

훈련결과 보고서

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한국과 미국의 고용통계 비교 요약

I. 서론

노동력통계는 한나라의 경제활동상태를 파악할 수 있는 중요한 지표중의 하나이다. 한국의 경제활동인구조사는 지난 40 여년간 경제정책을 수립하고 분석하는데 커다란 공헌을 하여 왔다. 따라서 한국과 미국의 노동력통계조사를 분석 비교하여 봄으로써 양국의 경제현황을 이해하는데 조금이나마 도움을 드리고자 한다. 동 보고서는 다음 두 가지 측면에서 분석을 하고자 한다.

첫째, 경제활동인구의 변화.

둘째, 고용 및 실업의 변화.

II. 이론적 배경

1. 개념 및 정의

총인구중 15 세 이상인구를 조사대상으로 하고 15 세 이상인구를 다시 경제활동에 참가한 사람과 참가하지 않은 사람을 구분한다. 경제활동인구에는 취업자와 실업자로 구성되어 있다. 취업자는 조사 대상기간 동안 적어도 1 시간이상 수입을 목적으로 일한사람,

18 시간이상 무급가족 종사자, 직업을 가지고 있으나 일기불순, 일시적 병 등으로 일하지 못한 사람을 포함한다.

실업자는 일하지 않은 모든 사람을 말한다. 하지만 조사대상기간 적극적으로 일거리를 찾아보고 일을 할 수 있어야 한다. 일하지도 않고 일거리를 찾아보지도 않았지만 조사 대상기간 이후 한달 안에 새로운 일을 시작하려는 사람은 실업자로 분류한다.

2. 이론적 접근방법

노동력 인구조사는 여러가지 방법으로 조사할 수 있겠지만 여기서는 1982 년 제 13 차 ILO 노동통계회의에서 채택하고 많은 국가에서 사용하고 있는 접근방법을 소개하고자 한다. 즉, 경제활동인구를 “ 상시활동인구’ 와 “ 경상활동인구” 나눈다.

2.1. The Approach of the Currently Active Population

상시활동인구 접근법을 노동력 접근법이라고도 한다. 노동력접근법이 가장 많이 사용되고 있다. 노동력접근법은 일주일 또는 1일과 같이 단기간의 활동상태의 특성을 조사한다. 노동력이라 함은 지난 40 년 동안 국제적인 기준으로 정의되고 통계적으로 사용된 것으로 취업자와 실업자를 측정하는 접근방법 이다.

2-2. The Approach of Usually Active Population

경제활동인구의 또 다른 하나는 경상활동상태를 측정하는 접근법이 있다. 즉, 1 년과 같은 장기간의 조사대상기간 동안 주로하는 활동상태를 측정하는 접근법이다. 이 접근법의 주목적은 조사당해연도의 특출한 활동상태의 패턴을 반영하는 자료를 수집하는 것이다. 경상활동상태 접근법은 농업이나 계절적인 요인 때문에 영향을 받는 개발도상국가에서 많이 사용한다. 경상활동상태 접근법으로 조사한 당해연도의 특성은 상시활동상태에서 조사한 특성과는 다르다. 평상활동상태의 접근법은 경상활동상태의 접근법과 같이 한 조사에서 사용할 수 있다.

III. 한국과 미국의 경제활동인구 비교 및 분석

1. 자료원의 주요 사항 비교

한국의 경제활동인구조사와 미국의 CPS의 주요 조사개요는 다음과 같다.

	한 국	미 국
배 경	1957 년 조사시작	1930 년대 대공항시 개발
조사범위	15 세 이상 조사	- 15 세이상 조사 - 16 세 이상공표
조사대상기간	매월 15 일이 속한 주	매월 12 일이 속한 주
조사방법	-A computer assisted interview - 면접조사	-A computer assisted interview - 면접 또는 전화조사
표본의 크기	약 30,000 가구	약 66,000 가구

2. 경제활동인구 분석

2-1. 한국

한국의 경제활동인구는 1963 년 56.6%에서 2002 년 61.9%를 5.3 퍼센트 포인트 증가 하였다 (표 1 참조). 남자의 경제활동인구는 1963 년 78.4%에서 2002 년 74.8%로 3.6%가 감소하였다. 여자의 경우 1963 년도에 39.3%에서 2002 년에는 49.7%로 10.4%가 증가하였다 . 이것으로 볼 때 지난 40 년간 노동시장에서 여성의 지위가 상당히 향상되었음을 볼 수 있다. 특히 1990 년대에 여성의 사회적 활동이 급격히 증가하였다. 1963 년도 남자와 여자의 경제활동인구 참가율의 차이는 41.4 퍼센트 포인트였는데 2002 년도에는 25.1 퍼센트 포인트로 남자와 여자의 경제활동인구 참가율의 차이가 빠른 속도로 줄어들어가고 있음을 볼 수 있다.

남자의 참가율이 줄어들고 여자의 참가율이 늘어나는 이유는 다음과 같은 몇 가지 이유가 있을 것으로 본다. 남자의 경우 과거에 중고등학교, 대학에 못 갔던 계층의 사람들이 경제여건이 좋아지면서 상위학교에 진학 함으로서 노동시장에서 이탈하는 것으로 판단된다. 여자의 경우는 직업에 대한 관념이 달라지는 것으로 생각할 수 있다. 예를 들면 60, 70 년대 여성 직장인이 결혼을 하면 다니던 직장을 그만 두는 것으로 여겼으나 최근에는 당연히 직장을 다니는 것으로 생각한다. 다른 이유로는 정부의 여성에 대한 노동정책이 강력히 추진되고 있는 것이다.

표 1: 경제활동참가율 (%)

Year	Activity Rate In Korea			Activity Rate In U.S.A.		
	Total	M	F	Total	IM	F
2002	61.9	74.8	49.7	66.3	74.1	59.6
2000	61.0	74.2	48.6	67.1	74.8	59.9
1995	61.9	76.4	48.4	66.6	75.0	59.0
1990	60.0	74.0	47.0	66.5	76.4	57.7
1985	56.6	72.3	41.9	64.8	76.3	54.5
1980	59.0	76.4	42.8	63.8	77.5	51.5
1975	58.3	77.4	40.4	61.2	77.9	46.4
1970	57.6	77.9	39.3	60.4	79.7	43.4
1965	57.0	78.9	37.2	58.8	80.7	39.2
1963	56.6	78.4	37.0	58.6	81.3	38.3

자료원 : -경제활동인구 연보 (통계청, 대한민국)

-The Current Population Survey (BLS, USA)

2-2. 미국

표 1 에서 보는 바와 같이 미국의 경제활동인구 참가율은 1963 년에 58.6%, 2002 년에 66.3%로 7.7 퍼센트 포인트가 증가하였다. 남자의 경우 1963 년 81.3%에서 2002 년에는 74.1%로 7.2 퍼센트 포인트가 낮아진 반면 여자는 38.3%에서 59.6%로 무려 21.3 퍼센트 포인트가 증가하였다. 특히 미국 여성들은 1970 년대에 급격히 증가하였음을 볼 수 있다. 남자와 여자의 차이가 1963 년도에는 43 퍼센트 포인트 이었으나 2002 년도에는 14.5 퍼센트 포인트이다. 미국 노동시장에서 남녀의 차이는 거의 없는 것으로 나타난다. 그러나 최근 미국 노동시장은 감소 추세상태에 있다 (표 2 참조). 2000 년에서 2003 년 사이 남자는 1.3 퍼센트 포인트 여자는 0.3 퍼센트 포인트가 각각 감소하였다. 이것은 특히 16 세부터 24 세의 젊은 세대의 활동상태가 감소한 것으로 나타난다. 이유로는 “ 학교에 가기” 때문인 것으로 조사되었다.

표 2. 미국의 최근 경제활동인구 (%)

Year	Activity Rate In USA		
	Total	M	F
2003	66.3	73.5	59.6
2002	66.6	74.1	59.6
2001	66.9	74.5	59.8
2000	67.1	74.8	59.9

자료원 : The Current Population Survey (BLS, USA)

2-3. 양국의 경제활동 참가율 비교

전체 경제활동 참가율은 지난 40 년 동안 한국은 5.3 퍼센트 포인트 미국은 7.7 퍼센트 포인트가 증가하였다. 참가율의 추세를 비교해 보면 한국은 계속 증가 추세에 있고 미국은 최근에 감소 추세에 있음을 볼 수 있다. 양국이 다 같이 남자의 참가율이 줄어든 반면 여자의 참가율은 한국이 12.7 퍼센트 포인트 미국이 21.3 퍼센트 포인트로 급속히 증가되었음을 볼 수 있다.

3. 고용동향 분석

3-1. 취업자

3-1-1. 한국

한국의 취업률은 1963 년 91.8%에서 2002 년 96.9%로 5.1 퍼센트 포인트가 증가하였다 (표 3 참조). 동 기간 동안에 노동시장은 양과 질적인 측면에서 커다란 변화를 가져왔다 (표 4 산업별 취업자율 참조). 남자의 취업률은 3.4 퍼센트 포인트 감소하였지만 여자의 경우에는 8.4 퍼센트 포인트가 증가하였다. 이러한 경향과 요인은 경제활동인구 참가율과 비슷하다.

3-1-2. 미국

취업률의 추세는 불규칙적인 경향을 보이고 있다. 취업률을 가지고 미국의 경제를 분석해 보면 2000 년도가 미국 경제의 최상의 상황이었음을 볼 수 있다. 경제활동 참가율에서와 같이 취업률에서도 남자는 1963 년 62.1%에서 2002 년 50.3%로 계속적인 하향추세를 보이고 있는 반면 여자의 경우에는 계속적으로 증가추세에 있다. 그러나 2000 년 이후 여자의 취업률도 감소 상태에 있다.

표 3: 연도별 취업률 (%)

Year	The rate of employed persons In Korea			The rate of employed persons In USA		
2002	96.9	56.5	40.3	94.2	50.3	43.8
2000	95.8	56.1	39.7	96.0	51.4	44.5
1995	97.9	58.2	39.6	94.4	50.9	43.4
1990	92.1	57.2	39.7	94.3	51.7	42.6
1985	96.0	58.6	37.4	92.7	51.8	40.9
1980	94.8	58.6	36.1	92.8	53.7	39.3
1975	95.8	60.9	34.9	91.5	55.2	36.2
1970	92.4	58.6	33.7	95.0	59.1	35.8
1965	92.6	60.2	32.4	95.4	62.1	33.2
1963	91.8	59.9	31.9	94.3	62.1	32.1

자료원: - 경제활동인구연보 (통계청, 대한민국)

- The results of the Current Population Survey (BLS, USA)

3-1-3. 양국의 취업률 비교

앞에서 보았듯이 경제활동참가율은 양국 모두 증가추세를 보였지만 취업률에 있어서 한국은 증가하고 미국은 95%를 전후하여 불규칙적인 추세를 보이고 있다. 아시다시피 지난 40 년간 한국은 경제발전이 급속도로 신장되었고 이와 더불어 노동시장도 확대되었다. 그러나 미국에서는 전체 취업률에 있어서는 별다른 변화가 없었지만 남자의 취업률이 11.8 퍼센트 포인트가 줄어든 반면 여자는 11.7 퍼센트 포인트가 증가한 것으로 보아 남자의 줄어든 취업률 만큼 여성이 그 자리를 차지한 것으로 본다. 이것은 노동시장에서 경쟁력이 떨어진 남자들이 도퇴되고 있음을 보여 준다고 할 수 있다.

3-2. 산업분류에 의한 취업자

3-2-1. 한국

지난 40 년간 한국은 급속히 경제가 성장하였다. 표 4 에서 보는 바와 같이 산업의 구조가 크게 변화하였다. 1963 년 농업과 어업에 종사하고 있는 취업자율은 62.9% 였던 것이 2000 년에는 10.1% 로 엄청난 변화를 초래하였음을 볼 수 있다. 이를 좀더 상세하게 살펴보기 위하여 2000 년도 산업별 취업률을 살펴보면 농업 및 어업이 10.1%, 제조업이 20.3%, 서비스 산업이 69.0%를 보이고 있다.

특히 최근에는 제조업 분야의 취업률이 줄어드는 대신 서비스 분야의 취업률이 급속히 신장되고 있는 것으로 볼 때 선진국형의 산업구조로 바뀌어 가고 있음을 볼 수 있다.

표 4: 산업별 취업자

(단위: 천명, %)

	2000	1990	1980	1970	1963
Total	21,156 (100.0)	18,085 (100.0)	13,683 (100.0)	9,617 (100.0)	7,563 (100.0)
Agri. & Fish.	2,243 (10.1)	3,237 (17.8)	4,654 (34.0)	4,846 (50.3)	4,763 (62.9)
Manufacture	4,310 (20.3)	4,990 (27.5)	3,079 (22.5)	1,377 (14.3)	657 (8.6)
Service	14,603 (69.0)	9,858 (54.5)	5,951 (43.4)	3,395 (35.3)	2,144 (28.3)

자료원: - 경제활동인구연보 (통계청, 대한민국)

3-3. 취업 시간별 취업자 수

3-3-1. 한국

취업 시간의 변화와 고용조건은 크게 관련이 없다고 여겨진다. 왜냐하면 전통적인 관습이나 맡고 있는 일에 따라서 일을 하기 때문이다. 그럼에도 불구하고 일한 시간은 노동조건을 판단할 수 있는 좋은 기준이 된다. 표 5 에서 보는 바와 같이 근로시간에 의한 근로자 수의 분포는 일반적으로 불규칙적이다. 특별한 경향을 나타내는 것은

없지만 대부분의 취업자는 45-53 시간과 54 시간이상의 카테고리에 분포되어 있음을 볼 수 있다.

