	122	53	8
1975	439	309	148	64	22	3
1980	458	292	103	28	7	1
1985	414	209	45	9	2	0.5
1987	271	192	41	6	· 4	-

Source: 1) Economic Planning Board/Bureau of Statistics, The 1985 Population and Housing Census, 1988.

 Korea Institute for Health and Social Affairs, The 1991 National Fertility and Family Health Survey, 1992. The period of 1980~1990 is characterized by a fertility decline in the younger age groups. The fertility rates of the 25~29 and the 20~24 groups decreased from 263 and 168(per 1,000 women) in 1980 to 188 and 62(per 1,000 women) in 1990, respectively. The fertility decline in latter age group was not so notable in this period because there was not much margin left for further reduction.

The fertility decline occurred on so large a scale that both the cohort and period fertility rates showed rapidly and continuously declining trends. It may be theoretically possible that although cohort fertility is low, period fertility is high. Such a situation can be brought about by some intermediate factors such as birth spacing, age at marriage and number of women at reproductive ages. A decrease in birth spacing and age at marriage, and an increase in the number of women at reproductive ages can lead to an increase in period fertility without affecting cohort fertility.

Korea experienced a baby boom in the late 1950s and has a relatively large number of births in the late 1970s as an echo of the baby boom generation (See Figure 1).

Birth intervals have shortened steadily. As is shown in Table 3, both the first and the second birth intervals decreased considerably. Particularly, the first interval was 30.2 months for the marriage cohort of 1944~55, but it decreased by two-thirds for the cohort of 1981~1985.

These factors might have the effect of retarding the decline in period fertility, but could not cause a notable difference in the speed of the decline between cohort and period fertility rates.

In Table 1, the age cohort which had almost completed its full reproductive life span by 1990 are those aged $15\sim19$ and $20\sim24$ in 1960, and those aged 15~19 in 1966. Although some years(1966 and 1974) are not exactly in the five-year interval, summing up the rates diagonally provides an approximate indicator of cohort fertility. The completed fertility rates of the cohorts aged 20~24 and 15~19 in 1960 are 4.9 per a woman(assuming that the age specific fertility rate when this cohort was 15~ 19 years old was 37 per 1,000 women) and 3.7 per woman. The completed fertility rate of those aged $15\sim19$ in 1966 is 2.9 per woman, assuming that ASFR when this cohort will become 45~49 years old will be 'zero'. A difference of 1.0 is observed among these three cohorts.

The completed fertility rates of the cohorts younger than these are not fully covered by Table 1. In connection with this, the National Fertility and Family Health Survey conducted in 1988 by the korea Institute for Health and Social Affairs provides expected completed fertility rates(number of living children-number of children to add), which can be used as proxies for actual completed fertility rates although they are based on the number of living children instead of the number of births. As Table 4 shows, the expected fertility rate of the cohort aged 40~44 in 1988, when the survey was conducted, is 2.94 per woman. This age cohort was about 18~22 years old in 1966 and shows quite a close rate to the completed fertility rate, 2.9,

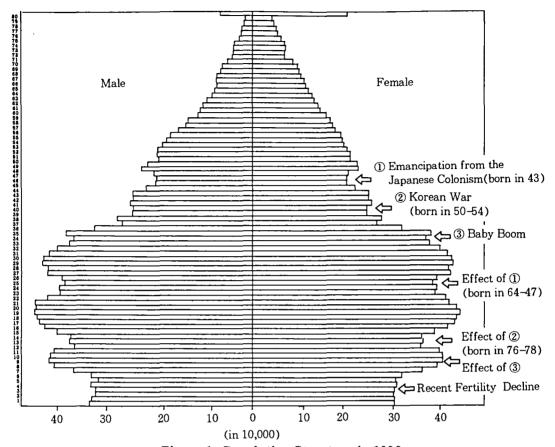


Figure 1. Population Structure in 1990

of the cohort aged 15~19 in 1966.

The expected fertility rate is 2.54 in the group of $35\sim39$, 2.15 in the group of $30\sim34$ and 1.83 in the group of $25\sim29$. The differentials among the groups reflect a cohort fertility trend. The differentials between contiguous age groups are around $0.3\sim0.4$. This fact may mean that roughly on the average, the cohort fertility rate decreased by about 0.6 per decade.