표 5: 취업시간별 취업자 수 (단위: 천명, %)

Hours	2002	2000	1995	1990	1985	1980
Total	22,169 (100.0)	21,156 (100.0)	20,414 (100.0)	18,085 (100.0)	14,970 (100.0)	13,683 (100.0)
1--35 total	1,402 (6.3)	1,107 (5.2)	1,230 (6.0)	1,262 (7.0)	2,044 (13.7)	2,331 (17.0)
1--17	647	582	289	197	112	81
18--35	1,684	1,462	973	1,033	995	1,321
18-26	836	726	458	445	416	535
27-35	847	736	515	588	579	786
36+ total	19,597 (88.4)	18,903 (89.4)	19,012 (93.1)	16,750 (92.6)	13,803 (92.2)	12,240 (89.5)
36--44	4,769	3,975	3,388	3,052	2,623	2,439
45--53	5,946	5,933	5,993	4,306	3,124	2,908
54 more over	8,882	8,995	9,631	9,392	8,056	6,893
Layoff	242	208	140	105	61	42
Ave. hour per week	49.8	50.6	52.5	53.7	55.1	53.9

자료원: 경제활동인구연보 (통계청, 대한민국)

36 시간이상의 카테고리에 분류된 취업자의 분포는 1980 년부터 1995 년까지는 증가추세에 있었지만 1995 년 이후에는 점차 감소하는 경향을 나타낸다. 이러한 현상은 노동시장에서 근로자의

목소리가 점차 커져 가고 있음을 알 수 있다. 그럼에도 불구하고 아직도 한국의 근로시간은 비교적 높은 편이다. 예를 들면 주당 평균근로 시간이 1985 년에 55.1 시간, 1990 년에 53.1 시간, 1995 년에 52.5 시간, 2000 년에 50.6 시간, 2002 년도에는 49.8 시간이다. 한국 근로자들이 열심히 일한 것을 알 수 있고 이것은 한국의 경제발전의 원동력이 되었다. 최근 근로시간이 감소하는 주요 요인은 1990 년대에 설립된 노동조합의 활발한 활동이라고 볼 수 있다.

3-3-2. 미국

미국의 경우는 세분된 취업시간별 분류자료를 확보하지 못하여 35 시간 미만과 35 시간 이상으로 구분하여 분석해 보겠다. 표 6 에서 보는 바와 같이 미국 근로자들의 노동시간은 매우 안정적인 것으로 보인다.

표 6. 근로시간별 취업자 수 (미국) (단위 : 천명, %)

	2002	2000	1995	1990	1985	1980
Total	136,486 (100.0)	136,900 (100.0)	124,908 (100.0)	118,796 (100.0)	107,154 (100.0)	397,213 (100.0)
35 hours less then	23,794 (17.4)	23,037 (16.8)	23,225 (18.6)	20,123 (16.9)	18,618 (17.4)	66,955 (17.7)
35 hours more then	112,709 (82.6)	113,855 (83.2)	101,677 (81.4)	98,699 (83.1)	88,548 (82.6)	33,0391 (83.2)

자료원: The results of the Current Population Survey (BLS, USA)

즉 근로자의 82%에서 83%가 주당 35 시간 이상 일한 카테고리에 분포되어 있고 35 시간미만은 17%내지 18%가 분포되어 있다.

3-3-3. 양국의 비교

취업시간에 의한 양국의 분석은 분류카테고리가 서로 달라 심도 있는 비교가 어렵다. 미국의 경우 35 시간 이상 근로자가 82%와 83%로 매우 안정적인 분포를 보인다. 한국은 36 시간 이상일한 근로자들이 90% 전후로 분포되어 있다. 이것은 노동시장에서 파트타임 등의 임시직으로 일하는 사람이 한국 보다는 미국이 보다 더 많다는 것을 알 수 있다.

4. 실업자 동향

4-1. 한국

한국의 실업률은 매우 안정적이다. 이유는 한국의 경제성장과 더불어 계속적으로 새로운 일거리를 창출하여온 결과라고 본다. 1990년대 이후 한국정부는 부족한 노동력을 충당하기 위하여 외국인을 수입하였다. 표 7-1 에서 보는 바와 같이 실업률이 제일 높은 연령계층은 15-19 와 20-29 이다. 이 계층은 학교를 갓 졸업한

신규 실업자로서 심각한 사회 문제가 되고 있다. 하지만 이들 고학력 실업자들은 소위 3D 라고 하는 업종에는 일하려 하지 않는다. 따라서 이들 3D 업종에는 일손이 부족한 상태에 있어 외국인을 수입하는 실정에 있다.

1995 년도와 2000 년을 비교해보면 모든 계층에서 2000 년도의 실업률이 배 이상 높아졌음을 알 수 있다. 이 것은 1997 년에 시작된 금융위기의 결과라고 본다. 특히 40-49 세와 50-60 세 남자그룹의 실업률이 다른 계층 보다 더 높아 졌음을 알 수 있다. 사실 1997 년 금융위기 이후 한국의 많은 40 대, 50 대 근로자들이 퇴직하거나 직장을 그만 두었다. 금융위기이후 한국의 노동시장에는 다음과 같은 몇 가지 특징이 나타났다.

- 1) 실업률의 급상승
- 2) 고용의 질 저하
- 3) 임금의 감소
- 4) 소득분배의 악화
- 5) 조기퇴직

여자의 경우도 15-19 세와 20-29 세 그룹에서 실업률이 제일 높는데 특히 15-19 세 그룹이 높은 이유는 학교를 졸업하자마자 노동시장으로 나오기 때문이라고 본다.

표 7-1 한국의 성별 실업률

(단위: %)

Age group	2002	2000	1995	1990	1985	1980
Total	3.1	4.1	2.1	2.4	4.0	5.2
15 - 19	11.1	13.8	7.9	9.2	11.1	13.3
20 - 29	6.3	7.1	4.3	4.9	7.1	8.1
30 - 39	2.8	3.4	1.4	1.6	2.8	3.8
40 - 49	1.9	3.3	1.1	1.2	2.3	2.9
50 - 59	1.8	2.9	0.9	1.1	1.6	2.5
60 +	1.0	1.3	0.4	0.4	0.3	0.6
Male	3.5	4.7	2.3	2.9	5.0	6.2
15 - 19	12.4	14.5	8.7	10.1	12.4	14.8
20 - 29	7.7	8.4	4.9	6.2	8.9	9.7
30 - 39	3.1	3.9	1.7	2.0	3.7	4.8
40 - 49	2.2	3.8	1.4	1.7	3.3	4.0
50 - 59	2.2	3.7	1.3	1.6	2.6	3.7
60 +	1.3	1.9	0.7	0.6	0.4	0.9
Female	2.5	3.3	1.7	1.8	2.4	3.5
15 - 19	9.9	13.0	7.3	8.7	10.0	12.0
20 - 29	4.8	5.6	3.6	3.4	4.3	5.6
30 - 39	2.2	2.6	0.8	0.9	1.1	1.6
40 - 49	1.5	2.6	0.7	0.5	0.7	0.9
50 - 59	1.1	1.7	0.4	0.3	0.2	0.7
60 +	0.6	0.7	0.3	0.2	0	0

자료원: 경제활동인구 연보 (통계청, 대한민국)

4-2. USA

미국의 실업률은 어떤 경향이 있는 것이 아니라 불규칙적으로 매년 그때그때의 경기가 좋고 안 좋음에 따라 상당 폭으로 차이가 나고

있다. 예를 들면 1980 년에 7.2%, 1985 년과 1990 년에 4.0%, 2002 년에 5.8%로 매년 실업률이 큰 차이가 있음을 보여준다. 이것은 미국의 노동시장이 상당히 유연함을 보여준 것이라 할 수 있다.

표 7-2 미국의 성별 실업률 (단위: %)

	2002	2000	1995	1990	1985	1980
Total	5.8	4.0	5.6	5.6	7.2	7.2
	5.9	3.9	5.6	5.7	7.0	7.0
Female	5.6	4.1	5.6	5.5	7.5	7.4

자료원: The results of the Current Population Survey (BLS, USA)

4-3. 양국의 실업률 비교

한국과 미국의 실업률을 비교해 보면 미국의 실업률이 더 높게 나타난다. 여러 가지 이유가 있겠지만 미국의 경우 어떤 사람이 실업상태에 있으면 즉시 노동시장에서 실업자로 포착이 가능하지만 한국의 경우 즉시 이것을 포착하기에는 여러가지 제도적인 면에서 부족한 점이 있다.

IV. 맺음말

한국의 경제발전 과정에서 경제활동인구도 많은 질적인 변화가 일어났다. 예를 들면 여성의 경제활동인구 참가율의 증가, 여성 직업관에 대한 태도가 변화되었다. 미국이나 한국 모두가 노동시장에서 남성들의 역할은 갈수록 줄어들어가고 있다. 미국에서 여성의 경제활동 참가율은 1963 년 이후 21.3 퍼센트 포인트가 증가한 반면 한국은 12.7 퍼센트 포인트가 증가하였다.

취업자 수의 추세도 한국과 미국은 차이를 보이고 있다. 한국은 1963 년 이후 2002 년까지 계속적으로 증가(5.1 퍼센트 포인트)하는 추세를 보이고 미국은 1963 년에 비해 2002 년도는 0.1 퍼센트 포인트가 줄어들었으나 불규칙적인 경향을 보이고 있다.

한국 취업자들의 경제활동은 전통적인 산업화 과정을 보이고 있다. 농업, 임업, 어업 종사자는 줄어들고 광공업, 서비스업 종사자는 늘어났다.

또한 한국 노동자들은 국가의 발전에 지대한 공헌을 하였다. 그들은 매주 50 시간 이상 일하여 왔다.

한국의 실업률은 미국의 그것에 비해 낮게 조사되고 있는데 그 이유로는 몇 가지를 생각해 볼 수 있다. 한가지 가장 큰 이유는

한국의 경우 경제발전과 더불어 계속적으로 직업을 창출하여 왔다고 볼 수 있다. 다른 이유로는 조사환경이나 국민들의 의식에 차이가 있다고 볼 수 있다.

마지막으로, 한국의 경제활동인구조사(EAPS)와 미국의 CPS 는 몇 가지 다른 배경을 가지고 있다. EAPS 는 인구의 15 세 이상을 조사하여 발표하고 있는 반면 CPS 는 15 세 이상의 인구를 조사하기는 하나 국내법상 16 세 이상을 공표한다.

두 나라의 실업률이 다르게 조사되는 커다란 이유는 조사환경의 차이가 있다는 점이다. 뿐 만 아니라 정확하고 시의적절한 자료를 수집하기 위하여서는 정부의 충분한 인력과 예산의 지원이 있어야 한다.

**A Comparison and Analysis of
Economically Active Population between
Korea and USA**

December 1, 2003

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I. Introduction

The Korea government built a series of socio-economic plans and carried out them from 1960s to 1990s. The Economically Active Population Survey (EAPS) was contributed to support those plans and policies. Korean economy has rapidly developed during last four decades. Now, Korea is one of leading countries in Asia. The growth rate of GDP was 5.9%, GDP per person \$10,013, and the unemployment rate 3.1% in 2002. In 1970, GDP per person was \$249 (<http://kosis.nso.go.kr-GDP>). It has tremendously increased. The change of employment and unemployment will help us to more deeply understand the circumstance of economic development of Korea. Also, the Current Population Survey (CPS) is the source of the official government statistics on employment and unemployment in USA. The CPS has been conducted monthly for over 50 years.

The EAPS and CPS has been one of the most important indexes on economic activities and characteristics of the population of two countries. Korea and USA have accumulated huge statistical data up to the present. These survey data have been used by the long and short-term national plans, and various academic researches. The primary purpose of the surveys is conducting up-to-date information on the economic status of the population and on changes in the activity pattern of the labor force. Therefore, if we compare results between EAPS and CPS, it is helpful us to understand two countries' economic situations, and, especially, the process of Korean economic development.

This analysis will be focus on the following points: 1) Comparison of survey methods between EAPS and CPS. 2) Transitional change of economic activity, 3) Change in employment and unemployment. This paper structure will

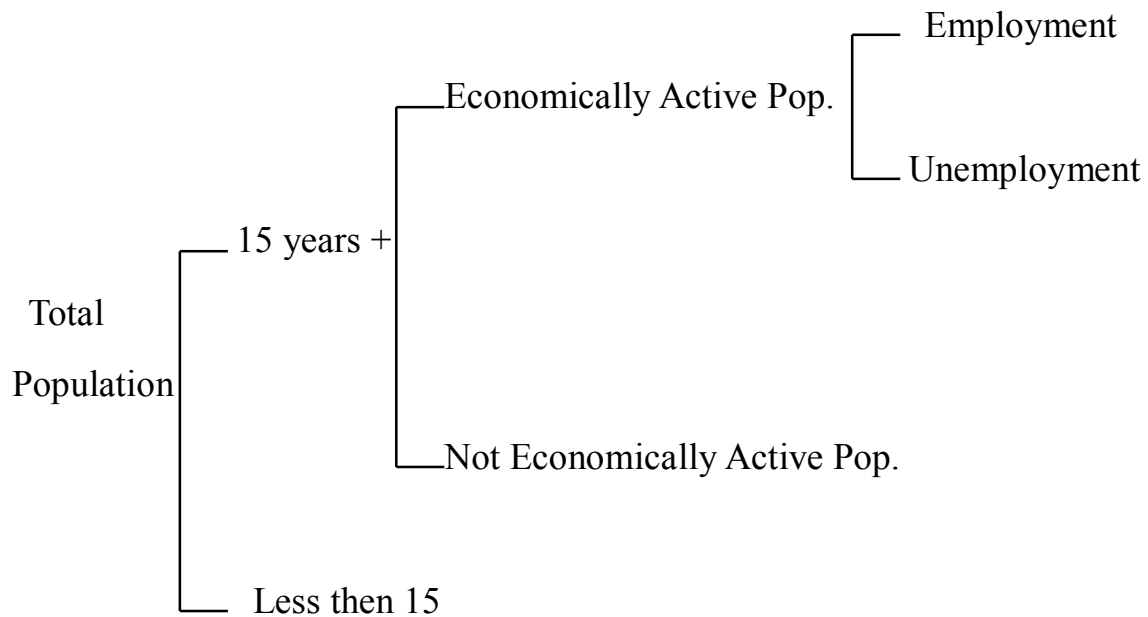
be consisted of 4 chapters such as I. Introduction, II. Theoretical background, III. Comparison and analysis of labor force between Korea and USA, IV. Summary.

II. Theoretical Background

1. Concept and Definitions (Annual Report on the Economically Active Population Survey, 2001, National Statistical Office (NSO of Korea).

I would like to introduce the concept and definitions based on the EAPS of Korea. The lower age limit of the survey is 15. The concepts and definitions of the employment and unemployment are as follows:

- The population 15 years and over is divided into the economically active population and not economically active population. The economically active population comprises all persons who were employed or unemployed during the reference week.
- The employed comprise all persons who work at least one hour or more for pay or profit, including those who work 18 hours or more as unpaid family workers during the reference week. Persons who have a job but are temporary absent from work on account of bad weather, temporary illness, etc. are also classified as the employed.



- The unemployed comprise all persons who are not working at all, but are available for work and are actively seeking work during the reference week. Those who are not working nor seeking work, but are expected to start a new job within a month right after the reference week, are also considered as the unemployed.

2. Approach Methods (An ILO manual on concepts and methods, ILO, 1990)

There are various methods to survey labor force. Here, I would like to introduce theoretical methods, which was adopted by International Labor Office(ILO), for statisticians who have to design or redesign a labour force survey. A resolution concerning statistics of the economically active population, employment, unemployment and underemployment was adopted by the 13th International Conference of Labour Force(ICLS) in 1982 as the international standards. The international standards use the term “ economically active population’ as a generic term and identify, in particular, two useful measures of

the economically active population.: the “usually active population” measured in relation to a long reference period such as a year; and the “currently active population” measured in relation to a short reference period such as one week or one day. An equivalent term for the latter is “labour force”.

2-1. The approach of the currently active population

The term “labour force” is used synonymously with “currently active population”. The currently active population is the most widely used measure of the economically active population”. It is based on a short reference period, such as one week or one day, and used for measuring the current employment characteristics of the population. Current changes over time can be monitored when measurement is repeated at sufficiently frequent intervals. The measurement of the currently active population is based on the labour force framework. The term “labour force” as defined by the international standards and used in statistical literature over the last four decades is associated with a particular approach to the measurement of employment and unemployment. Essentially, this approach is the categorization of persons according to their activities during a short reference period by using a specific set of priority rules. This approach has led to the development of a particular measurement framework known as the “labour force framework”.

2-2. The approach of usually active population

Another measure of the economically active population, called the “usually active population” in the international standards, refers to the main activity status of persons over a longer reference period such as a year. The usually active framework was introduced as an international standard for the first time

at the 1982 Thirteenth ICLS. Its chief purpose is to be a framework for the collection of data reflecting the dominant pattern of activities, particularly where the data collection programme does not permit repeated measurement in the course of the year (e.g. population censuses or surveys conducted only once a year). The use of the usual activity framework is particularly relevant in developing countries where, due to agriculture and other seasonal activities, the dominant pattern of activities over the year of a significant proportion of the population differs from the current situation at given points of time during the year. The measurement of usual activity is thus frequently combined with that of current activity in the same survey. The use of a long reference period permits collection of information not only on the main activity of individuals over the year, but also on their other activities during the year. Furthermore, data can be obtained on the duration of the activities, which may supplement the statistics of the usually active population. Such duration data are also necessary for the analysis of employment and income relationship measured over a year.

III. Comparison and Analysis of Economically Active Population between Korea and USA

1. Sources of Data

1-1. KOREA (Annual Report on the Economically Active Population Survey, 2001, National Statistical Office of Korea)

1-1-1. Background

Statistics on labor force were conducted by the Ministry of Home Affairs

from 1957 to 1962. In 1963, the survey was transferred to the National Bureau of Statistics (NBOS) which was under the Economic Planning Board, and its name was changed from the Labor Force Survey to the Economically Activity Population Survey. Also, the NBOS adopted the labor force approach recommended by the International Labor Office (ILO). In July 1982, the periodicity of the survey was changed from quarterly to monthly to figure out quickly the trend of the labor structure.

In 1983, the questionnaires of the survey were revised in order to capture the underemployment and underutilization of manpower. In January 1987, the lower age limit of the survey was raised from 14 to 15 years of age and employment rates adjusted by seasonal factors started to be produced to enhance the usefulness of the survey results and feasibility for international comparison.

On the based of the result from the 1985 Population and Housing Census , the sample size of the survey was expanded from 17,000 to 32,500 households in 1988 to produce regional data. In January 1998, the sample has been again changed to 30,000 households based on the 1995 Population and Housing Census to meet the increasing demands for detailed regional data. The labor statistics of 16 large cities and provinces has been produced on monthly basis from that time.

The questions of the survey were revised many times to reflect accuracy. For example, 1n July 1999, unemployment statistics based on the criteria by OECD started being produced and released to the public, which extends the period of looking for work from 1 week to 1 month. In Nov. 1999, the questionnaire was added extra sets to collect data such as number of discouraged workers, etc. Also, the 2nd supplementary survey was conducted in Aug.2001 including daily workers and part-time workers.

1-1-2. Scope of the Survey

The survey covers all persons aged 15 and over who usually reside within the territory of Korea at the time of interview. Member of armed forces, prisoners and foreigners are excluded from the survey.

1-1-3. Date and period of the survey

Reference period is the week containing the 15th day of every month. The survey of period is the week just after the reference week.

1-1-4. Method of the survey

The survey is undertaken by CAPI (Computer Assisted Personal Interviewing). Enumerators carry lap-top computers, asking questions as they appear on the screen and directly entering the responses obtained.

1-1-5. Sample Design

The data and materials from approximately 22,029 ordinary enumeration districts (ED's), which was 10% of the 1995 Population and Housing Census, are used for the sample selection. Island and social institutions are excluded from the sample selection.

Selections of Primary Sampling Units (PEU):

According to the classification of major administration regions, the country is divided into 25 strata; there are 7 large cities and 9 provinces in Korea, and provinces are further divided into 18 donges, ups, myons.

Once the number of PSE's (the sample size) of 25 regions is determined by the

relative standard error, ED's (PSU's) are systematically selected with a probability proportional to its measure of size within each region. Measure of size is the figure, which is derived from the number of households in each ED, divided by and rounded up.

Selection of the secondary sampling Unite (SSU) and Ultimate Sampling Unite (USU):

Each selected ED is divided into the same number of segments as the measure of size of each ED, each segment containing 8 households on average. Within each primary sampling unit, 3 contiguous segments (SSU) are randomly selected, and all households in each selected segment are the ultimate sampling unit of the survey.

The sampling is self-weighting in each stratum while the sampling rates are different from stratum to stratum. As a result, 29,529 households out of 1,231 ED's (PSU) were selected as samples of the 1995 Population and Housing Census, with the overall sampling rate of about 1/430. In April 2001, 15 ED's were added up to 1,246 ED's and the average number of household in the 2001 monthly survey was about 28,829 households.

1-2. USA (Overview of Current Population Survey)

1-2-1. Background

Specific concepts of the labor force, employment, and unemployment were developed in the later stages of the Depression of the 1930s. 1930s increased the need for statistics, and widely conflicting estimates based on a variety of indirect techniques began to appear. Dissatisfied with these methods,

many research groups, as well as State and municipal governments, began experimenting with direct surveys or samples of the population. In these surveys, an attempt was made to classify the population as employed, unemployed.

A set of precise concepts was developed in the late 1930s to address these various criticisms. The classification of an individual depended principally upon his or her actual activity within a designated period, that is, was the individual working, looking for work, or engaged in other activities? These concepts were adopted for the national sample survey of households, called the Monthly Report of Unemployment, initiated in 1940 by the Works Progress Administration.

The household survey was transferred to the Census Bureau in late 1942, and its name was changed to the Monthly Report on the Labor Force. The name was changed once more, in 1948, to the present Current Population Survey in order to reflect the survey expanding role as a source for data on a wide variety of demographic, social, and economic characteristics of the population. In 1959, responsibility for analyzing and publishing the CPS labor force data was transferred to BLS; the Census Bureau continues to collect the data.

1-2-2. Scope of the Survey

The CPS collects information on the labor force status of the civilian noninstitutional population 15 years of age and older, although labor force estimates are reported only for those 16 and older. Persons under 16 years of age are excluded from the official estimates because child labor laws, compulsory school attendance, and general social custom in the United States severely limit the types and amount of work that these children can do.

1-2-3. Date and period of the survey

Since July 1955, the calendar week, Sunday through Saturday, that includes the 12th day of the month has been defined as the reference week. The actual survey is conducted during the following week, the week containing the 19th day of the month.

1-2-4. Method of the survey

The new questionnaire was designed for a computer-assisted interview, in which interviewers ask the survey questions as they appear automatically on the screen of their laptop computer, and then type the responses directly into the laptop. In most cases, interviewers conduct the survey either in person at the respondent's home or by telephone from the interviewer's home. This mode of data collection is known as computer-assisted personal interviewing (CAPI). In addition, about 10 percent of sample households are interviewed from centralized telephone centers.

1-2-5. Sample Design

Since the inception of the survey, there have been various changes in the design of the CPS sample. The sample is traditionally redesigned and a new sample is selected after each decennial census. Also, the number of sample areas and the number of sample persons are changed occasionally. Most of these changes are made in order to improve the efficiency of the sample design, increase the reliability of the sample estimates, or control costs. Since the mid-1980s, the CPS has had a State-based sample design, meaning that all sampling operations such as allocation and selection are implemented at the State level.

A redesigned CPS sample based on the 1990 decennial census was selected for use during the 1990s and the early years of the new century. Households from this new sample were phased into the CPS between April 1994 and July 1995. The July 1995 sample was the first monthly sample based entirely on the 1990 census. A redesigned sample based on the results of the 2000 census will be phased in between April 2004 and July 2005.

The original 1990 census-based sample design included about 66,000 housing units per month located in 792 selected geographic areas called primary sampling units (PSUs). The sample initially was selected to meet specific reliability criteria for the Nation, for each of the 50 States and the District of Columbia, and for the substate areas of New York City and the Los Angeles-Long Beach metropolitan area. In 1996, the original reliability criteria for the sample design were modified to reduce costs, which decreased the sample to 754 PSUs and 59,000 housing units. The current criteria, given below, are based on the coefficient of variation (CV) of the unemployment level, where the CV is defined as the standard error of the estimate divided by the estimate, expressed as a percentage. These CV controls assume a 6-percent unemployment rate in order to establish a consistent specification of sampling error.

The current sample design, including an expansion to meet the requirements of the SCHIP legislation, was introduced in July 2001. It includes about 72,000 households from 754 sample areas, or PSUs, and maintains a 1.9-percent CV on national monthly estimates of unemployment level. This translates into a change of 0.2 percentage point in the unemployment rate being significant at a 90-percent confidence level. For each of the 50 States and for the District of Columbia, the design maintains a CV of at most 8 percent on the annual average estimate of unemployment level, assuming a 6-percent

unemployment rate. Due to the national reliability criterion, estimates for several large States are substantially more reliable than the State design criterion requires. Annual average unemployment estimates for California, Florida, New York, and Texas, for example, carry a CV of less than 4 percent.

In the first stage of sampling, the 754 PSUs are chosen. In the second stage, ultimate sampling unit clusters composed of about four housing units each are selected. Each month, about 72,000 housing units are assigned for data collection, of which about 60,000 are occupied and thus eligible for interview. The remainder are units found to be destroyed, vacant, converted to nonresidential use, containing persons whose usual place of residence is elsewhere, or ineligible for other reasons. Of the 60,000 housing units, about 7 to 8 percent are not interviewed in a given month due to temporary absence (vacation, for example) of the occupants, other failures to make contact after repeated attempts, inability of persons contacted to respond, unavailability for other reasons, and refusals to cooperate (about half of the noninterviews). Information is obtained each month for about 110,000 persons 16 years of age or older.

Selection of sample areas:

The entire area of the United States, consisting of 3,141 counties and independent cities, is divided into 2,007 PSUs. PSUs are defined within States and do not cross State boundaries. In most States, a PSU consists of a county or a number of contiguous counties. In New England and Hawaii, minor civil divisions are used instead of counties.