Table 3. Changes in Birth Intervals In Korea

		Unit: months
Marriage Cohort	First Interval	Second Interval
1948~55	30.2	36.0
1956~60	27.1	32.0
1961~65	21.6	30.3
1966~70	18.6	28.5
1971~75	16.7	28.5
1976~80	15.0	26.7
1981~85	11.8	21.7

Source: Sea-Baick Lee, Analysis of Birth Interval in Korea, Fertility Changes in Korea, 1987.

Table 4. Expected Total Number of Children

Unit: person

====	Age Group	No. of Living Children	No. of Additional	Expected Total No.
		(A)	Children Wanted(B)	of $Children(A+B)$
	15~24	0.98	0.64	1.61
	25~29	1.49	0.33	1.83
	30~34	2.06	0.09	2.15
	35~39	2.52	0.01	2.54
	40~44	2.93	0.01	2.94
	Total	2.04	0.18	2.22

Source: KIHASA, The 1988 National Fertility and Family Health Survey, 1989.

In the light of the rapid decline in both cohort fertility and period fertility, it can be said that the difference between cohort fertility and period fertility has not been significant in Korea.

III. Issues Resulting from the Rapid Fertility Decline in Korea

A. Imbalance in Sex Ratio at Birth

1. Preference for Son

There still remains a strong son preference in Korea. Table 5 shows that 40.5 percent of women aged $15\sim49$ who ever married think that a son is quite necessary, and 30.7 percent think that having a son, is better than not.

There are conflicting opinions on the effects of boy preference on the overall fertility level in Korea. One is that boy preference worked as a factor retarding the speed of the fertility decline and will continue to exert an influence on fertility¹⁾. The other is that in the current situation in which the small family norm is widespread, boy preference will not have a notable influence on the fertility level²⁾, but the results of the 1988 National Fertility and Family Health Survey support the latter position. As can be seen in Table 6, only 12.8 percent and 8.0 percent of the women with only two or three daughters want to bear more children.

Kwon, Y. H. and H. Y. Lee, "Preference for number and Sex of Children in a Korean Town", Paper Presented at the Conference on the Measurement of Preference for Number and Sex of Children, East-West Center, Honolulu, Hawaii, June 2∼5, 1975.

²⁾ Cho, L. J., F. Arnold and T. H. Kwon, "The determinants of Fertility in the Republic of Korea", No. 14, Committee on Population and Demography, National Academy Press, Washington, D.C., 1982.

Table 5. Perceived Need for a Son, Women aged 15~49 and Ever Married

Unit: %

Age Group	'Quite Necessary'	'Doesn't Matter'	'Better'	'Don't Know'	Total		
15~24	28.0	41.4	29.6	1.0	100.0		
25~29	27.7	36.0	35.3	1.0	100.0		
30~34	34.1	31.3	33.9	0.7	100.0		
35~39	41.3	26.7	31.1	0.9	100.0		
40~44	50.4	20.6	28.4	0.6	100.0		
45~49	63.1	16.1	20.5	0.3	100.0		
Whole	40.5	28.0	30.7	0.8	100.0		

Soure: KIHASA, The 1991 National Fertility and Family Health Survey, 1992.

Two-children families prevail in Korea. Although couples do not have the desired number of sons up to the second or third childbearing, they are quite likely to quit childbearing, but the problem is not what they do after having two or three children, but rather what they do up to the second or third childbearing.

Even if there are no reliable data on the prevalence of prenatal selection of sex and the abortion of female fetuses, it is obvious that many couples resort to the pre-birth practice of sex selection and induce abortion to avoid the risk of not having the desired sex-composition of children with reduced childbearing.

Table 6. The Proportion of Women Who Want More Children (1988)

Unit: %

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No. of Children	'Want no More'	'Want More'	'Not Decided'	Total
One				
Son	61.2	34.2	4.6	100.0
Daughter	39.4	56.0	4.6	100.0
Whole	52 . 5	42.9	4.6	100.0
Two				
One Son+One Daughter	99.2	0.7	0.1	100.0
Two Sons	99.1	0.7	0.2	100.0
Two Daughters	80.9	12.8	6.3	100.0
Whole	96.6	2.3	1.1	100.0
Three				
Two Sons+One Daughter	99.8	0.2	_	100.0
One Son+two Daughters	99.3	0.6	0.1	100.0
Three Sons	100.0	_	-	100.0
Three Daughters	90.4	8.0	1.6	100.0
Whole	98.7	1.1	0.2	100.0

Source: KIHASA, The 1988 National Fertility and Family Health Survey, 1989.

2. Sex Ratio at Birth

It is difficult to obtain reliable data on prenatal sex-selection through any channel of data collection. In the 1988 National Fertility and Family Health Survey, only 3.9 percent of currently married women aged 15~44 replied that they had a fetal sex examination. This may be radically under-estimated.

It might be much more effective to investigate the sex ratio at birth trend.

As is shown in Table 7, the sex ratio at birth (per 100 female births) markedly increased from 106.9 in 1982 to 113.6 in 1988. If we take a look at the trend by birth order, the situation is worse. While the sex ratio of the first birth increased slightly from 105.5 to 107.2 in 1988, those at the second and the third births jumped from 106.1 and 109.3 in 1982, to 113.5 and 170.5 respectively in 1988. Furthermore for fourth births, the sex ratio increased alarmingly from 114.2 to 199.1 during the same period. Since the parity progression rate from the second to a higher order is relatively low, the sex ratio of the third or fourth births may not be of great importance.

As Table 8 shows, third or more births occupy no more than 7.4 percent of total births in 1988.

The sex ratio of the first and the second may well, however, attract attention. While the sex ratio of first births remains at a moderate level, that of the second greatly surpasses the random biological level, say, 105. It is not possible to predict in what direction this trend will proceed. It is, however, certain that unless the current

trend is effectively curbed, there will be a serious problem in the marriage market in the near future.

Table 7. Sex Ratio at Birth

	Unit	: per 100 F	emale Births
Birth Order	1982	1985	1988
Total	106.9	110.0	113.6
1st	105.5	106.3	107.2
2nd	106.1	108.2	113.5
3rd	109.3	131.7	170.5
4th	114.2	153.8	199.1

Source: National Statistics Office, Annual Report on the Vital Statistics, 1989, Sex ratio early child population from 1990 census report.

Table 8. Composition of Births by Order
(1988)

						mit: %
Birth	1 at	2nd	329	1+h	5+h	Total
Order	lst er	ZIIU	Siu	4111	Jui	Total
%	53.9	38.7	5.7	1.2	0.5	100.0

Source: National Statistics Office, Annual Report on the Vital Statistics, 1989.

Sex Ratio of Population at Ages Eligible for Marriage

Table 9 shows the trend in sex ratios of population at ages eligible for marriage which are assumed to be 25~29 for males and 20~24 for females. The sex ratio of these age groups was 104.7 in 1990, and is expected to increase to as high as 119.4 in 2000 and 128.6 in 2010. In only one or two decades, the supply of males in the marriage market will exceed the demand by a great deal. Such situation will work towards

adding to social tensions.

Table 9. Sex Ratio of Population at Ages
Eligible for Marriage

Unit: 1.000 persons Male Female Sex Ratio Year $(25 \sim 29)$ $(20 \sim 24)$ (%) 1985 100.2 2,093 2,089 2,083 1990 104.7 2,181 1995 2,184 101.3 2,155 2000 2,263 1.896 119.4 2010 1,946 128.6 1,513

Source: National Statistics Office,

1990 Census Report.

B. Population Aging

A decresing fertility rate, improved mortality and the extension of life expectancy are major factors leading to the aging of the population. The tempo and type of change in these factors determine those aging in the population, by affecting the proportion and the absolute number of the aged population.

A change in fertility affects population aging indirectly in that it relates to the relative proportion of the aged. Changes in mortality and life expectancy affect population aging directly since they directly determine the absolute number and proportion of the elderly.