Metropolitan areas within a State are used as a basis for forming many PSUs. Outside of metropolitan areas, two or more counties normally are

combined to form a PSU except when the geographic area of an individual county is too large. Combining counties to form PSUs provides greater heterogeneity; a typical PSU includes urban and rural residents of both high and low economic levels and encompasses, to the extent feasible, diverse occupations and industries. Another important consideration is that the PSU be sufficiently compact so that, with a small sample spread throughout, it can be efficiently canvassed without undue travel costs.

The 2,007 PSUs are grouped into strata within each State. Then, one PSU is selected from each stratum with the probability of selection proportional to the population of the PSU. Nationally, there are a total of 428 PSUs in strata by themselves. These strata are self-representing and generally are the most populous PSUs in each State. The 326 remaining strata are formed by combining PSUs that are similar in such characteristics as unemployment, proportion of housing units with three or more persons, number of persons employed in various industries, and average monthly wages for various industries. The single PSU randomly selected from each of these strata is non-self-representing because it represents not only itself but the entire stratum. The probability of selecting a particular PSU in a non-self-representing stratum is proportional to its 1990 population. For example, within a stratum, the chance that a PSU with a population of 50,000 would be selected for the sample is twice that for a PSU having a population of 25,000.

Selection of sample households:

Because the sample design is State based, the sampling ratio differs by State and depends on State population size as well as both national and State reliability requirements. The State sampling ratios range roughly from 1 in every

200 households to 1 in every 3,000 households. The sampling ratio occasionally is modified slightly to hold the size of the sample relatively constant given the overall growth of the population (called a sample maintenance reduction. The sampling ratio used within a sample PSU depends on the probability of selection of the PSU and the sampling ratio for the State. In a sample PSU with a probability of selection of 1 in 10 and a State sampling ratio of 3,000, a within-PSU sampling ratio of 1 in 300 achieves the desired overall ratio of 1 in 3,000 for the stratum.

The 1990 within-PSU sample design was developed using block-level data from the 1990 census. (The 1990 census was the first decennial census that produced data at the block level for the entire country.) Normally, census blocks are bounded by streets and other prominent physical features such as rivers or railroad tracks. County, Minor Civil Division, and census place limits also serve as block boundaries. In cities, blocks can be bounded by four streets and be quite small in land area. In rural areas, blocks can be several square miles in size.

For the purpose of sample selection, census blocks were grouped into three strata: Unit, group quarters, and area. (Occasionally, units within a block were split between the unit and group-quarters strata.) The unit stratum contained regular housing units with addresses that were easy to locate (for example, most single-family homes, townhouses, condominiums, apartment units, and mobile homes). The group-quarters stratum contained housing units in which residents shared common facilities or received formal or authorized care or custody. Unit and group-quarters blocks exist primarily in urban and suburban areas. The area stratum contains blocks with addresses that are more difficult to locate. Area blocks exist primarily in rural areas.

To reduce the variability of the survey estimates and to ensure that the

within-PSU sample would reflect the demographic and socioeconomic characteristics of the PSU, blocks within the unit, group-quarters, and area strata were sorted using geographic and block-level data from the census. Examples of the census variables used for sorting include proportion of minority renter-occupied housing units, proportion of housing units with female householders, and proportion of owner-occupied housing units. The specific sorting variables used differed by type of PSU (urban or rural) and stratum.

Within each block, housing units were sorted geographically and grouped into clusters of approximately four units. A systematic sample of these clusters was then selected independently from each stratum using the appropriate within-PSU sampling ratio. The geographic clustering of the sample units reduces field representative travel costs. Prior to the interview, special listing procedures are used to locate the particular sample addresses in the group-quarters and area blocks.

Units in the three strata described above all existed at the time of the 1990 decennial census. Through a series of additional procedures, a sample of building permits is included in the CPS to represent housing units built after the decennial census. Adding these newly built units keeps the sample up-to-date and representative of the population. It also helps to keep the sample size stable: over the life of the sample, the addition of newly built housing units compensates for the loss of building units that may be abandoned, demolished, or converted to nonresidential use. In normal circumstances, the number of eligible households in the sample grows slowly. Sample maintenance reduction procedures are periodically implemented to hold the size of the sample relatively constant.

Rotation of sample:

Part of the sample is changed each month. Each monthly sample is divided into eight representative subsamples or rotation groups. A given rotation group is interviewed for a total of 8 months, divided into two equal periods. The group is in the sample for 4 consecutive months, leaves the sample during the following 8 months, and then returns for another 4 consecutive months. In each monthly sample, 1 of the 8 rotation groups is in the first month of enumeration, another rotation group is in the second month, and so on. (The rotation group in the fifth month of enumeration is returning after an 8-month break.) Under this system, 75 percent of the sample is common from month to month and 50 percent is common from year to year for the same month. This procedure provides a substantial amount of month-to-month and year-to-year overlap in the sample, thus yielding better estimates of change and reducing discontinuities in the series of data without burdening sampled households with an unduly long period of inquiry.

2. Trend of the economically active population

2-1. KOREA

First of all, change in economic activity rates should be observed to have an overview of the economic activity of the population. The economic activity rate (or as often referred simply activity rate) is the proportion economically active of the population, usually expressed in percent. These activity rates actually calculated for the EAPS of Korea from 1963 to 2002 are shown in Table 1 for males and females separately.

As shown in Table 1, the total activity rates are generally on an increasing

trend during the period. In fact, the activity rates of population rose from 56.6 percent in 1963 to 61.9 percent in 2002 in Korea. 5.3 percent points was increased.

Table 1: Economic Active Rates (%)

Year	Activity Rate In Korea			Activity Rate In USA		
	Total	M	F	Total	M	F
2002	61.9	74.8	49.7	66.3	74.1	59.6
2000	61.0	74.2	48.6	67.1	74.8	59.9
1995	61.9	76.4	48.4	66.6	75.0	59.0
1990	60.0	74.0	47.0	66.5	76.4	57.7
1985	56.6	72.3	41.9	64.8	76.3	54.5
1980	59.0	76.4	42.8	63.8	77.5	51.5
1975	58.3		40.4	61.2	77.9	46.4
1970	57.6	77.9	39.3	60.4	79.7	43.4
1965	57.0	78.9	37.2	58.8	80.7	39.2
1963	56.6	78.4	37.0	58.6	81.3	38.3

Source: - The annual report on the Labor Force Survey (NSO, Korea)
-The Current Population Survey (BLS, USA)

The activity rates of male shows from 78.4 percent in 1963 to 74.8 percent in 2002 and female from 39.3 percent in 1963 to 49.7 percent in 2002 respectively. There is very interesting phenomena. The activity rates of males decreased 3.6 percent points against 10.4 percent points of rise of females in Korea. We can realize that women's rights are rapidly enhanced in the labor market during last four decades. Especially, women's power was strongly increased after early 1990s. The gap between men and women shows 41.4% points in 1963, however, 25.1% points in 2002. The gap is gradually going down, but there is still great gap. One of important reasons why men's rate is going down is education. Young people go to higher level of school such as

colleges and universities instead of working.

However, in women's case, the rate is going up. There are couple of reasons. One reason is that women's attitude of occupation is changing. For example, during 60s and 70s, when a woman got married, she should quit her job, but nowadays, a woman can work continuously after getting married. Other reasons are that Korean government strongly supports gender policies to enhance women's rights in the labor market.

2-2. USA

As shown in Table 1, the total activity rates in USA were also generally increased during the period. The activity rates rose from 58.6 percent to 66.6 percent. 8.0 percent points were increased.

The activity rates of male shows from 81.3% in 1963 to 74.1 percent in 2002 and female 38.3% in 1963 to 59.6% in 2002. The activity rates of males decreased 7.2 percent points and females increased 21.3 percent points during that period. We can realize that women's rights are also greatly enhanced in the labor market in USA during last four decades. Especially, American women's power was shapely increased after 1970s. The gap of the activity rate between men and women was 43 percent point in 1963 and 14.5 percent point in 2002. In 1960s, the gap was above 40 percent. However, it shows very close between men and women recent.

As we can see in the table 1, the labor force participation in the market was continuously increased by 2000. However, the rate was decreasing trend between 2000 and 2002. Let's study more deeply recent participation rate in USA (See table 2). During these periods, the participation rates of male and

female have continuously been declined. From 2000 to 2002, the rate of male reduced 1.3 percent points and the rate of female reduced 0.3 percent points. Especially, during the most recent economic downturn, the labor force participation rate among younger workers aged 16 to 24 fell quite a bit more than it did during the recessionary period of the early 1990s; workers in that age group were more likely to have reported “going to school” as a reason for nonparticipation in 2001 than their counterparts had been a decade earlier.

Table 2. Recent Economic Active Rates (%)

Year	Activity Rate In USA		
	Total	M	F
2003	66.3	73.5	59.6
2002	66.6	74.1	59.6
2001	66.9	74.5	59.8
2000	67.1	74.8	59.9

Source: The Current Population Survey (BLS, USA)

The labor force participation rate among males aged 25 to 54 fell slightly more than it had before, and there was a slight decline rather than a slight increase in labor force participation among women in the central age range. In contrast, workers 55 and older increased their participation in the labor force significantly during the most recent period of weak labor market conditions. The rise in labor force participation rates among older workers may reflect several factors that affect work and retirement decisions such as changes to Social Security regulations, falling stock market prices, and declining interest rates. (U.S. Department of Labor, Bureau of Labor Statistics, Summary 03-03 September 2003)

2-3. Comparison between two countries

Total active participation rate are increased by 5.3 percent points in Korea and by 7.7 percent points in USA during that periods. It means that USA created more jobs for its citizens than Korea. If we review recent trend of the rates between two countries, there are a quite differences in the labor market. Because total active rates are continuously increased from 56.6 percent in 1963 to 61.9 percent in 2002 in Korea, the rates of USA were increased until 2000, but it is decreasing after 2001 (See table 2).

The activity rate of male was decreased at 3.6 percent point in Korea and 3.9 percent point in USA during last 4 decades. Men's jobs of the two countries have continuously been decreased in the labor market. It is more and more difficult for men to get their jobs in the labor market. Also, we can imagine that socio-economic structure has rapidly been changed.

Women's power has greatly been enhanced in the labor market both of two countries. 12.7 percent points in Korea and 21.3 percent points in USA were increased. Especially, American women's power was enhanced almost double during that periods, if we compare it to Korean women's power. However, I am not sure that women's participation rate in USA will be continuously increased in the future, because the trend of female's rate stagnates around 60.0 percent recently. (See table 2)

3. Trend in Employment

3-1. Trend of the rate of employed person

3-1-1. KOREA

The economic active population consists of employed persons and unemployed persons. The number of employed persons is increased with an increase of the population and with an upward trends of activity rates during the period. The rate of the employed persons holds 91.8 percent in 1963 and 96.9 percent in 2002(See table 3). It was increased at 5.1 percent points. The proportion shows minor fluctuations from year to year. However, there were a lot of qualitative changes. The industrial structure of the employment was changed (Refer 3-2 Trend of the rate of employed person by industrial classification).

The rate of male was decreased at 3.4 percent points from 1963 to 2002. However, the rate of female was increased at 8.4 percent points. Those trends are similar to the economically activity population. The reasons are also same as the economically activity population.

3-1-2. USA

In case of USA, the total rate of employed person was decreased from 94.3 percent in 1963 to 94.2 percent in 2002. We can guess that American economy was the highest active in 2000. Because the rate of employed person was the highest in 2000 as 96.0 %. During last 40 years, the fluctuation of employed person in USA has irregularly been changed. In 1975, the rate of employed person was the lowest as 91.5%.

The rate of male was continuously reduced from 62.1% in 1963 to 50.3% in 2002. 11.8 percent points was reduced. However, 11.7% was increased in female case.

Table 3: The rate of Employed Persons (%)

Year	The rate of employed persons In Korea			The rate of employed persons In USA		
	Total	M	F	Total	M	F
2002	96.9	56.5	40.3	94.2	50.3	43.8
2000	95.8	56.1	39.7	96.0	51.4	44.5
1995	97.9	58.2	39.6	94.4	50.9	43.4
1990	92.1	57.2	39.7	94.3	51.7	42.6
1985	96.0	58.6	37.4	92.7	51.8	40.9
1980	94.8	58.6	36.1	92.8	53.7	39.3
1975	95.8	60.9	34.9	91.5	55.2	36.2
1970	92.4	58.6	33.7	95.0	59.1	35.8
1965	92.6	60.2	32.4	95.4	62.1	33.2
1963	91.8	59.9	31.9	94.3	62.1	32.1

Source: - The annual report on the Labor Force Survey (NSO, Korea)
 - The results of the Current Population Survey (BLS, USA)

3-1-3. Comparison between two countries

There are different trend between the active population and employed person. As we see in table 2, total active participation rate has been increased at 5.3 percent points in Korea and at 7.7 percent points in USA during that period. The rate of the employed persons was increased at 5.1 percent points in Korea, but in USA, 0.1 percent point reduced. As we know, Korean government carried out the economic development plan from 1962. The plan was conducted successfully. The socio-economic structure was rapidly changed. The remarkable economic achievement resulted to tremendous changes in the labor force market. In USA, the rate of employed person fluctuated irregularly in the labor market.

The rate of male' employment in Korea 3.4 percent points was reduced and in USA, 11.8 percent points was also reduced. As I mentioned before, it means women's power has been enhanced in the labor markets of both countries.