It is, however, recognized that the effects of a fertility decline are greater than those of improved mortality and life expectancy. Improvement in infant mortality rather works for an increase in the size of the younger population and a decrease in the relative proportion of the eld-

erly. Improvement in the mortality of the aged may have to be long-term to be enough to influence overall population aging, In conjunction with the rapid decline in fertility stated above. the mortality rate has also decreased considerably. As can be seen in Table 10, the crude death rate declinde from 13.0(per 1,000) in 1960 to 5.8 per 1.000 in 1986. Life expectancy at birth increased from 63.2 years in 1970 to 70.1 years in 1988. Motivated and accelerated by such a rapid decline in mortality and fertility, the Korean population is aging at an unprecedented pace. Table 11 shows the trend in the proportion of the elderly aged 65 or over, and the dependency ratio. Those aged 65 or over increased from 0.7 million, 2.9 percent of total population, in 1960 to around 2.1 million, 5.0 percent of total population, in 1990, and will reach 3.2 million, 6.8 percent of total population, in 2000 and 6.6 million, 13.1 percent of total population, in 2021. According to UN criteria, when the proportion of those aged 65 or over is below 4 percent, it is defined as a young population, while over 7 percent is considered an old population. Classified by these criteria, the Korean population had already left the area of young population around 1982 and is expected to enter the area of old population between 2015 and 2021.

Even if the total dependency ratio is expected to decrease mainly due to a rapid decline in the younger dependency ratio, the elderly dependency ratio is expected to increase steadily. As a result, the index of aging, which is the percentage of those aged 65 or over to those aged under 15, will increase significantly. As is

shown in the table, the elderly population was only about one-fifth the size of the younger population in 1990, but this will increase to about four-fifths by 2021. This fact means that support for elderly dependents will become a heavy burden on Korean society in the near future.

Population aging in Korea is characterized by its rapid tempo and spacial disparities. Although the fertility rate began to decline from the early 1960s, it was not until the late 1970s, when the fertility rate started to decrease at a very rapid pace, that the Korean population initiated its aging process.

Table 10. Trends in Crude Death Rate and Life Expectancy at Birch

	1970	1980	1985	1988
CDR(per 1,000)	9.8	6.7	6.2	5.9
Life expectancy(years)	63.2	65.8	68.7	70.1

Source: Economic Planning Board, Bureau of Statistics, Report in the Vital Statistics and Population Projection, 1989.

Table 11. Population Aging Trend

Total 0		0-	14	15-64		65 +		Dependency Ratio(%)			Index of
Year	Pop	1,000	(%)	1,000	(%)	1,000	(%)	Total	Younger	Elderly	Aging(%)
1960	25,012	10,588	42.3	13,698	54.8	726	2.9	82.6	77.3	5.3	6.9
1970	32,241	13,709	42,5	17,541	54.4	991	3.1	83.9	78.2	5 .7	7.2
1980	38,124	12,951	34.0	23,717	62.2	1,456	3.8	60.7	54.6	6.1	11.2
1985	40,806	12,305	30.2	26,759	65.6	1,742	4.3	52.5	46.0	6.5	14.2
1990	42,869	11,077	25.8	29,648	69.2	2,144	5.0	44.5	37.3	7.2	19.4
1995	44,851	10,400	23.2	31,908	71.1	2,543	5.7	40.6	32.6	8.0	24.5
2000	46,789	9,917	21.2	33,705	72.0	3,168	6.8	38.8	29.4	9.4	31.9
2005	48,434	9,841	20.3	35,636	71.5	3,956	8.2	39.8	28.4	11.4	40.2
2010	49,683	9,510	19.1	35,505	71.5	4,668	9.4	39.9	26.8	13.1	49.1
2015	50,346	8,790	17.5	36,146	71.8	5,410	10.7	39.3	24.3	15.0	61.5
2021	50,586	7,989	15.8	35,972	71.1	6,625	13.1	40.6	22.2	18,4	82.9

Source: Office of Statistics, Population Projection (1990~2021), 1991.

The effect of the decline in the birth rate in the 1960s was offset by a decline in mortality so that the age structure of the population remained more or less stable. As can be seen in Table 11, the proportion of those aged 65 or over increased by only 0.2 percent point between 1960 and 1970. In this sense, it can be said that the aging process in Korea has a short history, but population aging, once initiated, has proceeded quite rapidly since the late 1970s. It took no more than about one and a half decades for the proportion of the elderly to increase from 3.1 percent to 4.3 percent, and it is expected to take around the same period to increase from 4.3 percent to 7 percent, which is the criterion of UN to be classified as old population. It might be a good idea to compare this with the tempo of the aging process in western countries which have already completed the demographic transition. It took 45 years (from 1930 to 1975) in Germany and England, 115 years(from 1865 to 1980) in France, and 70 years (from 1945 to 2015) in the United States for the proportion of those aged 65 or over to increase from 7 percent to 14 percent, but it is expected to take only 25 years(from 2000 to 2025) in Korea.

Another important aspect of population aging in Korea is a regional disparity. Table 12 shows the provincial(including major cities) disitribution of the expected elderly proportion based on a recent poulation projection³⁾ by subnational areas. A considerable variation in the proportion of the aged population can be observed among provinces or major cities. Six major cities represent a lower proportion than province areas. A primary source of this disparity is the rural-to-urban migration of the working age population. The six major citites are main destination of the migration movement.

Such an unparalleled speed of aging will make it impossible for Korean society to have enough time to be fully prepared for the problems arising from population aging in the coming decade. The rapid incresase in the number and proportion of the elderly will impose a great burden on the social service system, public aid, pensions and medical insurance.

It cannot be said that this population aging trend is completely attributable to the fertility decline. Improvement in mortality and life expectancy has its own share in the rapid aging process. It is, however, obvious that population aging has been accelerated mainly by the fertility decline. In this sense, the rapid aging of the population might be a kind of price for the achievements of the national family planning program, which was pivotal in the drive for the rapid fertility decline during the last three decades. The fertility decline not only increased the relative proportion of the elderly, but it also affected the life cycle the family considerably.

The decreased number of children to support lengthened the period of the empty nest stage. As in Figure 2, the time interval between the marriage of the last child and the death of the husband has been increasing over the last three decades. For example, while the cohort of women who married between 1935 and 1944 survived only one year after the marriage of the last child, those who married between 1975 and 1985 survived 23 years after the marriage of the last child. This would be another dimension of population aging, and serve as a factor increasing the demand for mental and psychological support for the elderly.

Choe, Ehn Hyun et. al., Population Projections by Sub−national Area, 1985 ~ 2050, Korea Institute for Population and Health, 1989.

Table 12. Proportional Changes of Aged Population Based on Sub-national Area Projections, 1985~2025.

				Unit: %
1985	1995	2005	2015	2025
4.69	6.27	8.63	10.31	13.76
5.24	6.47	8.96	11.26	15.06
5.91	8.69	12.07	13.75	16.41
6.32	9.33	13.05	14.73	18.01
6.22	7.88	10.22	11.04	14.55
6.55	9.44	13.73	15.23	18.84
2.96	4.19	5.96	8.01	12.37
5.22	7.19	10.07	11.49	15.39
3.41	3.76	5.11	6.22	8.99
4.22	8.09	7.03	9.21	13.74
6.99	9.29	12.01	13.26	16.56
5.07	5.75	6.98	8.15	11.49
2.63	3.95	5.89	7.98	11.59
2.94	4.02	5.85	7.81	11.17
3.07	4.36	6.43	8.44	11.93
3.44	3.81	5.21	6.58	9.52
	4.69 5.24 5.91 6.32 6.22 6.55 2.96 5.22 3.41 4.22 6.99 5.07 2.63 2.94 3.07	4.69 6.27 5.24 6.47 5.91 8.69 6.32 9.33 6.22 7.88 6.55 9.44 2.96 4.19 5.22 7.19 3.41 3.76 4.22 8.09 6.99 9.29 5.07 5.75 2.63 3.95 2.94 4.02 3.07 4.36	4.69 6.27 8.63 5.24 6.47 8.96 5.91 8.69 12.07 6.32 9.33 13.05 6.22 7.88 10.22 6.55 9.44 13.73 2.96 4.19 5.96 5.22 7.19 10.07 3.41 3.76 5.11 4.22 8.09 7.03 6.99 9.29 12.01 5.07 5.75 6.98 2.63 3.95 5.89 2.94 4.02 5.85 3.07 4.36 6.43	4.69 6.27 8.63 10.31 5.24 6.47 8.96 11.26 5.91 8.69 12.07 13.75 6.32 9.33 13.05 14.73 6.22 7.88 10.22 11.04 6.55 9.44 13.73 15.23 2.96 4.19 5.96 8.01 5.22 7.19 10.07 11.49 3.41 3.76 5.11 6.22 4.22 8.09 7.03 9.21 6.99 9.29 12.01 13.26 5.07 5.75 6.98 8.15 2.63 3.95 5.89 7.98 2.94 4.02 5.85 7.81 3.07 4.36 6.43 8.44