3-2. Trend of the rate of employed person by industrial classification

3-2-1. KOREA

Korean government under former President Park, Chunghee achieved its economic development plan successfully. An average growth in the GNP at an annual rate of higher than 8% was maintained for 30 years (Japan and Korea Labor in Transition, Dr. Kiwon Kang). As you see the table 4, the structure of industry was tremendously changed. The portion of employment in agriculture and fishery shows 62.9 percent in 1963 but 10.1 percent in 2000. There was huge gap between 1963 year and 2000 year. The employed person rapidly moved from the first industry to the second and third industry sector. In 1963, the worker in agriculture and fishery sector was in charge of 62.9 % among total employed person, in manufacture sector 8.6%, and service sector 28.3% respectively.

Table 4: Number of Employed person and rate by industry

(Unit: Thousand person, %)

	2000	1990	1980	1970	1963
Total	21,156 (100.0)	18,085 (100.0)	13,683 (100.0)	9,617 (100.0)	7,563 (100.0)
Agri. & Fish.	2,243(10.1)	3,237(17.8)	4,654(34.0)	4,846(50.3)	4,763(62.9)
Manufacture	4,310(20.3)	4,990(27.5)	3,079(22.5)	1,377(14.3)	657(8.6)
Service	14,603(69.0)	9,858(54.5)	5,951(43.4)	3,395(35.3)	2,144(28.3)

Source: - The annual report on the Labor Force Survey (NSO, Korea)

It was traditionally agricultural society. After 40 years, the worker in agriculture and fishery sector was in charge of 10.1% among total employed

person, in manufacture sector 20.3%, and service sector 69.0%. Particularly in recent year, manufacturing trend is considerably going down. On the other hand, service sector is rapidly increasing. It shows the shape of industrial society and advanced society.

3-3. Number of employed persons by number of hours worked

3-3-1. KOREA

A change in the number of hours worked is not so much related with the change in employment condition, because it is often determined by a traditional or customary practice or by a type of work undertaken. Even then, the number of hours worked, no doubt, constitutes one of the important working conditions.

Table 5 shows the distribution of employed persons by the number of hours worked per week from 1980 to 2002. The percentage distribution of employed person classified by the number of hours worked shows in general irregular fluctuation during that period, and it is not easy to find out any prominent trend among them. It is noted, however, that the majority of employed persons are classified in the class of worked 45-53 hours and 54 hours more. The class of 36 hours more is also irregular trend. However, there are found roughly some declining trends from 1995 to 2002, for example, at 93.1 percent in 1995, at 89.4 percent in 2000, and at 88.4 percent in 2002. It means that worker's voices are gradually enhanced in the labor market. Nevertheless, Korean workers' working hour is still high. Let us see average working hour per week. After 1985, the trend of average working hour per week is gradually going down, such as 55.1 hours in 1985, 53.1 hours in 1990, 52.5 hours in 1995, 50.6 hours in 2000, and at 49.8 hours in 2002 respectively. It shows that most

Korean workers have worked very hard. It is one of important motives to develop Korean economy. Recently, main reason of reducing working hours per week is activity of union. Labor union was built in 1990s in Korean labor market.

Table 5: Number of workers by working hours (Unit: thousand persons, %)

Hours	2002	2000	1995	1990	1985	1980
Total	22,169 (100.0)	21,156 (100.0)	20,414 (100.0)	18,085 (100.0)	14,970 (100.0)	13,683 (100.0)
1--35 total	1,402 (6.3)	1,107 (5.2)	1,230 (6.0)	1,262 (7.0)	2,044 (13.7)	2,331 (17.0)
1--17	647	582	289	197	112	81
18--35	1,684	1,462	973	1033	995	1321
18-26	836	726	458	445	416	535
27-35	847	736	515	588	579	786
36+ total	19,597 (88.4)	18,903 (89.4)	19,012 (93.1)	16,750 (92.6)	13,803 (92.2)	12,240 (89.5)
36--44	4,769	3,975	3,388	3,052	2,623	2,439
45--53	5,946	5,933	5,993	4,306	3,124	2,908
54 more over	8,882	8,995	9,631	9,392	8,056	6,893
Layoff	242	208	140	105	61	42
Ave. hour per week	49.8	50.6	52.5	53.7	55.1	53.9

Source: - The annual report on the Labor Force Survey (NSO, Korea)

After 1985, group of 35 hours less then per week was sharply decreased from 17.0 percent in 1980 to 7.7 percent in 2002. It means that temporary or part time jobs are decreased on the other hand regular workers were increased. Traditionally, lifetime employment and seniority-based wage system have been built in Korea. However, they are gradually changing recently.

3-3-2. USA

I will try to analysis two groups such as 35 hours less then and 35 hours more then because I can get specific data of class by working hours about USA.

We can see that American workers work very regular in general. The percentage distribution of employed person shows irregular fluctuation, but it is very stable. The class of 35 hours more then per week is distributed around from 82% to 83% among employed person. And, The class of 35 hours less then per week is distributed around from 17 % to 18 % respectively.

Table 6. Number of workers by working hours (Unite: thousands person, %)

	2002	2000	1995	1990	1985	1980
Total	136,486 (100.0)	136,900 (100.0)	124,908 (100.0)	118,796 (100.0)	107,154 (100.0)	397,213 (100.0)
35 hours less then	23,794 (17.4)	23,037 (16.8)	23,225 (18.6)	20,123 (16.9)	18,618 (17.4)	66,955 (17.7)
35 hours more then	112,709 (82.6)	113,855 (83.2)	101,677 (81.4)	98,699 (83.1)	88,548 (82.6)	33,0391 (83.2)

Source: The results of the Current Population Survey (BLS, USA)

3-3-3. Comparison between two countries

It is difficult to compare data of two countries directly because classification of working hours is different between two countries. The trend of employed person classified by the number of working hours shows irregular fluctuation in Korean and USA. It is not easy to explain any prominent trend. However, there are found roughly some declining trends of the class of 36 hours more then after 1995 in Korea, but very stable in USA. The class of 35 hours more then per week is distributed around from 82% to 83% among employed person in USA. The rate of employed person worked 36 hours more then is 88.4 percent in 2002 in Korea. It is 5.8 percent points higher than USA.

4. Trend in Unemployment

4-1. KOREA

As I mentioned before, the economically active population consists of employed person and unemployed persons. The unemployed person is defined as a person who was not work but was available for work and was actively looking for during the reference week just in accordance with internationally recommended definition. This category of the unemployed included also a person who was not looking for work because of bad whether, temporary illness, or having made arrangement to start a new job within a month subsequent to the reference week.

The rate of unemployment is shown in Korea in Table 7-1. The total rate of unemployment is very stable. It is almost the status of full employment. There are many reasons why Korean labor market is stable. The most important reason is that new jobs are continuously created with economic growth. After 1990s, Korean government imports foreign labor force to meet lack of manpower in labor market.

Especially, the rate of unemployment is very high in the group of 15-19 and 20-29 years old. These groups are almost new unemployment Students graduated from high schools and universities rush into the labor market at the same time. It is very competitive to get a job. High-educated unemployment is a controversial issue in Korea. Today, most young people graduate high schools or colleges. They do not work at the low-level workplaces, so called 3D jobs, which means Dirty jobs, Difficult jobs, and Dangerous jobs. This phenomenon occurred after 1988 Seoul Olympic Games in Korea.

We can fiend out one of particular trend in the 40-49 and 50-60 years old of male's age group. The unemployment rate of the groups was considerably

stable during 1990s less than 2 percent. However, it was sharply increased in 2000 at 3.8 percent. It increased nearly two times of the rate in 1995. Korea experienced financial crisis from 1997 to 2000. Under IMF's bailout, Korean economy resulted to many changes, including labor market. A lot of 40s and 50s male's workers has been fired/retired since financial crisis in 1997. Some characteristics were appeared in labor market during financial crisis as follows :

- 1) A soaring of unemployment rate
- 2) A deteriorating quality in employment
- 3) The reduction of wages
- 4) A worsening of income distribution
- 5) Early retire

In case of female, the group of 15-19 and 20-29 years old is higher than other groups. It is also same as male's reason. New unemployed persons arising from graduating schools appear suddenly in labor market. Especially, the most of girl students go into the labor market as soon as they graduate from high school. Therefore, the highest unemployment rate is shown in the 15-19 age group.

4-2. USA

I would like to analysis the rate of unemployment of USA simply because of absent data by age groups. The unemployment rate reflects a nation's economic situation sensitively. The unemployment rate of USA shows irregular trends such as 7.2 % in 1980, 5.6 % in 1985 and 1990, 4.0 % in 2000, and 5.8% in 2002 (See Table 7-2). The labor market of USA is very flexible. Owner of

company can fire employee easily. Also, American workers can transfer their jobs from a company to another company easily. Therefore, The employment and unemployment rate are reflected quickly and sensitively.

Table 7-1 The rate of unemployment by age and sex in Korea (Unite: %)

Age group	2002	2000	1995	1990	1985	1980
Total	3.1	4.1	2.1	2.4	4.0	5.2
15 – 19	11.1	13.8	7.9	9.2	11.1	13.3
20 – 29	6.3	7.1	4.3	4.9	7.1	8.1
30 – 39	2.8	3.4	1.4	1.6	2.8	3.8
40 – 49	1.9	3.3	1.1	1.2	2.3	2.9
50 – 59	1.8	2.9	0.9	1.1	1.6	2.5
60 +	1.0	1.3	0.4	0.4	0.3	0.6
Male	3.5	4.7	2.3	2.9	5.0	6.2
15 – 19	12.4	14.5	8.7	10.1	12.4	14.8
20 – 29	7.7	8.4	4.9	6.2	8.9	9.7
30 – 39	3.1	3.9	1.7	2.0	3.7	4.8
40 – 49	2.2	3.8	1.4	1.7	3.3	4.0
50 – 59	2.2	3.7	1.3	1.6	2.6	3.7
60 +	1.3	1.9	0.7	0.6	0.4	0.9
Female	2.5	3.3	1.7	1.8	2.4	3.5
15 – 19	9.9	13.0	7.3	8.7	10.0	12.0
20 – 29	4.8	5.6	3.6	3.4	4.3	5.6
30 – 39	2.2	2.6	0.8	0.9	1.1	1.6
40 – 49	1.5	2.6	0.7	0.5	0.7	0.9
50 – 59	1.1	1.7	0.4	0.3	0.2	0.7
60 +	0.6	0.7	0.3	0.2	0	0

Source: The annual report on the Labor Force Survey (NSO, Korea)

Table 7-2 The rate of unemployment by sex in USA (Unite: %)

	2002	2000	1995	1990	1985	1980
Total	5.8	4.0	5.6	5.6	7.2	7.2
Male	5.9	3.9	5.6	5.7	7.0	7.0
Female	5.6	4.1	5.6	5.5	7.5	7.4

Source: The results of the Current Population Survey (BLS, USA)

4-3. Comparison between two countries

The total rate of unemployment of Korea is lower than that of USA. There are some reasons. One reason is that new jobs are created with rapid economic growth in Korea. Another reason is that Korean people don't want to say an unemployed person traditionally. For example, if a boy and girl are under unemployment after graduating from a college, his/her parents (survey respondents) don't want to say my son/daughter is not work. They say their child help household works. However, most American respondents say clearly that my son/daughter is looking for jobs. American people graduated from a college are not supported by their parents. They have to go into the labor market directly. However, Korean parents support their children graduated from a college until he/she get a job. Sometimes, they do not go into the labor market. They stay non-economically active population. Therefore, there is the gap of the unemployment rate between Korea and USA.

IV. Summary

As series of analytical observations are presented in this paper, an attempt has been made to demonstrate some processes of modernization taking place in the structure of economically active population in Korea. In fact, some processes of transitional change towards the modernization were proved, for example, by an increase of female participation in the labor force market during last four decades. Such an increase of female participation in the economic activity is often supported by a progress of educational level of women as well as change of traditional professional consciousness.

Men's role is gradually reducing in the labor market in Korea and USA.

On the contrary, women's power has continuously been enhanced. In the United States, women's participation rate was increased by 21.3 percent points from 1963 to 2002. American women's power has greatly been enhanced. However, in Korea, women's participation was just increased by 12.7 percent points during the same period. There is still considerable gap between men's and women's participation rates in Korea.

We can see the different trends of employed persons between two countries. The trend of the number of employed person in Korea is increasing (at 5.1 percent points increased), but shows irregular fluctuation in USA (0.1 percent point reduced) from 1963 to 2002. The transitional progress of industrialization in economic activity of employed person in Korea has been also demonstrated, which shows decrease of the proportion in the agriculture, forestry and fishing industry, associated with an alternative increase of the proportion in the mining and manufacturing industry as well as service sectors. Unfortunately, it could not be compared data of the employed person by industry between two countries, because the classification of industry is quite different. We can also imagine that Korean workers have played a significant role to enhance economic development, working 50 hours and more than per week. It was one of huge motivations to enhancing development in Korea.

The unemployment rate is one of controversial issues in every country. It is an important and sensitive indicator to understand economic circumstance of a country. The total rate of unemployment of Korea is lower than that of USA. There are couples of reasons. One reason is that new jobs are created with rapid economic growth in Korea. The others are due to social custom, survey circumstance, people's consciousness, etc. Korean government should support budget and manpower to collect the data of the survey with timeliness and

accuracy

Finally, there are some different backgrounds and definitions between EAPS and CPS. The CPS reported only for those 16 and older. Persons under 16 years of age are excluded from the official estimates due to laws and social custom in the United States. However, The EAPS publishes 15 years old and more over.