* : Major cities

Source: Choe, Ehn Hyun, et. al., 1989. *Population Projections by Sub-National Area*, 1985~2050, Korea Institute for Health and Social Affairs.

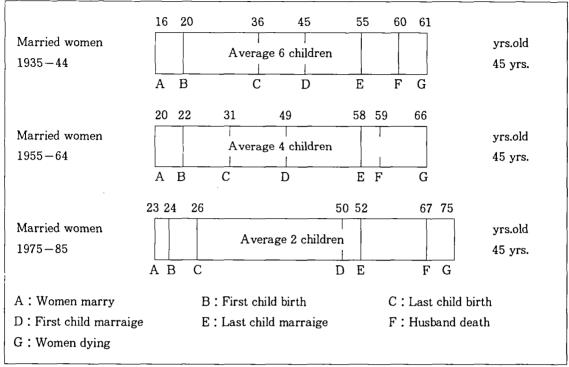
C. Issues Caused by the Rapid Transformation from a Large Size Family to a Small Size Family

With the rapid fertility decline, the average size of family has changed from 8.2 in 1960 to 3.9 in 1990. The rapid fertility decline during such a short period has given rise to older people's having many difficulties. Older people in the large family were respected and they had certain roles in the family such as educating their grandchildren and taking caring of the

house but in the small family, older people do not get respect and do not have important roles at home any more.

On the other hand, changes in the demographic structure have led to an increase in terms of proportion as well as number of older people. People who are 60 years old and above made up 7.5 percent of the total population in 1990.

It is expected that proportion will be 10.2 percent in 2000 and 18.5 percent in 2021 when zero population growth is expected. In 1990, there were an estimated 3.2 million aged per-



Source: Park, I.H., Estimate Life Cycle, Changes in Korean Family Structure,

Chapter 5, KIPH, Seoul, 1987.

Figure 2. Life Cycle of Family in Korea

sons 60 and over with the number expected to rise to 5.2 million by the year 2000, and to 11.2 million by the year 2021.

Along with the rapid pace of industrialization, urbanization, and the shift to small family size, the typical Korean family has swithched from an extended family to a nuclear family, so a considerable proportion of older people live separately from their married children although they are not economically independent. Older adults in Korea are, compared to those in developed countries, less independent economically and have lower educational achievements.

D. Formal Government Welfare Programs Needed

Welfare policy for the elderly in Korea may be divided into two types: an informal welfare system provided by the family and a formal welfare system supported by the government. The informal welfare system like family support has played a major role in the support of older adults for a long time, but older adults currently face financial difficulties because their children's attitudes have changed with rapid industrialization, urbanization, and the fertility decline. Traditionally, children were the corner-

stone of the support system and they lived with their older parents. Now, however, they are more likely to live by themselves. That is, the elderly person's family has a tendency not to absorb the burden of assistance or make many commitments, while formal organizations for help are not systematically developed.

Most present-day Korean elderly who are 60 and over, they are not prepared to maintain economic independence in their old age because they believed that they would be supported by their children both financially and emotionally, in the same way that they had supported their own parents. Thus, they are totally reliant upon their children. Nevertheless their children's attitudes toward support have changed dramatically and substantially declined, while the formal social care system for older people is relatively underdeveloped. Many older people are therefore suffering from several problems including financial difficulties and health care difficulties as well.

E. The Rapid Fertility Decline and Gender Roles

As mentioned bgefore, Korea has experienced a remarkable fertility decline during last three decades. While a Korean married woman had 6.2 children on the average in 1960, she had 1.9 children in 1991. Married women spent most of their lives rearing their 6 or 7 children in the past. As a result, they were in their 50s or 60s when they finished rearing their children, but today, the average number of children of is only 2, so women are still in their 30s or early 40s

when they finish rearing their children.

There has been an increase in female labor force participation over the past 25 years; that is, the overall female labor force participation rate rose from 26.8 percent to 41.9 percent between 1960 and 1985, but married women's labor force participation rate increased very slowly.

Along with the increased leisure time after rearing children, women's demand to participate in social activities has been increasing, There is a tendency that women who finished bringing up their children want to do more than what they do within their households as housewives. All of this tendency can not be attributed to the fertility decline, but it is obvious that the fertility decline and hence decrease in the number of children to support have served as a key factor encouraging married women to have an increased concern for outdoor activities. Efforts should therefore be made to develop new roles of women, to establish social education and leisure utilization programes and to expand job opportunity for women.

N. Policy Implication and Conclusion

To alleviate or solve social problems caused by the rapid fertility decline in the Republic of Korea, we propose the following policy considerations.

Currently, approximately 80 percent of married women practice contraception although the total fertility rate declined to 1.8 in 1992. We assume, therefore that many married Korean women still rely heavily on abortion to limit the number of children.

In the process of antinatalist policies through the National Family Planning Program, Koreans have been oriented toward a small family norm, but their son preference is still very strong. Regarding this matter, we suspect that there is an inverse relationship between the length of the first two birth intervals and the sex ratio, and in the present circumstances where the fertility tempo among young women, if ignored as in the past, it is feared that this will result in an extreme sex imbalance.

As for the behavioral aspects of the parental sex preference, those women with two boys are much more likely to terminate childbearing and to resort to abortion and contraception than those with two daughters; and those with no male heir are willing to go on to the next higher parity, resulting in an increase in ultimate family size. As a result, Korea stands at the very junction at which parental sex preference is creating a population quality issue, namely, sex imbalance. This kind of extreme sex imbalance is due mainly to the prevalence of pre-birth selection of sex and abortion of a female fetus through ultrasound and amniocentesis tests which were originally meant for medical purposes.

It is true that sexual discrimination exists in Korea in variety of spheres although men and women are equal by law, so to mitigate the extreme imbalance in sex ratio at birth it is necessary for the government to study and introduce several ways of influencing the public so that people change their attitudes toward son-prefer-

ence, that is, we need to make every effort to improve women's status so that people really feel that men and women are equal. For instance, it might be very helpful to open more job opportunities to women. At the same time, it is necessary for the government to prohibit prebirth selection of sex and abortion of a female fetus through ultrasound and amniocentesis tests except in special cases. Otherwise, in the near future, Korea will face an urgent problem such as marriage tensions caused by the extreme imbalance in the sex ratio.

It is a reality that while job opportunties are relatively limited for married women, they have relatively much more leisure time now. It is necessary to emphasize the development of social educational programs and other public outdoor activites for the women who have much spare time. At the same time, it is also desirable that colleges and universities develop and provide extended educational programs for them. We also believe that creating and providing more job opportunities for women would be very helpful in alleviating these problems.

The older people are in a bad situation as a result of the rapid fertility decline. Most people of 60 and over have not prepared funds to achieve appropriate economic independence in their old age, because they believed that they would be supported by their children, in the same way as they had done for their own parents. Thus, They are totally reliant upon their children. Nevertheless their children's attitude of support for them has changed dramatically and has declined substantially. Meanwhile, a formal social welfare system for older people is

relatively underdeveloped, so many older people are suffering from several problems, such as financial difficulties and health care difficulties.

Thus, we propose two types of welfare systems for the elderly; one a long term policy and the other a short term policy. In order to alleviate difficulties of the elderly, it is time for the government to implement a strong social welfare system with the introducation of incentives, such as tax exemptions or housing supply benefits for those who live with their parents and support their parents. In the long run, a strong formal social welfare system for the elderly led by government will be necessery so that older people who suffer financial and health difficulties can maintain themselves at a basic level. Furthermore, the introduction of a strong

formal support systems, such as medicaid and medicare, are necessary for older people who do not have the informal support of family or kin.