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한국의 도시화 요약

1. 서

한국은 전례없는 산업화를 달성하였다. 1960 년에 1 인당 GNP 는 US\$ 79 에서 2002 년에는 US\$ 10,013 로 성장하였다. 이 기간동안 한국은 산업사회로 변모하였고 이 과정에서 대도시로의 인구와 산업활동의 집중은 규모의 경제를 이룩하는데 효과적이었다. 수도권에 산업과 인프라의 투자는 집중화와 지역 불균형을 초래하였다. 이 보고서에서 지난 40 년간 한국의 도시화 현상을 수도권을 중심으로 소개하고자 한다.

2, 한국의 도시화

2-1. 도시화 과정

한국정부는 1962 년부터 1990 년대까지 경제개발 5 개년계획을 성공적으로 추진하였다. 이와 더불어 인구이동도 급속히 이루어졌다. 1960 년 24,898 천명중 72%가 농촌지역에 살고 있었고 28%가 도시지역에 살고 있었으나 10 년후에는 41.1%가 도시지역에 거주하였다. 1980 년에는 인구의 절반이 넘는 57.2%가 도시에서 생활하였고 2000 년에는 79.7%가 거주하게 되었다(표 1 참조).

표 1. 연도별, 시군별 인구

(단위 : 천명)

	1960	1970	1980	1990	2000
Total Pop.	24,898 (100.0%)	31,435 (100.0%)	37,407 (100.0%)	43,390 (100.0%)	45,985 (100.0%)
City Num. of Pop.	6,997 (28.1%)	12,929 (41.1%)	21,409 (57.2%)	32,290 (74.4%)	36,643 (79.7%)
Average Pop.	259	404	536	443	
Gun Num. Of Pop	17,992 (71.9%)	18,507 (58.9%)	15,998 (42.8%)	11,100 (17.3%)	9,342 (20.3%)
Average Pop.	129	132	113	81	

자료원: 2000 년 인구주택 총조사 보고서(대한민국, 통계청)

2-2. 도시화 이유

도시화의 이유가 될 수 있는 것은 다음 두 가지로 생각해 볼 수 있다. 첫째, 시골에 살고 있는 사람이 어떤 이유로 도시로 이동하는 것이고, 둘째로는 어떤 시골지역이 도시로 변경되는 것이다. 1960 년도에 한국의 도시 수는 27 개였으나 2000 년에는 87 개로 증가하였다(표 2 참조).

표 2. 연도별 시군수

	1960	1970	1980	1990	2000
Num. of city	27	32	40	73	87
Num. of gun	140	140	141	137	88

자료원 : 2000 년 인주택 총조사 보고서(대한민국, 통계청)

3. 도시화로부터 발생하는 문제점

3-1. 지역간 차별 발생

1960년대에는 전국적으로 분포된 인구가 지난 40년간 도시로의 이동이 급속하게 이루어져왔다. 이러한 도시로의 인구집중은 여러 가지 문제점을 일으켰다. 시부지역의 과밀화 현상, 농촌지역의 일손 부족 등의 현상을 초래하게 되었다. 특히 인구뿐만 아니라 경제, 교육 등이 수도권에 밀집하게 되었다(표 3 참조).

1990년대 이후 지역간 균형발전의 문제가 커다란 이슈가 되었다. 더구나 주택부족과 과밀인구 문제를 해결하기 위하여 수도권 지역에 신도시가 건설되고 계획될 것이다. 수도권 지역의 인구와 기능의 집중은 오늘날 커다란 이슈가 되고 있다. 현행 한국정부는 인구와 기능을 분산하기 위하여 행정수도를 서울에서 다른 지역으로 옮기는 것을 계획하고 있다.

표 3. 서울의 인구집중도

	Population (Thousand)	GDP (Million USD)	Economically Active Pop. (Thousand)	Num. of college students (Thousand)
전 국	44,712	503,785,053	22,069	2,266
서 울	9,632	109,306,461	4,904	478
비 율	21.5%	21.6	22.2%	21.0%

Source: www.kosis.nso.go.kr-population, GDP, Labor Force Survey, Education.

3-2. 주택문제

산업정책은 도시화와 핵가족화가 급속히 이루어지는 원인이 되었다. 이러한 현상은 주택의 부족과 주변 생활여건이 나쁘게 되었다. 비록 정부와 개인기업에서 끊임없이 주택을 보급하기는 하였지만 2000 년도 도시지역의 주택보급률은 58.4% 이다(표 4 참조). 수도권 지역의 주택보급에 대해서는 좀더 자세히 제 4 장에서 살펴보기로 하겠다.

표 4. 주택보급률

	1970	1980	1990	2000
전 국	76.9	71.2	63.1	76.6
시부지역	58.8	56.6	54.9	58.4

Source: Report on the 2000 Population and Housing Census (NSO, Korea)

Note: ordinary household/total house unite

3-3. 난개발 문제

1960 년대 이후 수도권으로의 인구이동은 육체노동자와 판자촌을 양산하게 되었다. 1980 년대 이후 정부는 판자촌 지역을 재개발하였다. 그러나 가난한 사람들은 재건축된 아파트를 살 수 있는 충분한 돈이

없어서 재건축 아파트에서 살 수가 없었다. 그들은 다른 지역으로 이주하게 되었고 새로운 슬럼가를 만들었다.

3-4. 교통

1970 년대에 한국에서 자동차가 급격하게 증가되었다. 자동차의 증가는 생활공간을 확대시켰고 하루에 어느 곳이든지 도착하게 되었다. 자동차의 증가는 교통에 대혁명을 가져왔지만 한편으로는 교통혼잡, 교통사고, 소음 등 많은 부정적인 요소도 동반하였다.

3-5. 공해

도시공해는 전 세계를 통하여 인간의 건강과 환경을 크게 위협하고 있다. 서울의 인구집중은 교통, 에너지, 산업활동의 집중 등으로 인하여 도시공해가 증가하였다.

3-6. 자연의 훼손

도시화는 새로운 거주지와 기능적인 공간이 요청된다. 이러한 요청에 부응하기 위하여 시는 환경적으로 중요한 외곽지역을 개발하려고 한다. 도시화의 확장은 필수불가결 하게 자연을 훼손한다. 서울의 경우 한국 정부는 1988 년과 1992 년 사이에 서울의

주택문제를 해결하려는 방안으로 서울 주변 5 개에 도시에 2 백만 호를 건설하기 위한 계획을 수립하였다. 신도시는 서울 중심에서 25 km 이내에 위치함으로써 산림과 농토 등을 파괴하여야 만 되었다.

4. 주택문제와 정책대응

4-1. 수도권으로의 집중

서울은 한국의 600 년 고도이다. 서울은 국가의 정치, 경제, 교육 등의 중심지로서 성장하여왔다. 정부의 5 개년 계획은 시골에 살고 있는 사람들을 서울로 모여들게 하였다. 1960 년대 서울, 경기, 인천에 살고 있는 인구는 전체 인구의 20.9%인 5,194 천명이 이었다. 2000 년에는 21,260 천명으로 48.2 퍼센트가 서울 수도권 지역에 살았다. 수도권에는 약 55.6%의 사업체와 44.2%의 근로자가 소재해 있으며 자본의 예금과 대출이 68.0%와 62.2%를 각각 차지하고 있다. 학교와 학생수는 41.0%, 39.3%가 수도권 지역에 편중되어 있다. 그러나 표 5 에서 보는 바와 같이 1980 년대초 이후부터 수도권 지역은 분권화하기 시작하여 경기와 인천 지역의 인구 증가가 서울보다 더 빠르게 진행되었다.

표 5. 년도별 수도권 지역의 인구

	1960	1970	1980	1990	2000
전체인구.	24,898 (100.0%)	31,435 (100.0%)	37,407 (100.0%)	43,390 (100.0%)	45,985 (100.0%)
수도권	5,194 (20.9)	8,578 (27.3)	13,281 (35.5)	18,573 (42.8)	21,260 (46.2)
서울	2,445 (9.8)	5,525 (17.6)	8,351 (22.3)	10,603 (24.4)	9,854 (21.4)
경기, 인천	2,749 (11.0)	3,353 (10.7)	4,930 (13.2)	7,970 (18.4)	11,406 (24.9)

자료원: 2000 년 인구 및 주택 총조사 보고서 (대한민국, 통계청)

4-2. 수도권의 주택문제

수도권 지역에서 주택문제는 경제조건, 인구성장, 주택제고 등과 관련이 있다. 여기에서는 다섯 가지로 요약해서 살펴보겠다.

첫째, 정부의 문제로 1970 년 이후 계속해서 주택이 부족하였다.

둘째, 정부의 분산화 정책에도 불구하고 지난 40 년간 수도권 지역의 인구가 집중되었다.

셋째, 사업체를 외곽지역에 분산하였음에도 불구하고 약 50 만 명이 서울로 출퇴근한다. 서울과 위성도시 간에 밀접한 관계는 정책에 관심을 끌고 신도시 배치, 주택건설과 같은 광역계획에 많은 문제를 야기 시킨다.

넷째, 한국에서의 교외화의 구조적 양상은 많은 점에서 선진국과 다르다. 선진국에서의 교외화는 중상층이 교외로 탈출하는 것이다. 그러나 한국의 경우 저소득층을 집값이 싼 도시 교외로 이동시키는 것이다.

다섯째, 한국의 기본적인 주택정책은 “filtering concept”이다. 즉 중상층에 집 공급을 늘이면 결국은 저소득층에게도 집을 늘리게 되는 것이고 집값을 낮출 수 있다고 보는 것이다. 이러한 필터링 컨셉은 수도권 지역에 유행하였다. 그러나 이러한 필터링 전략은 한국에서 부의 재분배 전략으로는 어려운 것으로 나타났다, 정부는 1988년부터 1992년 동안 매년 사십만호씩 이백만호 건설을 위한 5개년 계획을 수립하였다. 그 결과 1987년 69.2%였던 주택보급률은 1999년에는 72.9%가 되었다.

4-3. 신도시와 주택건설

4-3-1. 신도시효과와 목표

정부가 1989년 주택 이백만호 건설과 더불어 5개 신도시건설 계획을 발표한 첫 번째 동기는 수도권의 주택문제를 해결하기 위한 것이다. 실소득이 증가하였지만 집값 상승이 훨씬 더 높게

상승하였다. 1975 년과 1988 년 사이에 평균 가구소득은 2.9 배, 소비자물가는 3.5 배, 집값은 4.7 배 각각 증가하였다.

신도시 건설을 위한 두 번째 동기는 개발을 위한 적절한 서울의 땅이 부족하였기 때문이다. 1970 년대와 80 년대 “ 도시안의 도시” 전략은 개발 가능한 땅이 부족하여 더 이상 설득력을 갖지 못하였다. 비록 정부가 신도시 정책과 도시안의 도시 정책을 여러 차례 수립하였지만 아직도 주택이 부족하고 만성적인 집값 인플레이션 상태에 있다.

세번째, 소득의 증가, 도심의 퇴화와 복잡함으로 인하여 서울 거주자들은 거주환경에 관심을 갖게 되고 새로운 주거지와 신도시에 대한 수요가 증가되었다. 구도시의 답답함은 잘 보존된 교외의 자연환경과 함께하는 현대적인 주거환경이 대안이 될 수 있었다.

마지막으로 정부는 5 개 신도시가 서울의 복잡함을 해결하는 대안이 되기를 기대하였다. 5 개 신도시의 낮은 땅값과 주택가격은 서울시민들을 유혹하기에 충분하였고 많은 공공기관과 개인기업들이 복잡한 서울을 벗어났다.

4-3-2. 신도시 문제와 주택건설

비록 5 개 신도시 건설은 수도권에 부족한 주택난을 해결하는데는 성공을 하였지만 개발에 있어 많은 문제점을 낳았다.

1) 수도권의 인구 집중과 경제활동

수도권의 인구집중과 경제활동은 계속하여 증가하였다. 수도권은 총인구의 45%가 살고 있으며 경제사회적으로 많은 문제점을 야기시켰다. 이러한 수도권의 집중현상은 국가의 경제활동도 수도권에 집중되었다.

2) 고밀도 개발과 배드 타운

1 헥타당 평균 인구밀도는 181 명이고 신도시의 인구밀도는 헥타당 235 명이다. 이것은 서울의 인구밀도 더 높다. 순 거주지역 인구밀도는 더더욱 높다. 서울의 인구밀도가 헥타당 364 명인 반면 5 개 신도시 평균 신도시는 헥타당 686 명이다. 이것은 거주용 땅 공급을 제한하는 정부의 엄격한 토지이용 규정 때문으로 고밀도 개발을 촉진해 왔다. 신도시는 서울의 반경 25Km 안에 위치한 경기도 지역이지만 거주자의 66%가 서울로 통학하는 사람들이다. 이것은 단지 배드타운에 불과한 것이다. 그들은 기능적으로 서울에

의지하고 교외 주거지역으로의 역할을 수행한다. 불행히도 신도시는 자족도시로서 설계되지 못하였다.