Overall, the rapid fertility decline in Korea has had a positive impact in a variety of areas, but it is also true that such a rapid fertility decline has negative effects as well. As William F. Ogburn indicated, the time discrepancy between the introduction of a change in material culture and the adaptation of a nonmaterial culture to the change always results in some kinds of social problems until the society overcomes the discrepancy. It is, therefore necessary for the government to exert effort to reduce the problems which society faces in the process of a rapid change in the culture.

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《국문초록》

韓國에 있어서 急速한 出產率 低下의 影響

- 問題點 및 對策 -

최인현* · 김한고** · 이상영***

周知하는 바와 같이 우리나라는 과거 30여년 동안 급속한 出產率의 低下를 經驗하였다. 이러한 出產率의 급속한 低下와 거기에 따른 人口增加率의 鈍化는 그간 韓國社會가 이룩했던 經濟發展에 커다란 貢獻을 하였음을 否認할수 없다. 그러나 이러한 肯定的인 影響에도 不拘하고 몇가지 人口·社會的인 側面에서 否定的인 波及効果를 惹起했던 것도 사실이다.

따라서 本稿에서는 지난 30여년간의 急激한 出產率 低下로 인해 發生한 몇가지 問題點을 人口·社會的인 側面에서 檢討하는데 目的을 두 었는데, 要約하면 다음과 같다.

① 家父長的 傳統에 뿌리를 두고 있는 男兒 選好思想은 오늘에 이르기까지도 여전히 우리나라 婦人들의 出產行態에 至大한 影響을 미치고 있다. 특히 最近 小子女觀이 定着되면서 胎兒性鑑別,人工姙娠中絶,出生性比의 不均衡 등을 助長하는 要因으로 作用하고 있다. 즉,적은 數의 子女를 가지는 대신 자녀들중 원하는 數만큼의 아들을 반드시 가지기 위해 產前 胎兒性鑑別檢查의 人工姙娠中絶에 依存하는 傾向이擴散되고 있다는 것이다. 이로 인해 出生性比의 不均衡이 점차 惡化되는 趨勢에 있는데, 특

- 히 이러한 趨勢는 세번째 이후 出生兒의 경우에 더욱 두드러지고 있다.
- ② 人口의 老齡化는 出產率의 低下에 따르는 必然的인 產物이기는 하나 우리나라의 경우는 과거 出產率이 下落했던 速度만큼이나 그進行速度가 빠르다는 데에 問題가 있다. 이와 아울러 都·農間에 人口老齡化의 速度가 커다란 隔差를 보이고 있어서, 全般的으로는 老人扶養에 대한 社會的 負擔이 加重될 것으로 豫想된다.
- ③ 出產率의 低下에 따른 小家族化, 그리고 產業化, 都市化에 따른 核家族化 등으로 家族 의 老人扶養機能이 弱化되고 있다. 뿐만아니라, 子女數의 減少는 결국 子女 1人當 老父母에 대한 扶養負擔의 增大를 가져왔으며, 家族內에서 의 老人扶養機能이 弱化됨으로써 社會公共部門 의 老人扶養 負擔을 增大시키고 있다.
- ④ 養育해야 할 子女數가 減少함으로써 子 女養育을 끝낸 後의 婦人들의 餘暇時間은 增加 한 반면, 이들 婦人들의 家族內 혹은 社會的 役割, 餘暇活動 등은 충분히 開發되어있지 않 은 상태여서 婦人들의 脫線 등 各種 社會問題 가 惹起되고 있다.

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이러한 問題點들을 해결하기 위해서는 避姙 서비스의 質的 改善, 男兒選好觀의 拂拭을 위한 努力, 胎兒性鑑別 行爲의 엄격한 規制, 女性의 地位 向上 및 社會的 役割 開發, 老人福祉

를 위한 社會公共部門의 投資增大, 老人의 새로운 社會的 役割 開發, 敎育制度의 改革 등 社會 各 分野에서의 政策的 努力이 있어야 한다.