3) 다양성의 부족과 가격 조절

신도시 건설계획은 충분한 경제사회적인 연구없이 단기간에 결정되었다. 목적중 하나는 수도의 복잡함을 피하고 시민들에게 자연과 도시가 함께하는 생활공간을 제공하기 위함이다. 이러한 신도시 건설의 계획과 설계는 기술혁신과 혁신적인 기술을 요구하였다. 그러나 거기에는 집의 형태와 건설설계에 변화가 거의 없었다. 신도시의 약 90%가 다양성이 없는 아파트이다. 이것은 단지 대도시를 복사하는 것이나 다름없다. 주택건설업자가 아파트 설계를 향상시킴으로써 인센티브가 없기 때문에 가격통제는 주택을 단일화하는 결과를 초래하였다. 뿐만 아니라 아파트의 질도 떨어졌다. 값싼 자재를 사용하고 숙련되지 못한 인력을 투입하였다. 주택 건설업자와 입주자 사이에 많은 논란이 발생하였다. 1982 년 아파트 건설가격은 정부에 의해 결정되었다. flexible ceiling price 는 건설, 재료, 노동 등에 의해 결정된다. 1989 년에 정부는 고정비용 방식에서 flexible ceiling price 을 채택하고 소형과 대형 아파트에 채권입찰 방식을 채택하였다. 1983 년이후 채권입찰제에 추첨방식을 추가하였다.

이 제도는 조절가격이 시장가격의 70%보다 낮은 한정된 단독주택에 적용되었다. 이러한 제도하에서 주택을 사려는 사람은 주택채권을 사야 한다.

4) 여과 전략

한국의 많은 기획가와 정부관료들은 필터링 제도가 저소득층을 돕는다고 생각한다. 수도권에 주택수를 늘린다면 중산층이 살았던 집은 저소득층이 이용할 수 있다는 것이다.

5) 사회적 목표

신도시는 주택소유에 대한 기회를 균등하게 하고 고용을 창출하려는 것 뿐만 아니라 모든 계층이 함께하는 수단으로 나타났다. 수도권 5개 신도시건설의 가장 중요한 정의중 하나는 사회적으로 균형잡힌 사회를 만드는 것이다. 신도시는 여러 소득계층에게 적절한 가격으로 다양한 주택을 제공함으로써 이러한 사회적 목표를 달성하고자 하였다. 그러나 표 6에서 보는 바와 같이 고소득자와 고학력자들이 거주하게 되었다. 신도시 개발은 중상위 그룹의 열망에 기초하였고 저소득층에 대해서는 소홀히 하였다. 이러한 것들은 서울 도시개발에 일반적으로 나타나는

현상이다. 신도시 건설은 본래의 목적을 달성하지 못하였다. 신도시와 서울외곽 사이에 많은 위성도시는 난개발을 계속 허용하게 되었다. 신도시 개발의 완성은 교통을 악화 시키고 사업과 상업활동은 생각했던 만큼 활발하지 못했을 뿐만 아니라 주민들의 필수적인 생활 서비스도 부족하였다.

표 6. 신도시 사회경제적 특성

	가구주 연령	가구크기(명)	월수입(만원)	교육정도(%)*
분 당	43.0	3.9	194.0	60.6
일 산	43.8	3.8	147.7	47.2
평 촌	42.2	3.8	146.6	46.7
산 본	40.7	3.9	143.9	53.4
중 동	41.4	4.1	149.4	44.0
계	42.5	3.9	162.8	51.8

* : 대졸이상의 가구주, 자료원: KRIHS, 1993

5. 결론 및 정책제안

지난 40 년 동안 한국은 급속한 경제발전과 더불어 사회경제 구조가 변화하였다. 이러한 산업화 과정에서 대규모 농촌인구가 도시로 집중되었다. 도시와 농촌의 인구분포는 정반대로 바뀌었다.

시부지역의 인구는 1960 년에 28.0%에서 2000 년에는 79.7%로 바뀌었다. 특히 수도권 인구가 급격히 증가하였다. 수도권 인구는 총인구의 거의 절반을 차지하게 되었다. 현재 한국정부는 수도를 옮기는 계획을 수립하고 있다. 도시화 과정은 많은 문제점을 낳았다. 예를 들면 차별, 주택 부족, 슬럼화, 교통, 오염, 자연훼손 등. 특히 수도권의 주택문제는 매우 심각하다. 1960 년대 이후 중앙정부가 성장을 조절하고 지역균형 발전 계획을 수립하여왔으나 수도권 성장을 제한하려는 노력은 실패하였다. 5 개 신도시를 건설한 것은 한층 더 수도권을 복잡하게 하였다. 향후 주택과 신도시 개발에 종합적인 대안을 개발하기 위하여 다음 사항을 고려해 볼 필요가 있다.

1. 신도시 개발에 있어 주택정책은 저소득층을 위한 임대주택을 제공하기보다는 중상위 계층을 위하는 것 같다. 사실 이러한 필터링 제도로 소득을 재분배한 다는 것은 어렵다. 수도권 지역에서의 신도시는 다양한 주택의 형태와 다양한 계층이 살 수 있도록 하는 것이다.

2. 5 개 신도는 기능적으로 서울에 의존하게 되어 있다. 이제는 사람이 그곳에서 생활할 수 있는 자족도시가 필요하다. 신도시는

수도권의 복잡함을 해소할 수 있도록 건설하여야 할 뿐만 아니라 독립적으로 경제의 핵심이 되도록 만들어 져야 한다.

3. 수도권에 직면하고 있는 문제는 수도권의 문제로만 볼 수 없다. 다양한 공간정책이 필요하며 뒤 떨어진 지역의 경제사회 개발을 촉진할 필요가 있다.

4. 신도시의 인구는 저소득, 중상위 계층의 사람들이 다 같이 어울릴 수 있고 도록 균형적이어야 한다.

5. 향후 수도권 지역의 개발은 신규 도시가 보다 균형적인 발전, 도심과 외곽의 균형성장, 도시민과 농촌 사람들이 보다 밀접하게 할 수 있는 기회가 제공될 수 있도록 하여야 한다.

Urbanization in Korea)

December 3, 2003

Jong-Joon RYU

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1. Introduction

Korea has experienced an unprecedented transformation of its industrial and spatial structures. In 1960, the per capita GNP was US\$ 79 with the agricultural and fishery are the main industry of the total GNP. 63% of the workers were employed in primary sector. However, in 2002, the per capita was US\$ 10,013, the employment of primary sector has sharply declined to 11.3% of the total workers, and 5.7% of the total products (www.kosis.nso.go.kr /GDP).

During this period, Korea transformed into an industrialized society. Through this industrialization process, labor-intensive manufacturing activities were concentrated in large metropolitan areas particularly in Capital Region. The concentration of population and industrial activities in large metropolitan areas generated a synergistic effect creating agglomeration economies. The industrial and infrastructure investments in Capital Region have resulted further spatial concentration and created regional disparity problem. In this paper, I would like to introduce the urbanization of the Korea briefly during last four decades. Especially, I will study Seoul Metropolitan Area (SMA). The paper consists of the chapter 1: Introduction, the chapter 2: Urbanization in Korea, in the chapter 3: Problems and conflicts arising from urbanization, in the chapter 4: Housing problems and policy responses in the Seoul Metropolitan Area, in chapter 5: Summary.

2. Urbanization in Korea

2-1. The procedure of urbanization

Korean government conducted the 5-year Plan of Economic Development, which was started in 1962 to develop national economy. The plan was conducted successfully until 1990s. In Korea, migration has rapidly become during last 40 years. Korea had 24,898 thousand people in 1960. 72% among them lived in rural areas and 28 % in urban areas.

Table 1. Population by Year, City and Gun (Unite: thousand people)

		1960	1970	1980	1990	2000
Total Pop.		24,898 (100.0%)	31,435 (100.0%)	37,407 (100.0%)	43,390 (100.0%)	45,985 (100.0%)
City	Num. of Pop.	6,997 (28.1%)	12,929 (41.1%)	21,409 (57.2%)	32,290 (74.4%)	36,643 (79.7%)
	Average Pop.	259	404	536	443	
Gun	Num. of Pop	17,992 (71.9%)	18,507 (58.9%)	15,998 (42.8%)	11,100 (17.3%)	9,342 (20.3%)
	Average Pop.	129	132	113	81	

Source: Report on the 2000 Population and Housing Census (NSO, Korea)

After 10 years later, 41.1 percent of total population dwelled in cities. With industrialization, conceptualization of population was tremendously become

from rural to urban areas.

In 1980, 57.2 percent lived in cities. It was more than half of total population. In 1990, 74.4 percent, in 2000 79.7 percent dwelled in city areas respectively.

The figures were completely reversed between rural and urban. Urban population was increased 51.5 percent point from 1960 to 1990.

2-2. The reasons of urbanization

There are two reasons of urbanization. The first reason is that people, who live in rural areas, move to urban areas. This reason reduces rural population. It causes many social problems such as lack of labor force in rural areas. The second reason is that some rural areas change to urban areas by classifying administrative unites because population floods in a rural area. In 1960, Korea had 27 cities, however, it had 87 cities in 2000

Table 2. The number of cities by year

	1960	1970	1980	1990	2000
Num. of city	27	32	40	73	87
Num. of gun	140	140	141	137	88

Source: Report on the 2000 Population and Housing Census (NSO, Korea)

3. Problems and conflicts arising from urbanization

3-1. Growth discrimination between areas

Migration from urban to rural has rapidly been become during last four decades in Korea. In 1960s, Population was almost evenly distributed over the whole country. After carrying out the 5-year plan for development, which was started in 1962, population gathered into core areas. There were many problems between urban and rural after that time. Overpopulation and overdensity was occurred in the cities, and the scarcity of labor became in the rural areas. Especially, not only population but also economy, education were concentrated in the Seoul and other metropolitan areas. Since 1990s, the balance of development between areas has been big issue for the national land development. Moreover, new cities were built and will be constructed around metropolitan area in order to meet overpopulation and lack of housing. Concentration of population and function in metropolitan area are controversial issue today. Current Korean government has plan of moving capital city to distribute population and function. (KNLUA, 2001)

Table 3. The degree of concentration in Soul

	Population (Thousand)	GDP (Million USD)	Economically Active Pop. (Thousand)	Num. of college students (Thousand)
Whole country	44,712	503,785,053	22,069	2,266
Seoul	9,632	109,306,461	4,904	478
Rate	21.5%	21.6	22.2%	21.0%

Source: www.kosis.nso.go.kr-population., GDP, Labor Force Survey, Education.

3-2. Problems of Housing

The policy of industrialization caused rapidly to urbanize and nuclearize family. These phenomena occurred the lack of housing and low living condition. The rate of diffusion of housing in city areas was 58.4 percent in 2000. Even though Korean government and private sectors provide housing unites continuously to meet demand of housing. However, it is too short, especially, in SMA. I would like to introduce the housing problems and new-town policy in the SMA in chapter 4 more deeply.

Table 4. The rate of diffusion of housing

	1970	1980	1990	2000
Whole country	76.9	71.2	63.1	76.6
City Areas	58.8	56.6	54.9	58.4

Source: Report on the 2000 Population and Housing Census (NSO, Korea)

Note: ordinary household/total house unite

3-3. Problems of Slum

After 1960s, a lot of rural population rushed into SMA. This migration caused to produce physical workers and slum areas (Panja chon). After 1980s, government rebuilt slum areas. However, the poor people could not live in the rebuilt apartments because they could not have enough money to buy an apartment. They moved another place and new slum built.

3-4. Transportation

In late 1970s in Korea, automobile was greatly increased. Automobile enlarged our life spaces. It was possible for us to reach everywhere within one day. Increasing cars resulted in the great renovation of transportation in Korea. Today, it is necessities in our life. On the other hand, there are many harmful effects, such as traffic congestion, traffic accidents, street noise, etc.

3-5. Pollution

Urban pollution poses a significant threat to human health and the environment throughout the world. Over population in Seoul have resulted in increasing urban pollution due to transportation, energy production and industrial activity all concentrated in densely populated Seoul Metropolitan Areas.

Seoul has a combination of intense industrial activity, large population density and number and high motor vehicle use.

3-6. Damages on natural environment

Urbanization should request new residential and functional areas. In order to meet these requests, a city will try to develop its outskirts. The outskirts of a city are very important ecologically. The urban expansion damages on natural environment indispensably. In case of SMA, Korean government formulated a plan of the five new towns to construct 2 million dwelling unites between 1988 and 1992 to meet the lack of housing unites. The new towns are located within

25kilometres of the capital city center. This plan should destroyed forester, and farm lands.

4. Housing problems and policy responses in the Seoul Metropolitan Area

4-1. Concentration in Seoul Metropolitan Area

Seoul has been the capital of Korea since 600 years ago. It has been grown as the center of the nation's political and economic power. More recently, after conducting the 5-year Plan, People, who lived in rural areas, gathered into Seoul and the Capital Region. In 1960, Seoul Metropolitan Area includes the city of Seoul, Kyonggi province and Inchen city. SMA had 5,194 thousand persons. It was 20.9 percent of total population. In 2000, population of SMA was 21,260 thousand people. It was 46.2 percent of total population.

Table 5. Population of SMA by year

	1960	1970	1980	1990	2000
Total Pop.	24,898 (100.0%)	31,435 (100.0%)	37,407 (100.0%)	43,390 (100.0%)	45,985 (100.0%)
Metropolitan Areas	5,194 (20.9)	8,578 (27.3)	13,281 (35.5)	18,573 (42.8)	21,260 (46.2)
- Seoul	2,445 (9.8)	5,525 (17.6)	8,351 (22.3)	10,603 (24.4)	9,854 (21.4)
- Kyunggi & Incheon	2,749 (11.0)	3,353 (10.7)	4,930 (13.2)	7,970 (18.4)	11,406 (24.9)

Source: Report on the 2000 Population and Housing Census (National Statistical Office, Korea)

Approximately 55.6 percent of the total industrial establishments and 44.2 percent of their workers were located in the SMA (see Table 6). The share of bank deposits and loans in the Capital Region constituted 68.0 and 62.2 percent of the respective national totals. Since the early 1980s, however, the SMA started to decentralize. The population of Kyunggi and Incheon areas increased much faster than in Seoul. Because of the suburbanization of Seoul citizens and the relocation of manufacturing activities in Capital Region.

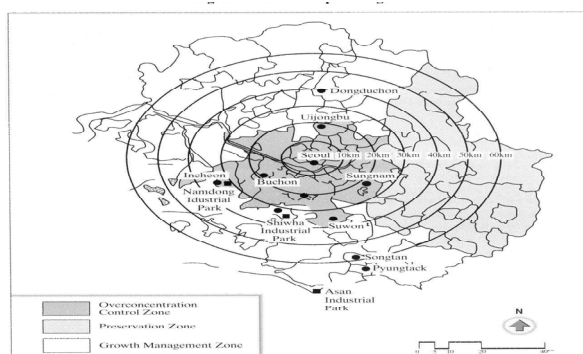
Table 6. Main indication of SMA (2000) (unit : %)

Indicator	MA	SEOUL	Inchon & Kyunggi
Area	11.8	0.6	11.2
Colleges	41.0	24.2	16.8
College Students	39.3	25.4	13.9
Enterprises	55.6	19.2	36.4
Employees	44.2	21.8	22.4
Loan	62.2	45.2	17.0
Saving	68.0	52.4	15.6
Passenger Cars	46.0	20.6	25.4
Medical Facilities	47.5	25.6	21.9

Note: 1) Nurnbers are shares in national total.

Sources: Ministry of Construction (MOC). 2000.

Fig. 1: Seoul Metropolitan Area



4-2. Housing problems in the SMA (Seong-Kyu HA)

The specific housing problems faced in the regions vary, depending on such factors as general economic conditions, a region's rate of population growth and its available housing stock. We can identify five for the SMA.

The first, there is the governmental problem of housing shortage. Since 1970 this shortage has grown.

Second, in spite of the government's efforts at decentralization, the population in Seoul and Capital Area has quadrupled during the past four decades (see Table 5).

Third, in spite of the decentralization of manufacturing employment to the outer ring of the SMA, the population shift is largely residential, approximately half a million suburban residents continuing to commute daily to Seoul. Such close interactions between Seoul and its satellite cities attract policy attention and create many region-wide planning problems, such as the allocation of new town and housing estates.

Fourth, the structural pattern of suburbanisation in Korea is different from that of developed countries in many respects. In Western countries suburbanisation may be characterized as an exodus of the middle – and higher income classes to suburbia, owing to their increased ability to drive there on the new motorway (Levy, 1990, 18-20). In Korea, however, suburbanisation consists in a relocation of lower-income classes to the outskirts of a city, where cheaper housing is available. The living environment within the SMA's suburban and satellite cities remains unsatisfactory.

Fifth, Korea's basic housing strategy has essentially been based on the 'filtering concept': an increase in the supply of housing for middle- and high-income households will eventually improve the housing available to lower-income households and reduce the rate of increase in the prices of housing services. The filtering concept has been particularly popular in the SMA. It is, however, difficult to demonstrate that filtering strategies in Korea encourage distributional equity.

The government formulated a five-year plan to construct 2 million dwelling units between 1988 and 1992, or 400,000 units per year, so that the housing supply ratio could increase from 69.2 percent in 1987 to 72.9 percent in 1999.

4-3. The new town and housing production (Seong-Kyu HA)

4-3-1. The goals and effects of the new towns

In addition to the plan to build 2 million dwelling units, in 1989 the government announced plans to construct five new towns, the prime motive being to solve the SMA's housing problems. Although real housing incomes had increased, the increase in house price had become far higher. Between 1975 and 1988, the average household's income increased 2.9 times, consumer prices 3.5 times, and house price 4.7 times (EPB, 1990; Ha, 1991b). Enormous fortunes were made from housing; this led to more speculation and accelerated increase in house price.

The second motive for the new town plan was the lack of land in Seoul suitable for development. During the 1970s and 1980s, the 'new town in town'

strategy pursued by the government proved to be limited because of lack of available land. Even though the government launched several major 'new town in-town' project, there was still a housing shortage and chronic house price inflation. This forced the government to move outside the green belt to acquire cheap land for housing.

Thirdly, there was certainly an increased demand for new dwellings and suburban living. Partly because of the rise in incomes and the deterioration and crowding of the old inner city, more and more Seoul residents have been turning their attention to the quality of their environment. For those living in the stuffiness of the older inner city, modern accommodation with a well-preserved natural environment in a suburban area could be an alternative (Ministry of Construction and Transportation, 1996)

Finally, the government expected that the five towns would alleviate Seoul's congestion (although the recent increase in automobiles has made the situation even worse). Land and housing prices in the five new towns would in theory be kept low enough to induce many Seoulities, as well as private firms and public organizations, to move out of the city's congested areas.

4-3-2. The problems of the new towns and their housing production

Even though the five new towns have achieved the mass production of housing required in the SMA, their development has come in for severe criticism.

1) The concentration of population and economic activities in the SMA.

The increasing concentration of population and economic activities in the

SMA and the capital has continued. The SMA has over 45 percent of nation's total population. This raises serious socio-economic problems. As a result of its dominance over other parts of the country, the SMA is often referred to as the SMA Republic. This cynical description is due in part to the lack of any balanced regional development. The nation's economic activities have been spatially focused on the capital, where tremendous locational advantages exist.

2) High-density development and the dormitory towns

In Korea, it is generally believed that achieving low density is one step towards improving the residential environment. The average gross density of the five new towns is 235 people per hectare, much higher than that of Seoul, which stands at 181 per hectare. Net residential density figures are more dramatic, and higher than those of the previous 'new towns in-town' and Seoul itself. The average for the five new towns is 686 people per hectare, while that of Seoul is 364 per hectare (see Table 7). These are a reflection of the government's rigid land-use regulation, which has limited the supply of residential land and, in turn, encouraged high-density development.

The five new towns are located within 25kilometres of the capital city center. Although they belong administratively to Kyonggi province, 66 percent of the residents commute to Seoul for jobs and other purposes. The five new towns are merely dormitory towns. They remain functionally dependent on Seoul and fill the role of its suburban residential area. Unfortunately the five new towns have not been designed as complete living and working entities, with jobs, homes, shops, civic facilities and open spaces.

Table 7 Density of population and housing

Specification	Five new towns in SMR	Seoul	Mogdong (new town in-town)
Gross population density (persons/ha)	235	181	264
Net residential population density (persons/ ha)	686	364	495
Floor area ratio for residential area (%)	184	-	122

Source: Ministry of Construction and Transportation, 1996; Seoul Municipal Government, 1995

3) Lack of diversity and price control

The decision to create the five new towns was decided in a short time. There were no full socio-economic surveys or planning studies for the development before its inception. Since one of its main purposes was to avoid the further congestion of the capital city and to provide opportunities for people to live close both to nature but also to urban activities, the new towns could have applied technological innovation and innovative techniques in planning and design. However, there were very few changes in house type and building design. About 90 percent of the housing in the five new towns is apartments, lacking diversity and variety. It seems to be that the new towns are merely copies of large cities.

It is interesting to note that price control is responsible for uniformity in housing development, since with it there is no incentive for the housebuilders to improve the design of the apartments. Equally, the quality of the apartments has not been good, because housebuilders have sought to profit under the constraints of price control by building improperly. They have tended to use cheap building materials and a cheap, unskilled labour force (Yoon, 1994; Chosun Ilbo, 1996).

Accordingly, many disputes over the quality of new apartments have occurred between residents and housebuilders (Korea Center for City and Environment Research, 1995).

Since 1982 the sale prices of new apartments have been set by the government (controlled prices), and housebuilders have had to sell within them. In this system, the flexible ceiling price is based on the cost of construction, i.e. materials and labour. In 1989, the government adopted a programme using flexible construction costs instead of fixed costs, and set a ceiling price for bond-bids (see below) for small and large apartments, considering the market dynamics of the housing units and construction materials.

Since 1983 the bond-bid system has been added to the lottery system. The system is applied to the limited number of private housing units whose controlled prices are less than 70 percent of their market prices. To buy under this system, people must purchase national housing bonds, type 2, which have a 20-year repayment period and 2 percent annual interest, in addition to paying for the house in advance. The main aim of the bond-bid system is to channel a part of the 'premium' into the National Housing Fund (KRIHS, 1987, 33).

The aims of introducing this price control were, first, to give new housebuyer the chance to buy cheap apartments, and, second, to stabilize the prices of existing houses.

4) Filtering strategies

In Korea many planners and government officials tend to believe that 'filtering' helps poor people, assuming that the total housing supply in the SMA thereby increases and vacated middle-income accommodation becomes available for the low-income group.

5) Social goal

New towns appear to be a means of equalizing opportunities for housing and employment, of bringing together people with different income. This encourages social integration. The emphasis on socially balanced communities is one of the most important justifications for the five new towns in the SMA. New towns can achieve such social goals because they provide a variety of housing types at prices suitable for a wide range of income groups and life-styles.

However, as shown in Table 8, the five new towns are generally inhabited by relatively high-income groups. The average monthly income of their households is higher than that in other Korea cities (1,628,000 won for the former, 1,356,000 won for the latter in 1992) (KRIHS, 1993). In the new towns, it is noticeably that more than half of the household heads had a college education. In Korea, highly educated people are paid more than those with less education.

Table 8 Socio-economic characteristics of the new towns

	Age of household head	Household size	Monthly income (10,000 won)	Education attainment (%)*
Pundang	43.0	3.9	194.0	60.6
Ilsan	43.8	3.8	147.7	47.2
Pyongchon	42.2	3.8	146.6	46.7
Sanbon	40.7	3.9	143.9	53.4
Chungdong	41.4	4.1	149.4	44.0
All five towns	42.5	3.9	162.8	51.8

* : Household heads with a college education

Source: KRIHS, 1993

As the new-town development was based on the anticipated housing demand from middle- and upper-income families, it neglected the needs of other groups, particularly those on low incomes. This neglect, coupled with the disruption of daily lives and the existing social network of the original settlers, has increased their feeling of isolation. In general, this has been a regular result of urban redevelopment projects in Seoul.

The new towns do not appear to have achieved many of their original goals. The pressure to allow urban sprawl continues to intensify, adding more satellite cities and towns between the edges of Seoul and the new town sites. Since the completion of the project, commuter traffic has worsened, business and commercial activities have not made as smooth an adjustment as anticipated, and the residents lack necessary services.

5. Conclusions and Policy recommendations

During last 4 decades, Korea has rapidly been industrialized and socio-economic structure was changed. In the procedure of industrialization, huge rural population moved to urban areas. The distribution of population between rural and urban was completely reversed during that time. Population of city areas was changed from 28.0 % in 1960 to 79.7 % in 2000. Especially, Population of Seoul Metropolitan Area was tremendously increased. It had almost half of total population. Now, current Korean government has plan for moving capital city.

There were many problems occurred in the procedure of urbanization, such

as discrimination, lack of housing units, slum areas, transportation, pollution, destruction of nature, etc. Especially, The lack of housing in Seoul Metropolitan Areas is serious problems.

Although the central government has introduced growth controls and plans for balanced regional development since the 1960s, they have failed to limit the growth of the SMA. In addition, the government initiated the development of the five new towns in the SMA, which further overcrowded the SMA.

In order to develop a comprehensive set of alternatives for future housing and new-town development in Korea, the following measures appear necessary:

1. The main emphasis of the housing policy in the new-town developments seems to have been on the expansion of housing for sale for the middle- and upper-income groups rather than on the provision of rental accommodation for the low-income group. It is, in fact, difficult to demonstrate that filtering strategies in Korea encourage distributional equity. New towns in the SMA need to provide a variety of housing types and prices to attract a wide range of income classes and allow people their life-style preferences.
2. The five new towns are functionally dependent on Seoul; they are effectively its suburban residential area. A new, self-contained town is needed now, one in which the residents can live full lives, satisfying all their daily needs within its boundaries. New towns should be built not only to ease congestion in the metropolis, but also to create new independent economic centres.
3. The problems facing the SMA are not confined to it. So solutions cannot be found by looking only at issues in the SMA. The restructuring of various spatial policies seems to be necessary. More integrated efforts are needed to stimulate economic and social development in less prosperous regions, and to control the

growth of the already large metropolis. The growth control policy in the SMA should be supported by the government's efforts to develop the large- and medium-sized cities of the provincial areas.

4. The populations of new towns should be balanced, so special efforts must be made to attract all kinds of people, including middle-class professionals, minorities and low-income people. Jobs, services, amenities and housing need to keep pace with one another. The government must therefore consider the balance of new towns, which means a diversity of jobs and dwelling and a balanced physical development.

5. It is desirable to adopt an 'expanding towns' approach for the revitalising of metropolitan areas in the future. This can provide an opportunity to establish an ever-closer balance between old-town and new-town growth, between growth at the center and growth in suburbia, and between urban and rural populations, all within the framework of a single developmental process. It would also provide a greater opportunity to upgrade the quality of life of an urbanizing region as a whole, rather than that of a single town or neighborhood.

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